STORMWATER REPORT

VyStar Credit Union

16181 NW US Highway 441
Alachua, Florida 32615

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PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida practicing with Newkirk Engineering Inc., a corporation authorized as an engineering business, Certificate of Authorization No. 30209, by the State of Florida, Department of Professional Regulation and Board of Professional Engineers. I have reviewed or approved the evaluation, findings, opinions and conclusions as reported for:

Project: **VYSTAR CREDIT UNION**

Location: **16181 NW US HIGHWAY 441**
ALACHUA, FL 32615

Client: **VYSTAR CREDIT UNION**

I acknowledge that the procedures and references used to develop the results are standard to the professional practice of civil engineering as applied through design standards and criteria set forth by the federal, state and local regulatory agencies as well as professional judgment and experience.

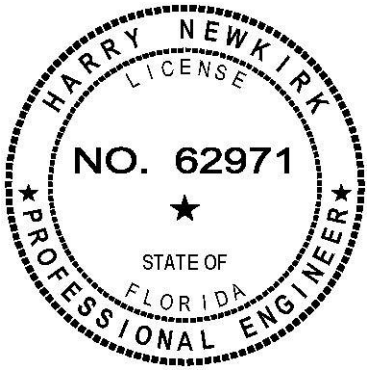

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TABLE OF CONTENTS

PAGE	TITLE
1	Professional Engineer Certificate
2	Table of Contents
3	Introduction
3 – 4	Existing Conditions
4	Proposed Project
5	Stormwater Management
5	Pre-Development Flood Routing Model
5	Post-Development Flood Routing Model
6	Erosion and Sediment Control
6	Assumptions and References Used
7	Conclusion
8 – 13	FDOT Critical Storm Events Results
Appendix A	Maps
	- Site Location Map
	- Aerial Map
	- Topographic Quad Map
	- Soils Map
	- FIRM Map
Appendix B	Pre-Development – Basin DA-3
	- Basin/Node/Reach Map
	- Calculations & PONDS Results
Appendix C	Post-Development – Basin DA-3
	- Basin/Node/Reach Map
	- Calculations & PONDS Results
Appendix D	Pre-Development – Basin DA-4
	- Basin/Node/Reach Map
	- Calculations & PONDS Results
Appendix E	Post-Development – Basin DA-4
	- Basin/Node/Reach Map
	- Calculations & PONDS Results
Appendix F	Pipe Sizing Calculations
Appendix G	Pond Recovery (MODRET)

INTRODUCTION

The subject site is a proposed 4,000 square feet VyStar Credit Union with four lanes for drive-thru banking located at 16181 NW US Highway 441 (SR 20 & 25), Alachua, Alachua County, Florida 32615within Section 9, Township 8 South, Range 18 East. See Appendix A for site location map.

The stormwater system is designed so that the Post-Development peak discharge rate and volumes do not exceed the Pre-Development peak discharge rate and volumes for the FDOT 100-Year Critical Storm Events. The stormwater system is also designed to recover the required treatment volume within 30 days as required by Suwannee River Water Management District. Stormwater treatment (water quality) will be provided by dry detention (DA-3) and dry retention (DA-4) pond systems. An Environmental Resource Permit Modification is requested for Suwannee River Water Management District (SRWMD) Permit No. ERP-001-221992-1 for 2.04 acres of land with 0.92 acres of impervious surface.

EXISTING CONDITIONS

Land Coverage

The existing site is currently vacant, fully cleared with no historic or large trees. The FLUCFCS Land Use is (140) Commercial and Services. See Appendix A for maps.

Topography

Elevations range from EL 107.0 along the north property line to EL 96.0 at the south property line. The site drains into the US Highway 441 right-of-way. An existing dry retention pond system (SRWMD Permit No. ERP-001-221992-1) will be modified with the development and will continue to discharge into the 167the Boulevard right-of-way.

Flood Zone

The property is located within Zone “X” per FEMA Map Panel No. 12001C0120D, Dated June 16, 2006. See FIRM map in Appendix A.

Soils

To the best of my knowledge, the soils on site will drain/percolate according to the assumptions made in the drainage calculations. Assumptions are based on normal season conditions for the site. Per the USDA Soil Survey of Alachua County, the existing soils associated with this project are as follows (See Soils map in Appendix A):

(5) Fort Meade Fine Sand, Soil Group “A”
(30) Kendrick Sand, Soil Group “A”

Stormwater Retention Design Parameters

The site specific Geotechnical evaluation was prepared by Universal Engineering Sciences (UES); UES Report No. 1308974 dated February 17, 2016. Based on the encountered conditions, UES would recommend the following design parameters be utilized in stormwater recover analyses:

DRAINAGE BASIN: DA-4	
Corresponding Soil Boring Test Locations	B-4 & B-5
Average Depth to Confining Layer (feet)	11
Average Unsaturated Vertical Infiltration Rate (feet/day)	0.8
Average Saturated Vertical Infiltration Rate (feet/day)	1.3
Estimated Horizontal Hydraulic Conductivity (feet/day)	1.6
Estimated Fillable Porosity (%)	20
Estimated Average Depth to Seasonal High Water Table (feet)	10

For design purposes, both retention ponds pond bottoms will be over-excavated by 2-feet and backfilled with clean coarse sand and loosely compacted in 12-inch lifts. The sand shall meet Kh = 30 feet/day and Kv = 20 feet/day allowing for an additional area of influence to be included in the PONDS input (the native soils will be the controlling media for percolation, thus the fill sand will provide a larger surface area for the pond to percolate into). The existing site curve numbers will be based on Hydraulic type C values as the laboratory measured hydraulic properties are consistent with type D soils, however the physical characteristics are consistent with type A/B soils with a shallow clay confining layer. Per the soil survey index this is a typical condition for type C soils.

See Geotechnical Evaluation by Universal Engineering Sciences.

PROPOSED PROJECT

To construct a 4,000 square feet VyStar Credit Union and associated paving, grading, drainage, utility and landscape improvements. The stormwater system provides water quality (treatment volume) for 2.04 acres of land with 0.92 acres of impervious surface. The stormwater runoff from the development will be provided by existing dry detention pond that will be modified with development (Basin: DA-3) and proposed dry retention pond (Basin: DA-4).

Stormwater Pond (DA-3) is a dry detention pond that will be modified with a segmental retaining wall and increased storage area/volume. The pond is currently designed for a drainage retention area (DA) = 0.75 acres with 0.49 acres. The modified pond is designed for a DA = 0.75 acres with 0.55 acres of impervious surface. The existing control structure will remain as permitted with SRWMD Permit No. ERP-001-221992-1

Stormwater Pond (DA-4) is a dry retention pond with control structure outfall discharge to US Highway 441. The pond is designed for a DA = 1.63 acres with 0.86 acres impervious surface.

STORMWATER MANAGEMENT

A. SRWMD

Basin DA-4: For dry retention (On-line Storage), the design treatment volume is (1) inch of runoff from the drainage area.

The design storms are 100-year duration (8, 24 and 240 hours). During the design storms the post-developed peak discharge rate cannot exceed the pre-developed peak discharge rate.

B. City of Alachua

Same as SRWMD.

C. Florida Department of Transportation (Drainage Permit)

Complete analysis of the FDOT critical storm events. (3, 5, 10, 25, 50 and 100-year frequency with durations of 1, 2, 4, 8, 24, 72, 168, 240 hours) demonstrating the post-development discharge rates and volumes are less than or equal to the pre-development discharge rates and volumes.

PRE-DEVELOPMENT FLOOD ROUTING MODEL

Drainage Basin (DA-3) is 0.75 acres with a Curve Number of 89.3 and a Time of Concentration of 6.0 minutes. Drainage Basin is modeled as a hydrograph to a dry detention pond (DA-3). When the stormwater in the system reaches EL 94.17 will overflow an existing 0.765 square feet weir and be discharged into the 167th Boulevard). SRWMD Permit No. ERP-001-221992-1.

Drainage Basin (DA-4) is 1.63 acres with a Curve Number of 70.0 and a Time of Concentration of 16.1 minutes. Drainage Basin is modeled as a hydrograph and sheet flows to the south property line, US Highway 441 right-of-way (OFFSITE).

POST-DEVELOPMENT FLOOD ROUTING MODEL

Drainage Basin (DA-3) is 0.75 acres with a Curve Number of 91.6 and a Time of Concentration of 6.0 minutes. Drainage Basin is modeled as a hydrograph to a dry detention pond (DA-3). When the stormwater in the system reaches EL 94.17 will overflow an existing 0.765 square feet weir and be discharged into the 167th Boulevard).

Drainage Basin (DA-4) is 1.63 acres with a Curve Number of 88.7 and a Time of Concentration of 10.0 minutes. DA-4 has 47.1% directly connected impervious area (DCIA) and a CN of 80.5 for the remaining site. Drainage Basin is modeled as a hydrograph to a dry detention pond (DA-4). When the stormwater in the system reaches EL 102.00 will overflow an 8-inch orifice bleeder pipe, at EL 102.25 the stormwater will overflow a 4-inch orifice bleeder pipe, and at EL 102.40 the stormwater will overflow a 2-foot 10-inch weir and be discharged into the US Highway 441 right-of-way from (CS-01) by a 12-inch HDPE culvert.

EROSION AND SEDIMENT CONTROL PLANS

All pervious surfaces will be planted with trees, shrubs and sodded solid to prevent erosion. All inlets will have a one (1) foot sump to trap sediments/fines. A temporary gravel construction entrance will be provided to prevent fines and sands from roadway. Silt fence will be installed around the entire site and around inlets during construction to retain sediment on-site and assure that any discharges from the site do not cause or contribute to a violation of state water quality standards.

ASSUMPTIONS AND REFERENCES USED

A. S.C.S. Unit Hydrograph Method
B. FDOT Rainfall Distribution
C. PONDS Version 3.3.0276
D. MODRET 6.1
E. Other references and assumptions listed in the drainage calculations.

CONCLUSION

The calculations indicate that the proposed stormwater treatment system meets the requirements for pollution abatement volume per State Stormwater Regulations, Suwannee River Water Management District, Florida Department of Transportation and City of Alachua Land Development Code. All stormwater runoff is directed into the stormwater treatment system by the conveyance of pavement grades and collection pipe system. See next page for Pre-Development versus Post-Development discharge rate and volume comparisons.

- See Appendix B for Pre-Development Basin DA-3
- See Appendix C for Post-Development Basin DA-3
- See Appendix D for Pre-Development Basin DA-4
- See Appendix E for Post-Development Basin DA-4
- See Appendix F for Pipe Sizing Calculations
- See Appendix G for Pond Recovery (PONDS Time After Storm)

Pond DA-4

- Half Volume Recovers in between 3 and 4 days
- Full Volume Recovers in between 8 and 9 days

DRAINAGE SUMMARY

STORM EVENT	RAINFALL (INCHES)	DA-3 DISCHARGE PRE (CFS)	DA-3 DISCHARGE POST (CFS)	DA-3 VOLUME PRE (CF)	DA-3 VOLUME POST (CF)	PRE PEAK STAGE (FT)	POST PEAK STAGE (FT)
3YR-1HR	2.6	0.78	0.00	463	-	94.21	93.70
3YR-2HR	3.0	0.57	0.00	1,396	-	94.19	93.98
3YR-4HR	3.6	0.95	0.48	2,849	794	94.23	94.19
3YR-8HR	4.2	1.09	0.47	4,249	2,203	94.25	94.19
3YR-24HR	6.0	0.40	0.29	8,370	6,202	94.18	94.18
3YR-72HR	6.8	0.24	0.24	9,255	7,514	94.17	94.17
3YR-168HR	8.4	0.18	0.18	12,456	10,868	94.17	94.13
3YR-240HR	9.6	0.24	0.24	15,024	13,514	94.17	94.17

STORM EVENT	RAINFALL (INCHES)	DA-4 DISCHARGE PRE-2 (CFS)	DA-4 DISCHARGE POST-2 (CFS)	DA-4 VOLUME PRE-2 (CF)	DA-4 VOLUME POST-2 (CF)	POND PEAK STAGE (FT)	
3YR-1HR	2.6	3.25	0.00	5,075	-	101.33	
3YR-2HR	3.0	2.49	0.00	6,588		101.71	
3YR-4HR	3.6	1.94	0.43	9,042	1,407	102.07	
3YR-8HR	4.2	1.87	0.60	11,670	4,365	102.13	
3YR-24HR	6.0	0.69	0.51	20,265	13,185	102.09	
3YR-72HR	6.8	0.48	0.49	24,319	14,351	102.09	
3YR-168HR	8.4	0.38	0.37	32,706	16,364	102.05	
3YR-240HR	9.6	0.50	0.50	39,172	17,419	102.09	

DRAINAGE SUMMARY

STORM EVENT	RAINFALL (INCHES)	DA-3 DISCHARGE PRE (CFS)	DA-3 DISCHARGE POST (CFS)	DA-3 VOLUME PRE (CF)	DA-3 VOLUME POST (CF)	PRE PEAK STAGE (FT)	POST PEAK STAGE (FT)
5YR-1HR	2.8	1.15	0.00	948	-	94.26	93.85
5YR-2HR	3.4	0.99	0.33	2,392	333	94.24	94.18
5YR-4HR	4.0	1.11	0.77	3,864	1,834	94.26	94.21
5YR-8HR	4.8	1.32	0.67	5,796	3,779	94.29	94.20
5YR-24HR	6.5	0.44	0.44	9,676	7,526	94.18	94.18
5YR-72HR	8.0	0.29	0.29	12,402	10,697	94.18	94.18
5YR-168HR	9.5	0.21	0.21	15,374	13,758	94.17	94.17
5YR-240HR	11.3	0.29	0.29	19,579	17,977	94.18	94.18

STORM EVENT	RAINFALL (INCHES)	DA-4 DISCHARGE PRE-2 (CFS)	DA-4 DISCHARGE POST-2 (CFS)	DA-4 VOLUME PRE-2 (CF)	DA-4 VOLUME POST-2 (CF)	POND PEAK STAGE (FT)	
5YR-1HR	2.8	3.70	0.00	5,818	-	101.53	
5YR-2HR	3.4	3.11	0.32	8,202	445	102.04	
5YR-4HR	4.0	1.92	0.79	10,777	3,516	102.22	
5YR-8HR	4.8	2.28	0.96	14,434	7,623	102.27	
5YR-24HR	6.5	0.77	0.61	22,786	15,972	102.13	
5YR-72HR	8.0	0.59	0.59	30,581	20,943	102.13	
5YR-168HR	9.5	0.44	0.42	38,629	21,093	102.06	
5YR-240HR	11.3	0.60	0.59	48,511	26,531	102.12	

DRAINAGE SUMMARY

STORM EVENT	RAINFALL (INCHES)	DA-3 DISCHARGE PRE (CFS)	DA-3 DISCHARGE POST (CFS)	DA-3 VOLUME PRE (CF)	DA-3 VOLUME POST (CF)	PRE PEAK STAGE (FT)	POST PEAK STAGE (FT)
10YR-1HR	3.4	1.91	0.65	2,436	385	94.43	94.20
10YR-2HR	3.8	1.37	0.63	3,403	1,370	94.30	94.20
10YR-4HR	4.4	1.25	0.93	4,890	2,881	94.28	94.23
10YR-8HR	5.6	1.59	1.38	7,882	5,896	94.35	94.31
10YR-24HR	7.2	0.50	0.50	11,516	9,388	94.19	94.19
10YR-72HR	9.3	0.34	0.34	15,839	14,167	94.18	94.18
10YR-168HR	11.2	0.24	0.24	19,924	18,302	94.17	94.17
10YR-240HR	13.0	0.33	0.33	24,159	22,551	94.18	94.18

STORM EVENT	RAINFALL (INCHES)	DA-4 DISCHARGE PRE-2 (CFS)	DA-4 DISCHARGE POST-2 (CFS)	DA-4 VOLUME PRE-2 (CF)	DA-4 VOLUME POST-2 (CF)	POND PEAK STAGE (FT)	
10YR-1HR	3.4	5.16	0.38	8,202	520	102.05	
10YR-2HR	3.8	3.76	0.70	9,901	2,407	102.17	
10YR-4HR	4.4	2.20	1.23	12,578	5,630	102.36	
10YR-8HR	5.6	2.84	1.34	18,284	10,756	102.41	
10YR-24HR	7.2	0.89	0.75	26,385	19,901	102.20	
10YR-72HR	9.3	0.70	0.70	37,544	28,207	102.17	
10YR-168HR	11.2	0.52	0.50	47,957	30,086	102.09	
10YR-240HR	13.0	0.70	0.69	58,000	36,097	102.17	

DRAINAGE SUMMARY

STORM EVENT	RAINFALL (INCHES)	DA-3 DISCHARGE PRE (CFS)	DA-3 DISCHARGE POST (CFS)	DA-3 VOLUME PRE (CF)	DA-3 VOLUME POST (CF)	PRE PEAK STAGE (FT)	POST PEAK STAGE (FT)
25YR-1HR	3.6	2.12	1.11	2,939	903	94.49	94.26
25YR-2HR	4.4	1.97	1.07	4,940	2,942	94.44	94.25
25YR-4HR	5.2	1.53	1.41	6,967	4,993	94.34	94.31
25YR-8HR	6.4	1.85	1.72	9,987	8,027	94.41	94.38
25YR-24HR	8.4	0.59	0.59	14,691	12,595	94.19	94.20
25YR-72HR	11.2	0.41	0.41	20,909	19,261	94.18	94.18
25YR-168HR	12.6	0.27	0.27	23,688	22,066	94.18	94.18
25YR-240HR	15.8	0.41	0.41	31,723	30,123	94.18	94.18

STORM EVENT	RAINFALL (INCHES)	DA-4 DISCHARGE PRE-2 (CFS)	DA-4 DISCHARGE POST-2 (CFS)	DA-4 VOLUME PRE-2 (CF)	DA-4 VOLUME POST-2 (CF)	POND PEAK STAGE (FT)	
25YR-1HR	3.6	5.66	0.71	9,042	1,410	102.18	
25YR-2HR	4.4	4.78	1.23	12,578	5,264	102.36	
25YR-4HR	5.2	2.78	2.08	16,338	9,885	102.54	
25YR-8HR	6.4	3.42	2.53	22,278	16,511	102.61	
25YR-24HR	8.4	1.10	1.12	32,706	26,700	102.32	
25YR-72HR	11.2	0.86	0.86	47,957	38,891	102.25	
25YR-168HR	12.6	0.59	0.56	55,757	37,956	102.11	
25YR-240HR	15.8	0.87	0.86	73,852	52,263	102.25	

DRAINAGE SUMMARY

STORM EVENT	RAINFALL (INCHES)	DA-3 DISCHARGE PRE (CFS)	DA-3 DISCHARGE POST (CFS)	DA-3 VOLUME PRE (CF)	DA-3 VOLUME POST (CF)	PRE PEAK STAGE (FT)	POST PEAK STAGE (FT)
50YR-1HR	3.9	2.41	1.55	3,701	1,685	94.58	94.34
50YR-2HR	4.8	2.29	1.43	5,976	3,998	94.54	94.32
50YR-4HR	6.0	1.86	1.72	9,065	7,121	94.42	94.38
50YR-8HR	7.2	2.10	2.00	12,105	10,167	94.48	94.45
50YR-24HR	9.6	0.68	0.69	17,880	15,815	94.20	94.20
50YR-72HR	12.8	0.47	0.47	25,216	23,562	94.19	94.19
50YR-168HR	14.5	0.32	0.32	28,807	27,195	94.18	94.18
50YR-240HR	16.3	0.42	0.42	33,076	31,476	94.18	94.18

STORM EVENT	RAINFALL (INCHES)	DA-4 DISCHARGE PRE-2 (CFS)	DA-4 DISCHARGE POST-2 (CFS)	DA-4 VOLUME PRE-2 (CF)	DA-4 VOLUME POST-2 (CF)	POND PEAK STAGE (FT)	
50YR-1HR	3.9	6.44	1.23	10,337	2,313	102.36	
50YR-2HR	4.8	5.48	1.67	14,434	5,763	102.48	
50YR-4HR	6.0	3.44	2.97	20,265	14,255	102.66	
50YR-8HR	7.2	3.99	3.65	26,285	21,029	102.74	
50YR-24HR	9.6	1.30	1.32	39,172	33,557	102.40	
50YR-72HR	12.8	1.00	0.99	56,878	48,112	102.28	
50YR-168HR	14.5	0.69	0.64	66,464	48,824	102.15	
50YR-240HR	16.3	0.90	0.89	76,704	54,428	102.25	

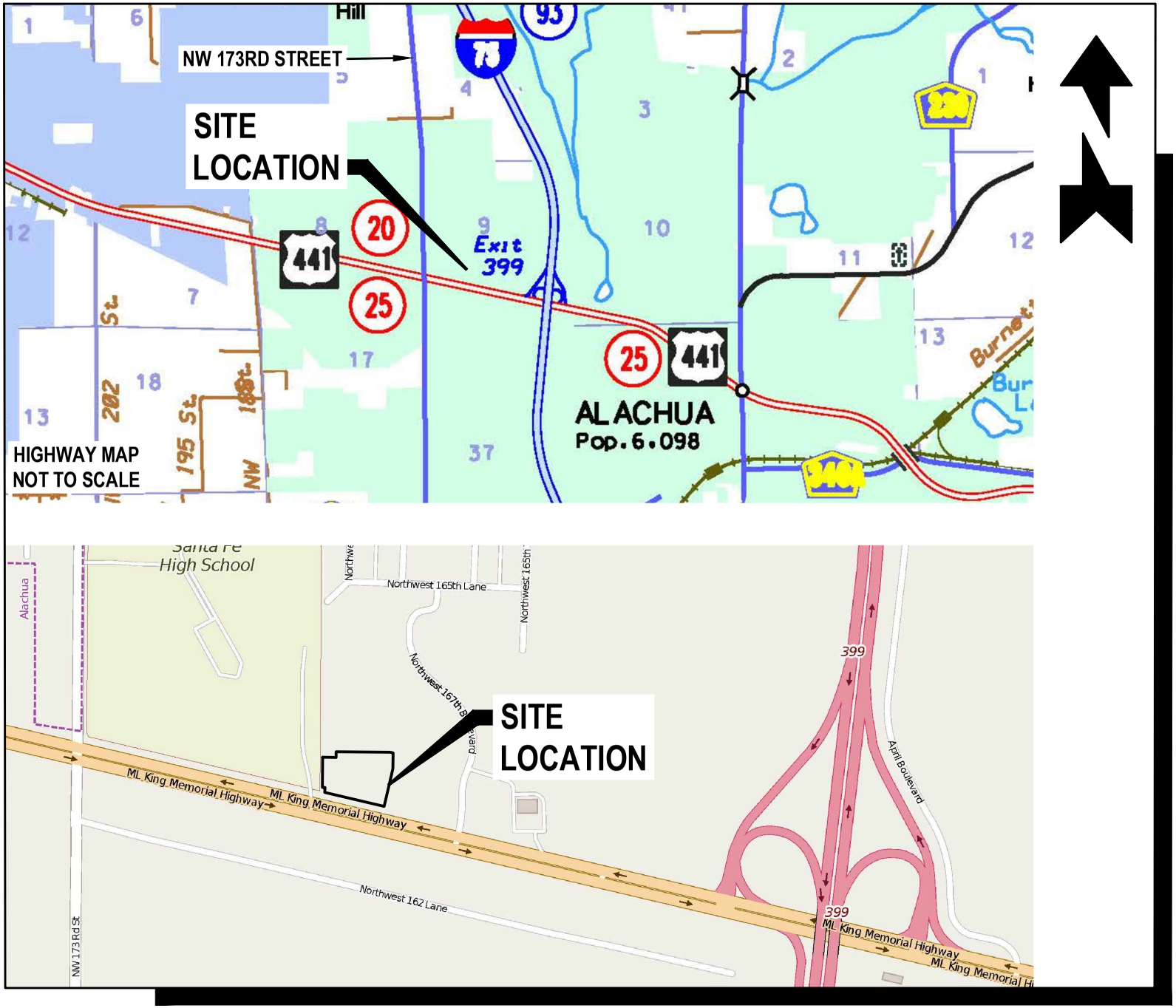
DRAINAGE SUMMARY

STORM EVENT	RAINFALL (INCHES)	DA-3 DISCHARGE PRE (CFS)	DA-3 DISCHARGE POST (CFS)	DA-3 VOLUME PRE (CF)	DA-3 VOLUME POST (CF)	PRE PEAK STAGE (FT)	POST PEAK STAGE (FT)
100YR-1HR	4.4	2.84	2.10	4,983	2,994	94.74	94.48
100YR-2HR	5.4	2.69	1.93	7,543	5,590	94.69	94.43
100YR-4HR	6.7	2.13	1.97	10,914	8,991	94.49	94.45
100YR-8HR	8.0	2.34	2.25	14,233	12,313	94.56	94.53
100YR-24HR	11.0	0.79	0.79	21,612	19,584	94.21	94.22
100YR-72HR	13.8	0.51	0.51	27,914	26,263	94.19	94.19
100YR-168HR	16.0	0.35	0.35	32,856	31,257	94.18	94.18
100YR-240HR	18.0	0.46	0.46	37,678	36,091	94.19	94.19

STORM EVENT	RAINFALL (INCHES)	DA-4 DISCHARGE PRE-2 (CFS)	DA-4 DISCHARGE POST-2 (CFS)	DA-4 VOLUME PRE-2 (CF)	DA-4 VOLUME POST-2 (CF)	POND PEAK STAGE (FT)	
100YR-1HR	4.4	7.76	2.58	12,578	4,714	102.61	
100YR-2HR	5.4	6.73	2.64	17,794	10,422	102.62	
100YR-4HR	6.7	4.04	3.81	23,807	18,131	102.76	
100YR-8HR	8.0	4.58	4.55	30,581	25,580	102.83	
100YR-24HR	11.0	1.55	1.62	46,851	41,610	102.47	
100YR-72HR	13.8	1.08	1.07	62,505	53,864	102.30	
100YR-168HR	16.0	0.76	0.72	74,992	57,477	102.19	
100YR-240HR	18.0	1.00	0.98	86,440	65,062	102.27	

APPENDIX A

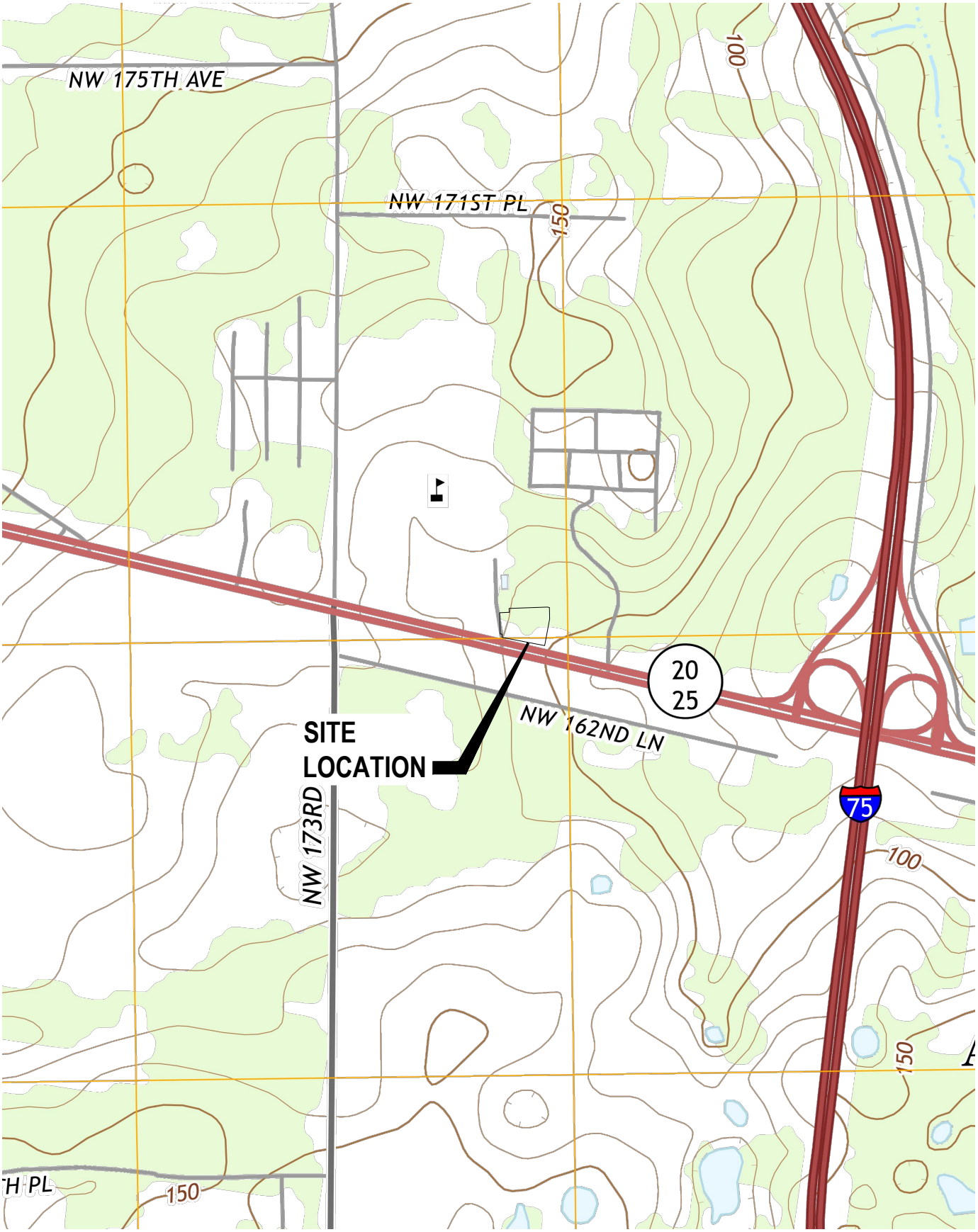
“MAPS”



LOCATION MAP

SITE LOCATION
LAT: 29°48'15.6" N
LON: 82°31'18.7" W
M L KING BOULEVARD
(US HIGHWAY 441)
NW 167TH BOULEVARD
314 ft

AERIAL MAP

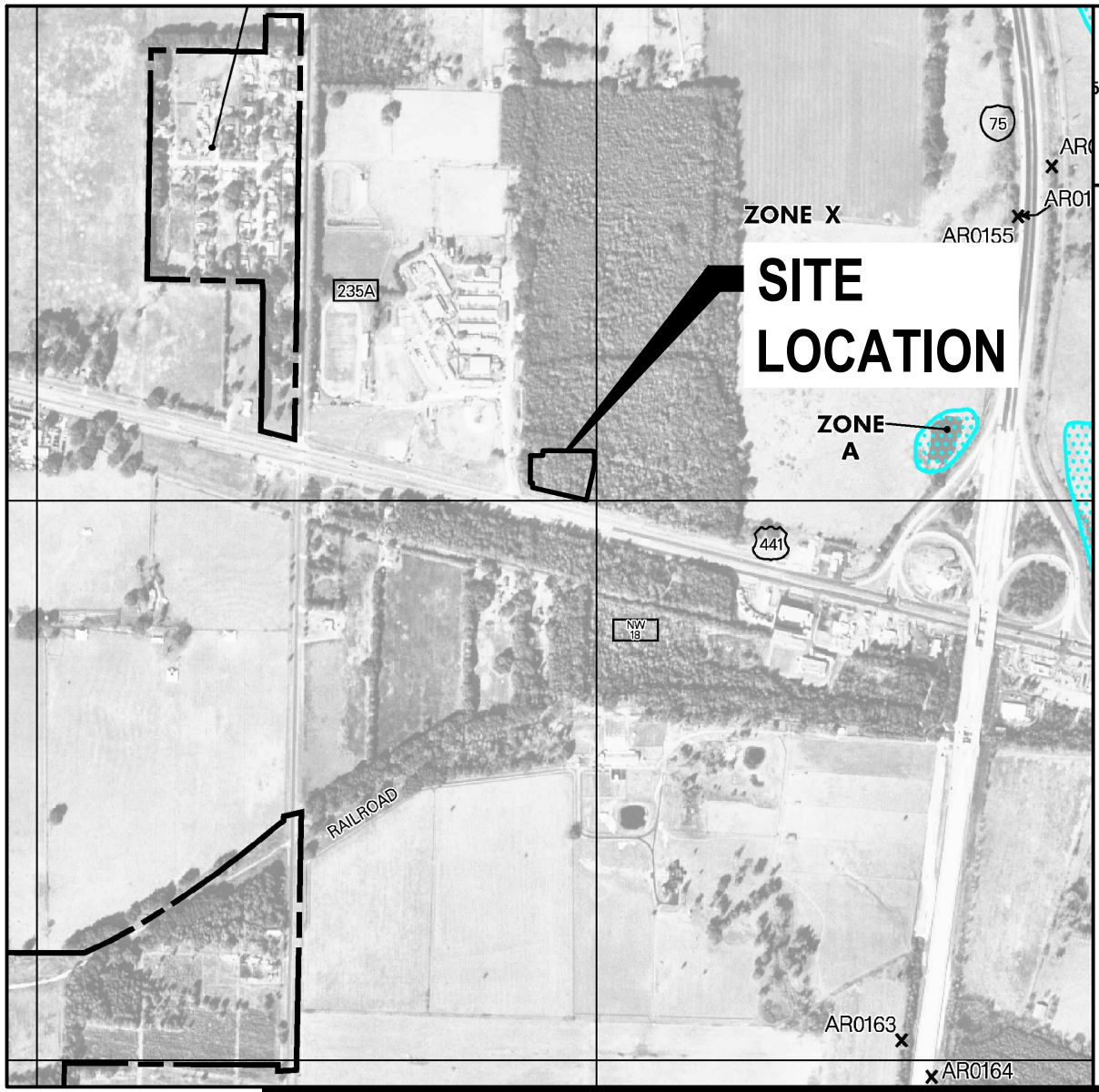


USGS QUADRANGLE MAP

SCALE: NOT TO SCALE

SOILS MAP

SOIL TYPES: (5) FORT MEADE FINE SAND, 0 TO 5 PERCENT SLOPES
(30) KENDRICK SAND, 2 TO 5 PERCENT SLOPES



MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0120D

FIRM

FLOOD INSURANCE RATE MAP

ALACHUA COUNTY, FLORIDA

AND INCORPORATED AREAS

PANEL 120 OF 640

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
ALACHUA, CITY OF	120664	0120	D
ALACHUA COUNTY	120001	0120	D
HIGH SPRINGS, CITY OF	120669	0120	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
12001C0120D

EFFECTIVE DATE
JUNE 16, 2006

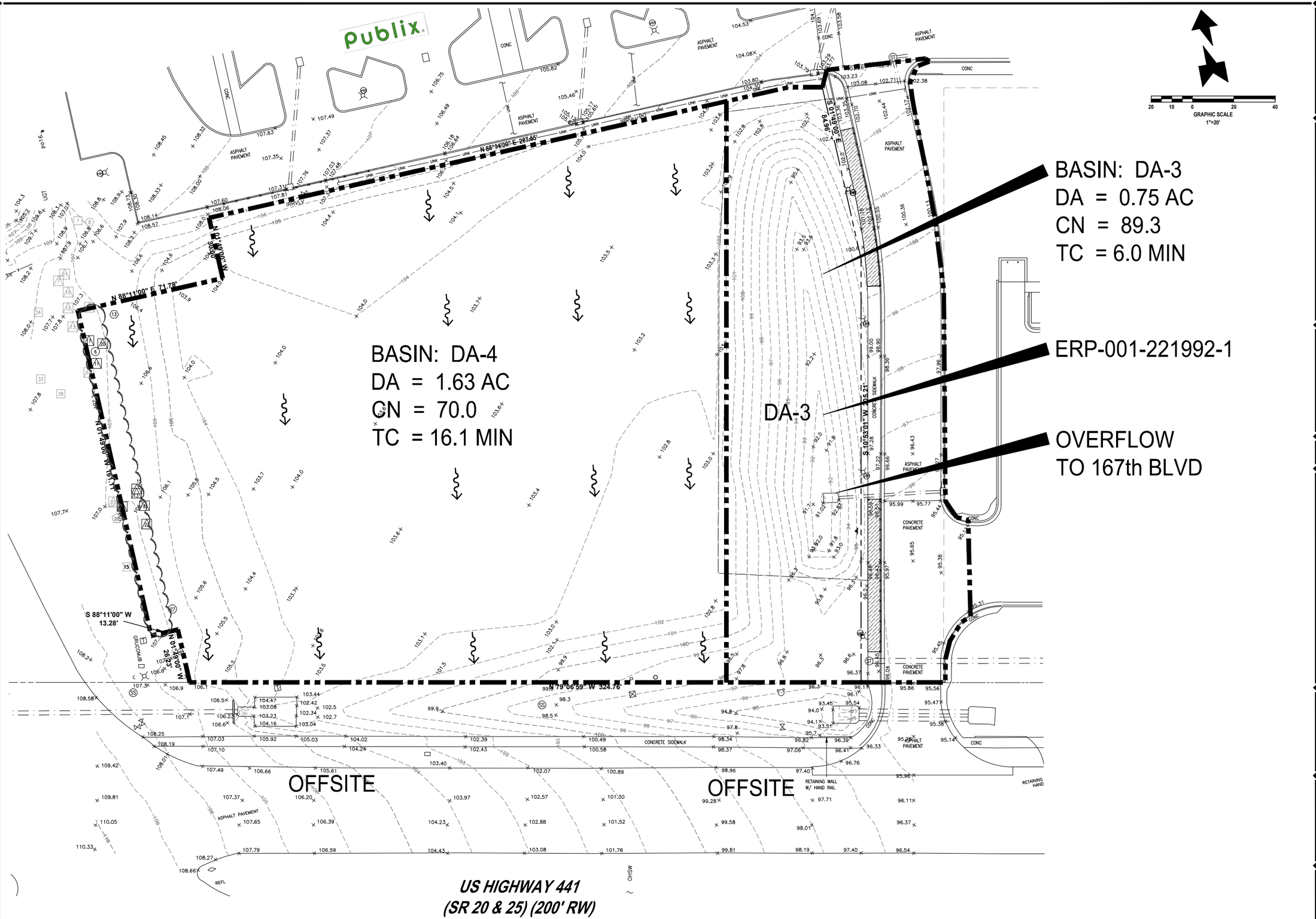
Federal Emergency Management Agency

FLOOD ZONE MAP

FLOOD ZONE "X"

APPENDIX B

“PRE-DEVELOPMENT ANALYSIS – BASIN: DA-3”



REVISIONS	
DATE	DESCRIPTION
4-18-17	CITY COMMENTS

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Land Development
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Inspection

VyStar Credit Union

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PRE-DEVELOPMENT DRAINAGE BASIN MAP

VYSTAR CREDIT UNION
16181 NW US HIGHWAY 441
ALACHUA, FLORIDA 32615

HARRY NEWKIRK LICENSE NO. 62971 STATE OF FLORIDA PROFESSIONAL ENGINEER

HARRY H. NEWKIRK, P.E., # 62971

PROJECT No:	2016-22
DATE:	JUNE 2016
DESIGN BY:	HHN
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1" = 20'

DRAWING NUMBER

PRE

PRE-DEVELOPMENT HYDROGRAPH WORKSHEET

Basin ID	DA (Acres)	Pervious (Acres)	Impervious (Acres) *	Wetland (Acres)	Pond Wet (Acres)	Pervious CN	Impervious CN	Wetland CN	Pond Wet CN	Composite CN
DA-3	0.750	0.260	0.490	0.000	0.000	73.0	98.0	85.0	100.0	89.3
TOTAL	0.750	0.260	0.490	0.000	0.000	73.0	98.0	85.0	100.0	89.3

Basin	Soil Type	Hydrologic Group	Area (Acres)	* CN
DA-3	Fort Meade & Kendrick	C*	0.260	73
Pervious Curve Number				73.0

Good condition woods. Hydraulic Group C values used for runoff curve numbers as geotechnical borings test at 0.025 inches per hour, per the USCS guidance, this qualifies the soil hydraulicly as a group D. Per the geotechnical report the site contains a near surface clay confining layer and clayey / silty sands which is also consistent with group C/D soils.

WATER QUALITY REQUIREMENTS FOR ONLINE RETENTION

Basin No.	Area (Ac)	Imp. Area (Ac)
DA-3	0.750	0.490

Treatment Volume Required

A. 1.0 inches of runoff over the drainage basin

0.063	Ac-Ft

B. 1.25 inches times impervious area + 0.5 inch of runoff over the entire site

0.082	Ac-Ft

Minimum Required Water Quality =	0.082	Ac-Ft	=	3,585 CF
Provided Water Quality =	0.087	Ac-Ft	=	3,776 CF

STAGE VERSUS STORAGE

Stage (Ft)	Area (sf)	Area (acres)	Volume (cf)	Volume (Ac-Ft)	Remarks
91.00	6.6	0.000	-	0.000	Pond Bottom
92.00	475.1	0.011	240.9	0.006	
93.00	1434.4	0.033	1,195.6	0.027	
94.00	2736.5	0.063	3,281.1	0.075	
94.17	3005.6	0.069	3,776.0	0.087	Treatment Volume, Weir
95.00	4255.2	0.098	6,776.9	0.156	Top of Bank

EFFECTIVE LENGTH AND WIDTH OF A POND

Average Basin Width	20 ft
Average Basin Length	213 ft
Average Unsaturated Area	4255 sf

PONDS Version 3.3.0276
Retention Pond Recovery - Refined Method
Copyright 2012
Devo Seereeram, Ph.D., P.E.

Project Data

Project Name:	VyStar Credit Union
Simulation Description:	Pre-Development DA3
Project Number:	2016-22
Engineer :	Harry Newkirk, PE
Supervising Engineer:	
Date:	04-13-2017

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	89.50
Water Table Elevation, [WT] (ft datum):	90.50
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	0.80
Fillable Porosity, [n] (%):	10.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day):	0.4
Maximum Area For Unsaturated Infiltration, [Av] (ft^2):	3515.0

Geometry Data

Equivalent Pond Length, [L] (ft):	213.0
Equivalent Pond Width, [W] (ft):	20.0

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft^2)
91.00	6.6
92.00	475.1
93.00	1434.4
94.00	2736.5
95.00	4255.2

Discharge Structures

Discharge Structure #1 is active as orifice

Structure Parameters

Description: Overflow

Orifice elevation, (ft datum):	94.17
Orifice coefficient:	4.9
Orifice area, (ft²):	.766
Orifice exponent:	.5

Tailwater - disabled, free discharge

Discharge Structure #2 is inactive

Discharge Structure #3 is inactive

Scenario Input Data

Scenario 1 :: 3YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	2.6
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 2 :: 3YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	3.0
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 3 :: 3YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	3.6
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 4 :: 3YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	4.2
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 5 :: 3YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	6.0
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 6 :: 3YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	6.8
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 7 :: 3YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	8.4
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 8 :: 3YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	9.6
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 9 :: 5YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	2.8
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 10 :: 5YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	3.4
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 11 :: 5YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	4.0
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 12 :: 5YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	4.8
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 13 :: 5YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	6.5
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 14 :: 5YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	8.0
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 15 :: 5YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	9.5
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 16 :: 5YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	11.3
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 17 :: 10YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	3.4
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 18 :: 10YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	3.8
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 19 :: 10YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	4.4
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 20 :: 10YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	5.6
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 21 :: 10YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	7.2
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 22 :: 10YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	9.3
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 23 :: 10YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	11.2
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 24 :: 10YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	13.0
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 25 :: 25YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	3.6
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 26 :: 25YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	4.4
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 27 :: 25YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	5.2
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 28 :: 25YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	6.4
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 29 :: 25YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	8.4
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 30 :: 25YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	11.2
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 31 :: 25YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	12.6
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 32 :: 25YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	15.8
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 33 :: 50YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	3.9
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 34 :: 50YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	4.8
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 35 :: 50YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	6.0
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 36 :: 50YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	7.2
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 37 :: 50YR-24R

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	9.6
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 38 :: 50YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	12.8
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 39 :: 50YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	14.5
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 40 :: 50YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	16.3
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 41 :: 100YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	4.4
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 42 :: 100YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	5.4
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 43 :: 100YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	6.7
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 44 :: 100YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	8.0
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 45 :: 100YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	11.0
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 46 :: 100YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	13.8
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 47 :: 100YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	16.0
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 48 :: 100YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	89.3
Design Rainfall Depth (inches)	18.0
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Modflow Log

```
MODFLOW CONTROL PARAMETERS
  Perimeter boundary condition:  constant head
  Maximum iterations of outer loop:  150
  Maximum iterations of inner loop:  60
  Horizontal conductivity within pond:  1000000 (if ground water mound is expected to intersect pond bottom)
  Instantanerous storage coefficient:  Volumetric balance
  Default head closure tolerance:  .01
  Default residual closure tolerance:  .5
  Target water budget error:  1
  On failure to converge:  Rerun limiting inner loop to one iteration
     > Maximum number of iterations of outer loop:  500
  Running Average Porosity is active
     > Starting on pass: 2
     > When outer iteration reaches:  50
     > Number of data points:  4
  Running Average Pond Stage (for discharge structures with tailwater) is active
     > Starting on pass: 2
     > When outer iteration reaches:  50
     > Number of data points:  4
  Grid size:  1000 ft (from pond centerline)
  Mound Output:  none

Begin Scenario 1  4/13/2017  17:35:15
End Scenario   1  4/13/2017  17:35:15

Begin Scenario 2  4/13/2017  17:35:16
End Scenario   2  4/13/2017  17:35:16

Begin Scenario 3  4/13/2017  17:35:16
End Scenario   3  4/13/2017  17:35:16

Begin Scenario 4  4/13/2017  17:35:17
End Scenario   4  4/13/2017  17:35:17

Begin Scenario 5  4/13/2017  17:35:17
End Scenario   5  4/13/2017  17:35:17

Begin Scenario 6  4/13/2017  17:35:18
  #WARNING:  Modflow did not converge with the following iterations limits:
     Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
     Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario   6  4/13/2017  17:35:22

Begin Scenario 7  4/13/2017  17:35:22
  #WARNING:  Modflow did not converge with the following iterations limits:
     Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
     Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario   7  4/13/2017  17:35:31

Begin Scenario 8  4/13/2017  17:35:31
  #WARNING:  Modflow did not converge with the following iterations limits:
     Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
     Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario   8  4/13/2017  17:35:43

Begin Scenario 9  4/13/2017  17:35:44
```

Modflow Log (cont'd.)

```
End Scenario   9  4/13/2017  17:35:44

Begin Scenario 10  4/13/2017  17:35:44
End Scenario  10  4/13/2017  17:35:44

Begin Scenario 11  4/13/2017  17:35:45
End Scenario  11  4/13/2017  17:35:45

Begin Scenario 12  4/13/2017  17:35:45
End Scenario  12  4/13/2017  17:35:45

Begin Scenario 13  4/13/2017  17:35:46
End Scenario  13  4/13/2017  17:35:46

Begin Scenario 14  4/13/2017  17:35:46
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  14  4/13/2017  17:35:51

Begin Scenario 15  4/13/2017  17:35:51
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  15  4/13/2017  17:36:0

Begin Scenario 16  4/13/2017  17:36:0
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  16  4/13/2017  17:36:12

Begin Scenario 17  4/13/2017  17:36:13
End Scenario  17  4/13/2017  17:36:13

Begin Scenario 18  4/13/2017  17:36:13
End Scenario  18  4/13/2017  17:36:13

Begin Scenario 19  4/13/2017  17:36:14
End Scenario  19  4/13/2017  17:36:14

Begin Scenario 20  4/13/2017  17:36:14
End Scenario  20  4/13/2017  17:36:14

Begin Scenario 21  4/13/2017  17:36:15
End Scenario  21  4/13/2017  17:36:15

Begin Scenario 22  4/13/2017  17:36:15
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  22  4/13/2017  17:36:21

Begin Scenario 23  4/13/2017  17:36:21
```

Modflow Log (cont'd.)

```
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  23  4/13/2017  17:36:30

Begin Scenario 24  4/13/2017  17:36:30
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  24  4/13/2017  17:36:42

Begin Scenario 25  4/13/2017  17:36:42
End Scenario  25  4/13/2017  17:36:42

Begin Scenario 26  4/13/2017  17:36:43
End Scenario  26  4/13/2017  17:36:43

Begin Scenario 27  4/13/2017  17:36:43
End Scenario  27  4/13/2017  17:36:43

Begin Scenario 28  4/13/2017  17:36:44
End Scenario  28  4/13/2017  17:36:44

Begin Scenario 29  4/13/2017  17:36:44
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  29  4/13/2017  17:36:45

Begin Scenario 30  4/13/2017  17:36:45
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  30  4/13/2017  17:36:51

Begin Scenario 31  4/13/2017  17:36:51
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  31  4/13/2017  17:37:0

Begin Scenario 32  4/13/2017  17:37:0
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  32  4/13/2017  17:37:12

Begin Scenario 33  4/13/2017  17:37:12
End Scenario  33  4/13/2017  17:37:12
```

Modflow Log (cont'd.)

```
Begin Scenario 34  4/13/2017  17:37:13
End Scenario  34  4/13/2017  17:37:13

Begin Scenario 35  4/13/2017  17:37:13
End Scenario  35  4/13/2017  17:37:13

Begin Scenario 36  4/13/2017  17:37:14
End Scenario  36  4/13/2017  17:37:14

Begin Scenario 37  4/13/2017  17:37:14
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  37  4/13/2017  17:37:15

Begin Scenario 38  4/13/2017  17:37:15
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  38  4/13/2017  17:37:21

Begin Scenario 39  4/13/2017  17:37:21
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  39  4/13/2017  17:37:30

Begin Scenario 40  4/13/2017  17:37:31
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  40  4/13/2017  17:37:43

Begin Scenario 41  4/13/2017  17:37:43
End Scenario  41  4/13/2017  17:37:43

Begin Scenario 42  4/13/2017  17:37:44
End Scenario  42  4/13/2017  17:37:44

Begin Scenario 43  4/13/2017  17:37:44
End Scenario  43  4/13/2017  17:37:44

Begin Scenario 44  4/13/2017  17:37:45
End Scenario  44  4/13/2017  17:37:45

Begin Scenario 45  4/13/2017  17:37:45
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  45  4/13/2017  17:37:46

Begin Scenario 46  4/13/2017  17:37:46
```

Modflow Log (cont'd.)

```
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  46  4/13/2017  17:37:52

Begin Scenario 47  4/13/2017  17:37:52
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  47  4/13/2017  17:38:1

Begin Scenario 48  4/13/2017  17:38:2
  #WARNING:  Modflow did not converge with the following iterations limits:
    Inner Loop=60,  Outer Loop=150
  Re-running with the following interation limits:
    Inner Loop=1,  Outer Loop=500
  Horizontal conductivity inside pond increased to 1.0000000E+07 ft/day
End Scenario  48  4/13/2017  17:38:15
```

Summary of Results *:: Scenario 1 :: 3YR-1HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.867	94.21		
Inflow				
Rate - Maximum - Positive	0.547		2.9985	
Rate - Maximum - Negative	1.320		0.0000	
Cumulative Volume - Maximum Positive	1.320			4264.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			4264.3
Infiltration				
Rate - Maximum - Positive	0.867		0.0142	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.347			42.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			42.0
Combined Discharge				
Rate - Maximum - Positive	0.867		0.7770	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.133			463.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			463.4
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.867		0.7770	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.133			463.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			463.4
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 2 :: 3YR-2HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	1.240	94.19		
Inflow				
Rate - Maximum - Positive	0.800		2.2884	
Rate - Maximum - Negative	2.320		0.0000	
Cumulative Volume - Maximum Positive	2.320			5242.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			5242.8
Infiltration				
Rate - Maximum - Positive	1.240		0.0141	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.347			86.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			86.1
Combined Discharge				
Rate - Maximum - Positive	1.240		0.5699	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.160			1396.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			1396.3
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	1.240		0.5699	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.160			1396.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			1396.3
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 3 :: 3YR-4HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	2.547	94.23		
Inflow				
Rate - Maximum - Positive	2.013		1.1743	
Rate - Maximum - Negative	4.320		0.0000	
Cumulative Volume - Maximum Positive	4.320			6747.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			6747.1
Infiltration				
Rate - Maximum - Positive	2.533		0.0144	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.347			139.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			139.2
Combined Discharge				
Rate - Maximum - Positive	2.547		0.9482	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.133			2848.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			2848.8
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	2.547		0.9482	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.133			2848.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			2848.8
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 4 :: 3YR-8HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	4.040	94.25		
Inflow				
Rate - Maximum - Positive	4.000		1.1988	
Rate - Maximum - Negative	8.320		0.0000	
Cumulative Volume - Maximum Positive	8.320			8281.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			8281.6
Infiltration				
Rate - Maximum - Positive	4.027		0.0146	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.347			273.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			273.3
Combined Discharge				
Rate - Maximum - Positive	4.040		1.0922	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.120			4249.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			4249.4
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	4.040		1.0922	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.120			4249.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			4249.4
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 5 :: 3YR-24HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	12.000	94.18		
Inflow				
Rate - Maximum - Positive	12.000		0.4158	
Rate - Maximum - Negative	24.320		0.0000	
Cumulative Volume - Maximum Positive	24.320			12988.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			12988.3
Infiltration				
Rate - Maximum - Positive	12.000		0.0140	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.347			861.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			861.1
Combined Discharge				
Rate - Maximum - Positive	12.000		0.4013	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.093			8369.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			8369.8
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	12.000		0.4013	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.093			8369.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			8369.8
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 6 :: 3YR-72HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	59.947	94.17		
Inflow				
Rate - Maximum - Positive	59.987		0.2464	
Rate - Maximum - Negative	72.320		0.0000	
Cumulative Volume - Maximum Positive	72.320			15109.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			15109.3
Infiltration				
Rate - Maximum - Positive	37.707		0.0355	
Rate - Maximum - Negative	64.080		-0.0005	
Cumulative Volume - Maximum Positive	72.347			2090.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			2090.3
Combined Discharge				
Rate - Maximum - Positive	59.987		0.2399	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.120			9254.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			9254.6
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	59.987		0.2399	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.120			9254.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			9254.6
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 7 :: 3YR-168HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	159.613	94.17		
Inflow				
Rate - Maximum - Positive	160.000		0.1834	
Rate - Maximum - Negative	168.320		0.0000	
Cumulative Volume - Maximum Positive	168.320			19381.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			19381.2
Infiltration				
Rate - Maximum - Positive	54.187		0.0217	
Rate - Maximum - Negative	160.093		-0.0073	
Cumulative Volume - Maximum Positive	168.347			3158.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			3158.8
Combined Discharge				
Rate - Maximum - Positive	160.000		0.1804	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.160			12455.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			12455.9
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	160.000		0.1804	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.160			12455.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			12455.9
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 8 :: 3YR-240HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	184.000	94.17		
Inflow				
Rate - Maximum - Positive	184.000		0.2453	
Rate - Maximum - Negative	240.320		0.0000	
Cumulative Volume - Maximum Positive	240.320			22602.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			22602.3
Infiltration				
Rate - Maximum - Positive	55.547		0.0228	
Rate - Maximum - Negative	184.107		-0.0103	
Cumulative Volume - Maximum Positive	240.347			3812.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			3812.0
Combined Discharge				
Rate - Maximum - Positive	184.000		0.2426	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.133			15023.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			15023.7
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	184.000		0.2426	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.133			15023.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			15023.7
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 9 :: 5YR-1HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.840	94.26		
Inflow				
Rate - Maximum - Positive	0.547		3.3244	
Rate - Maximum - Negative	1.320		0.0000	
Cumulative Volume - Maximum Positive	1.320			4750.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			4750.6
Infiltration				
Rate - Maximum - Positive	0.840		0.0146	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.347			43.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			43.4
Combined Discharge				
Rate - Maximum - Positive	0.840		1.1472	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.133			948.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			948.2
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.840		1.1472	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.133			948.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			948.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 10 :: 5YR-2HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	1.053	94.24		
Inflow				
Rate - Maximum - Positive	0.800		2.6866	
Rate - Maximum - Negative	2.320		0.0000	
Cumulative Volume - Maximum Positive	2.320			6241.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			6241.7
Infiltration				
Rate - Maximum - Positive	1.053		0.0145	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.347			89.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			89.5
Combined Discharge				
Rate - Maximum - Positive	1.053		0.9901	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.160			2391.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			2391.5
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	1.053		0.9901	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.160			2391.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			2391.5
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 11 :: 5YR-4HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	2.533	94.26		
Inflow				
Rate - Maximum - Positive	2.013		1.3402	
Rate - Maximum - Negative	4.320		0.0000	
Cumulative Volume - Maximum Positive	4.320			7767.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			7767.4
Infiltration				
Rate - Maximum - Positive	2.520		0.0146	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.347			144.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			144.0
Combined Discharge				
Rate - Maximum - Positive	2.533		1.1069	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.133			3864.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			3864.1
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	2.533		1.1069	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.133			3864.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			3864.1
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 12 :: 5YR-8HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	4.027	94.29		
Inflow				
Rate - Maximum - Positive	4.000		1.3985	
Rate - Maximum - Negative	8.320		0.0000	
Cumulative Volume - Maximum Positive	8.320			9836.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			9836.8
Infiltration				
Rate - Maximum - Positive	4.027		0.0149	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.347			281.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			281.5
Combined Discharge				
Rate - Maximum - Positive	4.027		1.3230	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.133			5796.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			5796.2
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	4.027		1.3230	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.133			5796.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			5796.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 13 :: 5YR-24HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	12.000	94.18		
Inflow				
Rate - Maximum - Positive	12.000		0.4552	
Rate - Maximum - Negative	24.320		0.0000	
Cumulative Volume - Maximum Positive	24.320			14312.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			14312.5
Infiltration				
Rate - Maximum - Positive	12.000		0.0140	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.347			878.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			878.5
Combined Discharge				
Rate - Maximum - Positive	12.000		0.4407	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			9676.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			9676.4
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	12.000		0.4407	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			9676.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			9676.4
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 14 :: 5YR-72HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	59.960	94.18		
Inflow				
Rate - Maximum - Positive	59.987		0.2924	
Rate - Maximum - Negative	72.320		0.0000	
Cumulative Volume - Maximum Positive	72.320			18310.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			18310.4
Infiltration				
Rate - Maximum - Positive	34.760		0.0609	
Rate - Maximum - Negative	64.080		-0.0017	
Cumulative Volume - Maximum Positive	72.347			2143.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			2143.8
Combined Discharge				
Rate - Maximum - Positive	59.987		0.2863	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.133			12401.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			12401.8
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	59.987		0.2863	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.133			12401.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			12401.8
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 15 :: 5YR-168HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	159.493	94.17		
Inflow				
Rate - Maximum - Positive	160.000		0.2082	
Rate - Maximum - Negative	168.320		0.0000	
Cumulative Volume - Maximum Positive	168.320			22333.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			22333.4
Infiltration				
Rate - Maximum - Positive	52.333		0.0244	
Rate - Maximum - Negative	160.093		-0.0086	
Cumulative Volume - Maximum Positive	168.347			3192.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			3192.9
Combined Discharge				
Rate - Maximum - Positive	160.000		0.2052	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.160			15373.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			15373.9
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	160.000		0.2052	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.160			15373.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			15373.9
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 16 :: 5YR-240HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	183.733	94.18		
Inflow				
Rate - Maximum - Positive	184.000		0.2902	
Rate - Maximum - Negative	240.320		0.0000	
Cumulative Volume - Maximum Positive	240.320			27181.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			27181.3
Infiltration				
Rate - Maximum - Positive	52.933		0.0235	
Rate - Maximum - Negative	184.107		-0.0123	
Cumulative Volume - Maximum Positive	240.347			3836.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			3836.0
Combined Discharge				
Rate - Maximum - Positive	184.000		0.2875	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.133			19578.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			19578.7
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	184.000		0.2875	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.133			19578.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			19578.7
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 17 :: 10YR-1HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.800	94.43		
Inflow				
Rate - Maximum - Positive	0.533		4.3186	
Rate - Maximum - Negative	1.320		0.0000	
Cumulative Volume - Maximum Positive	1.320			6241.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			6241.7
Infiltration				
Rate - Maximum - Positive	0.787		0.0159	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.347			47.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			47.2
Combined Discharge				
Rate - Maximum - Positive	0.800		1.9052	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.147			2435.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			2435.6
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.800		1.9052	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.147			2435.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			2435.6
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 18 :: 10YR-2HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.973	94.30		
Inflow				
Rate - Maximum - Positive	0.800		3.0846	
Rate - Maximum - Negative	2.320		0.0000	
Cumulative Volume - Maximum Positive	2.320			7255.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			7255.8
Infiltration				
Rate - Maximum - Positive	0.960		0.0149	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.347			92.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			92.3
Combined Discharge				
Rate - Maximum - Positive	0.973		1.3681	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.173			3402.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			3402.5
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.973		1.3681	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.173			3402.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			3402.5
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 19 :: 10YR-4HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	2.520	94.28		
Inflow				
Rate - Maximum - Positive	2.000		1.5062	
Rate - Maximum - Negative	4.320		0.0000	
Cumulative Volume - Maximum Positive	4.320			8798.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			8798.0
Infiltration				
Rate - Maximum - Positive	2.520		0.0148	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.347			148.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			148.3
Combined Discharge				
Rate - Maximum - Positive	2.520		1.2477	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.133			4890.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			4890.2
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	2.520		1.2477	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.133			4890.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			4890.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 20 :: 10YR-8HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	4.027	94.35		
Inflow				
Rate - Maximum - Positive	4.000		1.6633	
Rate - Maximum - Negative	8.320		0.0000	
Cumulative Volume - Maximum Positive	8.320			11933.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			11933.0
Infiltration				
Rate - Maximum - Positive	4.013		0.0153	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.347			291.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			291.5
Combined Discharge				
Rate - Maximum - Positive	4.027		1.5908	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.133			7882.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			7882.1
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	4.027		1.5908	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.133			7882.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			7882.1
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 21 :: 10YR-24HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	12.000	94.19		
Inflow				
Rate - Maximum - Positive	12.000		0.5102	
Rate - Maximum - Negative	24.320		0.0000	
Cumulative Volume - Maximum Positive	24.320			16174.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			16174.1
Infiltration				
Rate - Maximum - Positive	12.000		0.0140	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.347			900.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			900.5
Combined Discharge				
Rate - Maximum - Positive	12.000		0.4956	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			11515.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			11515.9
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	12.000		0.4956	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			11515.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			11515.9
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 22 :: 10YR-72HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	59.813	94.18		
Inflow				
Rate - Maximum - Positive	59.987		0.3419	
Rate - Maximum - Negative	72.320		0.0000	
Cumulative Volume - Maximum Positive	72.320			21796.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			21796.0
Infiltration				
Rate - Maximum - Positive	32.013		0.0337	
Rate - Maximum - Negative	64.093		-0.0030	
Cumulative Volume - Maximum Positive	72.347			2192.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			2192.1
Combined Discharge				
Rate - Maximum - Positive	59.987		0.3361	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.133			15838.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			15838.9
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	59.987		0.3361	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.133			15838.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			15838.9
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 23 :: 10YR-168HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	160.000	94.17		
Inflow				
Rate - Maximum - Positive	160.000		0.2464	
Rate - Maximum - Negative	168.320		0.0000	
Cumulative Volume - Maximum Positive	168.320			26911.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			26911.6
Infiltration				
Rate - Maximum - Positive	46.867		0.0240	
Rate - Maximum - Negative	160.093		-0.0103	
Cumulative Volume - Maximum Positive	168.347			3220.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			3220.7
Combined Discharge				
Rate - Maximum - Positive	160.000		0.2435	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.173			19924.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			19924.2
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	160.000		0.2435	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.173			19924.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			19924.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 24 :: 10YR-240HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	183.680	94.18		
Inflow				
Rate - Maximum - Positive	184.000		0.3349	
Rate - Maximum - Negative	240.320		0.0000	
Cumulative Volume - Maximum Positive	240.320			31772.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			31772.9
Infiltration				
Rate - Maximum - Positive	49.787		0.0259	
Rate - Maximum - Negative	184.107		-0.0141	
Cumulative Volume - Maximum Positive	240.347			3847.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			3847.3
Combined Discharge				
Rate - Maximum - Positive	184.000		0.3322	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.147			24158.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			24158.9
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	184.000		0.3322	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.147			24158.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			24158.9
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 25 :: 25YR-1HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.787	94.49		
Inflow				
Rate - Maximum - Positive	0.533		4.6529	
Rate - Maximum - Negative	1.320		0.0000	
Cumulative Volume - Maximum Positive	1.320			6747.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			6747.1
Infiltration				
Rate - Maximum - Positive	0.760		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.347			48.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			48.5
Combined Discharge				
Rate - Maximum - Positive	0.787		2.1204	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.173			2939.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			2939.1
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.787		2.1204	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.173			2939.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			2939.1
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 26 :: 25YR-2HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.907	94.44		
Inflow				
Rate - Maximum - Positive	0.800		3.6800	
Rate - Maximum - Negative	2.320		0.0000	
Cumulative Volume - Maximum Positive	2.320			8798.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			8798.0
Infiltration				
Rate - Maximum - Positive	0.907		0.0160	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.347			96.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			96.4
Combined Discharge				
Rate - Maximum - Positive	0.907		1.9680	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.173			4940.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			4940.3
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.907		1.9680	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.173			4940.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			4940.3
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 27 :: 25YR-4HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	2.520	94.34		
Inflow				
Rate - Maximum - Positive	2.000		1.8374	
Rate - Maximum - Negative	4.320		0.0000	
Cumulative Volume - Maximum Positive	4.320			10882.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			10882.2
Infiltration				
Rate - Maximum - Positive	2.507		0.0152	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.347			155.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			155.9
Combined Discharge				
Rate - Maximum - Positive	2.520		1.5260	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.147			6966.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			6966.5
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	2.520		1.5260	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.147			6966.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			6966.5
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 28 :: 25YR-8HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	4.027	94.41		
Inflow				
Rate - Maximum - Positive	4.000		1.9266	
Rate - Maximum - Negative	8.320		0.0000	
Cumulative Volume - Maximum Positive	8.320			14047.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			14047.2
Infiltration				
Rate - Maximum - Positive	4.013		0.0158	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.347			300.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			300.6
Combined Discharge				
Rate - Maximum - Positive	4.027		1.8464	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.147			9986.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			9986.9
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	4.027		1.8464	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.147			9986.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			9986.9
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 29 :: 25YR-24HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	12.000	94.19		
Inflow				
Rate - Maximum - Positive	12.000		0.6041	
Rate - Maximum - Negative	24.320		0.0000	
Cumulative Volume - Maximum Positive	24.320			19381.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			19381.2
Infiltration				
Rate - Maximum - Positive	24.160		0.0185	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.347			934.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			934.0
Combined Discharge				
Rate - Maximum - Positive	12.000		0.5893	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			14691.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			14691.3
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	12.000		0.5893	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			14691.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			14691.3
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 30 :: 25YR-72HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	59.867	94.18		
Inflow				
Rate - Maximum - Positive	59.987		0.4141	
Rate - Maximum - Negative	72.320		0.0000	
Cumulative Volume - Maximum Positive	72.320			26911.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			26911.6
Infiltration				
Rate - Maximum - Positive	32.067		0.0327	
Rate - Maximum - Negative	64.093		-0.0047	
Cumulative Volume - Maximum Positive	72.347			2237.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			2237.6
Combined Discharge				
Rate - Maximum - Positive	59.987		0.4085	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.147			20908.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			20908.7
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	59.987		0.4085	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.147			20908.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			20908.7
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 31 :: 25YR-168HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	159.373	94.18		
Inflow				
Rate - Maximum - Positive	160.000		0.2778	
Rate - Maximum - Negative	168.320		0.0000	
Cumulative Volume - Maximum Positive	168.320			30691.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			30691.7
Infiltration				
Rate - Maximum - Positive	47.107		0.0235	
Rate - Maximum - Negative	160.093		-0.0116	
Cumulative Volume - Maximum Positive	168.347			3237.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			3237.1
Combined Discharge				
Rate - Maximum - Positive	160.000		0.2748	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.173			23687.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			23687.8
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	160.000		0.2748	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.173			23687.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			23687.8
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 32 :: 25YR-240HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	183.720	94.18		
Inflow				
Rate - Maximum - Positive	184.000		0.4084	
Rate - Maximum - Negative	240.320		0.0000	
Cumulative Volume - Maximum Positive	240.320			39352.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			39352.7
Infiltration				
Rate - Maximum - Positive	47.947		0.0281	
Rate - Maximum - Negative	184.107		-0.0165	
Cumulative Volume - Maximum Positive	240.347			3862.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			3862.6
Combined Discharge				
Rate - Maximum - Positive	184.000		0.4057	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.147			31723.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			31723.3
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	184.000		0.4057	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.147			31723.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			31723.3
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 33 :: 50YR-1HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.787	94.58		
Inflow				
Rate - Maximum - Positive	0.533		5.1546	
Rate - Maximum - Negative	1.320		0.0000	
Cumulative Volume - Maximum Positive	1.320			7511.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			7511.2
Infiltration				
Rate - Maximum - Positive	0.667		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.347			49.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			49.9
Combined Discharge				
Rate - Maximum - Positive	0.787		2.4131	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.200			3701.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			3701.1
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.787		2.4131	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.200			3701.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			3701.1
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 34 :: 50YR-2HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.893	94.54		
Inflow				
Rate - Maximum - Positive	0.800		4.0756	
Rate - Maximum - Negative	2.320		0.0000	
Cumulative Volume - Maximum Positive	2.320			9836.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			9836.8
Infiltration				
Rate - Maximum - Positive	0.840		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.347			99.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			99.0
Combined Discharge				
Rate - Maximum - Positive	0.893		2.2872	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.187			5976.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			5976.4
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.893		2.2872	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.187			5976.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			5976.4
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 35 :: 50YR-4HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	2.093	94.42		
Inflow				
Rate - Maximum - Positive	2.000		2.1670	
Rate - Maximum - Negative	4.320		0.0000	
Cumulative Volume - Maximum Positive	4.320			12988.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			12988.3
Infiltration				
Rate - Maximum - Positive	2.093		0.0158	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.347			163.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			163.0
Combined Discharge				
Rate - Maximum - Positive	2.093		1.8621	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.147			9065.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			9065.2
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	2.093		1.8621	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.147			9065.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			9065.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 36 :: 50YR-8HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	4.027	94.48		
Inflow				
Rate - Maximum - Positive	4.000		2.1887	
Rate - Maximum - Negative	8.320		0.0000	
Cumulative Volume - Maximum Positive	8.320			16174.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			16174.1
Infiltration				
Rate - Maximum - Positive	4.013		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.347			309.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			309.3
Combined Discharge				
Rate - Maximum - Positive	4.027		2.0954	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.147			12104.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			12104.9
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	4.027		2.0954	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.147			12104.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			12104.9
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 37 :: 50YR-24R*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	12.000	94.20		
Inflow				
Rate - Maximum - Positive	12.000		0.6974	
Rate - Maximum - Negative	24.320		0.0000	
Cumulative Volume - Maximum Positive	24.320			22602.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			22602.3
Infiltration				
Rate - Maximum - Positive	23.640		0.0333	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.347			969.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			969.4
Combined Discharge				
Rate - Maximum - Positive	12.000		0.6825	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			17879.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			17879.6
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	12.000		0.6825	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			17879.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			17879.6
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 38 :: 50YR-72HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	59.987	94.19		
Inflow				
Rate - Maximum - Positive	59.987		0.4747	
Rate - Maximum - Negative	72.320		0.0000	
Cumulative Volume - Maximum Positive	72.320			31232.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			31232.2
Infiltration				
Rate - Maximum - Positive	28.560		0.0346	
Rate - Maximum - Negative	64.093		-0.0059	
Cumulative Volume - Maximum Positive	72.347			2250.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			2250.7
Combined Discharge				
Rate - Maximum - Positive	59.987		0.4691	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.147			25216.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			25216.1
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	59.987		0.4691	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.147			25216.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			25216.1
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 39 :: 50YR-168HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	158.813	94.18		
Inflow				
Rate - Maximum - Positive	160.000		0.3203	
Rate - Maximum - Negative	168.320		0.0000	
Cumulative Volume - Maximum Positive	168.320			35831.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			35831.4
Infiltration				
Rate - Maximum - Positive	43.267		0.0238	
Rate - Maximum - Negative	160.107		-0.0133	
Cumulative Volume - Maximum Positive	168.347			3257.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			3257.3
Combined Discharge				
Rate - Maximum - Positive	160.000		0.3174	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.187			28807.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			28807.3
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	160.000		0.3174	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.187			28807.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			28807.3
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 40 :: 50YR-240HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	183.920	94.18		
Inflow				
Rate - Maximum - Positive	184.000		0.4216	
Rate - Maximum - Negative	240.320		0.0000	
Cumulative Volume - Maximum Positive	240.320			40707.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			40707.8
Infiltration				
Rate - Maximum - Positive	47.653		0.0283	
Rate - Maximum - Negative	184.120		-0.0169	
Cumulative Volume - Maximum Positive	240.347			3865.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			3865.0
Combined Discharge				
Rate - Maximum - Positive	184.000		0.4188	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.147			33076.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			33076.0
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	184.000		0.4188	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.147			33076.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			33076.0
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 41 :: 100YR-1HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.773	94.74		
Inflow				
Rate - Maximum - Positive	0.533		5.9907	
Rate - Maximum - Negative	1.320		0.0000	
Cumulative Volume - Maximum Positive	1.320			8798.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			8798.0
Infiltration				
Rate - Maximum - Positive	0.613		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.347			51.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			51.8
Combined Discharge				
Rate - Maximum - Positive	0.773		2.8438	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.253			4983.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			4983.2
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.773		2.8438	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.253			4983.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			4983.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 42 :: 100YR-2HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	0.893	94.69		
Inflow				
Rate - Maximum - Positive	0.800		4.6669	
Rate - Maximum - Negative	2.320		0.0000	
Cumulative Volume - Maximum Positive	2.320			11407.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			11407.0
Infiltration				
Rate - Maximum - Positive	0.773		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.347			102.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			102.1
Combined Discharge				
Rate - Maximum - Positive	0.893		2.6944	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.187			7543.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			7543.3
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	0.893		2.6944	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.187			7543.3
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			7543.3
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 43 :: 100YR-4HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	2.093	94.49		
Inflow				
Rate - Maximum - Positive	2.000		2.4540	
Rate - Maximum - Negative	4.320		0.0000	
Cumulative Volume - Maximum Positive	4.320			14843.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			14843.6
Infiltration				
Rate - Maximum - Positive	2.040		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.347			168.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			168.8
Combined Discharge				
Rate - Maximum - Positive	2.093		2.1299	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.160			10914.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			10914.4
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	2.093		2.1299	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.160			10914.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			10914.4
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 44 :: 100YR-8HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	4.027	94.56		
Inflow				
Rate - Maximum - Positive	4.000		2.4498	
Rate - Maximum - Negative	8.320		0.0000	
Cumulative Volume - Maximum Positive	8.320			18310.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			18310.4
Infiltration				
Rate - Maximum - Positive	3.573		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.347			317.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			317.1
Combined Discharge				
Rate - Maximum - Positive	4.027		2.3393	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.160			14233.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			14233.1
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	4.027		2.3393	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.160			14233.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			14233.1
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 45 :: 100YR-24HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	12.000	94.21		
Inflow				
Rate - Maximum - Positive	12.000		0.8059	
Rate - Maximum - Negative	24.320		0.0000	
Cumulative Volume - Maximum Positive	24.320			26372.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			26372.2
Infiltration				
Rate - Maximum - Positive	23.133		0.0350	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.347			1008.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			1008.9
Combined Discharge				
Rate - Maximum - Positive	12.000		0.7908	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			21611.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			21611.8
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	12.000		0.7908	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			21611.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			21611.8
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 46 :: 100YR-72HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	59.880	94.19		
Inflow				
Rate - Maximum - Positive	59.987		0.5125	
Rate - Maximum - Negative	72.320		0.0000	
Cumulative Volume - Maximum Positive	72.320			33936.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			33936.7
Infiltration				
Rate - Maximum - Positive	28.200		0.0359	
Rate - Maximum - Negative	64.093		-0.0065	
Cumulative Volume - Maximum Positive	72.347			2256.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			2256.9
Combined Discharge				
Rate - Maximum - Positive	59.987		0.5070	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.147			27914.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			27914.4
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	59.987		0.5070	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.147			27914.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			27914.4
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 47 :: 100YR-168HR*

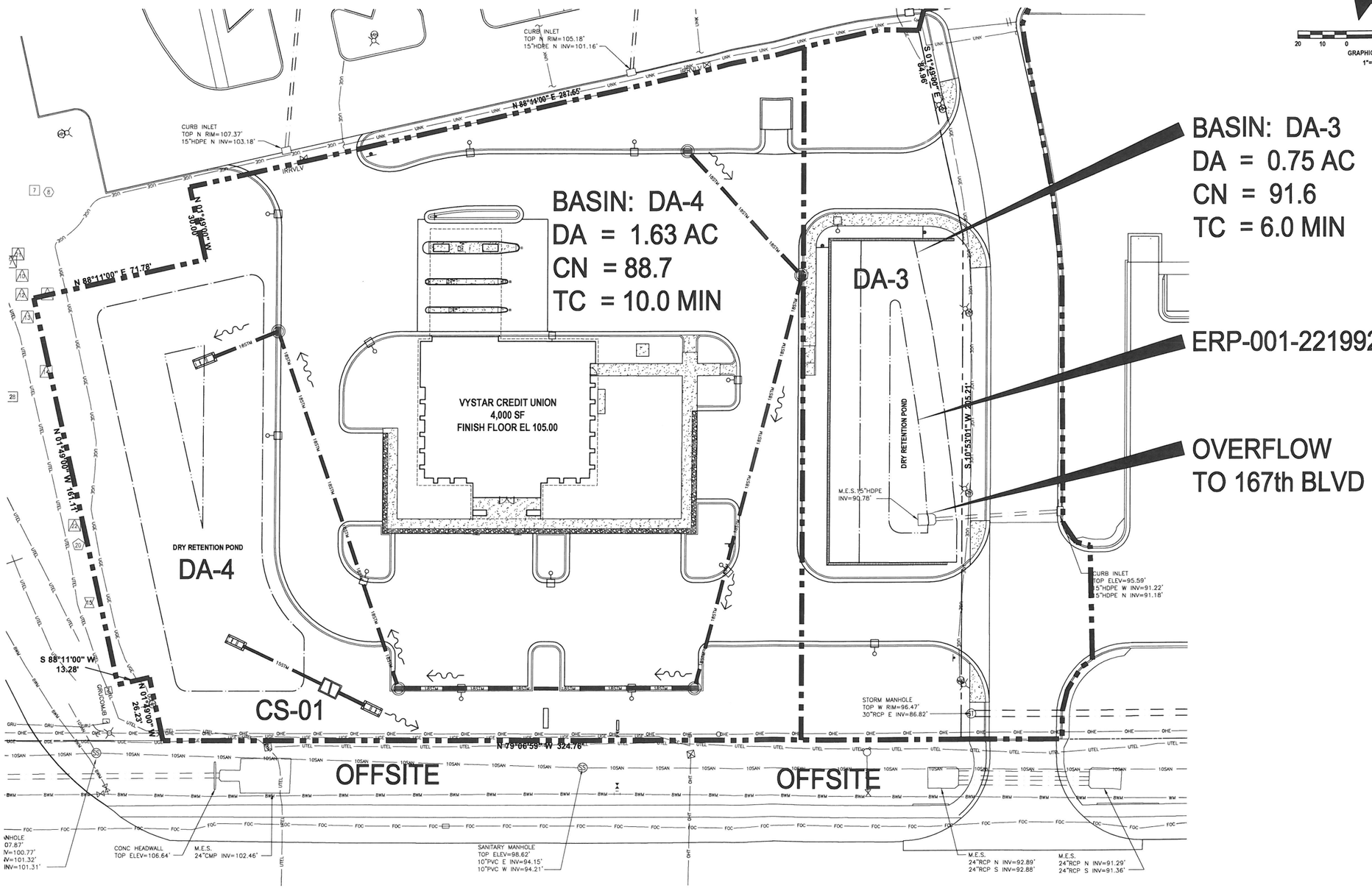
	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	159.267	94.18		
Inflow				
Rate - Maximum - Positive	160.000		0.3538	
Rate - Maximum - Negative	168.320		0.0000	
Cumulative Volume - Maximum Positive	168.320			39894.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			39894.7
Infiltration				
Rate - Maximum - Positive	43.653		0.0235	
Rate - Maximum - Negative	160.107		-0.0147	
Cumulative Volume - Maximum Positive	168.347			3271.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			3271.7
Combined Discharge				
Rate - Maximum - Positive	160.000		0.3509	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.187			32856.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			32856.2
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	160.000		0.3509	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.187			32856.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			32856.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 48 :: 100YR-240HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	183.587	94.19		
Inflow				
Rate - Maximum - Positive	184.000		0.4661	
Rate - Maximum - Negative	240.320		0.0000	
Cumulative Volume - Maximum Positive	240.320			45317.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			45317.9
Infiltration				
Rate - Maximum - Positive	46.693		0.0306	
Rate - Maximum - Negative	184.120		-0.0184	
Cumulative Volume - Maximum Positive	240.347			3873.1
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			3873.1
Combined Discharge				
Rate - Maximum - Positive	184.000		0.4634	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.160			37678.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			37678.0
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	184.000		0.4634	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	240.160			37678.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	240.347			37678.0
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

APPENDIX C

“POST-DEVELOPMENT ANALYSIS – BASIN: DA-3”



REVISIONS	
DATE	DESCRIPTION
4-18-17	CITY COMMENTS

NEWKIRK ENGINEERING
1370 North US1, Suite 204
Ormond Beach, Florida 32174
Phone (386) 290-7599
Harry@Newkirk-Engineering.com
Certificate of Authorization
No. 30209

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Civil Engineering
Land Development
Construction Engineering & Inspection

VyStar Credit Union

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POST DEVELOPMENT DRAINAGE BASIN MAP

VYSTAR CREDIT UNION
16181 NW US HIGHWAY 441
ALACHUA, FLORIDA 32615

HARRY NEWKIRK LICENSE NO. 62971 STATE OF FLORIDA PROFESSIONAL ENGINEER

HARRY H. NEWKIRK, P.E., # 62971

PROJECT No:	2016-22
DATE:	JUNE 2016
DESIGN BY:	HHN
DRAWN BY:	DAB
CHECKED BY:	HHN
SCALE:	1" = 20'

DRAWING NUMBER

POST

POST-DEVELOPMENT HYDROGRAPH WORKSHEET

Basin ID	DA (Acres)	Pervious (Acres)	Impervious (Acres) *	Wetland (Acres)	Pond Wet (Acres)	Pervious CN	Impervious CN	Wetland CN	Pond Wet CN	Composite CN
DA-3	0.750	0.200	0.550	0.000	0.000	74.0	98.0	85.0	100.0	91.6
TOTAL	0.750	0.200	0.550	0.000	0.000	74.0	98.0	85.0	100.0	91.6

Basin	Soil Type	Hydrologic Group	Area (Acres)	* CN
DA-3	Fort Meade & Kendrick	C*	0.200	74
Pervious Curve Number				74.0

Open Space Good Condition (>75% grass cover), hydraulic group C runoff values used in model to match pre-existing conditions and account for shallow clay confining layer.

WATER QUALITY REQUIREMENTS FOR ONLINE RETENTION

Basin No.	Area (Ac)	Imp. Area (Ac)
DA-3	0.750	0.550

Treatment Volume Required

A. 1.0 inches of runoff over the drainage basin

0.063	Ac-Ft

B. 1.25 inches times impervious area + 0.5 inch of runoff over the entire site

0.089	Ac-Ft

Minimum Required Water Quality =	0.089	Ac-Ft	=	3,857 CF
Provided Water Quality =	0.149	Ac-Ft	=	6,490 CF

STAGE VERSUS STORAGE

Stage (Ft)	Area (sf)	Area (acres)	Volume (cf)	Volume (Ac-Ft)	Remarks
91.00	192	0.004	-	0.000	Pond Bottom
92.00	1425	0.033	809	0.019	
93.00	2405	0.055	2,724	0.063	
94.00	3609	0.083	5,731	0.132	
94.17	3833	0.088	6,490	0.149	Treatment Volume, Weir
95.00	4941	0.113	10,006	0.230	Top of Bank

EFFECTIVE LENGTH AND WIDTH OF A POND

Perimeter (P)	398	FT
Volume (V)	10006	CF
Depth (h)	4.00	FT

L = [(P/2) + SQRT ((P^2/4) - (4*v)/h))]/2

W = [(P/2) - SQRT ((P^2/4) - (4*v)/h))]/2

L =	186	FT
W =	13	FT

PONDS Version 3.3.0276
Retention Pond Recovery - Refined Method
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Devo Seereeram, Ph.D., P.E.

Project Data

Project Name:	VyStar Credit Union
Simulation Description:	Post-Development DA-3
Project Number:	2016-22
Engineer :	Harry Newkirk, PE
Supervising Engineer:	
Date:	04-13-2017

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	88.50
Water Table Elevation, [WT] (ft datum):	90.50
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	0.80
Fillable Porosity, [n] (%):	10.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day):	0.4
Maximum Area For Unsaturated Infiltration, [Av] (ft^2):	3515.0

Geometry Data

Equivalent Pond Length, [L] (ft):	186.0
Equivalent Pond Width, [W] (ft):	13.0

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft^2)
91.00	192.0
92.00	1452.0
93.00	2405.0
94.00	3609.0
95.00	4941.0

Discharge Structures

Discharge Structure #1 is active as orifice

Structure Parameters

Description: Overflow

Orifice elevation, (ft datum):	94.17
Orifice coefficient:	4.9
Orifice area, (ft²):	.766
Orifice exponent:	.5

Tailwater - disabled, free discharge

Discharge Structure #2 is inactive

Discharge Structure #3 is inactive

Scenario Input Data

Scenario 1 :: 3YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	2.6
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 2 :: 3YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	3.0
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 3 :: 3YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	3.6
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 4 :: 3YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	4.2
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 5 :: 3YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	6.0
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 6 :: 3YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	6.8
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 7 :: 3YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	8.4
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 8 :: 3YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	9.6
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 9 :: 5YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	2.8
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 10 :: 5YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	3.4
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 11 :: 5YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	4.0
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 12 :: 5YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	4.8
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 13 :: 5YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	6.5
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 14 :: 5YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	8.0
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 15 :: 5YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	9.5
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 16 :: 5YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	11.3
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 17 :: 10YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	3.4
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 18 :: 10YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	3.8
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 19 :: 10YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	4.4
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 20 :: 10YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	5.6
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 21 :: 10YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	7.2
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 22 :: 10YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	9.3
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 23 :: 10YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	11.2
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 24 :: 10YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	13.0
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 25 :: 25YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	3.6
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 26 :: 25YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	4.4
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 27 :: 25YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	5.2
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 28 :: 25YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	6.4
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 29 :: 25YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	8.4
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 30 :: 25YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	11.2
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 31 :: 25YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	12.6
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 32 :: 25YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	15.8
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 33 :: 50YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	3.9
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 34 :: 50YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	4.8
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 35 :: 50YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	6.0
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 36 :: 50YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	7.2
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 37 :: 50YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	9.6
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 38 :: 50YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	12.8
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 39 :: 50YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	14.5
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 40 :: 50YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	16.3
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 41 :: 100YR-1HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	4.4
Design Rainfall Duration (hours)	1.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 1 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 42 :: 100YR-2HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	5.4
Design Rainfall Duration (hours)	2.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 2 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 43 :: 100YR-4HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	6.7
Design Rainfall Duration (hours)	4.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 4 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 44 :: 100YR-8HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	8.0
Design Rainfall Duration (hours)	8.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 8 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 45 :: 100YR-24HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	11.0
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 24 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario Input Data (cont'd.)

Scenario 46 :: 100YR-72HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	13.8
Design Rainfall Duration (hours)	72.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 72 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 47 :: 100YR-168HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	16.0
Design Rainfall Duration (hours)	168.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 168 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Scenario 48 :: 100YR-240HR

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1

Basin Area (acres)	0.750
Time Of Concentration (minutes)	6.0
DCIA (%)	0.0
Curve Number	91.6
Design Rainfall Depth (inches)	18.0
Design Rainfall Duration (hours)	240.0
Shape Factor	UHG 484
Rainfall Distribution	FDOT 240 Hour

Initial ground water level (ft datum) 90.50 (default)

No times after storm specified.

Modflow Log

```
MODFLOW CONTROL PARAMETERS
  Perimeter boundary condition:  constant head
  Maximum iterations of outer loop:  150
  Maximum iterations of inner loop:  60
  Horizontal conductivity within pond:  1000000 (if ground water mound is expected to intersect pond bottom)
  Instantanerous storage coefficient:  Volumetric balance
  Default head closure tolerance:  .01
  Default residual closure tolerance:  .5
  Target water budget error:  1
  On failure to converge:  Rerun limiting inner loop to one iteration
     > Maximum number of iterations of outer loop:  500
  Running Average Porosity is active
     > Starting on pass: 2
     > When outer iteration reaches:  50
     > Number of data points:  4
  Running Average Pond Stage (for discharge structures with tailwater) is active
     > Starting on pass: 2
     > When outer iteration reaches:  50
     > Number of data points:  4
  Grid size:  1000 ft (from pond centerline)
  Mound Output:  none

Begin Scenario 1  4/13/2017  17:45:42
End Scenario   1  4/13/2017  17:45:42

Begin Scenario 2  4/13/2017  17:45:43
End Scenario   2  4/13/2017  17:45:43

Begin Scenario 3  4/13/2017  17:45:43
End Scenario   3  4/13/2017  17:45:43

Begin Scenario 4  4/13/2017  17:45:44
End Scenario   4  4/13/2017  17:45:44

Begin Scenario 5  4/13/2017  17:45:44
End Scenario   5  4/13/2017  17:45:45

Begin Scenario 6  4/13/2017  17:45:45
End Scenario   6  4/13/2017  17:45:48

Begin Scenario 7  4/13/2017  17:45:48
End Scenario   7  4/13/2017  17:45:55

Begin Scenario 8  4/13/2017  17:45:55
End Scenario   8  4/13/2017  17:46:6

Begin Scenario 9  4/13/2017  17:46:6
End Scenario   9  4/13/2017  17:46:6

Begin Scenario 10  4/13/2017  17:46:6
End Scenario  10  4/13/2017  17:46:6

Begin Scenario 11  4/13/2017  17:46:7
End Scenario  11  4/13/2017  17:46:7

Begin Scenario 12  4/13/2017  17:46:7
End Scenario  12  4/13/2017  17:46:8

Begin Scenario 13  4/13/2017  17:46:8
End Scenario  13  4/13/2017  17:46:9

Begin Scenario 14  4/13/2017  17:46:9
```

Modflow Log (cont'd.)

```
End Scenario  14  4/13/2017  17:46:12

Begin Scenario 15  4/13/2017  17:46:12
End Scenario  15  4/13/2017  17:46:19

Begin Scenario 16  4/13/2017  17:46:19
End Scenario  16  4/13/2017  17:46:30

Begin Scenario 17  4/13/2017  17:46:30
End Scenario  17  4/13/2017  17:46:30

Begin Scenario 18  4/13/2017  17:46:30
End Scenario  18  4/13/2017  17:46:30

Begin Scenario 19  4/13/2017  17:46:31
End Scenario  19  4/13/2017  17:46:31

Begin Scenario 20  4/13/2017  17:46:31
End Scenario  20  4/13/2017  17:46:32

Begin Scenario 21  4/13/2017  17:46:32
End Scenario  21  4/13/2017  17:46:33

Begin Scenario 22  4/13/2017  17:46:33
End Scenario  22  4/13/2017  17:46:36

Begin Scenario 23  4/13/2017  17:46:36
End Scenario  23  4/13/2017  17:46:44

Begin Scenario 24  4/13/2017  17:46:44
End Scenario  24  4/13/2017  17:46:55

Begin Scenario 25  4/13/2017  17:46:55
End Scenario  25  4/13/2017  17:46:55

Begin Scenario 26  4/13/2017  17:46:55
End Scenario  26  4/13/2017  17:46:56

Begin Scenario 27  4/13/2017  17:46:56
End Scenario  27  4/13/2017  17:46:56

Begin Scenario 28  4/13/2017  17:46:57
End Scenario  28  4/13/2017  17:46:57

Begin Scenario 29  4/13/2017  17:46:57
End Scenario  29  4/13/2017  17:46:58

Begin Scenario 30  4/13/2017  17:46:59
End Scenario  30  4/13/2017  17:47:2

Begin Scenario 31  4/13/2017  17:47:2
End Scenario  31  4/13/2017  17:47:9

Begin Scenario 32  4/13/2017  17:47:10
End Scenario  32  4/13/2017  17:47:20

Begin Scenario 33  4/13/2017  17:47:21
End Scenario  33  4/13/2017  17:47:21

Begin Scenario 34  4/13/2017  17:47:21
End Scenario  34  4/13/2017  17:47:21
```

Modflow Log (cont'd.)

```
Begin Scenario 35  4/13/2017  17:47:22
End Scenario  35  4/13/2017  17:47:22

Begin Scenario 36  4/13/2017  17:47:22
End Scenario  36  4/13/2017  17:47:22

Begin Scenario 37  4/13/2017  17:47:23
End Scenario  37  4/13/2017  17:47:24

Begin Scenario 38  4/13/2017  17:47:24
End Scenario  38  4/13/2017  17:47:28

Begin Scenario 39  4/13/2017  17:47:28
End Scenario  39  4/13/2017  17:47:36

Begin Scenario 40  4/13/2017  17:47:36
End Scenario  40  4/13/2017  17:47:47

Begin Scenario 41  4/13/2017  17:47:47
End Scenario  41  4/13/2017  17:47:47

Begin Scenario 42  4/13/2017  17:47:48
End Scenario  42  4/13/2017  17:47:48

Begin Scenario 43  4/13/2017  17:47:48
End Scenario  43  4/13/2017  17:47:48

Begin Scenario 44  4/13/2017  17:47:49
End Scenario  44  4/13/2017  17:47:49

Begin Scenario 45  4/13/2017  17:47:49
End Scenario  45  4/13/2017  17:47:50

Begin Scenario 46  4/13/2017  17:47:51
End Scenario  46  4/13/2017  17:47:54

Begin Scenario 47  4/13/2017  17:47:55
End Scenario  47  4/13/2017  17:48:2

Begin Scenario 48  4/13/2017  17:48:3
End Scenario  48  4/13/2017  17:48:13
```

Summary of Results *:: Scenario 1 :: 3YR-1HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	1.120	93.70		
Inflow				
Rate - Maximum - Positive	0.533		3.3016	
Rate - Maximum - Negative	1.320		0.0000	
Cumulative Volume - Maximum Positive	1.320			4771.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			4771.6
Infiltration				
Rate - Maximum - Positive	1.120		0.0150	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	1.347			46.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			46.6
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			0.0
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	1.347			0.0
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 2 :: 3YR-2HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	2.147	93.98		
Inflow				
Rate - Maximum - Positive	0.800		2.4519	
Rate - Maximum - Negative	2.320		0.0000	
Cumulative Volume - Maximum Positive	2.320			5787.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			5787.5
Infiltration				
Rate - Maximum - Positive	1.813		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	2.347			98.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			98.7
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			0.0
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	2.347			0.0
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 3 :: 3YR-4HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	3.067	94.19		
Inflow				
Rate - Maximum - Positive	2.000		1.2491	
Rate - Maximum - Negative	4.320		0.0000	
Cumulative Volume - Maximum Positive	4.320			7336.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			7336.8
Infiltration				
Rate - Maximum - Positive	2.653		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.347			163.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			163.2
Combined Discharge				
Rate - Maximum - Positive	3.067		0.4808	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.120			794.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			794.4
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	3.067		0.4808	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	4.120			794.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	4.347			794.4
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 4 :: 3YR-8HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	5.000	94.19		
Inflow				
Rate - Maximum - Positive	4.000		1.2446	
Rate - Maximum - Negative	8.320		0.0000	
Cumulative Volume - Maximum Positive	8.320			8906.8
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			8906.8
Infiltration				
Rate - Maximum - Positive	4.080		0.0163	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.347			324.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			324.6
Combined Discharge				
Rate - Maximum - Positive	5.000		0.4680	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.120			2203.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			2203.2
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	5.000		0.4680	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	8.120			2203.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	8.347			2203.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 5 :: 3YR-24HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	12.973	94.18		
Inflow				
Rate - Maximum - Positive	12.000		0.4288	
Rate - Maximum - Negative	24.320		0.0000	
Cumulative Volume - Maximum Positive	24.320			13685.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			13685.5
Infiltration				
Rate - Maximum - Positive	18.133		0.0708	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.347			1102.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			1102.9
Combined Discharge				
Rate - Maximum - Positive	13.000		0.2871	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			6201.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			6201.6
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	13.000		0.2871	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.107			6201.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.347			6201.6
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 6 :: 3YR-72HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	59.787	94.17		
Inflow				
Rate - Maximum - Positive	59.987		0.2496	
Rate - Maximum - Negative	72.320		0.0000	
Cumulative Volume - Maximum Positive	72.320			15828.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			15828.4
Infiltration				
Rate - Maximum - Positive	28.933		0.0524	
Rate - Maximum - Negative	64.093		-0.0009	
Cumulative Volume - Maximum Positive	72.347			1927.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			1927.6
Combined Discharge				
Rate - Maximum - Positive	59.987		0.2439	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.120			7513.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			7513.9
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	59.987		0.2439	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	72.120			7513.9
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	72.347			7513.9
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Summary of Results *:: Scenario 7 :: 3YR-168HR*

	Time (hours)	Stage (ft datum)	Rate (ft^3/s)	Volume (ft^3)
Stage				
Minimum	0.000	90.50		
Maximum	157.960	94.17		
Inflow				
Rate - Maximum - Positive	160.000		0.1847	
Rate - Maximum - Negative	168.320		0.0000	
Cumulative Volume - Maximum Positive	168.320			20133.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			20133.2
Infiltration				
Rate - Maximum - Positive	42.507		0.0198	
Rate - Maximum - Negative	160.093		-0.0070	
Cumulative Volume - Maximum Positive	168.347			2877.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			2877.0
Combined Discharge				
Rate - Maximum - Positive	160.000		0.1817	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.160			10867.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			10867.7
Discharge Structure 1 - simple orifice				
Rate - Maximum - Positive	160.000		0.1817	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	168.160			10867.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	168.347			10867.7
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.