

Stormwater Management System Report

The Golf Plaza



Prepared For: Nature Valley Harvest, LTD

Submitted To: City of Alachua and Suwannee River Water Management District

Date: 06/27/2019
PN# 18-0431
PM: Daniel Young

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Alachua, FL 32615

www.chw-inc.com

CHW
Professional Consultants

Engineer's Certification Statement

I hereby certify that the design of the stormwater management systems for the project known as The Golf Plaza has been designed substantially in accordance with the City of Alachua and Suwannee River Water Management District applicable rules and criteria.

Daniel H. Young, FL PE No. 70780

Date

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Introduction

The Golf Plaza project proposes the construction of three commercial buildings with associated parking, sidewalk, drive aisles, utility infrastructure and two stormwater management facilities. The proposed development encompasses ±8.25 acres located at 11905 Turkey Creek Boulevard, Alachua, Florida.

According to the Alachua County Property Appraiser's website, the project is in Section 28, Township 8 South, Range 19 East on tax parcel numbers 05900-004-001 through 05900-004-010. Figure 1 provides a Location Map, Figure 2 depicts the site on a portion of the Alachua USGS quadrangle map, and Figure 3 shows an aerial map.

Refer to the accompanying engineering plans for details about the proposed construction.

Design Criteria

The design criteria for the proposed Stormwater Management Facilities are based upon the criteria set forth by the City of Alachua (CoA) and Suwannee River Water Management District (SRWMD) for dry retention system design in a "stream-to-sink" basin. The criteria met by this report are:

1. Provide Water Quality Treatment Volume (WQTV) – The minimum stormwater treatment volume shall be the runoff from the first 2.0 inches of rainfall from the design storm (SRWMD) or 0.5 inch of runoff from the drainage area (CoA), whichever is greater. WQTV must be recovered within 72 hours (SRWMD, CoA).
2. Provide Discharge Rate and Volume Attenuation – Attenuate the post-development peak discharge rates and volumes to be less than the pre-development peak discharge rates and volumes for the 100 year - 1 hour, 100 year - 2 hour, 100 year - 4 hour, 100 year - 8 hour, 100 year - 24 hour, 100 year - 72 hour, 100 year - 168 hour, and 100 year - 240 hour storm events (SRWMD, CoA).
3. Provide Volume Recovery – Retention systems must have one-half of the total volume available within 7 days following the end of the design storm event, and the total volume must be recovered within 30 days following the end of the storm event. Alternatively, if recovery requirements cannot be met, back-to-back storms can be routed through the system (SRWMD).
4. Freeboard - Retention ponds shall have a freeboard of 1 foot above the maximum stage in order to function properly during storms greater than the design storm (SRWMD).
- 5.

The CoA and the SRWMD require that best management practices (BMPs) be employed to control erosion and sedimentation and an operation and maintenance entity be established.

Site Characteristics

Physical characteristics of the site are described in the following sections. Additional details are provided in the accompanying Engineering plans.

Topography and Drainage

Pre-Development

In pre-development, the Golf Plaza site is delineated into two pre-development watersheds: Pre DA-1 and Pre DA-2.

Pre DA-1 consists of ± 2.37 acres of undeveloped land and is mostly wooded with moderate underbrush on the western portion of the site (west of the FDOT drainage ditch running north/south through the middle of the site). The drainage area slopes from the north to the south and west to east with stormwater runoff being directed to an existing creek on site, a tributary of Turkey Creek.

Pre DA-2 consists of ± 1.07 acres of undeveloped land on the eastern portion of the site (east of FDOT drainage ditch). Runoff from this drainage area slopes from north to south and east to west and runoff flows to the Turkey Creek tributary.

Runoff from the entire pre-development site is ultimately conveyed to Sanchez Prairie via Turkey Creek. Refer to Figure 6 for the pre-development drainage areas associated with this basin.

Post-Development

In post-development, the Golf Plaza site is delineated into two watersheds: Post DA-1 and Post DA-2.

Post DA-1 consists of ± 2.37 acres including the entire western portion of the site, corresponding with Pre DA-1. Runoff from this watershed flows via sheet flow and shallow concentrated flow into the proposed stormwater conveyance system and into SMF-1, a dry retention pond. This facility will have a discharge structure with a 6" orifice at EL. 160.10' and an emergency overflow weir at the top of the structure (EL. 161.00'). SMF-1 will ultimately discharge stormwater to the Turkey Creek tributary south of the project site.

Post DA-2 consists of ± 1.07 acres including the entire eastern portion of the site, corresponding to Pre DA-2. Runoff from this watershed flows via sheet flow and shallow concentrated flow into the proposed stormwater conveyance system and ultimately into SMF-2, a dry retention pond. This facility will have a discharge structure with a 3" orifice at EL. 163.80' and an emergency overflow weir at the top of the structure (EL. 164.00'). SMF-2 will ultimately discharge stormwater to the Turkey Creek tributary south of the project site.

Refer to Figure 7 for information on the post-development drainage patterns. Refer to Appendix A and the accompanying engineering plans for additional details about the proposed stormwater management system.

Soils Information

The Natural Resources Conservation Service (NRCS) Soil Survey for Alachua County describes the near surface soil profile as *Millhopper sand (0 to 5 percent slopes)* with a hydrologic soil group rating of 'A', and *Pelham Sand* with a hydrologic soil group rating of 'D'. Refer to Figure 4 for the NRCS Soils Map.

A site-specific soils investigation was conducted by GSE Engineering & Consulting, Inc. in December 2018. Based on the Summary Report of Geotechnical Site Exploration, the following design parameters were determined and applied for the stormwater management facility calculations. Refer to Appendix C for further details.

West Basin (SMF-1) Parameters

- Average elevation of ground at pond borings: 155'
- Base of mobilized aquifer: 7 ft bls ($155' - 7' = 148'$)
- Unsaturated vertical infiltration rate: 15 ft/day (7.5 ft/day used in calculations)
- Horizontal hydraulic conductivity: 20 ft/day (10 ft/day used in calculations)
- Fillable porosity: 20%
- Average seasonal high groundwater table: 3 ft bls ($155' - 3' = 152'$)

East Basin (SMF-2) Parameters

- Average elevation of ground at pond borings: 161'
- Base of mobilized aquifer: 2 ft bls ($161' - 2' = 159'$)
- Unsaturated vertical infiltration rate: 6 ft/day (3 ft/day used in calculations)
- Horizontal hydraulic conductivity: 8 ft/day (4 ft/day used in calculations)
- Fillable porosity: 20%
- Average seasonal high groundwater table: 1.5 ft bls ($161' - 1.5' = 159.5'$)

A safety factor of 2 was applied to the infiltration rate and hydraulic conductivity values for use in the analysis.

Drainage Analysis

The proposed systems, SMF-1 and SMF-2, were designed to provide retention of the required WQTV, and attenuate the pre-development volumes and discharge rates for the 100 year - 1 hour, 100 year - 2 hour, 100 year - 4 hour, 100 year - 8 hour, 100 year - 24 hour, 100 year - 72 hour, 100 year - 168 hour, and 100 year - 240 hour storm events. The proposed SMFs were designed to have one-half of the total volume available 7 days following the

end of the design storm events as well as the total volume available within 30 days of the design storm events. Due to SMF-2 not fully recovering within 30 days for the larger storm events, back-to-back storms were routed through the system to ensure the system had adequate storage.

Appendix A contains details and calculations as well as a section for routing results, recovery analysis, hydraulic calculations, and general drainage calculations.

Analysis Methodology

The drainage analysis was conducted using the computer program POND5 (v3.3) to generate runoff hydrographs and route the runoff hydrographs through the proposed stormwater systems with a groundwater mounding analysis. The required storm events were analyzed using SRWMD rainfall amounts for Alachua County and FDOT distributions for the post-development watershed.

Unit Hydrograph Parameters

Unit hydrograph parameters required for the drainage analysis include run-off curve number (CN), time of concentration (Tc), and drainage area. Values used in the analysis are summarized as follows:

Table 1: Pre-Development Curve Number

Pre-Development Watershed #1 (Pre DA-1)	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	103,431	2.37	100%		
Impervious	0	0.00	0.0%	98	0.0
Open space, type 'A' soil	46,095	1.06	44.6%	39	41.3
Open space, type 'D' soil	57,336	1.32	55.4%	80	105.3

CN = 62 **Tc = 15 min**

Pre-Development Watershed #2 (Pre DA-2)	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	46,393	1.07	100%		
Impervious	0	0.00	0.0%	98	0.0
Open space, type 'A' soil	0	0.00	0.0%	39	0.0
Open space, type 'D' soil	46,393	1.07	100.0%	80	85.2

CN = 80 **Tc = 18 min**

Table 2: Post-Development Curve Number

Post-Development Watershed #1 (Post DA-1)	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	103,431	2.37	100%		
Impervious	75,622	1.74	73.1%	98	170.1
Open space, type 'A' soil	2,584	0.06	2.5%	39	2.3
Open space, type 'D' soil	2,918	0.07	2.8%	80	5.4
Stormwater Management Facility	22,307	0.51	21.6%	100	51.2

CN = 94**Tc = 10 min***

Post-Development Watershed #2 (Post DA-2)	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	46,393	1.07	100%		
Impervious	28,838	0.66	62.2%	98	64.9
Open space, type 'A' soil	0	0.00	0.0%	39	0.0
Open space, type 'D' soil	2,563	0.06	5.5%	80	4.7
Stormwater Management Facility	14,992	0.34	32.3%	100	34.4

CN = 93**Tc = 10 min***

*To be conservative, time of concentration is assumed to be 10 minutes.

Pond Storage

Stage-storage values for the proposed SMFs are provided in Appendix A.

Water Quality Treatment Volume

Per SRWMD, the required WQTV for a dry retention system is the runoff from 2.0 inches of rainfall from the design storm calculated using the rational method. Per the CoA, the minimum required WQTV shall be the first 0.5 inches of runoff over the drainage area. For both SMFs, the SRWMD required WQTV was the greatest volume. Table 3 below summarizes the WQTV for each SMF.

To demonstrate compliance with the Alachua County stormwater quality treatment code, a BMPTRAINS analysis was performed to show a 70% reduction for nitrogen and 80% reduction for phosphorus nutrient loading in stormwater discharged from the project site. SMF-1 and SMF-2 were utilized as retention Best Management Practices (BMPs), and the total volume of treated water was calculated as a retention depth over the entire post-development drainage areas. The required depth was determined to be 1.25 inches over the drainage area for SMF-1 and 0.75 inches over the drainage area for SMF-2. The required treatment volume is outlined in Table 3 below.

Refer to Appendix A for WQTV and BMPTRAINS calculations.

Table 3: Post-Development Water Quality Treatment Volume

Basin ID	Required WQTV SRWMD (cf)	Required WQTV CoA (cf)	Required WQTV Nutrient Removal Alachua County (cf)	Provided WQTV (cf)	Recovery (hrs)
SMF-1	15,875	4,310	10,774	15,875	< 6
SMF-2	7,150	1,933	2,900	7,150	< 24

Routing the required volumes through the basin in the drainage model indicates that the stormwater management facility draws down the greater treatment volume well within 72 hours. Detailed calculations are provided in Appendix A.

Run-off and Facility Routing Results

The routing results for SMF-1 and SMF-2 are summarized below in Table 4 and Table 5. Table 4 shows the pre/post-development peak discharge rates, and pre/post-development peak discharge volumes. Table 5 summarizes the peak stage, freeboard, and recovery results.

Table 4: Pre-Development vs. Post-Development Routing Results

SMF-1				
Storm Event	Peak Discharge Rate (cfs)		Peak Discharge Volume (cf)	
	Pre-Development	Post-Development	Pre-Development	Post-Development
100yr-1 hr	4.71	1.13	9346	3203
100yr-2hr	4.30	1.15	14593	6449
100yr-4hr	3.92	1.35	22411	10046
100yr-8hr	4.63	1.23	30689	13773
100yr-24hr	1.74	0.89	52132	28396
100yr-72hr	1.40	1.12	72948	37709
100yr-168hr	1.02	0.96	90108	35313
100yr-240hr	1.33	1.13	106013	40574
SMF-2				
Storm Event	Peak Discharge Rate (cfs)		Peak Discharge Volume (cf)	
	Pre-Development	Post-Development	Pre-Development	Post-Development
100yr-1 hr	4.03	0.27	9259	825
100yr-2hr	3.61	0.31	12641	1789
100yr-4hr	2.63	0.36	17285	3028
100yr-8hr	2.98	0.37	21914	19014
100yr-24hr	1.05	0.38	33190	29534
100yr-72hr	0.71	0.35	43617	36478
100yr-168hr	0.50	0.33	51999	42573
100yr-240hr	0.65	0.40	59656	45435

Table 5: Post-Development Routing Results

SMF-1 (TOP = 162')					
Storm Event	Stage (ft)	Freeboard (ft)	Time to 1/2 Volume Available (EL = 160.65') (Days After Storm)	Time to Full Recovery (Days After Storm)	Stage After 30 Days (ft)
100yr-1 hr	160.63	1.37	-	< 1	-
100yr-2hr	160.65	1.35	< 1	< 1	-
100yr-4hr	160.85	1.15	< 1	< 1	-
100yr-8hr	160.73	1.27	< 1	< 2	-
100yr-24hr	160.43	1.57	-	< 3	-
100yr-72hr	160.62	1.38	-	< 4	-
100yr-168hr	160.48	1.52	-	< 4	-
100yr-240hr	160.63	1.37	-	< 5	-
SMF-2 (TOP = 165')					
Storm Event	Stage (ft)	Freeboard (ft)	Time to 1/2 Volume Available (EL = 163.67') (Days After Storm)	Time to Full Recovery (Days After Storm)	Stage After 30 Days (ft)
100yr-1 hr	163.30	1.70	-	< 2	-
100yr-2hr	163.43	1.57	-	< 6	-
100yr-4hr	163.67	1.33	<1	< 12	-
100yr-8hr	163.69	1.31	<1	< 22	-
100yr-24hr	163.75	1.25	< 1	< 25	-
100yr-72hr	163.62	1.38	-	< 28	-
100yr-168hr	163.52	1.48	-	> 30	162.03
100yr-240hr	163.84	1.16	< 1	> 30	162.06

Back-to-back Storms

Due to the large storm events not fully recovering within 30 days after the storm event for SMF-2, back-to-back storms were routed through SMF-2 to ensure the system could provide the necessary storage volume. To route the storm events back-to-back, the number of repetitions was set to “2” for the 100yr-168hr and 100yr-240hr storm events. Routing results are summarized in Table 6 and model results can be found in Appendix A.

Table 6: Back-to-Back Storm Results

Storm Event	Peak Stage (FT)	Freeboard (FT) (TOP = 165.0)
100YR-168HR	163.53	1.47
100YR-240HR	163.85	1.15

Summary and Conclusions

The proposed drainage system meets City of Alachua and SRWMD criteria for stormwater management facilities as follows:

1. Provide Water Quality Treatment Volume (WQTV): SMF-1 and SMF-2 have been designed to retain the runoff from the first 2.0 inches of rainfall from the design storm, which was the greatest required WQTV of the three methods. WQTV for both SMFs was recovered within 72 hours (SRWMD, CoA).
2. Provide Discharge Rate and Volume Attenuation: SMF-1 and SMF-2 have been designed so that post-development discharge rates and volumes do not exceed the pre-development discharge rates and volumes for the 100 year - 1 hour, 100 year - 2 hour, 100 year - 4 hour, 100 year - 8 hour, 100 year - 24 hour, 100 year - 72 hour, 100 year - 168 hour, and 100 year - 240 hour storm events (SRWMD, CoA).
3. Provide Volume Recovery: SMF-1 and SMF-2 have been designed so that one-half of the total volume is available within 7 days following the end of all design storm events and the total volume available is recovered within 30 days following the end of all design storm events. For events that do not meet the recovery requirements, back-to-back storms were routed to ensure the system could provide the necessary storage volume (SRWMD).
4. Freeboard: SMF-1 and SMF-2 have been designed to provide at least 1 foot of freeboard for all design storms (SRWMD).

Based on the information provided, the project is eligible for approval by the City of Alachua and SRWMD.

Figure 1

Project Location Map

Project Location Map THE GOLF PLAZA

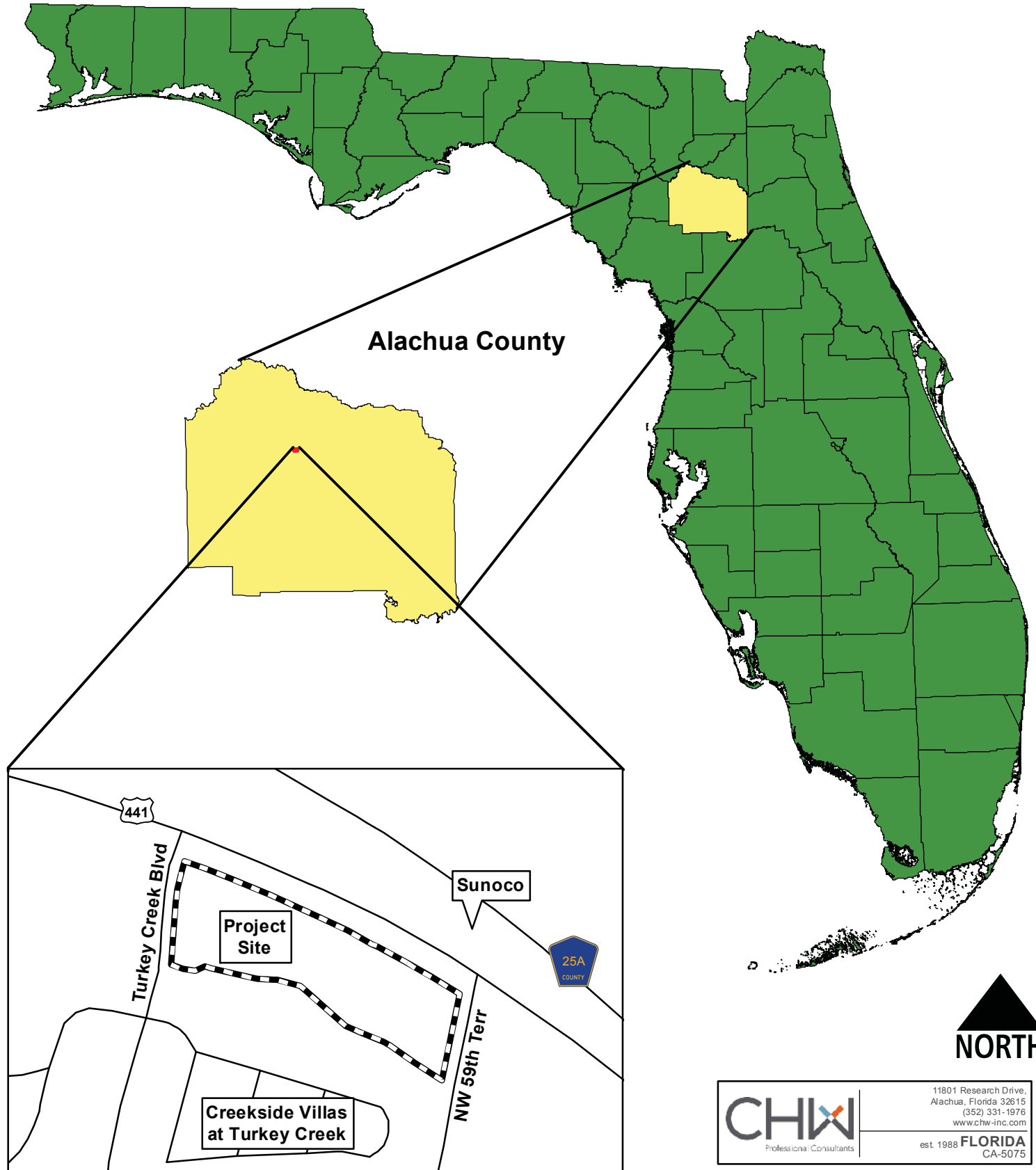
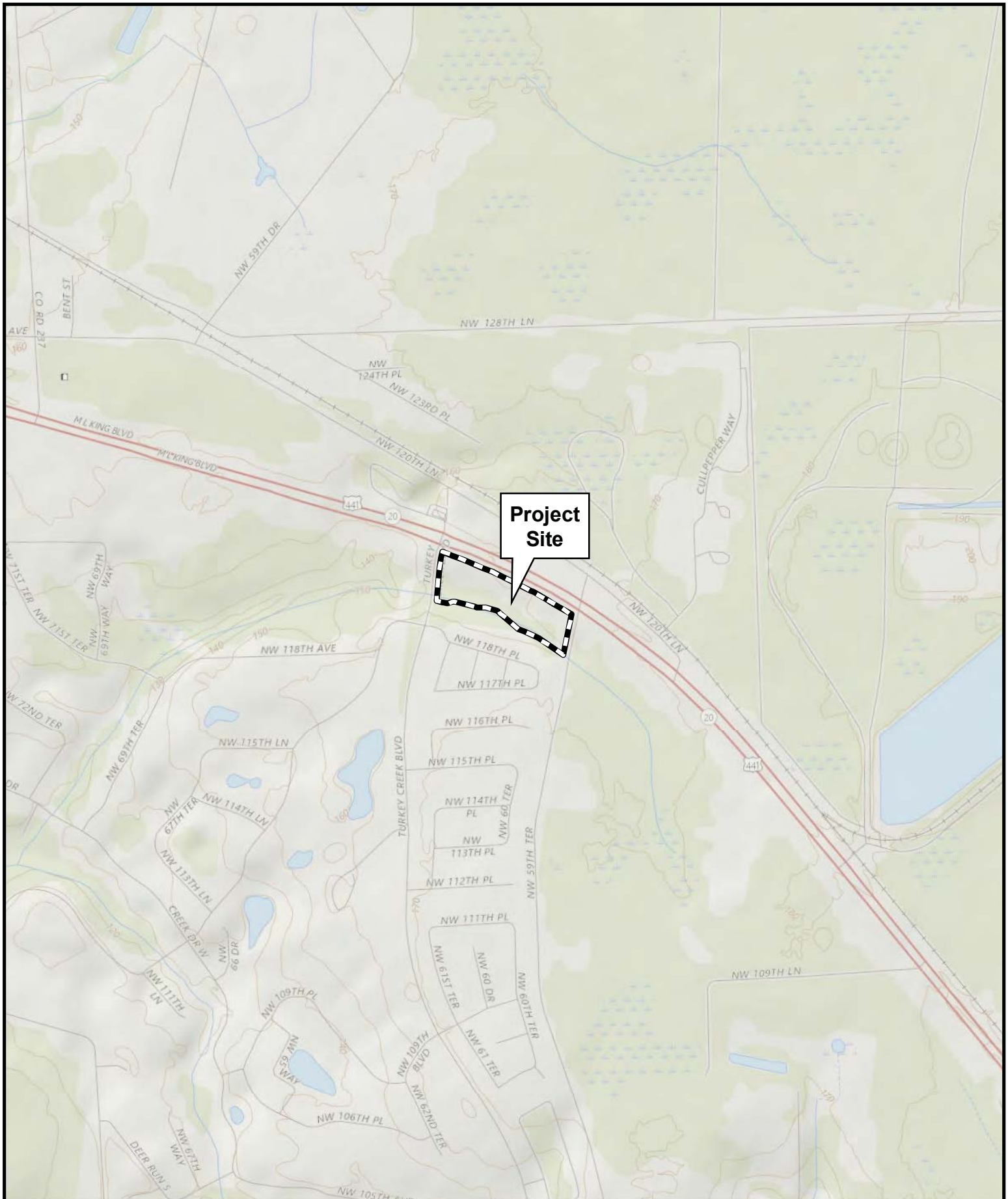


Figure 2

USGS Quadrangle Map



Project Site



11801 Research Drive,
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 **FLORIDA**
CA-5075

THE GOLF PLAZA Quad Map

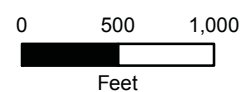
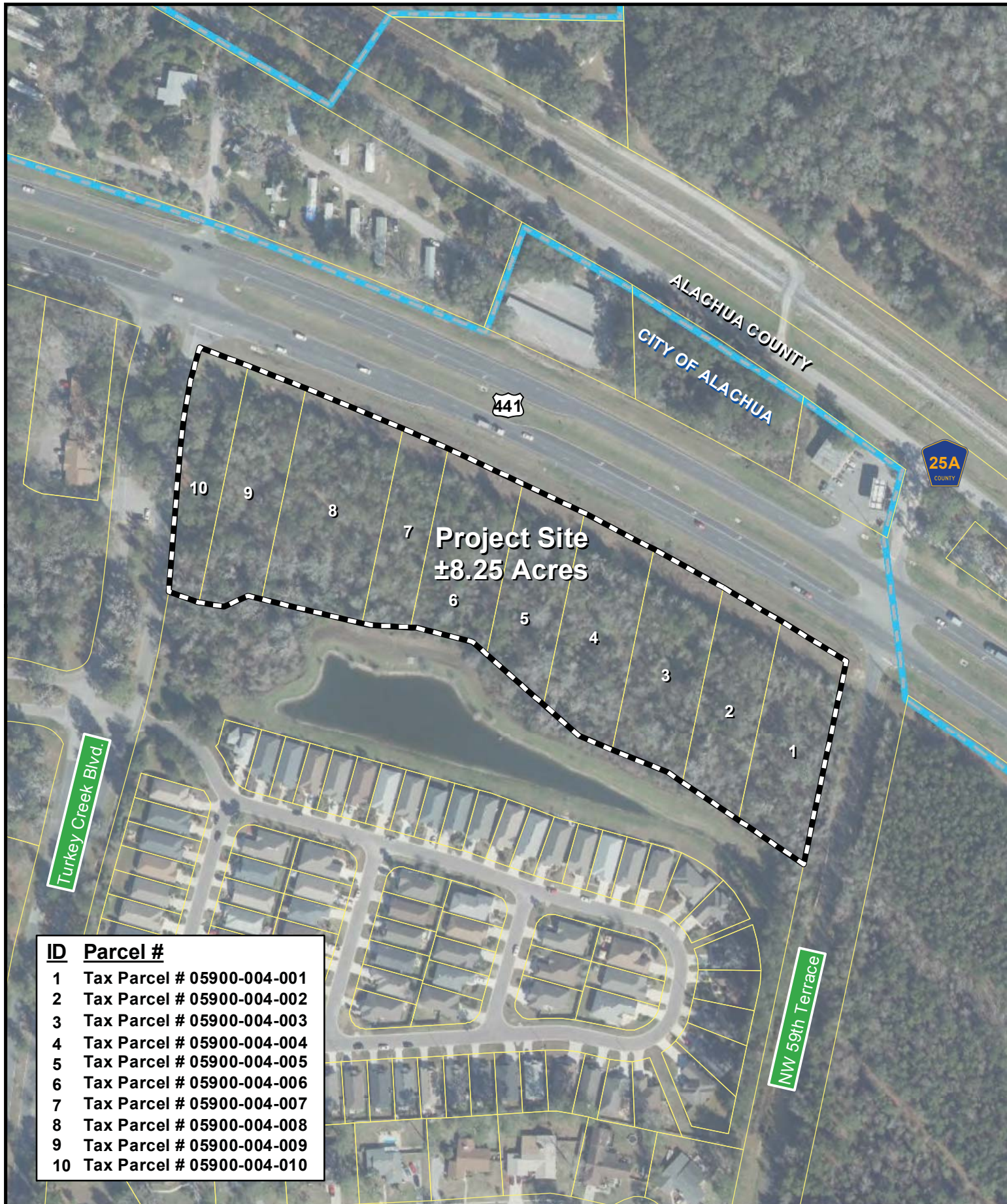


Figure 3

Aerial Map



ID	Parcel #
1	Tax Parcel # 05900-004-001
2	Tax Parcel # 05900-004-002
3	Tax Parcel # 05900-004-003
4	Tax Parcel # 05900-004-004
5	Tax Parcel # 05900-004-005
6	Tax Parcel # 05900-004-006
7	Tax Parcel # 05900-004-007
8	Tax Parcel # 05900-004-008
9	Tax Parcel # 05900-004-009
10	Tax Parcel # 05900-004-010



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THE GOLF PLAZA Aerial Map

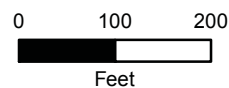
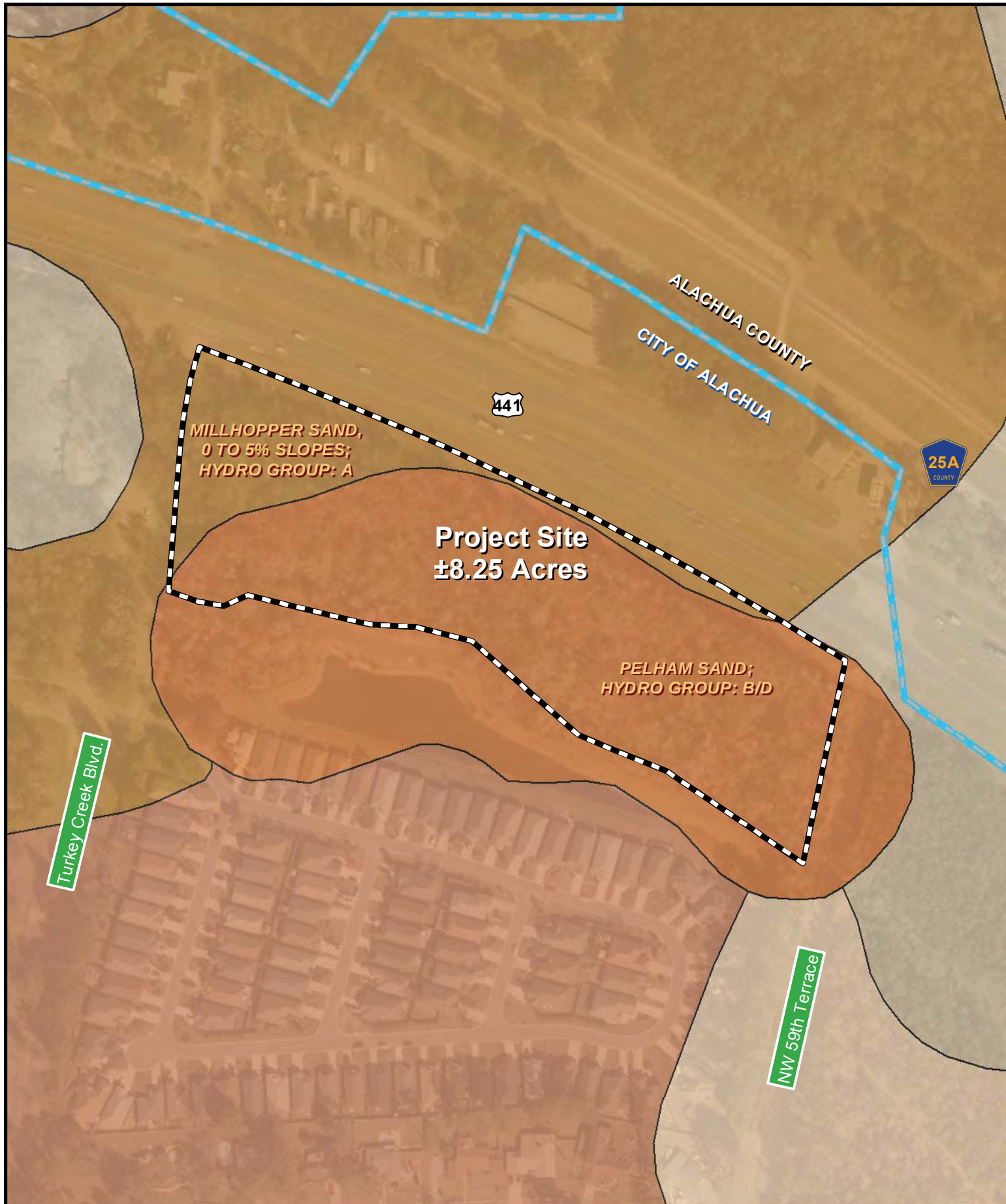


Figure 4

NRCS Soils Map



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CA-5075

THE GOLF PLAZA Soils Map

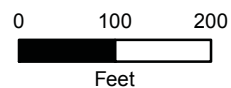


Figure 5

FEMA Flood Map



11801 Research Drive,
Alachua, Florida 32615
(352) 331-1976
www.chw-inc.com
est. 1988 **FLORIDA**
CA-5075

THE GOLF PLAZA FEMA Map

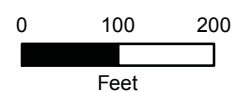


Figure 6

Pre-Development Drainage Map

LEGEND



PRE-DEVELOPMENT
ON-SITE WATERSHED:



PRE-DEVELOPMENT
DRAINAGE FLOW
PATTERNS:

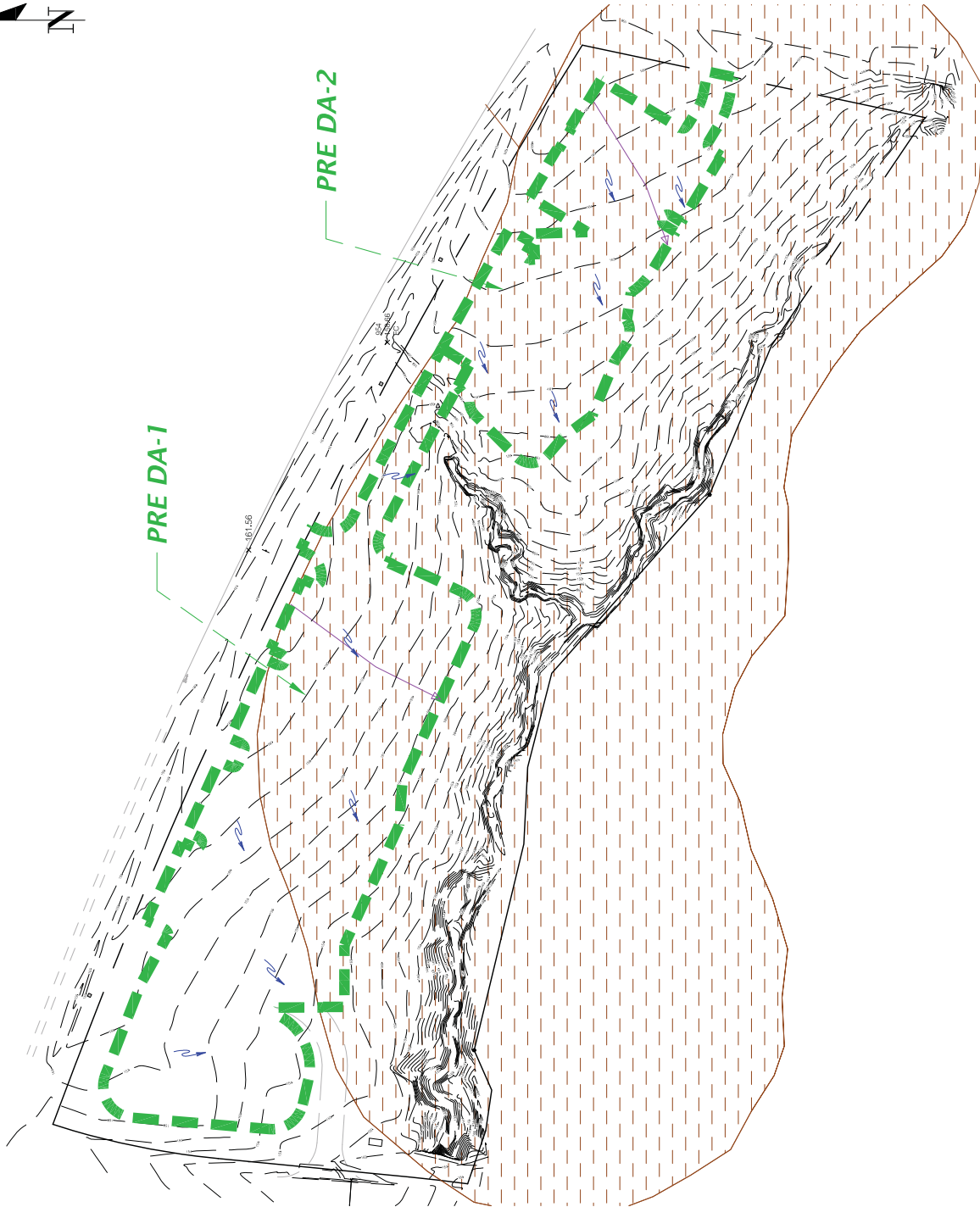


PRE-DEVELOPMENT
TIME OF
CONCENTRATION



TYPE 'D' SOILS

NOTE: ALL SOILS ARE TYPE 'A'
UNLESS OTHERWISE NOTED



PROJECT NAME 18-0431	PROJECT TYPE PRE-DEVELOPMENT DRAINAGE	PROJECT LOCATION THE GOLF PLAZA	PROJECT NUMBER 18-0431
CLIENT CAUSSEAU, HENRY & WATSON, INC.	DESIGNER CAUSSEAU, HENRY & WATSON, INC.	DATE 11/1/2018	SCALE 1" = 100'
PROJECT LOCATION THE GOLF PLAZA	PROJECT NUMBER 18-0431	PROJECT TYPE PRE-DEVELOPMENT DRAINAGE	PROJECT NAME 18-0431

PROFESSIONAL CONSULTANT CHM	PROJECT LOCATION THE GOLF PLAZA	PROJECT NUMBER 18-0431	PROJECT TYPE PRE-DEVELOPMENT DRAINAGE
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PROJECT NAME 18-0431	PROJECT TYPE PRE-DEVELOPMENT DRAINAGE	PROJECT LOCATION THE GOLF PLAZA	PROJECT NUMBER 18-0431
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Figure 7

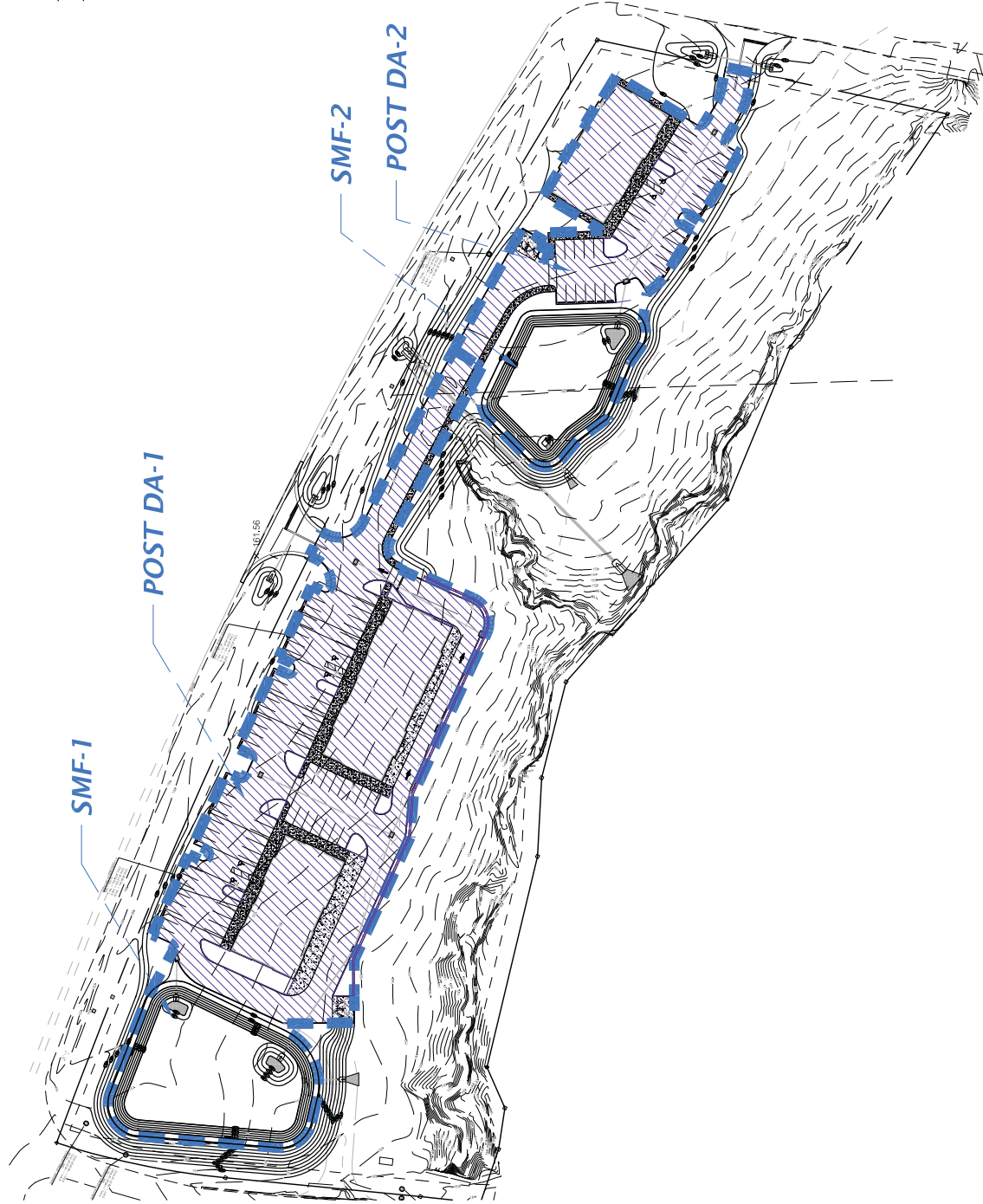
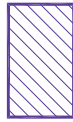
Post-Development Drainage Map

LEGEND

POST-DEVELOPMENT
WATERSHED:



PROPOSED ONSITE
IMPERVIOUS AREA:



SHEET NO. 1	PROJECT NAME 00-0000	PROJECT LOCATION PROJECT NAME PROJECT LOCATION PROJECT NAME PROJECT LOCATION	PROJECT NAME PROJECT LOCATION PROJECT NAME PROJECT LOCATION	PROJECT NAME PROJECT LOCATION PROJECT NAME PROJECT LOCATION	PROJECT NAME PROJECT LOCATION PROJECT NAME PROJECT LOCATION
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Appendix A

Drainage Calculations and Computer Model Output

CURVE NUMBER CALCULATIONS

Pre-Development Drainage Calculations

Pre-Development Watershed #1 (Pre DA-1)	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	103,431	2.37	100%		
Impervious	0	0.00	0.0%	98	0.0
Open space, type 'A' soil	46,095	1.06	44.6%	39	41.3
Open space, type 'D' soil	57,336	1.32	55.4%	80	105.3

CN = **62**

Tc = 15 min

Pre-Development Watershed #2 (Pre DA-2)	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	46,393	1.07	100%		
Impervious	0	0.00	0.0%	98	0.0
Open space, type 'A' soil	0	0.00	0.0%	39	0.0
Open space, type 'D' soil	46,393	1.07	100.0%	80	85.2

CN = **80**

Tc = 18 min

Post-Development Drainage Calculations

Post-Development Watershed #1 (Post DA-1)	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	103,431	2.37	100%		
Impervious	75,622	1.74	73.1%	98	170.1
Open space, type 'A' soil	2,584	0.06	2.5%	39	2.3
Open space, type 'D' soil	2,918	0.07	2.8%	80	5.4
Stormwater Management Facility	22,307	0.51	21.6%	100	51.2

CN = **94**

Tc = 10 min*

*Time of concentration is assumed to be 10 minutes.

2

Post-Development Watershed #2 (Post DA-2)	Area (sf)	Area (ac)	Percent	CN	Area*CN
Total Area:	46,393	1.07	100%		
Impervious	28,838	0.66	62.2%	98	64.9
Open space, type 'A' soil	0	0.00	0.0%	39	0.0
Open space, type 'D' soil	2,563	0.06	5.5%	80	4.7
Stormwater Management Facility	14,992	0.34	32.3%	100	34.4

CN = **93**

Tc = 10 min*

*Time of concentration is assumed to be 10 minutes.

Open Space (lawns, parks, golf courses, cemeteries, etc)

	A	B	C	D
Poor	68	79	86	89
Fair	49	69	79	84
Good	39	61	74	80

Impervious areas

Paved parking lots, roofs, driveways, etc. (excluding R/M)

	A	B	C	D
Paved	98	98	98	98
Dirt	72	82	87	89

WQTV Calculations - SMF-1

SRWMD

C = 0.92
i = 2.00 in
A = 2.37 ac
Q = **15,875 cf**

Runoff Coefficient Calculation			
	Area (ac.)	Coeff. C	C x A
Impervious	1.74	0.95	1.65
Open Space	0.13	0.20	0.03
SMF	0.51	1.00	0.51
TOTAL	2.37		2.19
C =			0.92

City of Alachua

Drainage Area = 103,431 sf
Drainage Area x 0.5 inches = 4,310 cf

BMPTrains

Nitrogen and Phosphorus Removal: 1.25 in
Drainage Area = 103,431 sf
Required Retention Volume = 10,774 cf

WQTV Calculations - SMF-2

SRWMD

C = 0.92
i = 2.00 in
A = 1.07 ac
Q = **7,150 cf**

Runoff Coefficient Calculation			
	Area (ac.)	Coeff. C	C x A
Impervious	0.66	0.95	0.63
Open Space	0.06	0.20	0.01
SMF	0.34	1.00	0.34
TOTAL	1.07		0.98
C =			0.92

City of Alachua

Drainage Area = 46,393 sf
Drainage Area x 0.5 inches = 1,933 cf

BMPTrains

Nitrogen and Phosphorus Removal: 0.75 in
Drainage Area = 46,393 sf
Required Retention Volume = 2,900 cf

GENERAL SITE INFORMATION: V 8.6		GO TO INTRODUCTION PAGE		6/25/2019	Blue Numbers = Red Numbers =	Input data Calculated or Carryover
Select the appropriate Meteorological Zone, input the appropriate Mean Annual Rainfall amount and select the type of analysis			NAME OF PROJECT The Golf Plaza		HELP Rainfall	
Meteorological Zone (Please use zone map):			CLICK ON CELL BELOW TO SELECT Zone 2		VIEW ZONE MAP	
Mean Annual Rainfall (Please use rainfall map):			52.00 Inches		VIEW MEAN ANNUAL RAINFALL MAP	
Type of analysis: Treatment efficiency (N, P) (ex 80 70 (no decimal points) use only for specified removal efficiency):			CLICK ON CELL BELOW TO SELECT Specified removal efficiency		GO TO WATERSHED CHARACTERISTICS	
70			80 %			
Select the STORMWATER TREATMENT ANALYSIS Button below to begin analyzing the effectiveness of Best Management Practices.			Model documentation and example problems.			
STORMWATER TREATMENT ANALYSIS Systems available for analysis: Retention Basin with option for calculating effluent concentration Wet Detention Exfiltration Trench Pervious Pavement Stormwater Harvesting Biofiltration Greenroof Rainwater Harvesting Managed Aquatic Plants Detention Vegetated Natural Buffer Vegetated Filter Strip Swale Rain Garden Tree Well Lined reuse pond User Defined BMP			There is a user's manual for the BMPTRAINS model. It can be downloaded from www.stormwater.ucf.edu. The results from the example problems shown in the manual however may not reflect current model results due to ongoing updates of the model.			
RESET INPUT FOR STORMWATER TREATMENT ANALYSIS			METHODOLOGY FOR CALCULATING REQUIRED TREATMENT EFFICIENCY			
			METHODOLOGY FOR RETENTION SYSTEMS		METHODOLOGY FOR WET DETENTION SYSTEMS	
			METHODOLOGY FOR GREENROOF SYSTEMS		METHODOLOGY FOR WATER HARVESTING SYSTEMS	

WATERSHED CHARACTERISTICS		V 8.6		GO TO STORMWATER TREATMENT ANALYSIS		Blue Numbers = Input data Red Numbers = Calculated		LAND USES/EMC	
SELECT CATCHMENT CONFIGURATION				CLICK ON CELL BELOW TO SELECT CONFIGURATION				VIEW CATCHMENT CONFIGURATION PAGE	
For comingling, the off-site catchment must be upstream. The delay is only for retention BMP's and must be used in hours as measured by the time of concentration at a one inch/hour rain				C - 2 Catchment-Parallel					
Delay [hrs]				COMINGLING					
CATCHMENT NO.1 NAME:				MULTI-LAND USE					
CLICK ON CELL BELOW TO SELECT				VIEW AVERAGE ANNUAL RUNOFF					
Undeveloped - Upland Hardwood: TN=1.042 TP=0.346				"C" Factor					
CLICK ON CELL BELOW TO SELECT				VIEW EMC & FLUCCS					
Low-Intensity Commercial: TN=1.13 TP=0.188				GO TO GIS LANDUSE DATA					
CATCHMENT NO.2 NAME:									
CLICK ON CELL BELOW TO SELECT									
Undeveloped - Upland Hardwood: TN=1.042 TP=0.346									
CLICK ON CELL BELOW TO SELECT									
Low-Intensity Commercial: TN=1.13 TP=0.188									
CATCHMENT NO.3 NAME:									
CLICK ON CELL BELOW TO SELECT									
Undeveloped - Upland Hardwood: TN=1.042 TP=0.346									
CLICK ON CELL BELOW TO SELECT									
Low-Intensity Commercial: TN=1.13 TP=0.188									
CATCHMENT NO.4 NAME:									
CLICK ON CELL BELOW TO SELECT									
Undeveloped - Upland Hardwood: TN=1.042 TP=0.346									
CLICK ON CELL BELOW TO SELECT									
Low-Intensity Commercial: TN=1.13 TP=0.188									
Pre-development land use: with default EMCs				Pre-development land use: with default EMCs				PRE: POST:	
Post-development land use: with default EMCs				Post-development land use: with default EMCs				EMC(N): mg/L EMC(P): mg/L	
Total pre-development catchment area:				Total pre-development catchment area:				USE DEFAULT CONCENTRATIONS	
Total post-development catchment or BMP analysis area:				Total post-development catchment or BMP analysis area:				Average annual pre runoff volume: 0.357 ac-ft/year	
Pre-development Non DCIA CN:				Pre-development Non DCIA CN:				Average annual post runoff volume (note no BMP area): 4.842 ac-ft/year	
Pre-development DCIA percentage:				Pre-development DCIA percentage:				Pre-development Annual Mass Loading - Nitrogen: 0.459 kg/year	
Post-development Non DCIA CN:				Post-development Non DCIA CN:				Pre-development Annual Mass Loading - Phosphorus: 0.153 kg/year	
Post-development DCIA percentage:				Post-development DCIA percentage:				Post-development Annual Mass Loading - Nitrogen: 6.748 kg/year	
Estimated BMP Area (No loading from this area)				Estimated BMP Area (No loading from this area)				Post-development Annual Mass Loading - Phosphorus: 1.123 kg/year	
Pre-development land use: with default EMCs				Pre-development land use: with default EMCs				PRE: POST:	
Post-development land use: with default EMCs				Post-development land use: with default EMCs				EMC(N): mg/L EMC(P): mg/L	
Total pre-development catchment area:				Total pre-development catchment area:				USE DEFAULT CONCENTRATIONS	
Total post-development catchment or BMP analysis area:				Total post-development catchment or BMP analysis area:				Average annual pre runoff volume: 0.515 ac-ft/year	
Pre-development Non DCIA CN:				Pre-development Non DCIA CN:				Average annual post runoff volume (note no BMP area): 1.725 ac-ft/year	
Pre-development DCIA percentage:				Pre-development DCIA percentage:				Pre-development Annual Mass Loading - Nitrogen: 0.661 kg/year	
Post-development Non DCIA CN:				Post-development Non DCIA CN:				Pre-development Annual Mass Loading - Phosphorus: 0.220 kg/year	
Post-development DCIA percentage:				Post-development DCIA percentage:				Post-development Annual Mass Loading - Nitrogen: 2.404 kg/year	
Estimated BMP Area (No loading from this area)				Estimated BMP Area (No loading from this area)				Post-development Annual Mass Loading - Phosphorus: 0.400 kg/year	
Pre-development land use: with default EMCs				Pre-development land use: with default EMCs				PRE: POST:	
Post-development land use: with default EMCs				Post-development land use: with default EMCs				EMC(N): mg/L EMC(P): mg/L	
Total pre-development catchment area:				Total pre-development catchment area:				USE DEFAULT CONCENTRATIONS	
Total post-development catchment or BMP analysis area:				Total post-development catchment or BMP analysis area:				Average annual pre runoff volume: ac-ft/year	
Pre-development Non DCIA CN:				Pre-development Non DCIA CN:				Average annual post runoff volume (note no BMP area): ac-ft/year	
Pre-development DCIA percentage:				Pre-development DCIA percentage:				Pre-development Annual Mass Loading - Nitrogen: kg/year	
Post-development Non DCIA CN:				Post-development Non DCIA CN:				Pre-development Annual Mass Loading - Phosphorus: kg/year	
Post-development DCIA percentage:				Post-development DCIA percentage:				Post-development Annual Mass Loading - Nitrogen: kg/year	
Estimated BMP Area (no loading from this area)				Estimated BMP Area (no loading from this area)				Post-development Annual Mass Loading - Phosphorus: kg/year	
Pre-development land use: with default EMCs				Pre-development land use: with default EMCs				PRE: POST:	
Post-development land use: with default EMCs				Post-development land use: with default EMCs				EMC(N): mg/L EMC(P): mg/L	
Total pre-development catchment area:				Total pre-development catchment area:				USE DEFAULT CONCENTRATIONS	
Total post-development catchment or BMP analysis area:				Total post-development catchment or BMP analysis area:				Average annual pre runoff volume: ac-ft/year	
Pre-development Non DCIA CN:				Pre-development Non DCIA CN:				Average annual post runoff volume (note no BMP area): ac-ft/year	
Pre-development DCIA percentage:				Pre-development DCIA percentage:				Pre-development Annual Mass Loading - Nitrogen: kg/year	
Post-development Non DCIA CN:				Post-development Non DCIA CN:				Pre-development Annual Mass Loading - Phosphorus: kg/year	
Post-development DCIA percentage:				Post-development DCIA percentage:				Post-development Annual Mass Loading - Nitrogen: kg/year	
Estimated BMP Area (no loading from this area)				Estimated BMP Area (no loading from this area)				Post-development Annual Mass Loading - Phosphorus: kg/year	

STORMWATER TREATMENT ANALYSIS:		V 8.6	GO TO GENERAL SITE INFORMATION PAGE		Blue Numbers = Red Numbers =	Input data Calculated																							
If not done, specify pre- and post-development watershed characteristics.																													
6/25/2019																													
GO TO WATERSHED CHARACTERISTICS																													
<u>Total Required Treatment Efficiency:</u> Required Treatment Eff (Nitrogen): 70 % Required Treatment Eff (Phosphorus): 80 %			Select one of the BMPs below to analyze efficiency or review the summary data. <table border="1"> <tr> <td>RETENTION BASIN</td> <td>WET DETENTION / MAP</td> <td>EXFILTRATION TRENCH</td> <td>RAIN GARDEN / depression storage</td> <td>SWALE</td> <td>USER DEFINED BMP</td> </tr> <tr> <td>PERVIOUS PAVEMENT</td> <td>STORMWATER HARVESTING</td> <td>FILTRATION</td> <td>View Media Mixes</td> <td colspan="2" rowspan="2"> NOTE !!!: All individual system must be sized prior to being analyzed in conjunction with other systems. Please read instructions in the CATCHMENT AND TREATMENT SUMMARY RESULTS tab for more information. </td> </tr> <tr> <td>GREENROOF</td> <td>RAINWATER HARVESTING</td> <td>LINED REUSE POND & UNDERDRAIN INPUT</td> <td>GO TO COST ANALYSIS WORKSHEET</td> </tr> <tr> <td>VEGETATED NATURAL BUFFER</td> <td>VEGETATED FILTER STRIP</td> <td>TREE WELL</td> <td colspan="4">CATCHMENT AND TREATMENT SURFACE</td> </tr> </table>				RETENTION BASIN	WET DETENTION / MAP	EXFILTRATION TRENCH	RAIN GARDEN / depression storage	SWALE	USER DEFINED BMP	PERVIOUS PAVEMENT	STORMWATER HARVESTING	FILTRATION	View Media Mixes	NOTE !!!: All individual system must be sized prior to being analyzed in conjunction with other systems. Please read instructions in the CATCHMENT AND TREATMENT SUMMARY RESULTS tab for more information.		GREENROOF	RAINWATER HARVESTING	LINED REUSE POND & UNDERDRAIN INPUT	GO TO COST ANALYSIS WORKSHEET	VEGETATED NATURAL BUFFER	VEGETATED FILTER STRIP	TREE WELL	CATCHMENT AND TREATMENT SURFACE			
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RETENTION BASIN:		6/25/2019	V 8.6																																			
RETENTION BASIN SERVING:		The Golf Plaza																																				
Loadings from BMP area are contained by the BMP, thus no BMP area load. Watershed area contributing to basin: Required Treatment Eff (Nitrogen): Required Treatment Eff (Phosphorus): Required retention depth over the watershed to meet required efficiency: Required water quality retention volume:		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SMF-1</th> <th>SMF-2</th> <th>Catchment 3</th> <th>Catchment 4</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.860</td> <td style="text-align: center;">0.730</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> </tr> <tr> <td style="text-align: center;">70.000</td> <td style="text-align: center;">70.000</td> <td style="text-align: center;">70.000</td> <td style="text-align: center;">70.000</td> </tr> <tr> <td style="text-align: center;">80.000</td> <td style="text-align: center;">80.000</td> <td style="text-align: center;">80.000</td> <td style="text-align: center;">80.000</td> </tr> <tr> <td style="text-align: center;">1.070</td> <td style="text-align: center;">1.070</td> <td style="text-align: center;">1.070</td> <td style="text-align: center;">1.070</td> </tr> <tr> <td style="text-align: center;">0.166</td> <td style="text-align: center;">0.065</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> </tr> <tr> <td colspan="4" style="text-align: right;">ac-ft</td> </tr> </tbody> </table>		SMF-1	SMF-2	Catchment 3	Catchment 4	1.860	0.730	0.000	0.000	70.000	70.000	70.000	70.000	80.000	80.000	80.000	80.000	1.070	1.070	1.070	1.070	0.166	0.065	0.000	0.000	ac-ft										
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RETENTION BASIN FOR MULTIPLE TREATMENT SYSTEMS (if there is a need for additional removal efficiencies in a series of BMPs):																																						
Retention volume based on retention depth and Total area - BMP area Provided retention depth (0.1-3.99 inches over the watershed) Provided treatment efficiency (Nitrogen): Provided treatment efficiency (Phosphorus): Remaining treatment efficiency (Nitrogen): Remaining treatment efficiency (Phosphorus): Remaining retention depth needed:																																						
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HELP - EXAMPLE PROBLEM 3		View Media Mixes <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Catchment 1</th> <th>Catchment 2</th> <th>Catchment 3</th> <th>Catchment 4</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		Catchment 1	Catchment 2	Catchment 3	Catchment 4																															
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Estimate of groundwater impacts Use only down flow media mix before water enters the ground, specify type Nitrogen mass reduction in groundwater discharge (%) Phosphorus mass reduction in groundwater discharge (%)																																						

GO TO STORMWATER TREATMENT ANALYSIS

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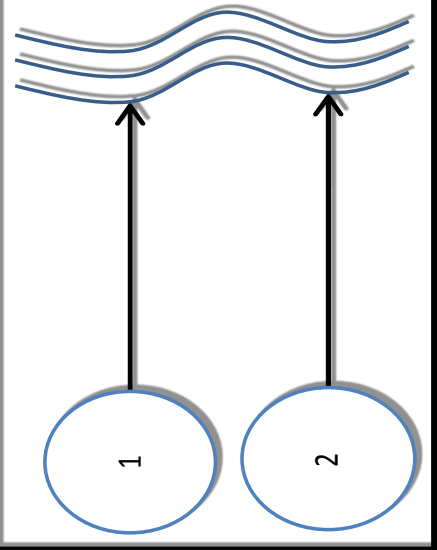
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CATCHMENTS AND TREATMENT SURFACE DISCHARGE SUMMARY					V 8.6
CALCULATION METHODS: 1. The effectiveness of each BMP in a single catchment is converted to an equivalent capture volume. 2. Certain BMP treatment train combinations have not been evaluated and in practice they are at this time not used, an example is a greenroof following a tree well. 3. Wet detention is last when used in a single catchment with other BMPs, except when followed by filtration					
PROJECT TITLE	The Golf Plaza		Optional Identification		
	SMF-1	SMF-2	Catchment 3	Catchment 4	
BMP Name	Retention Basin	Retention Basin			
BMP Name					
BMP Name					
Surface Water Discharge Summary Performance of Entire Watershed					
Catchment Configuration	C - 2 Catchment-Parallel				
Nitrogen Pre Load (kg/yr)	1.12				
Phosphorus Pre Load (kg/yr)	0.37				
Nitrogen Post Load (kg/yr)	9.15				
Phosphorus Post Load (kg/yr)	1.52				
Target Load Reduction (N) %	70				
Target Load Reduction (P) %	80				
Target Discharge Load, N (kg/yr)	2.75				
Target Discharge Load, P (kg/yr)	0.30				
Provided Overall Efficiency, N (%)	80				
Provided Overall Efficiency, P (%)	80				
Discharged Load, N (kg/yr & lb/yr):	1.79				
Discharged Load, P (kg/yr & lb/yr):	0.30				
Load Removed, N (kg/yr & lb/yr):	7.36				
Load Removed, P (kg/yr & lb/yr):	1.22				
			Treatment Objectives or Target for TN MET TP MET		
			3.95		
			0.66		
			16.21		
			2.70		
					
			6/25/2019		
			BMPTRAINS MODEL		

Project No. 18-0431: The Golf Plaza

SHEET FLOW					SHALLOW CONCENTRATED FLOW					CHANNEL / PIPE FLOW											
BASIN	Manning's n	Flow Length L (ft)	2-Year 24-Hour Rain, P2 (in)	Land Slope s (ft/ft)	Tt1 (hr)	Paved or Unpvd. (P or U)	Flow Length L (ft)	Water- course Slope, s (ft/ft)	Avg. Velocity V (ft/s)	Tt2 (hr)	Cross- Section Area, a (ft²)	Wetted Perim. Pw (ft)	Hydraulic Radius r (ft)	Pipe Slope s (ft/ft)	Manning n (-)	Avg. Velocity V (ft/s)	Flow Length L (ft)	Tt3 (hr)	Tc (hr)	Tc (min)	
	(-)																				
	PRE-1	0.4	100	5	0.03	0.24	U	68	0.044	3.39	0.01	-	-	-	-	-	-	0	-	0.25	15
	PRE-2	0.4	100	5	0.02	0.29	U	59	0.025	2.57	0.01	-	-	-	-	-	-	0	-	0.29	18

STAGE-STORAGE CALCULATIONS:

Post-Development: SMF-1 Stage-Storage Relationship				
ELEV.	AREA (SF)	AREA (Ac)	STORAGE VOLUME (CF)	STORAGE VOLUME (AC-FT)
159.00	14516	0.33	0	0.000
159.50	15473	0.36	7,497	0.172
160.50	17463	0.40	23,965	0.550
161.50	19553	0.45	42,473	0.975
162.00	22307	0.51	52,938	1.215

Ave. existing ground: 155.00 ft
Elev. of SHWT: 152.00 ft
Depth to Confining: 148.00 ft
Horiz. Infiltr.: 10.00 ft/day*
Vertical Infiltr.: 7.50 ft/day*
Fillable Porosity: 0.20
Volume = 52938 cf
Area = 22307 sf
Perimeter = 566 ft
Depth = 3.00 ft

*Factor of Safety of 2 applied

WQTV = 15875 cf
WQTV EL = 160.03 ft
6" Discharge Orifice EL : 160.10 ft
Half-Volume = 26469 cf
Half-Volume EL = 160.65 ft

Length = 190 ft

Width = 93 ft

Post-Development: SMF-2 Stage-Storage Relationship				
ELEV.	AREA (SF)	AREA (Ac)	STORAGE VOLUME (CF)	STORAGE VOLUME (AC-FT)
162.00	8669	0.20	0	0.000
162.50	9430	0.22	4,525	0.104
163.50	11028	0.25	14,754	0.339
164.50	12727	0.29	26,631	0.611
165.00	14992	0.34	33,561	0.770

Ave. existing ground: 161.00 ft
Elev. of SHWT: 159.50 ft
Depth to Confining: 159.00 ft
Horiz. Infiltr.: 4.00 ft/day*
Vertical Infiltr.: 3.00 ft/day*
Fillable Porosity: 0.20
Volume = 33561 cf
Area = 14992 sf
Perimeter = 468 ft
Depth = 3.00 ft

*Factor of Safety of 2 applied

WQTV = 7150 cf
WQTV EL = 162.77 ft
3" Discharge Orifice EL : 162.80
Half-Volume = 16781 cf
Half-Volume EL = 163.67 ft

Length = 167 ft

Width = 67 ft

Pipe Calcs - 18-0431 - The Golf Plaza																								
Structure No.		Invert Elev.		Length (ft)	Slope (ft/foot)	Dia. (in)	C	Tc (min)	i* (in/hr)	A (sf)	A (ac)	Q (cfs) Actual		Q Allowed (cfs)	Pipe A (sq-ft)	V - Full Flow (fps)	Pipe R (ft)	Minor Loss Coeff.	Minor Loss (ft)	Loss (ft)	HGL**		ToG/ EoP	F.B. (in)
		U.S.	D.S.									Inc	Cumul								U.S.	D.S.		
From	To	SMF-1																						
S-9	S-8	157.77	157.30	134	0.0035	24	0.95	6	6.2	20745	0.48	2.8	2.8	14.49	3.1	4.6	0.50	0.8	0.01	0.02	161.05	161.02	161.08	0
S-8	S-7	157.30	157.06	97	0.0025	24	0.95	6	6.2	3710	0.09	0.5	3.3	12.17	3.1	3.9	0.50	0.5	0.01	0.02	161.02	160.99	162.65	20
S-7	S-5	157.06	156.79	107	0.0025	24	0.95	6	6.2	5706	0.13	0.8	4.1	12.31	3.1	3.9	0.50	0.7	0.02	0.03	160.99	160.93	162.46	18
S-6	S-5	157.13	156.79	134	0.0025	15	0.95	6	6.2	18737	0.43	2.5	2.5	3.50	1.2	2.9	0.31	0.7	0.05	0.21	161.18	160.93	161.26	1
S-5	S-4	156.79	156.51	112	0.0025	24	0.95	6	6.2	8300	0.19	1.1	7.7	12.23	3.1	3.9	0.50	0.6	0.06	0.13	160.93	160.75	161.36	5
S-4	S-3	156.51	156.00	125	0.0041	30	0.95	6	6.2	10554	0.24	1.4	9.2	28.44	4.9	5.8	0.63	1.0	0.05	0.06	160.75	160.63	161.99	15
S-2	S-1	158.50	158.33	40	0.0042	15	0.95	6	6.2	11796	0.27	1.6	1.6	4.55	1.2	3.7	0.31	1.0	0.03	0.02	160.68	160.63	161.50	10
SMF-2																								
S-20	S-19	161.65	161.12	161	0.0033	15	0.95	6	6.2	6882	0.16	0.9	0.9	4.02	1.2	3.3	0.31	0.6	0.01	0.03	163.65	163.61	164.47	10
S-19	S-18	161.12	160.99	40	0.0032	15	0.95	6	6.2	22532	0.52	3.0	4.0	3.99	1.2	3.3	0.31	1.0	0.16	0.15	163.61	163.30	164.62	12

Notes

1. ToG = Top of Grate/EoP = Edge of Pavement
2. FB = Free Board
3. Rainfall intensity is based on the FDOT Zone 5 (Alachua County) Rainfall Intensity-Duration-Frequency Curve for the 3 YR - 10 min storm event (6.2 inches/hr)
4. The tailwater condition in the pond was set at the peak stage for the 100yr - 1hr storm event.

Section 1

Pre-Development Results

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Project Data

Project Name: Turkey Creek Retail
Simulation Description: Pre-Development Pre DA-1
Project Number: 18-0431
Engineer : Greg Wadzinski
Supervising Engineer: Travis Hastay, PE
Date: 06-26-2019

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 0.00
Water Table Elevation, [WT] (ft datum): 0.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 0.00
Fillable Porosity, [n] (%): 0.00
Vertical infiltration was not considered.

Geometry Data

Equivalent Pond Length, [L] (ft): 0.0
Equivalent Pond Width, [W] (ft): 0.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

<u>Stage (ft datum)</u>	<u>Area (ft²)</u>
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Discharge Structures

Discharge Structure #1 is inactive
Discharge Structure #2 is inactive
Discharge Structure #3 is inactive

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Scenario Input Data

Scenario 1 :: SRWMD 100yr-1hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 2.370
Time Of Concentration (minutes) 15.0
DCIA (%) 0.0
Curve Number 62
Design Rainfall Depth (inches) 4.4
Design Rainfall Duration (hours) 1.0
Shape Factor UHG 323
Rainfall Distribution FDOT 1 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 2 :: SRWMD 100yr-2hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 2.370
Time Of Concentration (minutes) 15.0
DCIA (%) 0.0
Curve Number 62
Design Rainfall Depth (inches) 5.4
Design Rainfall Duration (hours) 2.0
Shape Factor UHG 323
Rainfall Distribution FDOT 2 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 3 :: SRWMD 100yr-4hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 2.370
Time Of Concentration (minutes) 15.0
DCIA (%) 0.0
Curve Number 62
Design Rainfall Depth (inches) 6.7
Design Rainfall Duration (hours) 4.0
Shape Factor UHG 323
Rainfall Distribution FDOT 4 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

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Scenario Input Data (cont'd.)

Scenario 4 :: SRWMD 100yr-8hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 2.370
Time Of Concentration (minutes) 15.0
DCIA (%) 0.0
Curve Number 62
Design Rainfall Depth (inches) 8.0
Design Rainfall Duration (hours) 8.0
Shape Factor UHG 323
Rainfall Distribution FDOT 8 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 5 :: SRWMD 100yr-24hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 2.370
Time Of Concentration (minutes) 15.0
DCIA (%) 0.0
Curve Number 62
Design Rainfall Depth (inches) 11.0
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 323
Rainfall Distribution FDOT 24 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 6 :: SRWMD 100yr-72hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 2.370
Time Of Concentration (minutes) 15.0
DCIA (%) 0.0
Curve Number 62
Design Rainfall Depth (inches) 13.8
Design Rainfall Duration (hours) 72.0
Shape Factor UHG 323
Rainfall Distribution FDOT 72 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

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Scenario Input Data (cont'd.)

Scenario 7 :: SRWMD 100yr-168hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 2.370
Time Of Concentration (minutes) 15.0
DCIA (%) 0.0
Curve Number 62
Design Rainfall Depth (inches) 16.0
Design Rainfall Duration (hours) 168.0
Shape Factor UHG 323
Rainfall Distribution FDOT 168 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 8 :: SRWMD 100yr-240hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 2.370
Time Of Concentration (minutes) 15.0
DCIA (%) 0.0
Curve Number 62
Design Rainfall Depth (inches) 18.0
Design Rainfall Duration (hours) 240.0
Shape Factor UHG 323
Rainfall Distribution FDOT 240 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

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Sort-By-Category Report

Scenarios Considered: 1 to 8

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	1	Not Available	Not Available	SRWMD 100yr-1hr
2	2	Not Available	Not Available	SRWMD 100yr-2hr
3	3	Not Available	Not Available	SRWMD 100yr-4hr
4	4	Not Available	Not Available	SRWMD 100yr-8hr
5	5	Not Available	Not Available	SRWMD 100yr-24hr
6	6	Not Available	Not Available	SRWMD 100yr-72hr
7	7	Not Available	Not Available	SRWMD 100yr-168hr
8	8	Not Available	Not Available	SRWMD 100yr-240hr

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft ³ /s)	Time (hours)	Description
1	1	4.7143	0.800	SRWMD 100yr-1hr
2	4	4.6250	4.033	SRWMD 100yr-8hr
3	2	4.3040	0.900	SRWMD 100yr-2hr
4	3	3.9235	2.567	SRWMD 100yr-4hr
5	5	1.7419	12.033	SRWMD 100yr-24hr
6	6	1.4018	60.000	SRWMD 100yr-72hr
7	8	1.3349	184.000	SRWMD 100yr-240hr
8	7	1.0217	160.000	SRWMD 100yr-168hr

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft ³)	Time (hours)	Description
1	8	106012.7	241.233	SRWMD 100yr-240hr
2	7	90108.4	169.300	SRWMD 100yr-168hr
3	6	72948.3	73.267	SRWMD 100yr-72hr
4	5	52132.0	25.300	SRWMD 100yr-24hr
5	4	30689.4	9.300	SRWMD 100yr-8hr
6	3	22410.5	5.300	SRWMD 100yr-4hr
7	2	14593.0	3.300	SRWMD 100yr-2hr
8	1	9345.5	2.300	SRWMD 100yr-1hr

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Project Data

Project Name: Turkey Creek Retail
Simulation Description: Pre-Development Pre DA-2
Project Number: 18-0431
Engineer : Greg Wadzinski
Supervising Engineer: Travis Hastay, PE
Date: 06-26-2019

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 0.00
Water Table Elevation, [WT] (ft datum): 0.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 0.00
Fillable Porosity, [n] (%): 0.00
Vertical infiltration was not considered.

Geometry Data

Equivalent Pond Length, [L] (ft): 0.0
Equivalent Pond Width, [W] (ft): 0.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

<u>Stage</u> <u>(ft datum)</u>	<u>Area</u> <u>(ft²)</u>
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Discharge Structures

Discharge Structure #1 is inactive
Discharge Structure #2 is inactive
Discharge Structure #3 is inactive

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Scenario Input Data

Scenario 1 :: SRWMD 100yr-1hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.070
Time Of Concentration (minutes) 18.0
DCIA (%) 0.0
Curve Number 80
Design Rainfall Depth (inches) 4.4
Design Rainfall Duration (hours) 1.0
Shape Factor UHG 323
Rainfall Distribution FDOT 1 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 2 :: SRWMD 100yr-2hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.070
Time Of Concentration (minutes) 18.0
DCIA (%) 0.0
Curve Number 80
Design Rainfall Depth (inches) 5.4
Design Rainfall Duration (hours) 2.0
Shape Factor UHG 323
Rainfall Distribution FDOT 2 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 3 :: SRWMD 100yr-4hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.070
Time Of Concentration (minutes) 18.0
DCIA (%) 0.0
Curve Number 80
Design Rainfall Depth (inches) 6.7
Design Rainfall Duration (hours) 4.0
Shape Factor UHG 323
Rainfall Distribution FDOT 4 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

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Scenario Input Data (cont'd.)

Scenario 4 :: SRWMD 100yr-8hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.070
Time Of Concentration (minutes) 18.0
DCIA (%) 0.0
Curve Number 80
Design Rainfall Depth (inches) 8.0
Design Rainfall Duration (hours) 8.0
Shape Factor UHG 323
Rainfall Distribution FDOT 8 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 5 :: SRWMD 100yr-24hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.070
Time Of Concentration (minutes) 18.0
DCIA (%) 0.0
Curve Number 80
Design Rainfall Depth (inches) 11.0
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 323
Rainfall Distribution FDOT 24 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 6 :: SRWMD 100yr-72hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.070
Time Of Concentration (minutes) 18.0
DCIA (%) 0.0
Curve Number 80
Design Rainfall Depth (inches) 13.8
Design Rainfall Duration (hours) 72.0
Shape Factor UHG 323
Rainfall Distribution FDOT 72 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

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Scenario Input Data (cont'd.)

Scenario 7 :: SRWMD 100yr-168hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.070
Time Of Concentration (minutes) 18.0
DCIA (%) 0.0
Curve Number 80
Design Rainfall Depth (inches) 16.0
Design Rainfall Duration (hours) 168.0
Shape Factor UHG 323
Rainfall Distribution FDOT 168 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

Scenario 8 :: SRWMD 100yr-240hr

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.070
Time Of Concentration (minutes) 18.0
DCIA (%) 0.0
Curve Number 80
Design Rainfall Depth (inches) 18.0
Design Rainfall Duration (hours) 240.0
Shape Factor UHG 323
Rainfall Distribution FDOT 240 Hour

Initial ground water level (ft datum) 0.00 (default)

No times after storm specified.

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Sort-By-Category Report

Scenarios Considered: 1 to 8

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	1	Not Available	Not Available	SRWMD 100yr-1hr
2	2	Not Available	Not Available	SRWMD 100yr-2hr
3	3	Not Available	Not Available	SRWMD 100yr-4hr
4	4	Not Available	Not Available	SRWMD 100yr-8hr
5	5	Not Available	Not Available	SRWMD 100yr-24hr
6	6	Not Available	Not Available	SRWMD 100yr-72hr
7	7	Not Available	Not Available	SRWMD 100yr-168hr
8	8	Not Available	Not Available	SRWMD 100yr-240hr

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft ³ /s)	Time (hours)	Description
1	1	4.0324	0.760	SRWMD 100yr-1hr
2	2	3.6102	0.920	SRWMD 100yr-2hr
3	4	2.9847	4.040	SRWMD 100yr-8hr
4	3	2.6269	2.520	SRWMD 100yr-4hr
5	5	1.0544	12.000	SRWMD 100yr-24hr
6	6	0.7133	59.960	SRWMD 100yr-72hr
7	8	0.6549	184.000	SRWMD 100yr-240hr
8	7	0.4980	160.000	SRWMD 100yr-168hr

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft ³)	Time (hours)	Description
1	8	59655.8	241.520	SRWMD 100yr-240hr
2	7	51999.3	169.520	SRWMD 100yr-168hr
3	6	43616.7	73.560	SRWMD 100yr-72hr
4	5	33190.2	25.520	SRWMD 100yr-24hr
5	4	21914.4	9.560	SRWMD 100yr-8hr
6	3	17285.1	5.560	SRWMD 100yr-4hr
7	2	12640.6	3.560	SRWMD 100yr-2hr
8	1	9258.8	2.560	SRWMD 100yr-1hr

Section 2

Post-Development Results

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Project Data

Project Name: Turkey Creek Retail
Simulation Description: Post-Development Post DA-1 SMF-1
Project Number: 18-0431
Engineer : Greg Wadzinski
Supervising Engineer: Travis Hastay, PE
Date: 06-26-2019

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 148.00
Water Table Elevation, [WT] (ft datum): 152.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 10.00
Fillable Porosity, [n] (%): 20.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 7.5
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 17463.0

Geometry Data

Equivalent Pond Length, [L] (ft): 190.0
Equivalent Pond Width, [W] (ft): 93.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
159.00	14516.0
159.50	15473.0
160.50	17463.0
161.50	19553.0
162.00	22307.0

Discharge Structures

Discharge Structure #1 is active as orifice

Structure Parameters

Description: 6" Orifice @ EL. 160.10

Orifice elevation, (ft datum):	160.10
Orifice coefficient:	7.9
Orifice area, (ft²):	.19625
Orifice exponent:	0.5

Tailwater - disabled, free discharge

Discharge Structure #2 is inactive

Discharge Structure #3 is inactive

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Scenario Input Data

Scenario 1 :: SRWMD 100yr-1hr

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

Basin Area (acres) 2.370
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 94
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) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

Scenario 2 :: SRWMD 100yr-2hr

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

Basin Area (acres) 2.370
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 94
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) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	4.000	7.500	11.000	14.500
1.000	4.500	8.000	11.500	15.000
1.500	5.000	8.500	12.000	15.500
2.000	5.500	9.000	12.500	16.000
2.500	6.000	9.500	13.000	16.500
3.000	6.500	10.000	13.500	17.000
3.500	7.000	10.500	14.000	17.500

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Scenario Input Data (cont'd.)

Scenario 2 (cont'd.) :: SCS :: SRWMD 100yr-2hr

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
18.000	20.500	23.000	25.500	28.000
18.500	21.000	23.500	26.000	28.500
19.000	21.500	24.000	26.500	29.000
19.500	22.000	24.500	27.000	29.500
20.000	22.500	25.000	27.500	30.000

Scenario 3 :: SRWMD 100yr-4hr

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

Basin Area (acres) 2.370
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 94
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) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

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Scenario Input Data (cont'd.)

Scenario 4 :: SRWMD 100yr-8hr

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

Basin Area (acres) 2.370
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 94
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) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

Scenario 5 :: SRWMD 100yr-24hr

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

Basin Area (acres) 2.370
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 94
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) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	4.000	7.500	11.000	14.500
1.000	4.500	8.000	11.500	15.000
1.500	5.000	8.500	12.000	15.500
2.000	5.500	9.000	12.500	16.000
2.500	6.000	9.500	13.000	16.500
3.000	6.500	10.000	13.500	17.000
3.500	7.000	10.500	14.000	17.500

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Retention Pond Recovery - Refined Method
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Scenario Input Data (cont'd.)

Scenario 5 (cont'd.) :: SCS :: SRWMD 100yr-24hr

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
18.000	20.500	23.000	25.500	28.000
18.500	21.000	23.500	26.000	28.500
19.000	21.500	24.000	26.500	29.000
19.500	22.000	24.500	27.000	29.500
20.000	22.500	25.000	27.500	30.000

Scenario 6 :: SRWMD 100yr-72hr

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

Basin Area (acres) 2.370
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 94
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) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

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Scenario Input Data (cont'd.)

Scenario 7 :: SRWMD 100yr-168hr

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

Basin Area (acres) 2.370
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 94
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) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

Scenario 8 :: SRWMD 100yr-240hr

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

Basin Area (acres) 2.370
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 94
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) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	4.000	7.500	11.000	14.500
1.000	4.500	8.000	11.500	15.000
1.500	5.000	8.500	12.000	15.500
2.000	5.500	9.000	12.500	16.000
2.500	6.000	9.500	13.000	16.500
3.000	6.500	10.000	13.500	17.000
3.500	7.000	10.500	14.000	17.500

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Scenario Input Data (cont'd.)

Scenario 8 (cont'd.) :: SCS :: SRWMD 100yr-240hr

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
18.000	20.500	23.000	25.500	28.000
18.500	21.000	23.500	26.000	28.500
19.000	21.500	24.000	26.500	29.000
19.500	22.000	24.500	27.000	29.500
20.000	22.500	25.000	27.500	30.000

Scenario 9 :: WQTV 15,875 CF Slug Load

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

Treatment Volume (ft³) 15875

Initial ground water level (ft datum) 152.00 (default)

Time After Storm Event (days)	Time After Storm Event (days)
0.100	2.000
0.250	2.500
0.500	3.000
1.000	3.500
1.500	4.000

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Sort-By-Category Report

Scenarios Considered: 1 to 9

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	3	160.853	3.133	SRWMD 100yr-4hr
2	4	160.728	5.067	SRWMD 100yr-8hr
3	2	160.653	1.578	SRWMD 100yr-2hr
4	1	160.633	0.978	SRWMD 100yr-1hr
5	8	160.628	184.067	SRWMD 100yr-240hr
6	6	160.618	60.111	SRWMD 100yr-72hr
7	7	160.481	160.044	SRWMD 100yr-168hr
8	5	160.427	16.111	SRWMD 100yr-24hr
9	9	160.023	0.002	WQTV 15,875 CF Slug Load

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft ³ /s)	Time (hours)	Description
1	3	1.3453	3.133	SRWMD 100yr-4hr
2	4	1.2286	5.067	SRWMD 100yr-8hr
3	2	1.1531	1.578	SRWMD 100yr-2hr
4	1	1.1316	0.978	SRWMD 100yr-1hr
5	8	1.1264	184.067	SRWMD 100yr-240hr
6	6	1.1163	60.111	SRWMD 100yr-72hr
7	7	0.9568	160.044	SRWMD 100yr-168hr
8	5	0.8870	16.111	SRWMD 100yr-24hr
9	9	None	N.A.	WQTV 15,875 CF Slug Load

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft ³)	Time (hours)	Description
1	8	40573.6	216.489	SRWMD 100yr-240hr
2	6	37708.6	72.156	SRWMD 100yr-72hr
3	7	35312.7	168.378	SRWMD 100yr-168hr
4	5	28396.2	24.422	SRWMD 100yr-24hr
5	4	13773.3	8.467	SRWMD 100yr-8hr
6	3	10045.7	4.578	SRWMD 100yr-4hr
7	2	6449.3	2.578	SRWMD 100yr-2hr
8	1	3203.2	1.578	SRWMD 100yr-1hr
9	9	None	N.A.	WQTV 15,875 CF Slug Load

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Detailed Results :: Scenario 1 :: SRWMD 100yr-1hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
0.000	0.0000	0.0000	152.000	0.00000	0.00000	0.0	0.0	0.0	N.A.
0.022	0.0000	0.0000	152.000	0.00000	0.00000	0.0	0.0	0.0	U
0.044	0.0000	0.0000	152.000	0.00000	0.00000	0.0	0.0	0.0	U
0.067	0.0000	0.0000	152.000	0.00000	0.00000	0.0	0.0	0.0	U
0.089	0.0000	0.0000	152.000	0.00000	0.00000	0.0	0.0	0.0	U
0.111	0.0000	0.0000	152.000	0.00137	0.00000	0.0	0.0	0.0	U
0.133	0.0055	0.0000	152.000	0.01182	0.00000	0.2	0.2	0.0	U
0.156	0.0363	0.0000	152.001	0.05111	0.00000	1.9	1.9	0.0	U
0.178	0.1263	0.0000	152.002	0.15007	0.00000	8.4	8.4	0.0	U
0.200	0.3113	0.0000	152.007	0.35057	0.00000	25.9	25.9	0.0	U
0.222	0.6533	0.0000	152.019	0.70569	0.00000	64.5	64.5	0.0	U
0.244	1.2048	0.0000	152.040	1.09531	0.00000	138.8	138.8	0.0	U
0.267	2.0312	0.0000	159.002	1.26214	0.00000	268.3	239.7	0.0	U/P
0.289	3.0900	0.0000	159.009	1.26385	0.00000	473.1	340.8	0.0	U/P
0.311	4.3158	0.0000	159.023	1.26668	0.00000	769.3	442.0	0.0	U/P
0.333	5.7284	0.0000	159.043	1.27079	0.00000	1171.1	543.4	0.0	U/P
0.356	7.4084	0.0000	159.072	1.27641	0.00000	1696.6	645.3	0.0	U/P
0.378	9.3438	0.0000	159.111	1.28370	0.00000	2366.7	747.7	0.0	U/P
0.400	11.3807	0.0000	159.160	1.29273	0.00000	3195.6	850.7	0.0	U/P
0.422	13.3415	0.0000	159.219	1.30339	0.00000	4184.5	954.5	0.0	U/P
0.444	15.1084	0.0000	159.288	1.31549	0.00000	5322.5	1059.2	0.0	U/P
0.467	16.5980	0.0000	159.365	1.32876	0.00000	6590.8	1165.0	0.0	U/P
0.489	17.7901	0.0000	159.448	1.34305	0.00000	7966.3	1271.8	0.0	U/P
0.511	18.7093	0.0000	159.535	1.35827	0.00000	9426.3	1379.9	0.0	U/P
0.533	19.3544	0.0000	159.626	1.37400	0.00000	10948.8	1489.1	0.0	U/P
0.556	19.6934	0.0000	159.718	1.38984	0.00000	12510.7	1599.7	0.0	U/P
0.578	19.7337	0.0000	159.809	1.40554	0.00000	14087.8	1711.5	0.0	U/P
0.600	19.5797	0.0000	159.899	1.42093	0.00000	15660.4	1824.6	0.0	U/P
0.622	19.2371	0.0000	159.987	1.43585	0.00000	17213.0	1938.9	0.0	U/P
0.644	18.6647	0.0000	160.072	1.45010	0.00000	18729.1	2054.3	0.0	U/P
0.667	17.7653	0.0000	160.152	1.46342	0.35206	20186.3	2170.9	14.1	U/P
0.689	16.6406	0.0000	160.224	1.47555	0.54631	21562.6	2288.5	50.0	U/P
0.711	15.4536	0.0000	160.290	1.48644	0.67564	22846.3	2407.0	98.9	U/P
0.733	14.2710	0.0000	160.349	1.49619	0.77374	24035.3	2526.3	156.9	U/P
0.756	13.0938	0.0000	160.402	1.50486	0.85185	25129.9	2646.4	221.9	U/P
0.778	11.9751	0.0000	160.449	1.51241	0.91558	26132.6	2767.1	292.6	U/P
0.800	10.9422	0.0000	160.490	1.51589	0.96837	27049.3	2888.3	367.9	U/P
0.822	9.9399	0.0000	160.526	1.51589	1.01244	27884.6	3009.6	447.2	U/P
0.844	8.8916	0.0000	160.558	1.51589	1.04895	28637.9	3130.9	529.6	U/P
0.867	7.6987	0.0000	160.584	1.51589	1.07829	29301.5	3252.2	614.7	U/P
0.889	6.4204	0.0000	160.604	1.51589	1.10055	29866.3	3373.4	701.9	U/P
0.911	5.1934	0.0000	160.618	1.51589	1.11615	30330.8	3494.7	790.5	U/P
0.933	4.1006	0.0000	160.627	1.51589	1.12588	30702.6	3616.0	880.2	U/P
0.956	3.1830	0.0000	160.632	1.51589	1.13067	30993.9	3737.2	970.5	U/P
0.978	2.4891	0.0000	160.633	1.51589	1.13158	31220.8	3858.5	1061.0	U/P
1.000	1.9710	0.0000	160.631	1.51589	1.12958	31399.2	3979.8	1151.4	U/P
1.022	1.5705	0.0000	160.627	1.51589	1.12539	31540.9	4101.1	1241.6	U/P
1.044	1.2467	0.0000	160.621	1.51589	1.11944	31653.6	4222.3	1331.4	U/P
1.067	0.9768	0.0000	160.615	1.51589	1.11205	31742.5	4343.6	1420.7	U/P
1.089	0.7466	0.0000	160.607	1.51589	1.10341	31811.4	4464.9	1509.3	U/P
1.111	0.5563	0.0000	160.598	1.51589	1.09369	31863.6	4586.1	1597.2	U/P
1.133	0.4042	0.0000	160.588	1.51589	1.08306	31902.0	4707.4	1684.3	U/P
1.156	0.2868	0.0000	160.578	1.51589	1.07169	31929.6	4828.7	1770.4	U/P
1.178	0.2021	0.0000	160.567	1.51589	1.05972	31949.2	4949.9	1855.7	U/P
1.200	0.1421	0.0000	160.556	1.51589	1.04728	31962.9	5071.2	1940.0	U/P
1.222	0.0995	0.0000	160.545	1.51589	1.03447	31972.6	5192.5	2023.2	U/P
1.244	0.0689	0.0000	160.534	1.51589	1.02136	31979.3	5313.8	2105.5	U/P
1.267	0.0468	0.0000	160.523	1.51589	1.00799	31984.0	5435.0	2186.7	U/P
1.289	0.0309	0.0000	160.511	1.51589	0.99439	31987.1	5556.3	2266.8	U/P
1.311	0.0198	0.0000	160.500	1.51589	0.98058	31989.1	5677.6	2345.7	U/P
1.333	0.0126	0.0000	160.489	1.51491	0.96658	31990.4	5798.8	2423.6	U/P
1.356	0.0088	0.0000	160.477	1.51296	0.95243	31991.2	5920.0	2500.4	U/P
1.378	0.0060	0.0000	160.466	1.51101	0.93811	31991.8	6040.9	2576.0	U/P
1.400	0.0039	0.0000	160.455	1.50907	0.92364	31992.2	6161.7	2650.5	U/P
1.422	0.0025	0.0000	160.444	1.50714	0.90900	31992.5	6282.4	2723.8	U/P
1.444	0.0016	0.0000	160.433	1.50521	0.89421	31992.7	6402.9	2795.9	U/P
1.467	0.0009	0.0000	160.422	1.50330	0.87925	31992.8	6523.2	2866.9	U/P
1.489	0.0005	0.0000	160.411	1.50140	0.86411	31992.8	6643.4	2936.6	U/P
1.511	0.0002	0.0000	160.400	1.49951	0.84880	31992.8	6763.4	3005.1	U/P
1.533	0.0000	0.0000	160.389	1.49763	0.83330	31992.8	6883.3	3072.4	U/P
1.556	0.0000	0.0000	160.378	1.49576	0.81760	31992.8	7003.0	3138.4	U/P
1.578	0.0000	0.0000	160.367	1.49207	0.80170	31992.8	7122.6	3203.2	U/P
13.578	0.0000	0.0000	----	----	----	31992.8	28789.6	3203.2	dry
25.578	0.0000	0.0000	----	----	----	31992.8	28789.6	3203.2	dry

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Detailed Results (cont,d.) :: Scenario 2 :: SRWMD 100yr-2hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
1.644	2.5606	0.0000	160.653	1.51589	1.15256	37363.1	7691.2	3016.5	U/P
1.667	2.4830	0.0000	160.652	1.51589	1.15187	37564.9	7812.5	3108.7	U/P
1.689	2.3836	0.0000	160.651	1.51589	1.15077	37759.5	7933.8	3200.8	U/P
1.711	2.2805	0.0000	160.649	1.51589	1.14920	37946.1	8055.0	3292.8	U/P
1.733	2.1865	0.0000	160.648	1.51589	1.14718	38124.8	8176.3	3384.7	U/P
1.756	2.1083	0.0000	160.645	1.51589	1.14475	38296.6	8297.6	3476.3	U/P
1.778	2.0523	0.0000	160.643	1.51589	1.14201	38463.0	8418.9	3567.8	U/P
1.800	2.0132	0.0000	160.640	1.51589	1.13904	38625.6	8540.1	3659.0	U/P
1.822	1.9756	0.0000	160.637	1.51589	1.13591	38785.2	8661.4	3750.0	U/P
1.844	1.9253	0.0000	160.634	1.51589	1.13256	38941.2	8782.7	3840.8	U/P
1.867	1.8475	0.0000	160.630	1.51589	1.12892	39092.1	8903.9	3931.2	U/P
1.889	1.7479	0.0000	160.626	1.51589	1.12485	39235.9	9025.2	4021.4	U/P
1.911	1.6446	0.0000	160.622	1.51589	1.12030	39371.6	9146.5	4111.2	U/P
1.933	1.5504	0.0000	160.618	1.51589	1.11527	39499.4	9267.7	4200.6	U/P
1.956	1.4721	0.0000	160.612	1.51589	1.10982	39620.3	9389.0	4289.6	U/P
1.978	1.4158	0.0000	160.607	1.51589	1.10403	39735.8	9510.3	4378.2	U/P
2.000	1.3766	0.0000	160.602	1.51589	1.09800	39847.5	9631.6	4466.3	U/P
2.022	1.3294	0.0000	160.596	1.51589	1.09175	39955.8	9752.8	4553.9	U/P
2.044	1.2493	0.0000	160.590	1.51589	1.08517	40058.9	9874.1	4640.9	U/P
2.067	1.1082	0.0000	160.584	1.51589	1.07802	40153.2	9995.4	4727.5	U/P
2.089	0.9195	0.0000	160.576	1.51589	1.07002	40234.3	10116.6	4813.4	U/P
2.111	0.7205	0.0000	160.568	1.51589	1.06100	40299.9	10237.9	4898.6	U/P
2.133	0.5372	0.0000	160.560	1.51589	1.05094	40350.2	10359.2	4983.1	U/P
2.156	0.3841	0.0000	160.550	1.51589	1.03995	40387.1	10480.5	5066.7	U/P
2.178	0.2742	0.0000	160.540	1.51589	1.02819	40413.4	10601.7	5149.5	U/P
2.200	0.1976	0.0000	160.529	1.51589	1.01584	40432.3	10723.0	5231.2	U/P
2.222	0.1426	0.0000	160.519	1.51589	1.00303	40445.9	10844.3	5312.0	U/P
2.244	0.1020	0.0000	160.508	1.51589	0.98984	40455.7	10965.5	5391.7	U/P
2.267	0.0731	0.0000	160.497	1.51562	0.97634	40462.7	11086.8	5470.3	U/P
2.289	0.0520	0.0000	160.486	1.51438	0.96257	40467.7	11208.0	5547.9	U/P
2.311	0.0369	0.0000	160.474	1.51244	0.94857	40471.3	11329.1	5624.3	U/P
2.333	0.0262	0.0000	160.463	1.51051	0.93436	40473.8	11450.0	5699.7	U/P
2.356	0.0185	0.0000	160.452	1.50859	0.91995	40475.6	11570.8	5773.8	U/P
2.378	0.0130	0.0000	160.441	1.50666	0.90536	40476.8	11691.4	5846.8	U/P
2.400	0.0090	0.0000	160.430	1.50475	0.89058	40477.7	11811.9	5918.7	U/P
2.422	0.0061	0.0000	160.419	1.50284	0.87562	40478.3	11932.2	5989.3	U/P
2.444	0.0040	0.0000	160.408	1.50095	0.86047	40478.7	12052.3	6058.8	U/P
2.467	0.0023	0.0000	160.397	1.49906	0.84513	40479.0	12172.3	6127.0	U/P
2.489	0.0011	0.0000	160.386	1.49718	0.82959	40479.1	12292.2	6194.0	U/P
2.511	0.0004	0.0000	160.376	1.49532	0.81385	40479.2	12411.9	6259.7	U/P
2.533	0.0000	0.0000	160.365	1.49347	0.79790	40479.2	12531.4	6324.2	U/P
2.556	0.0000	0.0000	160.354	1.49162	0.78173	40479.2	12650.8	6387.4	U/P
2.578	0.0000	0.0000	160.344	1.48795	0.76533	40479.2	12770.1	6449.3	U/P
14.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
26.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
38.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
50.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
62.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
74.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
86.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
98.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
110.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
122.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
134.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
146.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
158.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
170.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
182.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
194.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
206.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
218.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
230.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
242.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
254.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
266.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
278.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
290.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
302.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
314.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
326.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
338.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
350.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
362.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry
374.578	0.0000	0.0000	----	----	----	40479.2	34029.9	6449.3	dry

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Detailed Results (cont,d.) :: Scenario 3 :: SRWMD 100yr-4hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
3.289	1.7082	0.0000	160.828	1.51589	1.32309	48589.1	13793.8	4984.4	U/P
3.311	1.6752	0.0000	160.823	1.51589	1.31850	48724.4	13915.1	5090.1	U/P
3.333	1.6517	0.0000	160.818	1.51589	1.31379	48857.5	14036.4	5195.4	U/P
3.356	1.6345	0.0000	160.813	1.51589	1.30900	48988.9	14157.6	5300.3	U/P
3.378	1.6221	0.0000	160.808	1.51589	1.30415	49119.2	14278.9	5404.8	U/P
3.400	1.6132	0.0000	160.802	1.51589	1.29925	49248.6	14400.2	5509.0	U/P
3.422	1.6068	0.0000	160.797	1.51589	1.29432	49377.4	14521.4	5612.7	U/P
3.444	1.6021	0.0000	160.792	1.51589	1.28937	49505.8	14642.7	5716.1	U/P
3.467	1.5985	0.0000	160.786	1.51589	1.28439	49633.8	14764.0	5819.0	U/P
3.489	1.5959	0.0000	160.781	1.51589	1.27941	49761.6	14885.3	5921.6	U/P
3.511	1.5871	0.0000	160.776	1.51589	1.27439	49888.9	15006.5	6023.7	U/P
3.533	1.5569	0.0000	160.770	1.51589	1.26930	50014.6	15127.8	6125.5	U/P
3.556	1.4874	0.0000	160.765	1.51589	1.26399	50136.4	15249.1	6226.8	U/P
3.578	1.3735	0.0000	160.759	1.51589	1.25829	50250.8	15370.3	6327.7	U/P
3.600	1.2352	0.0000	160.752	1.51589	1.25205	50355.2	15491.6	6428.1	U/P
3.622	1.0968	0.0000	160.745	1.51589	1.24520	50448.5	15612.9	6528.0	U/P
3.644	0.9743	0.0000	160.737	1.51589	1.23778	50531.3	15734.1	6627.3	U/P
3.667	0.8783	0.0000	160.729	1.51589	1.22986	50605.4	15855.4	6726.0	U/P
3.689	0.8102	0.0000	160.721	1.51589	1.22156	50673.0	15976.7	6824.1	U/P
3.711	0.7622	0.0000	160.712	1.51589	1.21298	50735.8	16098.0	6921.4	U/P
3.733	0.7273	0.0000	160.703	1.51589	1.20418	50795.4	16219.2	7018.1	U/P
3.756	0.7019	0.0000	160.694	1.51589	1.19521	50852.6	16340.5	7114.1	U/P
3.778	0.6837	0.0000	160.685	1.51589	1.18611	50908.0	16461.8	7209.4	U/P
3.800	0.6705	0.0000	160.676	1.51589	1.17689	50962.2	16583.0	7303.9	U/P
3.822	0.6611	0.0000	160.667	1.51589	1.16758	51015.5	16704.3	7397.7	U/P
3.844	0.6543	0.0000	160.658	1.51589	1.15820	51068.1	16825.6	7490.7	U/P
3.867	0.6494	0.0000	160.649	1.51589	1.14874	51120.2	16946.9	7583.0	U/P
3.889	0.6458	0.0000	160.640	1.51589	1.13922	51172.0	17068.1	7674.5	U/P
3.911	0.6432	0.0000	160.631	1.51589	1.12964	51223.6	17189.4	7765.2	U/P
3.933	0.6414	0.0000	160.622	1.51589	1.12001	51275.0	17310.7	7855.2	U/P
3.956	0.6400	0.0000	160.613	1.51589	1.11031	51326.2	17431.9	7944.4	U/P
3.978	0.6389	0.0000	160.604	1.51589	1.10057	51377.4	17553.2	8032.9	U/P
4.000	0.6382	0.0000	160.595	1.51589	1.09077	51428.5	17674.5	8120.5	U/P
4.022	0.6282	0.0000	160.586	1.51589	1.08090	51479.1	17795.8	8207.4	U/P
4.044	0.5984	0.0000	160.577	1.51589	1.07087	51528.2	17917.0	8293.5	U/P
4.067	0.5353	0.0000	160.568	1.51589	1.06055	51573.5	18038.3	8378.7	U/P
4.089	0.4464	0.0000	160.559	1.51589	1.04978	51612.8	18159.6	8463.1	U/P
4.111	0.3508	0.0000	160.549	1.51589	1.03846	51644.7	18280.8	8546.7	U/P
4.133	0.2619	0.0000	160.538	1.51589	1.02656	51669.2	18402.1	8629.3	U/P
4.156	0.1874	0.0000	160.528	1.51589	1.01414	51687.2	18523.4	8710.9	U/P
4.178	0.1338	0.0000	160.517	1.51589	1.00126	51700.0	18644.6	8791.5	U/P
4.200	0.0965	0.0000	160.506	1.51589	0.98802	51709.2	18765.9	8871.1	U/P
4.222	0.0698	0.0000	160.495	1.51548	0.97448	51715.9	18887.2	8949.6	U/P
4.244	0.0500	0.0000	160.484	1.51411	0.96067	51720.7	19008.4	9027.0	U/P
4.267	0.0359	0.0000	160.473	1.51218	0.94665	51724.1	19129.5	9103.3	U/P
4.289	0.0257	0.0000	160.462	1.51025	0.93241	51726.6	19250.3	9178.4	U/P
4.311	0.0183	0.0000	160.451	1.50832	0.91798	51728.3	19371.1	9252.5	U/P
4.333	0.0131	0.0000	160.440	1.50640	0.90337	51729.6	19491.7	9325.3	U/P
4.356	0.0093	0.0000	160.429	1.50449	0.88857	51730.5	19612.1	9397.0	U/P
4.378	0.0065	0.0000	160.418	1.50259	0.87359	51731.1	19732.4	9467.5	U/P
4.400	0.0045	0.0000	160.407	1.50069	0.85842	51731.6	19852.5	9536.8	U/P
4.422	0.0030	0.0000	160.396	1.49881	0.84306	51731.9	19972.5	9604.8	U/P
4.444	0.0020	0.0000	160.385	1.49694	0.82750	51732.1	20092.3	9671.6	U/P
4.467	0.0012	0.0000	160.374	1.49507	0.81174	51732.2	20212.0	9737.2	U/P
4.489	0.0006	0.0000	160.363	1.49322	0.79576	51732.3	20331.5	9801.5	U/P
4.511	0.0002	0.0000	160.353	1.49138	0.77957	51732.3	20450.9	9864.5	U/P
4.533	0.0000	0.0000	160.342	1.48955	0.76314	51732.3	20570.2	9926.2	U/P
4.556	0.0000	0.0000	160.332	1.48774	0.74647	51732.3	20689.3	9986.6	U/P
4.578	0.0000	0.0000	160.321	1.48498	0.72953	51732.3	20808.2	10045.7	U/P
16.578	0.0000	0.0000	157.018	0.24165	0.00000	51732.3	41686.6	10045.7	U/S
28.578	0.0000	0.0000	156.240	0.00000	0.00000	51732.3	41686.6	10045.7	S
40.578	0.0000	0.0000	155.775	0.00000	0.00000	51732.3	41686.6	10045.7	S
52.578	0.0000	0.0000	155.447	0.00000	0.00000	51732.3	41686.6	10045.7	S
64.578	0.0000	0.0000	155.195	0.00000	0.00000	51732.3	41686.6	10045.7	S
76.578	0.0000	0.0000	154.993	0.00000	0.00000	51732.3	41686.6	10045.7	S
88.578	0.0000	0.0000	154.824	0.00000	0.00000	51732.3	41686.6	10045.7	S
100.578	0.0000	0.0000	154.681	0.00000	0.00000	51732.3	41686.6	10045.7	S
112.578	0.0000	0.0000	154.556	0.00000	0.00000	51732.3	41686.6	10045.7	S
124.578	0.0000	0.0000	154.447	0.00000	0.00000	51732.3	41686.6	10045.7	S
136.578	0.0000	0.0000	154.349	0.00000	0.00000	51732.3	41686.6	10045.7	S
148.578	0.0000	0.0000	154.262	0.00000	0.00000	51732.3	41686.6	10045.7	S
160.578	0.0000	0.0000	154.182	0.00000	0.00000	51732.3	41686.6	10045.7	S
172.578	0.0000	0.0000	154.110	0.00000	0.00000	51732.3	41686.6	10045.7	S
184.578	0.0000	0.0000	154.044	0.00000	0.00000	51732.3	41686.6	10045.7	S

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Detailed Results (cont,d.) :: Scenario 4 :: SRWMD 100yr-8hr

Elapsed Time (hours)	Inflow Rate (ft ³ /s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft ³ /s)	Overflow Discharge (ft ³ /s)	Cumulative Inflow Volume (ft ³)	Cumulative Infiltration Volume (ft ³)	Cumulative Discharge Volume (ft ³)	Flow Type
4.933	3.0358	0.0000	160.721	1.51589	1.22217	50923.4	18206.8	4833.3	U/P
4.956	3.0360	0.0000	160.723	1.51589	1.22348	51166.3	18328.1	4931.1	U/P
4.978	3.0362	0.0000	160.724	1.51589	1.22477	51409.1	18449.3	5029.1	U/P
5.000	3.0364	0.0000	160.725	1.51589	1.22606	51652.1	18570.6	5127.1	U/P
5.022	3.0081	0.0000	160.727	1.51589	1.22729	51893.8	18691.9	5225.2	U/P
5.044	2.9201	0.0000	160.728	1.51589	1.22825	52131.0	18813.1	5323.4	U/P
5.067	2.7324	0.0000	160.728	1.51589	1.22861	52357.1	18934.4	5421.7	U/P
5.089	2.4678	0.0000	160.727	1.51589	1.22798	52565.1	19055.7	5520.0	U/P
5.111	2.1833	0.0000	160.726	1.51589	1.22615	52751.1	19177.0	5618.1	U/P
5.133	1.9187	0.0000	160.722	1.51589	1.22313	52915.2	19298.2	5716.1	U/P
5.156	1.6968	0.0000	160.718	1.51589	1.21905	53059.8	19419.5	5813.8	U/P
5.178	1.5374	0.0000	160.713	1.51589	1.21413	53189.2	19540.8	5911.1	U/P
5.200	1.4265	0.0000	160.708	1.51589	1.20861	53307.7	19662.0	6008.0	U/P
5.222	1.3468	0.0000	160.702	1.51589	1.20266	53418.7	19783.3	6104.5	U/P
5.244	1.2880	0.0000	160.696	1.51589	1.19639	53524.1	19904.6	6200.5	U/P
5.267	1.2461	0.0000	160.689	1.51589	1.18989	53625.4	20025.9	6295.9	U/P
5.289	1.2157	0.0000	160.682	1.51589	1.18321	53723.9	20147.1	6390.8	U/P
5.311	1.1938	0.0000	160.676	1.51589	1.17640	53820.3	20268.4	6485.2	U/P
5.333	1.1782	0.0000	160.669	1.51589	1.16949	53915.2	20389.7	6579.0	U/P
5.356	1.1668	0.0000	160.662	1.51589	1.16250	54009.0	20510.9	6672.3	U/P
5.378	1.1586	0.0000	160.655	1.51589	1.15545	54102.0	20632.2	6765.0	U/P
5.400	1.1527	0.0000	160.649	1.51589	1.14835	54194.4	20753.5	6857.2	U/P
5.422	1.1484	0.0000	160.642	1.51589	1.14121	54286.5	20874.8	6948.8	U/P
5.444	1.1453	0.0000	160.635	1.51589	1.13404	54378.2	20996.0	7039.8	U/P
5.467	1.1429	0.0000	160.628	1.51589	1.12684	54469.8	21117.3	7130.2	U/P
5.489	1.1411	0.0000	160.622	1.51589	1.11961	54561.1	21238.6	7220.1	U/P
5.511	1.1400	0.0000	160.615	1.51589	1.11235	54652.4	21359.8	7309.4	U/P
5.533	1.1395	0.0000	160.608	1.51589	1.10507	54743.5	21481.1	7398.1	U/P
5.556	1.1395	0.0000	160.601	1.51589	1.09778	54834.7	21602.4	7486.2	U/P
5.578	1.1395	0.0000	160.595	1.51589	1.09046	54925.9	21723.6	7573.7	U/P
5.600	1.1396	0.0000	160.588	1.51589	1.08313	55017.0	21844.9	7660.6	U/P
5.622	1.1396	0.0000	160.582	1.51589	1.07578	55108.2	21966.2	7747.0	U/P
5.644	1.1396	0.0000	160.575	1.51589	1.06841	55199.4	22087.5	7832.8	U/P
5.667	1.1396	0.0000	160.568	1.51589	1.06102	55290.5	22208.7	7917.9	U/P
5.689	1.1396	0.0000	160.562	1.51589	1.05362	55381.7	22330.0	8002.5	U/P
5.711	1.1397	0.0000	160.555	1.51589	1.04619	55472.9	22451.3	8086.5	U/P
5.733	1.1397	0.0000	160.549	1.51589	1.03874	55564.0	22572.5	8169.9	U/P
5.756	1.1397	0.0000	160.543	1.51589	1.03128	55655.2	22693.8	8252.7	U/P
5.778	1.1397	0.0000	160.536	1.51589	1.02379	55746.4	22815.1	8334.9	U/P
5.800	1.1398	0.0000	160.530	1.51589	1.01629	55837.6	22936.4	8416.5	U/P
5.822	1.1398	0.0000	160.523	1.51589	1.00876	55928.8	23057.6	8497.5	U/P
5.844	1.1398	0.0000	160.517	1.51589	1.00121	56019.9	23178.9	8577.9	U/P
5.867	1.1398	0.0000	160.511	1.51589	0.99364	56111.1	23300.2	8657.7	U/P
5.889	1.1398	0.0000	160.505	1.51589	0.98605	56202.3	23421.4	8736.9	U/P
5.911	1.1399	0.0000	160.498	1.51589	0.97844	56293.5	23542.7	8815.5	U/P
5.933	1.1399	0.0000	160.492	1.51565	0.97080	56384.7	23664.0	8893.5	U/P
5.956	1.1399	0.0000	160.486	1.51489	0.96315	56475.9	23785.2	8970.8	U/P
5.978	1.1399	0.0000	160.480	1.51383	0.95548	56567.1	23906.4	9047.6	U/P
6.000	1.1399	0.0000	160.474	1.51278	0.94780	56658.3	24027.4	9123.7	U/P
6.022	1.1371	0.0000	160.468	1.51173	0.94008	56749.4	24148.4	9199.2	U/P
6.044	1.1283	0.0000	160.462	1.51067	0.93232	56840.0	24269.3	9274.1	U/P
6.067	1.1095	0.0000	160.456	1.50961	0.92446	56929.5	24390.1	9348.4	U/P
6.089	1.0831	0.0000	160.449	1.50854	0.91644	57017.2	24510.8	9422.0	U/P
6.111	1.0546	0.0000	160.443	1.50745	0.90823	57102.7	24631.5	9495.0	U/P
6.133	1.0281	0.0000	160.437	1.50634	0.89984	57186.0	24752.0	9567.3	U/P
6.156	1.0059	0.0000	160.431	2.30475	0.89126	57267.4	24872.5	9639.0	U/P
6.178	0.9900	0.0000	160.419	2.79683	0.87503	57347.2	25120.8	9674.0	U/S
6.200	0.9789	0.0000	160.408	2.49841	0.85980	57426.0	25320.0	9743.4	S
6.222	0.9709	0.0000	160.397	2.48072	0.84422	57503.9	25520.5	9811.5	S
6.244	0.9650	0.0000	160.386	2.40387	0.82875	57581.4	25716.9	9878.4	S
6.267	0.9608	0.0000	160.376	2.28796	0.81372	57658.4	25905.2	9944.1	S
6.289	0.9578	0.0000	160.366	2.15174	0.79940	57735.2	26083.0	10008.7	S
6.311	0.9556	0.0000	160.357	2.01004	0.78588	57811.7	26249.4	10072.1	S
6.333	0.9541	0.0000	160.349	1.87302	0.77323	57888.1	26404.6	10134.4	S
6.356	0.9530	0.0000	160.341	1.74660	0.76141	57964.4	26549.1	10195.8	S
6.378	0.9521	0.0000	160.334	1.63346	0.75036	58040.6	26684.0	10256.3	S
6.400	0.9516	0.0000	160.328	1.53407	0.74002	58116.7	26810.5	10315.9	S
6.422	0.9511	0.0000	160.322	1.44764	0.73032	58192.8	26929.5	10374.7	S
6.444	0.9508	0.0000	160.317	1.37274	0.72117	58268.9	27042.1	10432.8	S
6.467	0.9506	0.0000	160.311	1.30772	0.71251	58345.0	27149.1	10490.1	S
6.489	0.9505	0.0000	160.307	1.25102	0.70430	58421.0	27251.3	10546.8	S
6.511	0.9504	0.0000	160.302	1.20122	0.69647	58497.0	27349.3	10602.8	S
6.533	0.9503	0.0000	160.298	1.15712	0.68899	58573.1	27443.5	10658.3	S
6.556	0.9503	0.0000	160.294	1.11775	0.68182	58649.1	27534.4	10713.1	S

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Detailed Results (cont,d.) :: Scenario 4 :: SRWMD 100yr-8hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
8.222	0.0624	0.0000	160.129	0.44395	0.26212	62661.8	31411.3	13633.4	S
8.244	0.0447	0.0000	160.126	0.44045	0.24761	62666.1	31446.7	13653.8	S
8.267	0.0321	0.0000	160.123	0.43704	0.23226	62669.2	31481.8	13673.0	S
8.289	0.0230	0.0000	160.120	0.43370	0.21604	62671.4	31516.6	13690.9	S
8.311	0.0164	0.0000	160.117	0.43039	0.19884	62673.0	31551.1	13707.5	S
8.333	0.0117	0.0000	160.114	0.42707	0.18050	62674.1	31585.4	13722.7	S
8.356	0.0083	0.0000	160.111	0.42365	0.16072	62674.9	31619.5	13736.3	S
8.378	0.0058	0.0000	160.108	0.41998	0.13901	62675.4	31653.2	13748.3	S
8.400	0.0040	0.0000	160.106	0.41566	0.11446	62675.8	31686.7	13758.5	S
8.422	0.0027	0.0000	160.103	0.40901	0.08500	62676.1	31719.7	13766.4	S
8.444	0.0018	0.0000	160.101	0.40354	0.04289	62676.3	31752.1	13771.6	S
8.467	0.0010	0.0000	160.099	0.41200	0.00000	62676.4	31784.3	13773.3	S
8.489	0.0005	0.0000	160.097	0.42064	0.00000	62676.5	31818.0	13773.3	S
8.511	0.0002	0.0000	160.095	0.41856	0.00000	62676.5	31851.6	13773.3	S
8.533	0.0000	0.0000	160.093	0.41648	0.00000	62676.5	31885.0	13773.3	S
8.556	0.0000	0.0000	160.091	0.41443	0.00000	62676.5	31918.2	13773.3	S
8.578	0.0000	0.0000	160.089	0.41301	0.00000	62676.5	31951.3	13773.3	S
20.578	0.0000	0.0000	159.557	0.16333	0.00000	62676.5	40527.8	13773.3	S
32.578	0.0000	0.0000	159.193	0.09694	0.00000	62676.5	46063.2	13773.3	S
44.578	0.0000	0.0000	158.733	0.03287	0.00000	62676.5	48903.2	13773.3	S
56.578	0.0000	0.0000	158.075	0.00000	0.00000	62676.5	48903.2	13773.3	S
68.578	0.0000	0.0000	157.593	0.00000	0.00000	62676.5	48903.2	13773.3	S
80.578	0.0000	0.0000	157.214	0.00000	0.00000	62676.5	48903.2	13773.3	S
92.578	0.0000	0.0000	156.904	0.00000	0.00000	62676.5	48903.2	13773.3	S
104.578	0.0000	0.0000	156.643	0.00000	0.00000	62676.5	48903.2	13773.3	S
116.578	0.0000	0.0000	156.418	0.00000	0.00000	62676.5	48903.2	13773.3	S
128.578	0.0000	0.0000	156.222	0.00000	0.00000	62676.5	48903.2	13773.3	S
140.578	0.0000	0.0000	156.049	0.00000	0.00000	62676.5	48903.2	13773.3	S
152.578	0.0000	0.0000	155.894	0.00000	0.00000	62676.5	48903.2	13773.3	S
164.578	0.0000	0.0000	155.755	0.00000	0.00000	62676.5	48903.2	13773.3	S
176.578	0.0000	0.0000	155.628	0.00000	0.00000	62676.5	48903.2	13773.3	S
188.578	0.0000	0.0000	155.512	0.00000	0.00000	62676.5	48903.2	13773.3	S
200.578	0.0000	0.0000	155.405	0.00000	0.00000	62676.5	48903.2	13773.3	S
212.578	0.0000	0.0000	155.307	0.00000	0.00000	62676.5	48903.2	13773.3	S
224.578	0.0000	0.0000	155.216	0.00000	0.00000	62676.5	48903.2	13773.3	S
236.578	0.0000	0.0000	155.131	0.00000	0.00000	62676.5	48903.2	13773.3	S
248.578	0.0000	0.0000	155.051	0.00000	0.00000	62676.5	48903.2	13773.3	S
260.578	0.0000	0.0000	154.977	0.00000	0.00000	62676.5	48903.2	13773.3	S
272.578	0.0000	0.0000	154.907	0.00000	0.00000	62676.5	48903.2	13773.3	S
284.578	0.0000	0.0000	154.841	0.00000	0.00000	62676.5	48903.2	13773.3	S
296.578	0.0000	0.0000	154.778	0.00000	0.00000	62676.5	48903.2	13773.3	S
308.578	0.0000	0.0000	154.720	0.00000	0.00000	62676.5	48903.2	13773.3	S
320.578	0.0000	0.0000	154.664	0.00000	0.00000	62676.5	48903.2	13773.3	S
332.578	0.0000	0.0000	154.610	0.00000	0.00000	62676.5	48903.2	13773.3	S
344.578	0.0000	0.0000	154.560	0.00000	0.00000	62676.5	48903.2	13773.3	S
356.578	0.0000	0.0000	154.512	0.00000	0.00000	62676.5	48903.2	13773.3	S
368.578	0.0000	0.0000	154.465	0.00000	0.00000	62676.5	48903.2	13773.3	S
380.578	0.0000	0.0000	154.421	0.00000	0.00000	62676.5	48903.2	13773.3	S
392.578	0.0000	0.0000	154.379	0.00000	0.00000	62676.5	48903.2	13773.3	S
404.578	0.0000	0.0000	154.339	0.00000	0.00000	62676.5	48903.2	13773.3	S
416.578	0.0000	0.0000	154.300	0.00000	0.00000	62676.5	48903.2	13773.3	S
428.578	0.0000	0.0000	154.263	0.00000	0.00000	62676.5	48903.2	13773.3	S
440.578	0.0000	0.0000	154.227	0.00000	0.00000	62676.5	48903.2	13773.3	S
452.578	0.0000	0.0000	154.192	0.00000	0.00000	62676.5	48903.2	13773.3	S
464.578	0.0000	0.0000	154.159	0.00000	0.00000	62676.5	48903.2	13773.3	S
476.578	0.0000	0.0000	154.127	0.00000	0.00000	62676.5	48903.2	13773.3	S
488.578	0.0000	0.0000	154.096	0.00000	0.00000	62676.5	48903.2	13773.3	S
500.578	0.0000	0.0000	154.066	0.00000	0.00000	62676.5	48903.2	13773.3	S
512.578	0.0000	0.0000	154.037	0.00000	0.00000	62676.5	48903.2	13773.3	S
524.578	0.0000	0.0000	154.009	0.00000	0.00000	62676.5	48903.2	13773.3	S
536.578	0.0000	0.0000	153.982	0.00000	0.00000	62676.5	48903.2	13773.3	S
548.578	0.0000	0.0000	153.956	0.00000	0.00000	62676.5	48903.2	13773.3	S
560.578	0.0000	0.0000	153.930	0.00000	0.00000	62676.5	48903.2	13773.3	S
572.578	0.0000	0.0000	153.905	0.00000	0.00000	62676.5	48903.2	13773.3	S
584.578	0.0000	0.0000	153.881	0.00000	0.00000	62676.5	48903.2	13773.3	S
596.578	0.0000	0.0000	153.858	0.00000	0.00000	62676.5	48903.2	13773.3	S
608.578	0.0000	0.0000	153.836	0.00000	0.00000	62676.5	48903.2	13773.3	S
620.578	0.0000	0.0000	153.814	0.00000	0.00000	62676.5	48903.2	13773.3	S
632.578	0.0000	0.0000	153.792	0.00000	0.00000	62676.5	48903.2	13773.3	S
644.578	0.0000	0.0000	153.771	0.00000	0.00000	62676.5	48903.2	13773.3	S
656.578	0.0000	0.0000	153.751	0.00000	0.00000	62676.5	48903.2	13773.3	S
668.578	0.0000	0.0000	153.731	0.00000	0.00000	62676.5	48903.2	13773.3	S
680.578	0.0000	0.0000	153.712	0.00000	0.00000	62676.5	48903.2	13773.3	S
692.578	0.0000	0.0000	153.693	0.00000	0.00000	62676.5	48903.2	13773.3	S

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Detailed Results (cont,d.) :: Scenario 5 :: SRWMD 100yr-24hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
72.578	0.0000	0.0000	159.023	0.04022	0.00000	88733.8	59997.4	28396.2	S
84.578	0.0000	0.0000	158.506	0.00394	0.00000	88733.8	60337.5	28396.2	S
96.578	0.0000	0.0000	158.065	0.00000	0.00000	88733.8	60337.5	28396.2	S
108.578	0.0000	0.0000	157.707	0.00000	0.00000	88733.8	60337.5	28396.2	S
120.578	0.0000	0.0000	157.408	0.00000	0.00000	88733.8	60337.5	28396.2	S
132.578	0.0000	0.0000	157.151	0.00000	0.00000	88733.8	60337.5	28396.2	S
144.578	0.0000	0.0000	156.926	0.00000	0.00000	88733.8	60337.5	28396.2	S
156.578	0.0000	0.0000	156.727	0.00000	0.00000	88733.8	60337.5	28396.2	S
168.578	0.0000	0.0000	156.549	0.00000	0.00000	88733.8	60337.5	28396.2	S
180.578	0.0000	0.0000	156.389	0.00000	0.00000	88733.8	60337.5	28396.2	S
192.578	0.0000	0.0000	156.243	0.00000	0.00000	88733.8	60337.5	28396.2	S
204.578	0.0000	0.0000	156.109	0.00000	0.00000	88733.8	60337.5	28396.2	S
216.578	0.0000	0.0000	155.987	0.00000	0.00000	88733.8	60337.5	28396.2	S
228.578	0.0000	0.0000	155.873	0.00000	0.00000	88733.8	60337.5	28396.2	S
240.578	0.0000	0.0000	155.768	0.00000	0.00000	88733.8	60337.5	28396.2	S
252.578	0.0000	0.0000	155.670	0.00000	0.00000	88733.8	60337.5	28396.2	S
264.578	0.0000	0.0000	155.578	0.00000	0.00000	88733.8	60337.5	28396.2	S
276.578	0.0000	0.0000	155.492	0.00000	0.00000	88733.8	60337.5	28396.2	S
288.578	0.0000	0.0000	155.411	0.00000	0.00000	88733.8	60337.5	28396.2	S
300.578	0.0000	0.0000	155.335	0.00000	0.00000	88733.8	60337.5	28396.2	S
312.578	0.0000	0.0000	155.263	0.00000	0.00000	88733.8	60337.5	28396.2	S
324.578	0.0000	0.0000	155.195	0.00000	0.00000	88733.8	60337.5	28396.2	S
336.578	0.0000	0.0000	155.130	0.00000	0.00000	88733.8	60337.5	28396.2	S
348.578	0.0000	0.0000	155.068	0.00000	0.00000	88733.8	60337.5	28396.2	S
360.578	0.0000	0.0000	155.010	0.00000	0.00000	88733.8	60337.5	28396.2	S
372.578	0.0000	0.0000	154.954	0.00000	0.00000	88733.8	60337.5	28396.2	S
384.578	0.0000	0.0000	154.901	0.00000	0.00000	88733.8	60337.5	28396.2	S
396.578	0.0000	0.0000	154.850	0.00000	0.00000	88733.8	60337.5	28396.2	S
408.578	0.0000	0.0000	154.801	0.00000	0.00000	88733.8	60337.5	28396.2	S
420.578	0.0000	0.0000	154.754	0.00000	0.00000	88733.8	60337.5	28396.2	S
432.578	0.0000	0.0000	154.709	0.00000	0.00000	88733.8	60337.5	28396.2	S
444.578	0.0000	0.0000	154.665	0.00000	0.00000	88733.8	60337.5	28396.2	S
456.578	0.0000	0.0000	154.624	0.00000	0.00000	88733.8	60337.5	28396.2	S
468.578	0.0000	0.0000	154.584	0.00000	0.00000	88733.8	60337.5	28396.2	S
480.578	0.0000	0.0000	154.545	0.00000	0.00000	88733.8	60337.5	28396.2	S
492.578	0.0000	0.0000	154.508	0.00000	0.00000	88733.8	60337.5	28396.2	S
504.578	0.0000	0.0000	154.472	0.00000	0.00000	88733.8	60337.5	28396.2	S
516.578	0.0000	0.0000	154.437	0.00000	0.00000	88733.8	60337.5	28396.2	S
528.578	0.0000	0.0000	154.403	0.00000	0.00000	88733.8	60337.5	28396.2	S
540.578	0.0000	0.0000	154.371	0.00000	0.00000	88733.8	60337.5	28396.2	S
552.578	0.0000	0.0000	154.339	0.00000	0.00000	88733.8	60337.5	28396.2	S
564.578	0.0000	0.0000	154.309	0.00000	0.00000	88733.8	60337.5	28396.2	S
576.578	0.0000	0.0000	154.279	0.00000	0.00000	88733.8	60337.5	28396.2	S
588.578	0.0000	0.0000	154.251	0.00000	0.00000	88733.8	60337.5	28396.2	S
600.578	0.0000	0.0000	154.223	0.00000	0.00000	88733.8	60337.5	28396.2	S
612.578	0.0000	0.0000	154.196	0.00000	0.00000	88733.8	60337.5	28396.2	S
624.578	0.0000	0.0000	154.169	0.00000	0.00000	88733.8	60337.5	28396.2	S
636.578	0.0000	0.0000	154.144	0.00000	0.00000	88733.8	60337.5	28396.2	S
648.578	0.0000	0.0000	154.119	0.00000	0.00000	88733.8	60337.5	28396.2	S
660.578	0.0000	0.0000	154.095	0.00000	0.00000	88733.8	60337.5	28396.2	S
672.578	0.0000	0.0000	154.071	0.00000	0.00000	88733.8	60337.5	28396.2	S
684.578	0.0000	0.0000	154.048	0.00000	0.00000	88733.8	60337.5	28396.2	S
696.578	0.0000	0.0000	154.026	0.00000	0.00000	88733.8	60337.5	28396.2	S
708.578	0.0000	0.0000	154.004	0.00000	0.00000	88733.8	60337.5	28396.2	S
720.578	0.0000	0.0000	153.982	0.00000	0.00000	88733.8	60337.5	28396.2	S
732.578	0.0000	0.0000	153.962	0.00000	0.00000	88733.8	60337.5	28396.2	S
744.578	0.0000	0.0000	153.941	----	----	88733.8	60337.5	28396.2	N.A.

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Detailed Results (cont,d.) :: Scenario 6 :: SRWMD 100yr-72hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
72.356	0.0021	0.0000	160.096	0.10788	0.00000	112430.5	57655.2	37708.6	S
72.378	0.0015	0.0000	160.095	0.10776	0.00000	112430.6	57663.8	37708.6	S
72.400	0.0010	0.0000	160.095	0.10765	0.00000	112430.8	57672.5	37708.6	S
72.422	0.0007	0.0000	160.094	0.10754	0.00000	112430.8	57681.1	37708.6	S
72.444	0.0005	0.0000	160.094	0.10744	0.00000	112430.9	57689.7	37708.6	S
72.467	0.0003	0.0000	160.093	0.10735	0.00000	112430.9	57698.3	37708.6	S
72.489	0.0001	0.0000	160.093	0.10725	0.00000	112430.9	57706.8	37708.6	S
72.511	0.0000	0.0000	160.092	0.10716	0.00000	112430.9	57715.4	37708.6	S
72.533	0.0000	0.0000	160.092	0.10708	0.00000	112430.9	57724.0	37708.6	S
72.556	0.0000	0.0000	160.091	0.10699	0.00000	112430.9	57732.5	37708.6	S
72.578	0.0000	0.0000	160.091	0.10692	0.00000	112430.9	57741.1	37708.6	S
84.578	0.0000	0.0000	159.854	0.08425	0.00000	112430.9	61631.7	37708.6	S
96.578	0.0000	0.0000	159.641	0.07401	0.00000	112430.9	65020.7	37708.6	S
108.578	0.0000	0.0000	159.448	0.06604	0.00000	112430.9	68026.3	37708.6	S
120.578	0.0000	0.0000	159.271	0.05961	0.00000	112430.9	70726.4	37708.6	S
132.578	0.0000	0.0000	159.106	0.04625	0.00000	112430.9	73176.5	37708.6	S
144.578	0.0000	0.0000	158.858	0.01789	0.00000	112430.9	74722.4	37708.6	S
156.578	0.0000	0.0000	158.452	0.00000	0.00000	112430.9	74722.4	37708.6	S
168.578	0.0000	0.0000	158.121	0.00000	0.00000	112430.9	74722.4	37708.6	S
180.578	0.0000	0.0000	157.841	0.00000	0.00000	112430.9	74722.4	37708.6	S
192.578	0.0000	0.0000	157.596	0.00000	0.00000	112430.9	74722.4	37708.6	S
204.578	0.0000	0.0000	157.380	0.00000	0.00000	112430.9	74722.4	37708.6	S
216.578	0.0000	0.0000	157.187	0.00000	0.00000	112430.9	74722.4	37708.6	S
228.578	0.0000	0.0000	157.012	0.00000	0.00000	112430.9	74722.4	37708.6	S
240.578	0.0000	0.0000	156.852	0.00000	0.00000	112430.9	74722.4	37708.6	S
252.578	0.0000	0.0000	156.706	0.00000	0.00000	112430.9	74722.4	37708.6	S
264.578	0.0000	0.0000	156.571	0.00000	0.00000	112430.9	74722.4	37708.6	S
276.578	0.0000	0.0000	156.447	0.00000	0.00000	112430.9	74722.4	37708.6	S
288.578	0.0000	0.0000	156.331	0.00000	0.00000	112430.9	74722.4	37708.6	S
300.578	0.0000	0.0000	156.222	0.00000	0.00000	112430.9	74722.4	37708.6	S
312.578	0.0000	0.0000	156.121	0.00000	0.00000	112430.9	74722.4	37708.6	S
324.578	0.0000	0.0000	156.025	0.00000	0.00000	112430.9	74722.4	37708.6	S
336.578	0.0000	0.0000	155.936	0.00000	0.00000	112430.9	74722.4	37708.6	S
348.578	0.0000	0.0000	155.851	0.00000	0.00000	112430.9	74722.4	37708.6	S
360.578	0.0000	0.0000	155.771	0.00000	0.00000	112430.9	74722.4	37708.6	S
372.578	0.0000	0.0000	155.695	0.00000	0.00000	112430.9	74722.4	37708.6	S
384.578	0.0000	0.0000	155.622	0.00000	0.00000	112430.9	74722.4	37708.6	S
396.578	0.0000	0.0000	155.553	0.00000	0.00000	112430.9	74722.4	37708.6	S
408.578	0.0000	0.0000	155.488	0.00000	0.00000	112430.9	74722.4	37708.6	S
420.578	0.0000	0.0000	155.425	0.00000	0.00000	112430.9	74722.4	37708.6	S
432.578	0.0000	0.0000	155.365	0.00000	0.00000	112430.9	74722.4	37708.6	S
444.578	0.0000	0.0000	155.308	0.00000	0.00000	112430.9	74722.4	37708.6	S
456.578	0.0000	0.0000	155.253	0.00000	0.00000	112430.9	74722.4	37708.6	S
468.578	0.0000	0.0000	155.200	0.00000	0.00000	112430.9	74722.4	37708.6	S
480.578	0.0000	0.0000	155.149	0.00000	0.00000	112430.9	74722.4	37708.6	S
492.578	0.0000	0.0000	155.101	0.00000	0.00000	112430.9	74722.4	37708.6	S
504.578	0.0000	0.0000	155.054	0.00000	0.00000	112430.9	74722.4	37708.6	S
516.578	0.0000	0.0000	155.009	0.00000	0.00000	112430.9	74722.4	37708.6	S
528.578	0.0000	0.0000	154.965	0.00000	0.00000	112430.9	74722.4	37708.6	S
540.578	0.0000	0.0000	154.923	0.00000	0.00000	112430.9	74722.4	37708.6	S
552.578	0.0000	0.0000	154.882	0.00000	0.00000	112430.9	74722.4	37708.6	S
564.578	0.0000	0.0000	154.843	0.00000	0.00000	112430.9	74722.4	37708.6	S
576.578	0.0000	0.0000	154.805	0.00000	0.00000	112430.9	74722.4	37708.6	S
588.578	0.0000	0.0000	154.768	0.00000	0.00000	112430.9	74722.4	37708.6	S
600.578	0.0000	0.0000	154.732	0.00000	0.00000	112430.9	74722.4	37708.6	S
612.578	0.0000	0.0000	154.697	0.00000	0.00000	112430.9	74722.4	37708.6	S
624.578	0.0000	0.0000	154.664	0.00000	0.00000	112430.9	74722.4	37708.6	S
636.578	0.0000	0.0000	154.631	0.00000	0.00000	112430.9	74722.4	37708.6	S
648.578	0.0000	0.0000	154.599	0.00000	0.00000	112430.9	74722.4	37708.6	S
660.578	0.0000	0.0000	154.569	0.00000	0.00000	112430.9	74722.4	37708.6	S
672.578	0.0000	0.0000	154.539	0.00000	0.00000	112430.9	74722.4	37708.6	S
684.578	0.0000	0.0000	154.509	0.00000	0.00000	112430.9	74722.4	37708.6	S
696.578	0.0000	0.0000	154.481	0.00000	0.00000	112430.9	74722.4	37708.6	S
708.578	0.0000	0.0000	154.453	0.00000	0.00000	112430.9	74722.4	37708.6	S
720.578	0.0000	0.0000	154.427	0.00000	0.00000	112430.9	74722.4	37708.6	S
732.578	0.0000	0.0000	154.400	0.00000	0.00000	112430.9	74722.4	37708.6	S
744.578	0.0000	0.0000	154.375	0.00000	0.00000	112430.9	74722.4	37708.6	S
756.578	0.0000	0.0000	154.350	0.00000	0.00000	112430.9	74722.4	37708.6	S
768.578	0.0000	0.0000	154.325	0.00000	0.00000	112430.9	74722.4	37708.6	S
780.578	0.0000	0.0000	154.302	0.00000	0.00000	112430.9	74722.4	37708.6	S
792.578	0.0000	0.0000	154.278	----	----	112430.9	74722.4	37708.6	N.A.

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Detailed Results (cont,d.) :: Scenario 7 :: SRWMD 100yr-168hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
167.733	0.2102	0.0000	160.107	0.07915	0.13158	131032.1	78709.9	35062.8	S
167.756	0.2102	0.0000	160.107	0.07916	0.13156	131048.9	78716.3	35073.3	S
167.778	0.2102	0.0000	160.107	0.07917	0.13153	131065.7	78722.6	35083.8	S
167.800	0.2102	0.0000	160.107	0.07918	0.13151	131082.5	78728.9	35094.4	S
167.822	0.2102	0.0000	160.107	0.07919	0.13149	131099.3	78735.3	35104.9	S
167.845	0.2102	0.0000	160.107	0.07920	0.13147	131116.2	78741.6	35115.4	S
167.867	0.2102	0.0000	160.107	0.07920	0.13144	131133.0	78748.0	35125.9	S
167.889	0.2102	0.0000	160.107	0.07921	0.13142	131149.8	78754.3	35136.4	S
167.911	0.2102	0.0000	160.107	0.07922	0.13140	131166.6	78760.6	35146.9	S
167.933	0.2102	0.0000	160.107	0.07923	0.13138	131183.4	78767.0	35157.5	S
167.956	0.2102	0.0000	160.107	0.07924	0.13136	131200.2	78773.3	35168.0	S
167.978	0.2102	0.0000	160.107	0.07925	0.13134	131217.0	78779.6	35178.5	S
168.000	0.2102	0.0000	160.107	0.07922	0.13133	131233.8	78786.0	35189.0	S
168.022	0.2070	0.0000	160.107	0.07912	0.13124	131250.5	78792.3	35199.5	S
168.044	0.1972	0.0000	160.107	0.07886	0.13089	131266.7	78798.6	35210.0	S
168.067	0.1765	0.0000	160.107	0.07835	0.12991	131281.7	78804.9	35220.4	S
168.089	0.1471	0.0000	160.107	0.07764	0.12789	131294.6	78811.2	35230.7	S
168.111	0.1156	0.0000	160.107	0.07680	0.12460	131305.1	78817.4	35240.8	S
168.133	0.0863	0.0000	160.106	0.07593	0.12000	131313.2	78823.5	35250.6	S
168.156	0.0618	0.0000	160.105	0.07509	0.11416	131319.1	78829.5	35260.0	S
168.178	0.0441	0.0000	160.105	0.07436	0.10726	131323.3	78835.5	35268.8	S
168.200	0.0318	0.0000	160.104	0.07373	0.09948	131326.4	78841.4	35277.1	S
168.222	0.0230	0.0000	160.103	0.07314	0.09093	131328.6	78847.3	35284.7	S
168.244	0.0165	0.0000	160.103	0.07256	0.08161	131330.2	78853.1	35291.6	S
168.267	0.0118	0.0000	160.102	0.07196	0.07147	131331.3	78858.9	35297.7	S
168.289	0.0085	0.0000	160.102	0.07125	0.06032	131332.1	78864.6	35303.0	S
168.311	0.0060	0.0000	160.101	0.07022	0.04777	131332.7	78870.3	35307.3	S
168.333	0.0043	0.0000	160.100	0.06772	0.03277	131333.1	78875.8	35310.5	S
168.356	0.0031	0.0000	160.100	0.06891	0.01038	131333.4	78881.1	35312.3	S
168.378	0.0021	0.0000	160.100	0.07456	0.00000	131333.6	78886.9	35312.7	S
168.400	0.0015	0.0000	160.099	0.07716	0.00000	131333.7	78893.1	35312.7	S
168.422	0.0010	0.0000	160.099	0.07715	0.00000	131333.8	78899.2	35312.7	S
168.444	0.0007	0.0000	160.099	0.07713	0.00000	131333.9	78905.4	35312.7	S
168.467	0.0004	0.0000	160.098	0.07711	0.00000	131334.0	78911.6	35312.7	S
168.489	0.0002	0.0000	160.098	0.07708	0.00000	131334.0	78917.7	35312.7	S
168.511	0.0001	0.0000	160.098	0.07705	0.00000	131334.0	78923.9	35312.7	S
168.533	0.0000	0.0000	160.097	0.07702	0.00000	131334.0	78930.1	35312.7	S
168.556	0.0000	0.0000	160.097	0.07699	0.00000	131334.0	78936.2	35312.7	S
168.578	0.0000	0.0000	160.096	0.07696	0.00000	131334.0	78942.4	35312.7	S
180.578	0.0000	0.0000	159.918	0.06485	0.00000	131334.0	81884.6	35312.7	S
192.578	0.0000	0.0000	159.753	0.05898	0.00000	131334.0	84545.6	35312.7	S
204.578	0.0000	0.0000	159.599	0.05420	0.00000	131334.0	86980.8	35312.7	S
216.578	0.0000	0.0000	159.454	0.05017	0.00000	131334.0	89228.2	35312.7	S
228.578	0.0000	0.0000	159.318	0.04671	0.00000	131334.0	91315.5	35312.7	S
240.578	0.0000	0.0000	159.188	0.04370	0.00000	131334.0	93264.2	35312.7	S
252.578	0.0000	0.0000	159.064	0.03191	0.00000	131334.0	95091.0	35312.7	S
264.578	0.0000	0.0000	158.838	0.01077	0.00000	131334.0	96021.3	35312.7	S
276.578	0.0000	0.0000	158.526	0.00000	0.00000	131334.0	96021.3	35312.7	S
288.578	0.0000	0.0000	158.263	0.00000	0.00000	131334.0	96021.3	35312.7	S
300.578	0.0000	0.0000	158.035	0.00000	0.00000	131334.0	96021.3	35312.7	S
312.578	0.0000	0.0000	157.832	0.00000	0.00000	131334.0	96021.3	35312.7	S
324.578	0.0000	0.0000	157.649	0.00000	0.00000	131334.0	96021.3	35312.7	S
336.578	0.0000	0.0000	157.482	0.00000	0.00000	131334.0	96021.3	35312.7	S
348.578	0.0000	0.0000	157.329	0.00000	0.00000	131334.0	96021.3	35312.7	S
360.578	0.0000	0.0000	157.187	0.00000	0.00000	131334.0	96021.3	35312.7	S
372.578	0.0000	0.0000	157.056	0.00000	0.00000	131334.0	96021.3	35312.7	S
384.578	0.0000	0.0000	156.934	0.00000	0.00000	131334.0	96021.3	35312.7	S
396.578	0.0000	0.0000	156.819	0.00000	0.00000	131334.0	96021.3	35312.7	S
408.578	0.0000	0.0000	156.712	0.00000	0.00000	131334.0	96021.3	35312.7	S
420.578	0.0000	0.0000	156.610	0.00000	0.00000	131334.0	96021.3	35312.7	S
432.578	0.0000	0.0000	156.515	0.00000	0.00000	131334.0	96021.3	35312.7	S
444.578	0.0000	0.0000	156.424	0.00000	0.00000	131334.0	96021.3	35312.7	S
456.578	0.0000	0.0000	156.338	0.00000	0.00000	131334.0	96021.3	35312.7	S
468.578	0.0000	0.0000	156.257	0.00000	0.00000	131334.0	96021.3	35312.7	S
480.578	0.0000	0.0000	156.179	0.00000	0.00000	131334.0	96021.3	35312.7	S
492.578	0.0000	0.0000	156.105	0.00000	0.00000	131334.0	96021.3	35312.7	S
504.578	0.0000	0.0000	156.034	0.00000	0.00000	131334.0	96021.3	35312.7	S
516.578	0.0000	0.0000	155.966	0.00000	0.00000	131334.0	96021.3	35312.7	S
528.578	0.0000	0.0000	155.901	0.00000	0.00000	131334.0	96021.3	35312.7	S
540.578	0.0000	0.0000	155.838	0.00000	0.00000	131334.0	96021.3	35312.7	S
552.578	0.0000	0.0000	155.779	0.00000	0.00000	131334.0	96021.3	35312.7	S
564.578	0.0000	0.0000	155.721	0.00000	0.00000	131334.0	96021.3	35312.7	S
576.578	0.0000	0.0000	155.665	0.00000	0.00000	131334.0	96021.3	35312.7	S
588.578	0.0000	0.0000	155.612	0.00000	0.00000	131334.0	96021.3	35312.7	S

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Detailed Results (cont,d.) :: Scenario 8 :: SRWMD 100yr-240hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
240.089	0.0527	0.0000	160.084	0.07192	0.00000	148511.2	91066.1	40573.6	S
240.111	0.0414	0.0000	160.084	0.07183	0.00000	148515.0	91071.8	40573.6	S
240.133	0.0309	0.0000	160.084	0.07173	0.00000	148517.9	91077.6	40573.6	S
240.156	0.0221	0.0000	160.083	0.07161	0.00000	148520.0	91083.3	40573.6	S
240.178	0.0158	0.0000	160.083	0.07149	0.00000	148521.5	91089.0	40573.6	S
240.200	0.0114	0.0000	160.083	0.07138	0.00000	148522.6	91094.8	40573.6	S
240.222	0.0082	0.0000	160.083	0.07126	0.00000	148523.4	91100.5	40573.6	S
240.244	0.0059	0.0000	160.082	0.07116	0.00000	148524.0	91106.2	40573.6	S
240.267	0.0042	0.0000	160.082	0.07106	0.00000	148524.4	91111.8	40573.6	S
240.289	0.0030	0.0000	160.082	0.07096	0.00000	148524.6	91117.5	40573.6	S
240.311	0.0022	0.0000	160.081	0.07087	0.00000	148524.9	91123.2	40573.6	S
240.333	0.0015	0.0000	160.081	0.07079	0.00000	148525.0	91128.9	40573.6	S
240.356	0.0011	0.0000	160.081	0.07070	0.00000	148525.1	91134.5	40573.6	S
240.378	0.0008	0.0000	160.080	0.07063	0.00000	148525.2	91140.2	40573.6	S
240.400	0.0005	0.0000	160.080	0.07056	0.00000	148525.2	91145.8	40573.6	S
240.422	0.0004	0.0000	160.080	0.07049	0.00000	148525.3	91151.5	40573.6	S
240.444	0.0002	0.0000	160.079	0.07042	0.00000	148525.3	91157.1	40573.6	S
240.467	0.0001	0.0000	160.079	0.07035	0.00000	148525.3	91162.7	40573.6	S
240.489	0.0001	0.0000	160.079	0.07029	0.00000	148525.3	91168.4	40573.6	S
240.511	0.0000	0.0000	160.078	0.07023	0.00000	148525.3	91174.0	40573.6	S
240.533	0.0000	0.0000	160.078	0.07018	0.00000	148525.3	91179.6	40573.6	S
240.556	0.0000	0.0000	160.078	0.07012	0.00000	148525.3	91185.2	40573.6	S
240.578	0.0000	0.0000	160.077	0.07007	0.00000	148525.3	91190.8	40573.6	S
252.578	0.0000	0.0000	159.917	0.05836	0.00000	148525.3	93833.5	40573.6	S
264.578	0.0000	0.0000	159.768	0.05336	0.00000	148525.3	96232.7	40573.6	S
276.578	0.0000	0.0000	159.629	0.04940	0.00000	148525.3	98444.2	40573.6	S
288.578	0.0000	0.0000	159.497	0.04607	0.00000	148525.3	100500.6	40573.6	S
300.578	0.0000	0.0000	159.372	0.04319	0.00000	148525.3	102424.4	40573.6	S
312.578	0.0000	0.0000	159.252	0.04066	0.00000	148525.3	104232.4	40573.6	S
324.578	0.0000	0.0000	159.138	0.03841	0.00000	148525.3	105937.6	40573.6	S
336.578	0.0000	0.0000	159.028	0.02331	0.00000	148525.3	107550.8	40573.6	S
348.578	0.0000	0.0000	158.768	0.00464	0.00000	148525.3	107951.8	40573.6	S
360.578	0.0000	0.0000	158.498	0.00000	0.00000	148525.3	107951.8	40573.6	S
372.578	0.0000	0.0000	158.268	0.00000	0.00000	148525.3	107951.8	40573.6	S
384.578	0.0000	0.0000	158.064	0.00000	0.00000	148525.3	107951.8	40573.6	S
396.578	0.0000	0.0000	157.881	0.00000	0.00000	148525.3	107951.8	40573.6	S
408.578	0.0000	0.0000	157.714	0.00000	0.00000	148525.3	107951.8	40573.6	S
420.578	0.0000	0.0000	157.562	0.00000	0.00000	148525.3	107951.8	40573.6	S
432.578	0.0000	0.0000	157.421	0.00000	0.00000	148525.3	107951.8	40573.6	S
444.578	0.0000	0.0000	157.290	0.00000	0.00000	148525.3	107951.8	40573.6	S
456.578	0.0000	0.0000	157.168	0.00000	0.00000	148525.3	107951.8	40573.6	S
468.578	0.0000	0.0000	157.053	0.00000	0.00000	148525.3	107951.8	40573.6	S
480.578	0.0000	0.0000	156.945	0.00000	0.00000	148525.3	107951.8	40573.6	S
492.578	0.0000	0.0000	156.844	0.00000	0.00000	148525.3	107951.8	40573.6	S
504.578	0.0000	0.0000	156.748	0.00000	0.00000	148525.3	107951.8	40573.6	S
516.578	0.0000	0.0000	156.656	0.00000	0.00000	148525.3	107951.8	40573.6	S
528.578	0.0000	0.0000	156.570	0.00000	0.00000	148525.3	107951.8	40573.6	S
540.578	0.0000	0.0000	156.488	0.00000	0.00000	148525.3	107951.8	40573.6	S
552.578	0.0000	0.0000	156.409	0.00000	0.00000	148525.3	107951.8	40573.6	S
564.578	0.0000	0.0000	156.334	0.00000	0.00000	148525.3	107951.8	40573.6	S
576.578	0.0000	0.0000	156.262	0.00000	0.00000	148525.3	107951.8	40573.6	S
588.578	0.0000	0.0000	156.193	0.00000	0.00000	148525.3	107951.8	40573.6	S
600.578	0.0000	0.0000	156.128	0.00000	0.00000	148525.3	107951.8	40573.6	S
612.578	0.0000	0.0000	156.064	0.00000	0.00000	148525.3	107951.8	40573.6	S
624.578	0.0000	0.0000	156.003	0.00000	0.00000	148525.3	107951.8	40573.6	S
636.578	0.0000	0.0000	155.945	0.00000	0.00000	148525.3	107951.8	40573.6	S
648.578	0.0000	0.0000	155.888	0.00000	0.00000	148525.3	107951.8	40573.6	S
660.578	0.0000	0.0000	155.834	0.00000	0.00000	148525.3	107951.8	40573.6	S
672.578	0.0000	0.0000	155.781	0.00000	0.00000	148525.3	107951.8	40573.6	S
684.578	0.0000	0.0000	155.730	0.00000	0.00000	148525.3	107951.8	40573.6	S
696.578	0.0000	0.0000	155.681	0.00000	0.00000	148525.3	107951.8	40573.6	S
708.578	0.0000	0.0000	155.633	0.00000	0.00000	148525.3	107951.8	40573.6	S
720.578	0.0000	0.0000	155.587	0.00000	0.00000	148525.3	107951.8	40573.6	S
732.578	0.0000	0.0000	155.543	0.00000	0.00000	148525.3	107951.8	40573.6	S
744.578	0.0000	0.0000	155.499	0.00000	0.00000	148525.3	107951.8	40573.6	S
756.578	0.0000	0.0000	155.457	0.00000	0.00000	148525.3	107951.8	40573.6	S
768.578	0.0000	0.0000	155.417	0.00000	0.00000	148525.3	107951.8	40573.6	S
780.578	0.0000	0.0000	155.377	0.00000	0.00000	148525.3	107951.8	40573.6	S
792.578	0.0000	0.0000	155.338	0.00000	0.00000	148525.3	107951.8	40573.6	S
804.578	0.0000	0.0000	155.301	0.00000	0.00000	148525.3	107951.8	40573.6	S
816.578	0.0000	0.0000	155.264	0.00000	0.00000	148525.3	107951.8	40573.6	S
828.578	0.0000	0.0000	155.229	0.00000	0.00000	148525.3	107951.8	40573.6	S
840.578	0.0000	0.0000	155.194	0.00000	0.00000	148525.3	107951.8	40573.6	S
852.578	0.0000	0.0000	155.161	0.00000	0.00000	148525.3	107951.8	40573.6	S

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Detailed Results :: Scenario 9 :: WQTV 15,875 CF Slug Load

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
0.000	2645.8330	0.0000	152.000	0.00000	0.00000	0.0	0.0	0.0	N.A.
0.002	2645.8330	0.0000	160.023	1.43358	0.00000	15875.0	8.6	0.0	U/P
2.400	0.0000	0.0000	159.272	0.82317	0.00000	15875.0	11850.8	0.0	U/P
6.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry
12.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry
24.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry
36.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry
48.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry
60.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry
72.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry
84.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry
96.000	0.0000	0.0000	----	----	----	15875.0	15875.0	0.0	dry

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Project Data

Project Name: Turkey Creek Retail
Simulation Description: Post-Development Post DA-2 SMF-2
Project Number: 18-0431
Engineer : Greg Wadzinski
Supervising Engineer: Travis Hastay, PE
Date: 06-26-2019

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 159.00
Water Table Elevation, [WT] (ft datum): 159.50
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 4.00
Fillable Porosity, [n] (%): 20.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 3.0
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 11028.0

Geometry Data

Equivalent Pond Length, [L] (ft): 167.0
Equivalent Pond Width, [W] (ft): 67.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft²)
162.00	8669.0
162.50	9430.0
163.50	11028.0
164.50	12727.0
165.00	14992.0

Discharge Structures

Discharge Structure #1 is active as orifice

Structure Parameters

Description: 3" Orifice @ EL. 162.80

Orifice elevation, (ft datum):	162.80
Orifice coefficient:	7.9
Orifice area, (ft²):	.04906
Orifice exponent:	0.5

Tailwater - disabled, free discharge

Discharge Structure #2 is inactive

Discharge Structure #3 is inactive

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Scenario Input Data

Scenario 1 :: SRWMD 100yr-1hr

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

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

Scenario 2 :: SRWMD 100yr-2hr

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

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	4.000	7.500	11.000	14.500
1.000	4.500	8.000	11.500	15.000
1.500	5.000	8.500	12.000	15.500
2.000	5.500	9.000	12.500	16.000
2.500	6.000	9.500	13.000	16.500
3.000	6.500	10.000	13.500	17.000
3.500	7.000	10.500	14.000	17.500

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Scenario Input Data (cont'd.)

Scenario 2 (cont'd.) :: SCS :: SRWMD 100yr-2hr

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
18.000	20.500	23.000	25.500	28.000
18.500	21.000	23.500	26.000	28.500
19.000	21.500	24.000	26.500	29.000
19.500	22.000	24.500	27.000	29.500
20.000	22.500	25.000	27.500	30.000

Scenario 3 :: SRWMD 100yr-4hr

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

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

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Scenario Input Data (cont'd.)

Scenario 4 :: SRWMD 100yr-8hr

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

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

Scenario 5 :: SRWMD 100yr-24hr

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

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	4.000	7.500	11.000	14.500
1.000	4.500	8.000	11.500	15.000
1.500	5.000	8.500	12.000	15.500
2.000	5.500	9.000	12.500	16.000
2.500	6.000	9.500	13.000	16.500
3.000	6.500	10.000	13.500	17.000
3.500	7.000	10.500	14.000	17.500

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Scenario Input Data (cont'd.)

Scenario 5 (cont'd.) :: SCS :: SRWMD 100yr-24hr

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
18.000	20.500	23.000	25.500	28.000
18.500	21.000	23.500	26.000	28.500
19.000	21.500	24.000	26.500	29.000
19.500	22.000	24.500	27.000	29.500
20.000	22.500	25.000	27.500	30.000

Scenario 6 :: SRWMD 100yr-72hr

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

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

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Scenario Input Data (cont'd.)

Scenario 7 :: SRWMD 100yr-168hr

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

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

Scenario 8 :: SRWMD 100yr-240hr

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

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	4.000	7.500	11.000	14.500
1.000	4.500	8.000	11.500	15.000
1.500	5.000	8.500	12.000	15.500
2.000	5.500	9.000	12.500	16.000
2.500	6.000	9.500	13.000	16.500
3.000	6.500	10.000	13.500	17.000
3.500	7.000	10.500	14.000	17.500

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Scenario Input Data (cont'd.)

Scenario 8 (cont'd.) :: SCS :: SRWMD 100yr-240hr

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
18.000	20.500	23.000	25.500	28.000
18.500	21.000	23.500	26.000	28.500
19.000	21.500	24.000	26.500	29.000
19.500	22.000	24.500	27.000	29.500
20.000	22.500	25.000	27.500	30.000

Scenario 9 :: WQTV 7,150 CF Slug Load

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

Treatment Volume (ft³) 7150

Initial ground water level (ft datum) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.100	2.500	5.500	8.500	11.500
0.250	3.000	6.000	9.000	12.000
0.500	3.500	6.500	9.500	12.500
1.000	4.000	7.000	10.000	13.000
1.500	4.500	7.500	10.500	13.500
2.000	5.000	8.000	11.000	14.000

Scenario 10 :: SRWMD 100yr-168hr Back-to-Back

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 2

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	4.500	8.500	12.500	16.500
1.000	5.000	9.000	13.000	17.000
1.500	5.500	9.500	13.500	17.500
2.000	6.000	10.000	14.000	18.000
2.500	6.500	10.500	14.500	18.500
3.000	7.000	11.000	15.000	19.000
3.500	7.500	11.500	15.500	19.500
4.000	8.000	12.000	16.000	20.000

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Scenario Input Data (cont'd.)

Scenario 10 (cont'd.) :: SCS :: SRWMD 100yr-168hr Back-to-Back

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
20.500	23.000	25.500	28.000
21.000	23.500	26.000	28.500
21.500	24.000	26.500	29.000
22.000	24.500	27.000	29.500
22.500	25.000	27.500	30.000

Scenario 11 :: SRWMD 100yr-240hr Back-to-Back

Hydrograph Type: Inline SCS
Modflow Routing: Routed with infiltration
Repetitions: 2

Basin Area (acres) 1.070
Time Of Concentration (minutes) 10.0
DCIA (%) 0.0
Curve Number 93
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) 159.50 (default)

Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)	Time After Storm Event (days)
0.500	6.500	12.500	18.500	24.500
1.000	7.000	13.000	19.000	25.000
1.500	7.500	13.500	19.500	25.500
2.000	8.000	14.000	20.000	26.000
2.500	8.500	14.500	20.500	26.500
3.000	9.000	15.000	21.000	27.000
3.500	9.500	15.500	21.500	27.500
4.000	10.000	16.000	22.000	28.000
4.500	10.500	16.500	22.500	28.500
5.000	11.000	17.000	23.000	29.000
5.500	11.500	17.500	23.500	29.500
6.000	12.000	18.000	24.000	30.000

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Sort-By-Category Report

Scenarios Considered: 1 to 11

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	11	163.847	1144.689	SRWMD 100yr-240hr Back-to-Back
2	8	163.839	184.111	SRWMD 100yr-240hr
3	5	163.753	19.111	SRWMD 100yr-24hr
4	4	163.687	5.156	SRWMD 100yr-8hr
5	3	163.672	3.333	SRWMD 100yr-4hr
6	6	163.614	64.067	SRWMD 100yr-72hr
7	10	163.533	1048.689	SRWMD 100yr-168hr Back-to-Back
8	7	163.524	160.111	SRWMD 100yr-168hr
9	2	163.434	1.933	SRWMD 100yr-2hr
10	1	163.295	1.022	SRWMD 100yr-1hr
11	9	162.772	0.002	WQTV 7,150 CF Slug Load

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft ³ /s)	Time (hours)	Description
1	11	0.3965	1144.689	SRWMD 100yr-240hr Back-to-Back
2	8	0.3950	184.111	SRWMD 100yr-240hr
3	5	0.3783	19.111	SRWMD 100yr-24hr
4	4	0.3651	5.156	SRWMD 100yr-8hr
5	3	0.3619	3.333	SRWMD 100yr-4hr
6	6	0.3497	64.067	SRWMD 100yr-72hr
7	10	0.3317	1048.689	SRWMD 100yr-168hr Back-to-Back
8	7	0.3298	160.111	SRWMD 100yr-168hr
9	2	0.3087	1.933	SRWMD 100yr-2hr
10	1	0.2727	1.022	SRWMD 100yr-1hr
11	9	None	N.A.	WQTV 7,150 CF Slug Load

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft ³)	Time (hours)	Description
1	11	101421.1	1213.156	SRWMD 100yr-240hr Back-to-Back
2	10	94815.4	1093.156	SRWMD 100yr-168hr Back-to-Back
3	8	45434.6	252.578	SRWMD 100yr-240hr
4	7	42573.1	192.578	SRWMD 100yr-168hr
5	6	36477.8	96.578	SRWMD 100yr-72hr
6	5	29533.7	60.578	SRWMD 100yr-24hr
7	4	19013.7	44.578	SRWMD 100yr-8hr
8	3	3028.2	4.578	SRWMD 100yr-4hr
9	2	1788.7	2.578	SRWMD 100yr-2hr
10	1	824.8	1.578	SRWMD 100yr-1hr
11	9	None	N.A.	WQTV 7,150 CF Slug Load

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Detailed Results (cont,d.) :: Scenario 1 :: SRWMD 100yr-1hr

Elapsed Time (hours)	Inflow Rate (ft ³ /s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft ³ /s)	Overflow Discharge (ft ³ /s)	Cumulative Inflow Volume (ft ³)	Cumulative Infiltration Volume (ft ³)	Cumulative Discharge Volume (ft ³)	Flow Type
37.578	0.0000	0.0000	161.994	0.00446	0.00000	14028.3	13203.6	824.8	S
49.578	0.0000	0.0000	161.870	0.00000	0.00000	14028.3	13203.6	824.8	S
61.578	0.0000	0.0000	161.772	0.00000	0.00000	14028.3	13203.6	824.8	S
73.578	0.0000	0.0000	161.691	0.00000	0.00000	14028.3	13203.6	824.8	S
85.578	0.0000	0.0000	161.622	0.00000	0.00000	14028.3	13203.6	824.8	S
97.578	0.0000	0.0000	161.561	0.00000	0.00000	14028.3	13203.6	824.8	S
109.578	0.0000	0.0000	161.507	0.00000	0.00000	14028.3	13203.6	824.8	S
121.578	0.0000	0.0000	161.459	0.00000	0.00000	14028.3	13203.6	824.8	S
133.578	0.0000	0.0000	161.415	0.00000	0.00000	14028.3	13203.6	824.8	S
145.578	0.0000	0.0000	161.375	0.00000	0.00000	14028.3	13203.6	824.8	S
157.578	0.0000	0.0000	161.338	0.00000	0.00000	14028.3	13203.6	824.8	S
169.578	0.0000	0.0000	161.304	0.00000	0.00000	14028.3	13203.6	824.8	S
181.578	0.0000	0.0000	161.272	0.00000	0.00000	14028.3	13203.6	824.8	S
193.578	0.0000	0.0000	161.242	0.00000	0.00000	14028.3	13203.6	824.8	S
205.578	0.0000	0.0000	161.214	0.00000	0.00000	14028.3	13203.6	824.8	S
217.578	0.0000	0.0000	161.188	0.00000	0.00000	14028.3	13203.6	824.8	S
229.578	0.0000	0.0000	161.163	0.00000	0.00000	14028.3	13203.6	824.8	S
241.578	0.0000	0.0000	161.139	0.00000	0.00000	14028.3	13203.6	824.8	S
253.578	0.0000	0.0000	161.117	0.00000	0.00000	14028.3	13203.6	824.8	S
265.578	0.0000	0.0000	161.096	0.00000	0.00000	14028.3	13203.6	824.8	S
277.578	0.0000	0.0000	161.075	0.00000	0.00000	14028.3	13203.6	824.8	S
289.578	0.0000	0.0000	161.056	0.00000	0.00000	14028.3	13203.6	824.8	S
301.578	0.0000	0.0000	161.037	0.00000	0.00000	14028.3	13203.6	824.8	S
313.578	0.0000	0.0000	161.019	0.00000	0.00000	14028.3	13203.6	824.8	S
325.578	0.0000	0.0000	161.002	0.00000	0.00000	14028.3	13203.6	824.8	S
337.578	0.0000	0.0000	160.986	0.00000	0.00000	14028.3	13203.6	824.8	S
349.578	0.0000	0.0000	160.970	0.00000	0.00000	14028.3	13203.6	824.8	S
361.578	0.0000	0.0000	160.954	0.00000	0.00000	14028.3	13203.6	824.8	S
373.578	0.0000	0.0000	160.940	0.00000	0.00000	14028.3	13203.6	824.8	S
385.578	0.0000	0.0000	160.925	0.00000	0.00000	14028.3	13203.6	824.8	S
397.578	0.0000	0.0000	160.911	0.00000	0.00000	14028.3	13203.6	824.8	S
409.578	0.0000	0.0000	160.898	0.00000	0.00000	14028.3	13203.6	824.8	S
421.578	0.0000	0.0000	160.885	0.00000	0.00000	14028.3	13203.6	824.8	S
433.578	0.0000	0.0000	160.873	0.00000	0.00000	14028.3	13203.6	824.8	S
445.578	0.0000	0.0000	160.860	0.00000	0.00000	14028.3	13203.6	824.8	S
457.578	0.0000	0.0000	160.849	0.00000	0.00000	14028.3	13203.6	824.8	S
469.578	0.0000	0.0000	160.837	0.00000	0.00000	14028.3	13203.6	824.8	S
481.578	0.0000	0.0000	160.826	0.00000	0.00000	14028.3	13203.6	824.8	S
493.578	0.0000	0.0000	160.815	0.00000	0.00000	14028.3	13203.6	824.8	S
505.578	0.0000	0.0000	160.805	0.00000	0.00000	14028.3	13203.6	824.8	S
517.578	0.0000	0.0000	160.794	0.00000	0.00000	14028.3	13203.6	824.8	S
529.578	0.0000	0.0000	160.784	0.00000	0.00000	14028.3	13203.6	824.8	S
541.578	0.0000	0.0000	160.774	0.00000	0.00000	14028.3	13203.6	824.8	S
553.578	0.0000	0.0000	160.765	0.00000	0.00000	14028.3	13203.6	824.8	S
565.578	0.0000	0.0000	160.756	0.00000	0.00000	14028.3	13203.6	824.8	S
577.578	0.0000	0.0000	160.746	0.00000	0.00000	14028.3	13203.6	824.8	S
589.578	0.0000	0.0000	160.738	0.00000	0.00000	14028.3	13203.6	824.8	S
601.578	0.0000	0.0000	160.729	0.00000	0.00000	14028.3	13203.6	824.8	S
613.578	0.0000	0.0000	160.720	0.00000	0.00000	14028.3	13203.6	824.8	S
625.578	0.0000	0.0000	160.712	0.00000	0.00000	14028.3	13203.6	824.8	S
637.578	0.0000	0.0000	160.704	0.00000	0.00000	14028.3	13203.6	824.8	S
649.578	0.0000	0.0000	160.696	0.00000	0.00000	14028.3	13203.6	824.8	S
661.578	0.0000	0.0000	160.688	0.00000	0.00000	14028.3	13203.6	824.8	S
673.578	0.0000	0.0000	160.681	0.00000	0.00000	14028.3	13203.6	824.8	S
685.578	0.0000	0.0000	160.673	0.00000	0.00000	14028.3	13203.6	824.8	S
697.578	0.0000	0.0000	160.666	0.00000	0.00000	14028.3	13203.6	824.8	S
709.578	0.0000	0.0000	160.659	0.00000	0.00000	14028.3	13203.6	824.8	S
721.578	0.0000	0.0000	160.652	----	----	14028.3	13203.6	824.8	N.A.

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Detailed Results (cont,d.) :: Scenario 2 :: SRWMD 100yr-2hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
1.644	1.1507	0.0000	163.412	0.37839	0.30316	16440.3	1876.6	776.2	U/P
1.667	1.1158	0.0000	163.415	0.37857	0.30398	16530.9	1906.9	800.5	U/P
1.689	1.0712	0.0000	163.418	0.37873	0.30472	16618.4	1937.1	824.8	U/P
1.711	1.0249	0.0000	163.421	0.37887	0.30538	16702.3	1967.4	849.2	U/P
1.733	0.9827	0.0000	163.423	0.37899	0.30595	16782.6	1997.8	873.7	U/P
1.756	0.9476	0.0000	163.425	0.37910	0.30646	16859.8	2028.1	898.2	U/P
1.778	0.9224	0.0000	163.427	0.37919	0.30690	16934.6	2058.4	922.7	U/P
1.800	0.9049	0.0000	163.429	0.37928	0.30731	17007.7	2088.8	947.3	U/P
1.822	0.8880	0.0000	163.430	0.37936	0.30769	17079.4	2119.1	971.9	U/P
1.844	0.8654	0.0000	163.432	0.37944	0.30803	17149.5	2149.5	996.5	U/P
1.867	0.8305	0.0000	163.433	0.37949	0.30831	17217.4	2179.8	1021.2	U/P
1.889	0.7857	0.0000	163.434	0.37953	0.30853	17282.0	2210.2	1045.8	U/P
1.911	0.7393	0.0000	163.434	0.37955	0.30866	17343.0	2240.5	1070.5	U/P
1.933	0.6970	0.0000	163.434	0.37956	0.30871	17400.5	2270.9	1095.2	U/P
1.956	0.6618	0.0000	163.434	0.37955	0.30870	17454.8	2301.3	1119.9	U/P
1.978	0.6365	0.0000	163.434	0.37953	0.30863	17506.7	2331.6	1144.6	U/P
2.000	0.6189	0.0000	163.434	0.37950	0.30852	17557.0	2362.0	1169.3	U/P
2.022	0.5977	0.0000	163.433	0.37946	0.30838	17605.6	2392.4	1194.0	U/P
2.044	0.5617	0.0000	163.432	0.37941	0.30818	17652.0	2422.7	1218.6	U/P
2.067	0.4982	0.0000	163.431	0.37933	0.30790	17694.4	2453.1	1243.3	U/P
2.089	0.4134	0.0000	163.429	0.37922	0.30749	17730.8	2483.4	1267.9	U/P
2.111	0.3239	0.0000	163.427	0.37907	0.30692	17760.3	2513.7	1292.5	U/P
2.133	0.2415	0.0000	163.424	0.37889	0.30620	17783.0	2544.1	1317.0	U/P
2.156	0.1727	0.0000	163.421	0.37868	0.30534	17799.5	2574.4	1341.5	U/P
2.178	0.1233	0.0000	163.417	0.37846	0.30437	17811.4	2604.6	1365.8	U/P
2.200	0.0889	0.0000	163.413	0.37822	0.30332	17819.9	2634.9	1390.2	U/P
2.222	0.0641	0.0000	163.408	0.37796	0.30222	17826.0	2665.2	1414.4	U/P
2.244	0.0459	0.0000	163.404	0.37771	0.30108	17830.4	2695.4	1438.5	U/P
2.267	0.0328	0.0000	163.399	0.37744	0.29990	17833.5	2725.6	1462.5	U/P
2.289	0.0234	0.0000	163.394	0.37718	0.29870	17835.8	2755.8	1486.5	U/P
2.311	0.0166	0.0000	163.389	0.37691	0.29749	17837.4	2785.9	1510.3	U/P
2.333	0.0118	0.0000	163.384	0.37664	0.29626	17838.5	2816.1	1534.1	U/P
2.356	0.0083	0.0000	163.379	0.37636	0.29501	17839.3	2846.2	1557.7	U/P
2.378	0.0058	0.0000	163.375	0.37609	0.29376	17839.9	2876.3	1581.3	U/P
2.400	0.0040	0.0000	163.370	0.37582	0.29251	17840.3	2906.4	1604.7	U/P
2.422	0.0027	0.0000	163.365	0.37555	0.29124	17840.5	2936.4	1628.1	U/P
2.444	0.0018	0.0000	163.360	0.37527	0.28997	17840.7	2966.5	1651.3	U/P
2.467	0.0010	0.0000	163.355	0.37500	0.28870	17840.8	2996.5	1674.5	U/P
2.489	0.0005	0.0000	163.350	0.37473	0.28742	17840.9	3026.5	1697.5	U/P
2.511	0.0002	0.0000	163.345	0.37445	0.28613	17840.9	3056.4	1720.5	U/P
2.533	0.0000	0.0000	163.340	0.37418	0.28484	17840.9	3086.4	1743.3	U/P
2.556	0.0000	0.0000	163.335	0.37391	0.28355	17840.9	3116.3	1766.0	U/P
2.578	0.0000	0.0000	163.330	0.37352	0.28226	17840.9	3146.2	1788.7	U/P
14.578	0.0000	0.0000	162.318	0.12383	0.00000	17840.9	13222.3	1788.7	U/S
26.578	0.0000	0.0000	162.249	0.01239	0.00000	17840.9	13845.0	1788.7	S
38.578	0.0000	0.0000	162.200	0.00938	0.00000	17840.9	14292.4	1788.7	S
50.578	0.0000	0.0000	162.159	0.00780	0.00000	17840.9	14655.5	1788.7	S
62.578	0.0000	0.0000	162.124	0.00678	0.00000	17840.9	14966.6	1788.7	S
74.578	0.0000	0.0000	162.093	0.00605	0.00000	17840.9	15241.4	1788.7	S
86.578	0.0000	0.0000	162.065	0.00549	0.00000	17840.9	15489.1	1788.7	S
98.578	0.0000	0.0000	162.039	0.00504	0.00000	17840.9	15715.7	1788.7	S
110.578	0.0000	0.0000	162.015	0.00390	0.00000	17840.9	15925.0	1788.7	S
122.578	0.0000	0.0000	161.974	0.00147	0.00000	17840.9	16052.2	1788.7	S
134.578	0.0000	0.0000	161.906	0.00000	0.00000	17840.9	16052.2	1788.7	S
146.578	0.0000	0.0000	161.846	0.00000	0.00000	17840.9	16052.2	1788.7	S
158.578	0.0000	0.0000	161.792	0.00000	0.00000	17840.9	16052.2	1788.7	S
170.578	0.0000	0.0000	161.743	0.00000	0.00000	17840.9	16052.2	1788.7	S
182.578	0.0000	0.0000	161.698	0.00000	0.00000	17840.9	16052.2	1788.7	S
194.578	0.0000	0.0000	161.656	0.00000	0.00000	17840.9	16052.2	1788.7	S
206.578	0.0000	0.0000	161.618	0.00000	0.00000	17840.9	16052.2	1788.7	S
218.578	0.0000	0.0000	161.582	0.00000	0.00000	17840.9	16052.2	1788.7	S
230.578	0.0000	0.0000	161.548	0.00000	0.00000	17840.9	16052.2	1788.7	S
242.578	0.0000	0.0000	161.516	0.00000	0.00000	17840.9	16052.2	1788.7	S
254.578	0.0000	0.0000	161.486	0.00000	0.00000	17840.9	16052.2	1788.7	S
266.578	0.0000	0.0000	161.457	0.00000	0.00000	17840.9	16052.2	1788.7	S
278.578	0.0000	0.0000	161.430	0.00000	0.00000	17840.9	16052.2	1788.7	S
290.578	0.0000	0.0000	161.404	0.00000	0.00000	17840.9	16052.2	1788.7	S
302.578	0.0000	0.0000	161.379	0.00000	0.00000	17840.9	16052.2	1788.7	S
314.578	0.0000	0.0000	161.356	0.00000	0.00000	17840.9	16052.2	1788.7	S
326.578	0.0000	0.0000	161.333	0.00000	0.00000	17840.9	16052.2	1788.7	S
338.578	0.0000	0.0000	161.312	0.00000	0.00000	17840.9	16052.2	1788.7	S
350.578	0.0000	0.0000	161.291	0.00000	0.00000	17840.9	16052.2	1788.7	S
362.578	0.0000	0.0000	161.271	0.00000	0.00000	17840.9	16052.2	1788.7	S
374.578	0.0000	0.0000	161.252	0.00000	0.00000	17840.9	16052.2	1788.7	S

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Detailed Results (cont,d.) :: Scenario 3 :: SRWMD 100yr-4hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
3.289	0.7688	0.0000	163.672	0.38292	0.36188	21489.3	3407.9	1407.8	U/P
3.311	0.7540	0.0000	163.672	0.38292	0.36191	21550.2	3438.6	1436.7	U/P
3.333	0.7434	0.0000	163.672	0.38292	0.36191	21610.1	3469.2	1465.7	U/P
3.356	0.7357	0.0000	163.672	0.38292	0.36190	21669.3	3499.8	1494.6	U/P
3.378	0.7301	0.0000	163.672	0.38292	0.36189	21727.9	3530.5	1523.6	U/P
3.400	0.7261	0.0000	163.672	0.38292	0.36186	21786.2	3561.1	1552.5	U/P
3.422	0.7232	0.0000	163.672	0.38292	0.36183	21844.1	3591.7	1581.5	U/P
3.444	0.7212	0.0000	163.671	0.38292	0.36180	21901.9	3622.4	1610.4	U/P
3.467	0.7195	0.0000	163.671	0.38292	0.36176	21959.5	3653.0	1639.4	U/P
3.489	0.7184	0.0000	163.671	0.38292	0.36173	22017.1	3683.6	1668.3	U/P
3.511	0.7144	0.0000	163.671	0.38292	0.36168	22074.4	3714.3	1697.2	U/P
3.533	0.7008	0.0000	163.671	0.38292	0.36163	22131.0	3744.9	1726.2	U/P
3.556	0.6695	0.0000	163.670	0.38292	0.36154	22185.8	3775.5	1755.1	U/P
3.578	0.6183	0.0000	163.670	0.38292	0.36140	22237.3	3806.2	1784.0	U/P
3.600	0.5560	0.0000	163.668	0.38292	0.36116	22284.3	3836.8	1812.9	U/P
3.622	0.4938	0.0000	163.667	0.38292	0.36084	22326.3	3867.4	1841.8	U/P
3.644	0.4386	0.0000	163.665	0.38292	0.36043	22363.6	3898.1	1870.6	U/P
3.667	0.3954	0.0000	163.663	0.38292	0.35995	22396.9	3928.7	1899.5	U/P
3.689	0.3647	0.0000	163.660	0.38292	0.35942	22427.3	3959.3	1928.2	U/P
3.711	0.3431	0.0000	163.657	0.38292	0.35884	22455.6	3990.0	1957.0	U/P
3.733	0.3274	0.0000	163.654	0.38292	0.35824	22482.5	4020.6	1985.7	U/P
3.756	0.3160	0.0000	163.651	0.38292	0.35762	22508.2	4051.2	2014.3	U/P
3.778	0.3078	0.0000	163.648	0.38292	0.35698	22533.1	4081.9	2042.9	U/P
3.800	0.3019	0.0000	163.645	0.38292	0.35633	22557.5	4112.5	2071.4	U/P
3.822	0.2976	0.0000	163.642	0.38292	0.35567	22581.5	4143.1	2099.9	U/P
3.844	0.2946	0.0000	163.639	0.38292	0.35501	22605.2	4173.8	2128.3	U/P
3.867	0.2923	0.0000	163.636	0.38292	0.35434	22628.7	4204.4	2156.7	U/P
3.889	0.2907	0.0000	163.633	0.38292	0.35367	22652.0	4235.0	2185.0	U/P
3.911	0.2896	0.0000	163.630	0.38292	0.35299	22675.2	4265.7	2213.3	U/P
3.933	0.2887	0.0000	163.626	0.38292	0.35232	22698.3	4296.3	2241.5	U/P
3.956	0.2881	0.0000	163.623	0.38292	0.35164	22721.4	4326.9	2269.6	U/P
3.978	0.2876	0.0000	163.620	0.38292	0.35096	22744.4	4357.6	2297.7	U/P
4.000	0.2873	0.0000	163.617	0.38292	0.35028	22767.4	4388.2	2325.8	U/P
4.022	0.2828	0.0000	163.614	0.38292	0.34959	22790.2	4418.8	2353.8	U/P
4.044	0.2694	0.0000	163.610	0.38292	0.34889	22812.3	4449.5	2381.7	U/P
4.067	0.2410	0.0000	163.607	0.38292	0.34816	22832.7	4480.1	2409.6	U/P
4.089	0.2010	0.0000	163.603	0.38292	0.34738	22850.4	4510.7	2437.4	U/P
4.111	0.1579	0.0000	163.599	0.38292	0.34652	22864.8	4541.4	2465.2	U/P
4.133	0.1179	0.0000	163.595	0.38292	0.34561	22875.8	4572.0	2492.9	U/P
4.156	0.0843	0.0000	163.591	0.38292	0.34463	22883.9	4602.6	2520.5	U/P
4.178	0.0602	0.0000	163.586	0.38292	0.34361	22889.7	4633.3	2548.0	U/P
4.200	0.0435	0.0000	163.581	0.38292	0.34255	22893.8	4663.9	2575.5	U/P
4.222	0.0314	0.0000	163.576	0.38292	0.34147	22896.8	4694.5	2602.8	U/P
4.244	0.0225	0.0000	163.571	0.38292	0.34037	22899.0	4725.2	2630.1	U/P
4.267	0.0162	0.0000	163.566	0.38292	0.33925	22900.5	4755.8	2657.3	U/P
4.289	0.0116	0.0000	163.561	0.38292	0.33813	22901.7	4786.4	2684.4	U/P
4.311	0.0083	0.0000	163.556	0.38292	0.33699	22902.4	4817.1	2711.4	U/P
4.333	0.0059	0.0000	163.551	0.38292	0.33584	22903.0	4847.7	2738.3	U/P
4.356	0.0042	0.0000	163.546	0.38292	0.33469	22903.4	4878.3	2765.1	U/P
4.378	0.0029	0.0000	163.541	0.38292	0.33354	22903.7	4909.0	2791.8	U/P
4.400	0.0020	0.0000	163.536	0.38292	0.33238	22903.9	4939.6	2818.5	U/P
4.422	0.0014	0.0000	163.530	0.38292	0.33121	22904.0	4970.2	2845.0	U/P
4.444	0.0009	0.0000	163.525	0.38292	0.33004	22904.1	5000.9	2871.5	U/P
4.467	0.0005	0.0000	163.520	0.38292	0.32887	22904.2	5031.5	2897.8	U/P
4.489	0.0003	0.0000	163.515	0.38292	0.32769	22904.2	5062.1	2924.1	U/P
4.511	0.0001	0.0000	163.510	0.38292	0.32651	22904.2	5092.8	2950.3	U/P
4.533	0.0000	0.0000	163.505	0.38292	0.32533	22904.2	5123.4	2976.3	U/P
4.556	0.0000	0.0000	163.500	0.38290	0.32414	22904.2	5154.0	3002.3	U/P
4.578	0.0000	0.0000	163.494	0.38258	0.32295	22904.2	5184.7	3028.2	U/P
16.578	0.0000	0.0000	162.582	0.11681	0.00000	22904.2	14571.7	3028.2	U/S
28.578	0.0000	0.0000	162.508	0.01404	0.00000	22904.2	15277.2	3028.2	S
40.578	0.0000	0.0000	162.454	0.01064	0.00000	22904.2	15784.8	3028.2	S
52.578	0.0000	0.0000	162.410	0.00886	0.00000	22904.2	16196.9	3028.2	S
64.578	0.0000	0.0000	162.372	0.00770	0.00000	22904.2	16550.1	3028.2	S
76.578	0.0000	0.0000	162.338	0.00687	0.00000	22904.2	16862.3	3028.2	S
88.578	0.0000	0.0000	162.307	0.00624	0.00000	22904.2	17143.7	3028.2	S
100.578	0.0000	0.0000	162.279	0.00573	0.00000	22904.2	17401.1	3028.2	S
112.578	0.0000	0.0000	162.253	0.00532	0.00000	22904.2	17639.0	3028.2	S
124.578	0.0000	0.0000	162.228	0.00497	0.00000	22904.2	17860.7	3028.2	S
136.578	0.0000	0.0000	162.205	0.00467	0.00000	22904.2	18068.5	3028.2	S
148.578	0.0000	0.0000	162.183	0.00442	0.00000	22904.2	18264.5	3028.2	S
160.578	0.0000	0.0000	162.162	0.00419	0.00000	22904.2	18450.1	3028.2	S
172.578	0.0000	0.0000	162.142	0.00399	0.00000	22904.2	18626.6	3028.2	S
184.578	0.0000	0.0000	162.123	0.00381	0.00000	22904.2	18794.9	3028.2	S

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Detailed Results (cont,d.) :: Scenario 3 :: SRWMD 100yr-4hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
196.578	0.0000	0.0000	162.105	0.00365	0.00000	22904.2	18955.8	3028.2	S
208.578	0.0000	0.0000	162.088	0.00350	0.00000	22904.2	19110.2	3028.2	S
220.578	0.0000	0.0000	162.071	0.00337	0.00000	22904.2	19258.5	3028.2	S
232.578	0.0000	0.0000	162.055	0.00325	0.00000	22904.2	19401.4	3028.2	S
244.578	0.0000	0.0000	162.039	0.00313	0.00000	22904.2	19539.1	3028.2	S
256.578	0.0000	0.0000	162.024	0.00303	0.00000	22904.2	19672.2	3028.2	S
268.578	0.0000	0.0000	162.009	0.00236	0.00000	22904.2	19800.9	3028.2	S
280.578	0.0000	0.0000	161.981	0.00087	0.00000	22904.2	19876.0	3028.2	S
292.578	0.0000	0.0000	161.936	0.00000	0.00000	22904.2	19876.0	3028.2	S
304.578	0.0000	0.0000	161.895	0.00000	0.00000	22904.2	19876.0	3028.2	S
316.578	0.0000	0.0000	161.857	0.00000	0.00000	22904.2	19876.0	3028.2	S
328.578	0.0000	0.0000	161.822	0.00000	0.00000	22904.2	19876.0	3028.2	S
340.578	0.0000	0.0000	161.788	0.00000	0.00000	22904.2	19876.0	3028.2	S
352.578	0.0000	0.0000	161.757	0.00000	0.00000	22904.2	19876.0	3028.2	S
364.578	0.0000	0.0000	161.727	0.00000	0.00000	22904.2	19876.0	3028.2	S
376.578	0.0000	0.0000	161.699	0.00000	0.00000	22904.2	19876.0	3028.2	S
388.578	0.0000	0.0000	161.672	0.00000	0.00000	22904.2	19876.0	3028.2	S
400.578	0.0000	0.0000	161.646	0.00000	0.00000	22904.2	19876.0	3028.2	S
412.578	0.0000	0.0000	161.621	0.00000	0.00000	22904.2	19876.0	3028.2	S
424.578	0.0000	0.0000	161.597	0.00000	0.00000	22904.2	19876.0	3028.2	S
436.578	0.0000	0.0000	161.574	0.00000	0.00000	22904.2	19876.0	3028.2	S
448.578	0.0000	0.0000	161.552	0.00000	0.00000	22904.2	19876.0	3028.2	S
460.578	0.0000	0.0000	161.531	0.00000	0.00000	22904.2	19876.0	3028.2	S
472.578	0.0000	0.0000	161.511	0.00000	0.00000	22904.2	19876.0	3028.2	S
484.578	0.0000	0.0000	161.491	0.00000	0.00000	22904.2	19876.0	3028.2	S
496.578	0.0000	0.0000	161.472	0.00000	0.00000	22904.2	19876.0	3028.2	S
508.578	0.0000	0.0000	161.453	0.00000	0.00000	22904.2	19876.0	3028.2	S
520.578	0.0000	0.0000	161.436	0.00000	0.00000	22904.2	19876.0	3028.2	S
532.578	0.0000	0.0000	161.418	0.00000	0.00000	22904.2	19876.0	3028.2	S
544.578	0.0000	0.0000	161.401	0.00000	0.00000	22904.2	19876.0	3028.2	S
556.578	0.0000	0.0000	161.385	0.00000	0.00000	22904.2	19876.0	3028.2	S
568.578	0.0000	0.0000	161.369	0.00000	0.00000	22904.2	19876.0	3028.2	S
580.578	0.0000	0.0000	161.354	0.00000	0.00000	22904.2	19876.0	3028.2	S
592.578	0.0000	0.0000	161.339	0.00000	0.00000	22904.2	19876.0	3028.2	S
604.578	0.0000	0.0000	161.324	0.00000	0.00000	22904.2	19876.0	3028.2	S
616.578	0.0000	0.0000	161.310	0.00000	0.00000	22904.2	19876.0	3028.2	S
628.578	0.0000	0.0000	161.296	0.00000	0.00000	22904.2	19876.0	3028.2	S
640.578	0.0000	0.0000	161.282	0.00000	0.00000	22904.2	19876.0	3028.2	S
652.578	0.0000	0.0000	161.269	0.00000	0.00000	22904.2	19876.0	3028.2	S
664.578	0.0000	0.0000	161.256	0.00000	0.00000	22904.2	19876.0	3028.2	S
676.578	0.0000	0.0000	161.243	0.00000	0.00000	22904.2	19876.0	3028.2	S
688.578	0.0000	0.0000	161.231	0.00000	0.00000	22904.2	19876.0	3028.2	S
700.578	0.0000	0.0000	161.219	0.00000	0.00000	22904.2	19876.0	3028.2	S
712.578	0.0000	0.0000	161.207	0.00000	0.00000	22904.2	19876.0	3028.2	S
724.578	0.0000	0.0000	161.196	----	----	22904.2	19876.0	3028.2	N.A.

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Detailed Results (cont,d.) :: Scenario 4 :: SRWMD 100yr-8hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
4.933	1.3667	0.0000	163.655	0.38292	0.35839	22540.1	4542.7	1513.0	U/P
4.956	1.3668	0.0000	163.660	0.38292	0.35932	22649.4	4573.4	1541.7	U/P
4.978	1.3669	0.0000	163.664	0.38292	0.36024	22758.8	4604.0	1570.5	U/P
5.000	1.3670	0.0000	163.668	0.38292	0.36116	22868.1	4634.6	1599.4	U/P
5.022	1.3543	0.0000	163.673	0.38292	0.36206	22977.0	4665.3	1628.3	U/P
5.044	1.3147	0.0000	163.677	0.38292	0.36292	23083.7	4695.9	1657.3	U/P
5.067	1.2302	0.0000	163.681	0.38292	0.36369	23185.5	4726.5	1686.4	U/P
5.089	1.1111	0.0000	163.684	0.38292	0.36431	23279.2	4757.2	1715.5	U/P
5.111	0.9830	0.0000	163.686	0.38292	0.36474	23362.9	4787.8	1744.7	U/P
5.133	0.8639	0.0000	163.687	0.38292	0.36500	23436.8	4818.4	1773.8	U/P
5.156	0.7640	0.0000	163.687	0.38292	0.36509	23501.9	4849.1	1803.1	U/P
5.178	0.6922	0.0000	163.687	0.38292	0.36507	23560.2	4879.7	1832.3	U/P
5.200	0.6423	0.0000	163.687	0.38292	0.36495	23613.6	4910.3	1861.5	U/P
5.222	0.6064	0.0000	163.686	0.38292	0.36477	23663.5	4941.0	1890.6	U/P
5.244	0.5799	0.0000	163.685	0.38292	0.36455	23711.0	4971.6	1919.8	U/P
5.267	0.5611	0.0000	163.684	0.38292	0.36429	23756.6	5002.2	1949.0	U/P
5.289	0.5474	0.0000	163.682	0.38292	0.36401	23801.0	5032.9	1978.1	U/P
5.311	0.5376	0.0000	163.681	0.38292	0.36371	23844.4	5063.5	2007.2	U/P
5.333	0.5305	0.0000	163.679	0.38292	0.36340	23887.1	5094.1	2036.3	U/P
5.356	0.5254	0.0000	163.678	0.38292	0.36308	23929.3	5124.8	2065.4	U/P
5.378	0.5217	0.0000	163.676	0.38292	0.36276	23971.2	5155.4	2094.4	U/P
5.400	0.5191	0.0000	163.675	0.38292	0.36243	24012.8	5186.0	2123.4	U/P
5.422	0.5171	0.0000	163.673	0.38292	0.36210	24054.3	5216.7	2152.4	U/P
5.444	0.5157	0.0000	163.671	0.38292	0.36176	24095.6	5247.3	2181.3	U/P
5.467	0.5147	0.0000	163.670	0.38292	0.36142	24136.8	5277.9	2210.3	U/P
5.489	0.5139	0.0000	163.668	0.38292	0.36109	24178.0	5308.6	2239.2	U/P
5.511	0.5134	0.0000	163.666	0.38292	0.36075	24219.0	5339.2	2268.0	U/P
5.533	0.5131	0.0000	163.665	0.38292	0.36041	24260.1	5369.8	2296.9	U/P
5.556	0.5132	0.0000	163.663	0.38292	0.36007	24301.2	5400.5	2325.7	U/P
5.578	0.5132	0.0000	163.662	0.38292	0.35973	24342.2	5431.1	2354.5	U/P
5.600	0.5132	0.0000	163.660	0.38292	0.35939	24383.3	5461.7	2383.3	U/P
5.622	0.5132	0.0000	163.658	0.38292	0.35905	24424.3	5492.4	2412.0	U/P
5.644	0.5132	0.0000	163.657	0.38292	0.35871	24465.4	5523.0	2440.7	U/P
5.667	0.5132	0.0000	163.655	0.38292	0.35837	24506.4	5553.6	2469.4	U/P
5.689	0.5132	0.0000	163.653	0.38292	0.35804	24547.5	5584.3	2498.0	U/P
5.711	0.5132	0.0000	163.652	0.38292	0.35770	24588.5	5614.9	2526.7	U/P
5.733	0.5133	0.0000	163.650	0.38292	0.35736	24629.6	5645.5	2555.3	U/P
5.756	0.5133	0.0000	163.649	0.38292	0.35702	24670.7	5676.2	2583.9	U/P
5.778	0.5133	0.0000	163.647	0.38292	0.35668	24711.7	5706.8	2612.4	U/P
5.800	0.5133	0.0000	163.645	0.38292	0.35634	24752.8	5737.4	2640.9	U/P
5.822	0.5133	0.0000	163.644	0.38292	0.35601	24793.9	5768.1	2669.4	U/P
5.844	0.5133	0.0000	163.642	0.38292	0.35567	24834.9	5798.7	2697.9	U/P
5.867	0.5133	0.0000	163.641	0.38292	0.35533	24876.0	5829.3	2726.3	U/P
5.889	0.5134	0.0000	163.639	0.37648	0.35499	24917.1	5860.0	2754.7	U/P
5.911	0.5134	0.0000	163.639	0.20905	0.35494	24958.1	5889.6	2768.9	U/S
5.933	0.5134	0.0000	163.640	0.04887	0.35510	24999.2	5893.4	2797.3	S
5.956	0.5134	0.0000	163.640	0.05050	0.35526	25040.3	5897.4	2825.7	S
5.978	0.5134	0.0000	163.641	0.05217	0.35542	25081.3	5901.5	2854.2	S
6.000	0.5134	0.0000	163.642	0.05386	0.35558	25122.4	5905.7	2882.6	S
6.022	0.5121	0.0000	163.643	0.05558	0.35574	25163.4	5910.1	2911.1	S
6.044	0.5082	0.0000	163.643	0.05732	0.35588	25204.3	5914.6	2939.5	S
6.067	0.4997	0.0000	163.644	0.05909	0.35602	25244.6	5919.3	2968.0	S
6.089	0.4878	0.0000	163.644	0.06087	0.35613	25284.1	5924.1	2996.5	S
6.111	0.4750	0.0000	163.645	0.06267	0.35623	25322.6	5929.0	3025.0	S
6.133	0.4631	0.0000	163.645	0.06448	0.35630	25360.1	5934.1	3053.5	S
6.156	0.4531	0.0000	163.645	0.06631	0.35636	25396.7	5939.3	3082.0	S
6.178	0.4459	0.0000	163.646	0.06815	0.35639	25432.7	5944.7	3110.5	S
6.200	0.4409	0.0000	163.646	0.07001	0.35642	25468.2	5950.2	3139.0	S
6.222	0.4373	0.0000	163.646	0.07187	0.35644	25503.3	5955.9	3167.5	S
6.244	0.4347	0.0000	163.646	0.07374	0.35645	25538.2	5961.7	3196.0	S
6.267	0.4328	0.0000	163.646	0.07561	0.35645	25572.9	5967.7	3224.6	S
6.289	0.4314	0.0000	163.646	0.07747	0.35645	25607.5	5973.8	3253.1	S
6.311	0.4304	0.0000	163.646	0.07934	0.35644	25641.9	5980.1	3281.6	S
6.333	0.4297	0.0000	163.646	0.08119	0.35643	25676.3	5986.5	3310.1	S
6.356	0.4292	0.0000	163.646	0.08304	0.35642	25710.7	5993.1	3338.6	S
6.378	0.4289	0.0000	163.646	0.08486	0.35640	25745.0	5999.8	3367.1	S
6.400	0.4286	0.0000	163.646	0.08667	0.35638	25779.3	6006.7	3395.7	S
6.422	0.4284	0.0000	163.645	0.08846	0.35636	25813.6	6013.7	3424.2	S
6.444	0.4283	0.0000	163.645	0.09022	0.35633	25847.9	6020.8	3452.7	S
6.467	0.4282	0.0000	163.645	0.09195	0.35631	25882.1	6028.1	3481.2	S
6.489	0.4281	0.0000	163.645	0.09364	0.35627	25916.4	6035.5	3509.7	S
6.511	0.4281	0.0000	163.645	0.09530	0.35624	25950.6	6043.1	3538.2	S
6.533	0.4281	0.0000	163.645	0.09692	0.35620	25984.9	6050.8	3566.7	S
6.556	0.4281	0.0000	163.645	0.09850	0.35617	26019.1	6058.6	3595.2	S

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Detailed Results (cont,d.) :: Scenario 4 :: SRWMD 100yr-8hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
8.222	0.0281	0.0000	163.565	0.07156	0.33894	27826.9	6659.2	5695.6	S
8.244	0.0202	0.0000	163.562	0.07082	0.33833	27828.8	6664.9	5722.7	S
8.267	0.0145	0.0000	163.559	0.07009	0.33770	27830.2	6670.5	5749.7	S
8.289	0.0104	0.0000	163.556	0.06939	0.33707	27831.2	6676.1	5776.7	S
8.311	0.0074	0.0000	163.554	0.06871	0.33643	27831.9	6681.6	5803.7	S
8.333	0.0053	0.0000	163.551	0.06805	0.33579	27832.4	6687.1	5830.6	S
8.356	0.0037	0.0000	163.548	0.06741	0.33515	27832.7	6692.5	5857.4	S
8.378	0.0026	0.0000	163.545	0.06678	0.33451	27833.0	6697.8	5884.2	S
8.400	0.0018	0.0000	163.542	0.06618	0.33386	27833.2	6703.2	5910.9	S
8.422	0.0012	0.0000	163.539	0.06559	0.33321	27833.3	6708.4	5937.6	S
8.444	0.0008	0.0000	163.536	0.06502	0.33257	27833.4	6713.7	5964.2	S
8.467	0.0005	0.0000	163.534	0.06447	0.33192	27833.4	6718.8	5990.8	S
8.489	0.0002	0.0000	163.531	0.06394	0.33127	27833.5	6724.0	6017.3	S
8.511	0.0001	0.0000	163.528	0.06342	0.33063	27833.5	6729.1	6043.8	S
8.533	0.0000	0.0000	163.525	0.06291	0.32998	27833.5	6734.1	6070.2	S
8.556	0.0000	0.0000	163.522	0.06242	0.32934	27833.5	6739.1	6096.6	S
8.578	0.0000	0.0000	163.519	0.06192	0.32869	27833.5	6744.1	6122.9	S
20.578	0.0000	0.0000	162.906	-0.05994	0.12594	27833.5	3409.5	15942.9	S
32.578	0.0000	0.0000	162.800	-0.01706	0.00811	27833.5	1565.0	18838.4	S
44.578	0.0000	0.0000	162.745	0.00953	0.00000	27833.5	1935.2	19013.7	S
56.578	0.0000	0.0000	162.699	0.00980	0.00000	27833.5	2388.8	19013.7	S
68.578	0.0000	0.0000	162.658	0.00860	0.00000	27833.5	2781.9	19013.7	S
80.578	0.0000	0.0000	162.622	0.00771	0.00000	27833.5	3131.6	19013.7	S
92.578	0.0000	0.0000	162.589	0.00703	0.00000	27833.5	3448.3	19013.7	S
104.578	0.0000	0.0000	162.559	0.00648	0.00000	27833.5	3738.9	19013.7	S
116.578	0.0000	0.0000	162.530	0.00602	0.00000	27833.5	4008.0	19013.7	S
128.578	0.0000	0.0000	162.504	0.00564	0.00000	27833.5	4259.2	19013.7	S
140.578	0.0000	0.0000	162.479	0.00531	0.00000	27833.5	4495.2	19013.7	S
152.578	0.0000	0.0000	162.455	0.00502	0.00000	27833.5	4718.0	19013.7	S
164.578	0.0000	0.0000	162.432	0.00477	0.00000	27833.5	4929.2	19013.7	S
176.578	0.0000	0.0000	162.411	0.00455	0.00000	27833.5	5130.2	19013.7	S
188.578	0.0000	0.0000	162.390	0.00435	0.00000	27833.5	5322.1	19013.7	S
200.578	0.0000	0.0000	162.370	0.00416	0.00000	27833.5	5505.7	19013.7	S
212.578	0.0000	0.0000	162.351	0.00400	0.00000	27833.5	5681.9	19013.7	S
224.578	0.0000	0.0000	162.333	0.00385	0.00000	27833.5	5851.3	19013.7	S
236.578	0.0000	0.0000	162.315	0.00371	0.00000	27833.5	6014.5	19013.7	S
248.578	0.0000	0.0000	162.298	0.00358	0.00000	27833.5	6172.0	19013.7	S
260.578	0.0000	0.0000	162.281	0.00347	0.00000	27833.5	6324.2	19013.7	S
272.578	0.0000	0.0000	162.265	0.00336	0.00000	27833.5	6471.5	19013.7	S
284.578	0.0000	0.0000	162.249	0.00326	0.00000	27833.5	6614.3	19013.7	S
296.578	0.0000	0.0000	162.234	0.00316	0.00000	27833.5	6752.8	19013.7	S
308.578	0.0000	0.0000	162.219	0.00307	0.00000	27833.5	6887.3	19013.7	S
320.578	0.0000	0.0000	162.204	0.00299	0.00000	27833.5	7018.0	19013.7	S
332.578	0.0000	0.0000	162.190	0.00291	0.00000	27833.5	7145.3	19013.7	S
344.578	0.0000	0.0000	162.176	0.00283	0.00000	27833.5	7269.2	19013.7	S
356.578	0.0000	0.0000	162.163	0.00276	0.00000	27833.5	7390.0	19013.7	S
368.578	0.0000	0.0000	162.149	0.00269	0.00000	27833.5	7507.8	19013.7	S
380.578	0.0000	0.0000	162.137	0.00263	0.00000	27833.5	7622.7	19013.7	S
392.578	0.0000	0.0000	162.124	0.00257	0.00000	27833.5	7735.1	19013.7	S
404.578	0.0000	0.0000	162.111	0.00251	0.00000	27833.5	7844.8	19013.7	S
416.578	0.0000	0.0000	162.099	0.00246	0.00000	27833.5	7952.1	19013.7	S
428.578	0.0000	0.0000	162.087	0.00241	0.00000	27833.5	8057.2	19013.7	S
440.578	0.0000	0.0000	162.076	0.00236	0.00000	27833.5	8160.0	19013.7	S
452.578	0.0000	0.0000	162.064	0.00231	0.00000	27833.5	8260.6	19013.7	S
464.578	0.0000	0.0000	162.053	0.00226	0.00000	27833.5	8359.3	19013.7	S
476.578	0.0000	0.0000	162.042	0.00222	0.00000	27833.5	8456.0	19013.7	S
488.578	0.0000	0.0000	162.031	0.00217	0.00000	27833.5	8550.8	19013.7	S
500.578	0.0000	0.0000	162.020	0.00213	0.00000	27833.5	8643.9	19013.7	S
512.578	0.0000	0.0000	162.010	0.00204	0.00000	27833.5	8735.2	19013.7	S
524.578	0.0000	0.0000	161.998	0.00098	0.00000	27833.5	8819.8	19013.7	S
536.578	0.0000	0.0000	161.964	0.00000	0.00000	27833.5	8819.8	19013.7	S
548.578	0.0000	0.0000	161.934	0.00000	0.00000	27833.5	8819.8	19013.7	S
560.578	0.0000	0.0000	161.905	0.00000	0.00000	27833.5	8819.8	19013.7	S
572.578	0.0000	0.0000	161.878	0.00000	0.00000	27833.5	8819.8	19013.7	S
584.578	0.0000	0.0000	161.852	0.00000	0.00000	27833.5	8819.8	19013.7	S
596.578	0.0000	0.0000	161.828	0.00000	0.00000	27833.5	8819.8	19013.7	S
608.578	0.0000	0.0000	161.804	0.00000	0.00000	27833.5	8819.8	19013.7	S
620.578	0.0000	0.0000	161.782	0.00000	0.00000	27833.5	8819.8	19013.7	S
632.578	0.0000	0.0000	161.760	0.00000	0.00000	27833.5	8819.8	19013.7	S
644.578	0.0000	0.0000	161.739	0.00000	0.00000	27833.5	8819.8	19013.7	S
656.578	0.0000	0.0000	161.719	0.00000	0.00000	27833.5	8819.8	19013.7	S
668.578	0.0000	0.0000	161.699	0.00000	0.00000	27833.5	8819.8	19013.7	S
680.578	0.0000	0.0000	161.680	0.00000	0.00000	27833.5	8819.8	19013.7	S
692.578	0.0000	0.0000	161.662	0.00000	0.00000	27833.5	8819.8	19013.7	S

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Detailed Results (cont,d.) :: Scenario 5 :: SRWMD 100yr-24hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
21.378	0.2383	0.0000	163.708	0.03027	0.36922	38080.5	8227.9	12773.3	S
21.400	0.2379	0.0000	163.706	0.03018	0.36899	38099.6	8230.4	12802.9	S
21.422	0.2376	0.0000	163.705	0.03009	0.36876	38118.6	8232.8	12832.4	S
21.444	0.2375	0.0000	163.704	0.03000	0.36853	38137.6	8235.2	12861.9	S
21.467	0.2373	0.0000	163.703	0.02991	0.36830	38156.6	8237.6	12891.3	S
21.489	0.2372	0.0000	163.702	0.02983	0.36807	38175.6	8240.0	12920.8	S
21.511	0.2371	0.0000	163.701	0.02974	0.36783	38194.6	8242.3	12950.2	S
21.533	0.2371	0.0000	163.700	0.02966	0.36760	38213.5	8244.7	12979.6	S
21.556	0.2371	0.0000	163.699	0.02958	0.36737	38232.5	8247.1	13009.0	S
21.578	0.2371	0.0000	163.697	0.02950	0.36714	38251.5	8249.4	13038.4	S
21.600	0.2371	0.0000	163.696	0.02942	0.36691	38270.4	8251.8	13067.8	S
21.622	0.2371	0.0000	163.695	0.02934	0.36669	38289.4	8254.2	13097.1	S
21.644	0.2371	0.0000	163.694	0.02927	0.36646	38308.4	8256.5	13126.5	S
21.667	0.2371	0.0000	163.693	0.02919	0.36623	38327.3	8258.8	13155.8	S
21.689	0.2371	0.0000	163.692	0.02912	0.36600	38346.3	8261.2	13185.1	S
21.711	0.2371	0.0000	163.691	0.02904	0.36577	38365.3	8263.5	13214.3	S
21.733	0.2371	0.0000	163.690	0.02897	0.36554	38384.2	8265.8	13243.6	S
21.756	0.2371	0.0000	163.689	0.02890	0.36531	38403.2	8268.1	13272.8	S
21.778	0.2371	0.0000	163.687	0.02883	0.36509	38422.2	8270.4	13302.0	S
21.800	0.2371	0.0000	163.686	0.02876	0.36486	38441.1	8272.7	13331.2	S
21.822	0.2371	0.0000	163.685	0.02869	0.36463	38460.1	8275.0	13360.4	S
21.844	0.2371	0.0000	163.684	0.02862	0.36441	38479.1	8277.3	13389.6	S
21.867	0.2371	0.0000	163.683	0.02856	0.36418	38498.0	8279.6	13418.7	S
21.889	0.2371	0.0000	163.682	0.02849	0.36395	38517.0	8281.9	13447.8	S
21.911	0.2371	0.0000	163.681	0.02842	0.36373	38536.0	8284.2	13476.9	S
21.933	0.2371	0.0000	163.680	0.02836	0.36350	38554.9	8286.5	13506.0	S
21.956	0.2371	0.0000	163.679	0.02829	0.36328	38573.9	8288.7	13535.1	S
21.978	0.2371	0.0000	163.678	0.02823	0.36305	38592.9	8291.0	13564.2	S
22.000	0.2371	0.0000	163.676	0.02817	0.36282	38611.8	8293.2	13593.2	S
22.022	0.2354	0.0000	163.675	0.02810	0.36260	38630.7	8295.5	13622.2	S
22.044	0.2300	0.0000	163.674	0.02803	0.36237	38649.4	8297.7	13651.2	S
22.067	0.2186	0.0000	163.673	0.02794	0.36212	38667.3	8300.0	13680.2	S
22.089	0.2022	0.0000	163.672	0.02785	0.36186	38684.1	8302.2	13709.1	S
22.111	0.1846	0.0000	163.670	0.02774	0.36157	38699.6	8304.4	13738.1	S
22.133	0.1680	0.0000	163.669	0.02763	0.36126	38713.7	8306.6	13767.0	S
22.156	0.1541	0.0000	163.667	0.02751	0.36093	38726.6	8308.8	13795.9	S
22.178	0.1440	0.0000	163.666	0.02739	0.36057	38738.5	8311.0	13824.7	S
22.200	0.1370	0.0000	163.664	0.02726	0.36021	38749.8	8313.2	13853.6	S
22.222	0.1320	0.0000	163.662	0.02714	0.35984	38760.5	8315.4	13882.4	S
22.244	0.1282	0.0000	163.660	0.02703	0.35946	38770.9	8317.6	13911.1	S
22.267	0.1256	0.0000	163.658	0.02691	0.35907	38781.1	8319.7	13939.9	S
22.289	0.1237	0.0000	163.657	0.02679	0.35869	38791.1	8321.9	13968.6	S
22.311	0.1223	0.0000	163.655	0.02668	0.35830	38800.9	8324.0	13997.3	S
22.333	0.1213	0.0000	163.653	0.02657	0.35791	38810.6	8326.1	14025.9	S
22.356	0.1206	0.0000	163.651	0.02646	0.35751	38820.3	8328.3	14054.5	S
22.378	0.1201	0.0000	163.649	0.02635	0.35712	38829.9	8330.4	14083.1	S
22.400	0.1197	0.0000	163.647	0.02625	0.35673	38839.5	8332.5	14111.7	S
22.422	0.1194	0.0000	163.645	0.02614	0.35634	38849.1	8334.6	14140.2	S
22.444	0.1192	0.0000	163.644	0.02604	0.35594	38858.6	8336.7	14168.7	S
22.467	0.1191	0.0000	163.642	0.02594	0.35555	38868.2	8338.7	14197.2	S
22.489	0.1190	0.0000	163.640	0.02584	0.35515	38877.7	8340.8	14225.6	S
22.511	0.1189	0.0000	163.638	0.02574	0.35476	38887.2	8342.9	14254.0	S
22.533	0.1188	0.0000	163.636	0.02565	0.35437	38896.7	8344.9	14282.3	S
22.556	0.1188	0.0000	163.634	0.02556	0.35397	38906.2	8347.0	14310.7	S
22.578	0.1188	0.0000	163.632	0.02546	0.35358	38915.7	8349.0	14339.0	S
22.600	0.1188	0.0000	163.631	0.02537	0.35319	38925.2	8351.1	14367.3	S
22.622	0.1188	0.0000	163.629	0.02528	0.35280	38934.7	8353.1	14395.5	S
22.644	0.1188	0.0000	163.627	0.02519	0.35240	38944.3	8355.1	14423.7	S
22.667	0.1188	0.0000	163.625	0.02511	0.35201	38953.8	8357.1	14451.9	S
22.689	0.1188	0.0000	163.623	0.02502	0.35162	38963.3	8359.1	14480.0	S
22.711	0.1188	0.0000	163.621	0.02494	0.35123	38972.8	8361.1	14508.1	S
22.733	0.1188	0.0000	163.619	0.02485	0.35084	38982.3	8363.1	14536.2	S
22.756	0.1188	0.0000	163.618	0.02477	0.35044	38991.8	8365.1	14564.3	S
22.778	0.1188	0.0000	163.616	0.02469	0.35005	39001.3	8367.1	14592.3	S
22.800	0.1188	0.0000	163.614	0.02461	0.34966	39010.8	8369.0	14620.3	S
22.822	0.1188	0.0000	163.612	0.02453	0.34927	39020.3	8371.0	14648.2	S
22.844	0.1188	0.0000	163.610	0.02445	0.34888	39029.8	8373.0	14676.2	S
22.867	0.1188	0.0000	163.609	0.02437	0.34849	39039.3	8374.9	14704.1	S
22.889	0.1188	0.0000	163.607	0.02429	0.34810	39048.8	8376.9	14731.9	S
22.911	0.1188	0.0000	163.605	0.02422	0.34771	39058.3	8378.8	14759.8	S
22.933	0.1188	0.0000	163.603	0.02414	0.34732	39067.9	8380.7	14787.6	S
22.956	0.1188	0.0000	163.601	0.02407	0.34693	39077.4	8382.7	14815.3	S
22.978	0.1188	0.0000	163.600	0.02399	0.34654	39086.9	8384.6	14843.1	S
23.000	0.1188	0.0000	163.598	0.02392	0.34615	39096.4	8386.5	14870.8	S

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Detailed Results (cont,d.) :: Scenario 5 :: SRWMD 100yr-24hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
72.578	0.0000	0.0000	162.721	0.00829	0.00000	39579.9	3400.0	29533.7	S
84.578	0.0000	0.0000	162.686	0.00756	0.00000	39579.9	3740.9	29533.7	S
96.578	0.0000	0.0000	162.654	0.00696	0.00000	39579.9	4053.6	29533.7	S
108.578	0.0000	0.0000	162.624	0.00646	0.00000	39579.9	4342.7	29533.7	S
120.578	0.0000	0.0000	162.596	0.00604	0.00000	39579.9	4612.1	29533.7	S
132.578	0.0000	0.0000	162.569	0.00568	0.00000	39579.9	4864.6	29533.7	S
144.578	0.0000	0.0000	162.544	0.00536	0.00000	39579.9	5102.5	29533.7	S
156.578	0.0000	0.0000	162.521	0.00508	0.00000	39579.9	5327.8	29533.7	S
168.578	0.0000	0.0000	162.498	0.00484	0.00000	39579.9	5541.8	29533.7	S
180.578	0.0000	0.0000	162.476	0.00462	0.00000	39579.9	5745.8	29533.7	S
192.578	0.0000	0.0000	162.455	0.00442	0.00000	39579.9	5940.9	29533.7	S
204.578	0.0000	0.0000	162.435	0.00424	0.00000	39579.9	6127.8	29533.7	S
216.578	0.0000	0.0000	162.416	0.00408	0.00000	39579.9	6307.4	29533.7	S
228.578	0.0000	0.0000	162.398	0.00393	0.00000	39579.9	6480.2	29533.7	S
240.578	0.0000	0.0000	162.380	0.00379	0.00000	39579.9	6646.8	29533.7	S
252.578	0.0000	0.0000	162.362	0.00366	0.00000	39579.9	6807.7	29533.7	S
264.578	0.0000	0.0000	162.345	0.00355	0.00000	39579.9	6963.3	29533.7	S
276.578	0.0000	0.0000	162.329	0.00344	0.00000	39579.9	7114.1	29533.7	S
288.578	0.0000	0.0000	162.313	0.00333	0.00000	39579.9	7260.2	29533.7	S
300.578	0.0000	0.0000	162.297	0.00324	0.00000	39579.9	7402.0	29533.7	S
312.578	0.0000	0.0000	162.282	0.00315	0.00000	39579.9	7539.9	29533.7	S
324.578	0.0000	0.0000	162.267	0.00306	0.00000	39579.9	7673.9	29533.7	S
336.578	0.0000	0.0000	162.253	0.00298	0.00000	39579.9	7804.4	29533.7	S
348.578	0.0000	0.0000	162.239	0.00291	0.00000	39579.9	7931.6	29533.7	S
360.578	0.0000	0.0000	162.225	0.00283	0.00000	39579.9	8055.6	29533.7	S
372.578	0.0000	0.0000	162.212	0.00277	0.00000	39579.9	8176.5	29533.7	S
384.578	0.0000	0.0000	162.199	0.00270	0.00000	39579.9	8294.6	29533.7	S
396.578	0.0000	0.0000	162.186	0.00264	0.00000	39579.9	8410.0	29533.7	S
408.578	0.0000	0.0000	162.173	0.00258	0.00000	39579.9	8522.8	29533.7	S
420.578	0.0000	0.0000	162.161	0.00253	0.00000	39579.9	8633.1	29533.7	S
432.578	0.0000	0.0000	162.149	0.00247	0.00000	39579.9	8741.1	29533.7	S
444.578	0.0000	0.0000	162.137	0.00242	0.00000	39579.9	8846.8	29533.7	S
456.578	0.0000	0.0000	162.125	0.00237	0.00000	39579.9	8950.3	29533.7	S
468.578	0.0000	0.0000	162.114	0.00233	0.00000	39579.9	9051.8	29533.7	S
480.578	0.0000	0.0000	162.102	0.00228	0.00000	39579.9	9151.3	29533.7	S
492.578	0.0000	0.0000	162.091	0.00224	0.00000	39579.9	9248.9	29533.7	S
504.578	0.0000	0.0000	162.080	0.00220	0.00000	39579.9	9344.7	29533.7	S
516.578	0.0000	0.0000	162.070	0.00216	0.00000	39579.9	9438.7	29533.7	S
528.578	0.0000	0.0000	162.059	0.00212	0.00000	39579.9	9531.0	29533.7	S
540.578	0.0000	0.0000	162.049	0.00208	0.00000	39579.9	9621.6	29533.7	S
552.578	0.0000	0.0000	162.039	0.00204	0.00000	39579.9	9710.7	29533.7	S
564.578	0.0000	0.0000	162.029	0.00201	0.00000	39579.9	9798.3	29533.7	S
576.578	0.0000	0.0000	162.019	0.00198	0.00000	39579.9	9884.3	29533.7	S
588.578	0.0000	0.0000	162.009	0.00187	0.00000	39579.9	9969.0	29533.7	S
600.578	0.0000	0.0000	161.998	0.00089	0.00000	39579.9	10046.2	29533.7	S
612.578	0.0000	0.0000	161.966	0.00000	0.00000	39579.9	10046.2	29533.7	S
624.578	0.0000	0.0000	161.938	0.00000	0.00000	39579.9	10046.2	29533.7	S
636.578	0.0000	0.0000	161.911	0.00000	0.00000	39579.9	10046.2	29533.7	S
648.578	0.0000	0.0000	161.886	0.00000	0.00000	39579.9	10046.2	29533.7	S
660.578	0.0000	0.0000	161.861	0.00000	0.00000	39579.9	10046.2	29533.7	S
672.578	0.0000	0.0000	161.838	0.00000	0.00000	39579.9	10046.2	29533.7	S
684.578	0.0000	0.0000	161.816	0.00000	0.00000	39579.9	10046.2	29533.7	S
696.578	0.0000	0.0000	161.795	0.00000	0.00000	39579.9	10046.2	29533.7	S
708.578	0.0000	0.0000	161.775	0.00000	0.00000	39579.9	10046.2	29533.7	S
720.578	0.0000	0.0000	161.755	0.00000	0.00000	39579.9	10046.2	29533.7	S
732.578	0.0000	0.0000	161.736	0.00000	0.00000	39579.9	10046.2	29533.7	S
744.578	0.0000	0.0000	161.717	----	----	39579.9	10046.2	29533.7	N.A.

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Detailed Results (cont,d.) :: Scenario 6 :: SRWMD 100yr-72hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
72.356	0.0010	0.0000	163.089	0.00625	0.20850	50268.6	10285.9	29622.2	S
72.378	0.0007	0.0000	163.088	0.00621	0.20790	50268.6	10286.4	29638.9	S
72.400	0.0005	0.0000	163.086	0.00618	0.20731	50268.7	10286.9	29655.5	S
72.422	0.0003	0.0000	163.085	0.00614	0.20671	50268.7	10287.4	29672.0	S
72.444	0.0002	0.0000	163.083	0.00610	0.20612	50268.7	10287.9	29688.6	S
72.467	0.0001	0.0000	163.081	0.00606	0.20552	50268.8	10288.3	29705.0	S
72.489	0.0001	0.0000	163.080	0.00603	0.20492	50268.8	10288.8	29721.4	S
72.511	0.0000	0.0000	163.078	0.00599	0.20433	50268.8	10289.3	29737.8	S
72.533	0.0000	0.0000	163.076	0.00596	0.20373	50268.8	10289.8	29754.1	S
72.556	0.0000	0.0000	163.075	0.00593	0.20313	50268.8	10290.3	29770.4	S
72.578	0.0000	0.0000	163.073	0.00577	0.20253	50268.8	10290.7	29786.6	S
84.578	0.0000	0.0000	162.819	-0.04403	0.05362	50268.8	7333.5	35319.6	S
96.578	0.0000	0.0000	162.788	-0.00628	0.00000	50268.8	6486.6	36477.8	S
108.578	0.0000	0.0000	162.757	0.00687	0.00000	50268.8	6790.9	36477.8	S
120.578	0.0000	0.0000	162.727	0.00651	0.00000	50268.8	7080.2	36477.8	S
132.578	0.0000	0.0000	162.699	0.00616	0.00000	50268.8	7353.6	36477.8	S
144.578	0.0000	0.0000	162.673	0.00583	0.00000	50268.8	7612.3	36477.8	S
156.578	0.0000	0.0000	162.648	0.00554	0.00000	50268.8	7857.5	36477.8	S
168.578	0.0000	0.0000	162.623	0.00527	0.00000	50268.8	8090.5	36477.8	S
180.578	0.0000	0.0000	162.600	0.00503	0.00000	50268.8	8312.6	36477.8	S
192.578	0.0000	0.0000	162.578	0.00481	0.00000	50268.8	8524.8	36477.8	S
204.578	0.0000	0.0000	162.557	0.00461	0.00000	50268.8	8727.9	36477.8	S
216.578	0.0000	0.0000	162.536	0.00443	0.00000	50268.8	8922.9	36477.8	S
228.578	0.0000	0.0000	162.517	0.00426	0.00000	50268.8	9110.4	36477.8	S
240.578	0.0000	0.0000	162.497	0.00411	0.00000	50268.8	9290.9	36477.8	S
252.578	0.0000	0.0000	162.479	0.00397	0.00000	50268.8	9465.2	36477.8	S
264.578	0.0000	0.0000	162.461	0.00383	0.00000	50268.8	9633.6	36477.8	S
276.578	0.0000	0.0000	162.444	0.00371	0.00000	50268.8	9796.5	36477.8	S
288.578	0.0000	0.0000	162.427	0.00360	0.00000	50268.8	9954.3	36477.8	S
300.578	0.0000	0.0000	162.410	0.00349	0.00000	50268.8	10107.4	36477.8	S
312.578	0.0000	0.0000	162.394	0.00339	0.00000	50268.8	10256.1	36477.8	S
324.578	0.0000	0.0000	162.379	0.00330	0.00000	50268.8	10400.5	36477.8	S
336.578	0.0000	0.0000	162.363	0.00321	0.00000	50268.8	10541.1	36477.8	S
348.578	0.0000	0.0000	162.348	0.00313	0.00000	50268.8	10677.9	36477.8	S
360.578	0.0000	0.0000	162.334	0.00305	0.00000	50268.8	10811.3	36477.8	S
372.578	0.0000	0.0000	162.320	0.00297	0.00000	50268.8	10941.3	36477.8	S
384.578	0.0000	0.0000	162.306	0.00290	0.00000	50268.8	11068.2	36477.8	S
396.578	0.0000	0.0000	162.292	0.00284	0.00000	50268.8	11192.2	36477.8	S
408.578	0.0000	0.0000	162.279	0.00277	0.00000	50268.8	11313.2	36477.8	S
420.578	0.0000	0.0000	162.266	0.00271	0.00000	50268.8	11431.6	36477.8	S
432.578	0.0000	0.0000	162.253	0.00265	0.00000	50268.8	11547.4	36477.8	S
444.578	0.0000	0.0000	162.241	0.00260	0.00000	50268.8	11660.7	36477.8	S
456.578	0.0000	0.0000	162.228	0.00254	0.00000	50268.8	11771.7	36477.8	S
468.578	0.0000	0.0000	162.216	0.00249	0.00000	50268.8	11880.4	36477.8	S
480.578	0.0000	0.0000	162.204	0.00244	0.00000	50268.8	11987.0	36477.8	S
492.578	0.0000	0.0000	162.193	0.00240	0.00000	50268.8	12091.5	36477.8	S
504.578	0.0000	0.0000	162.181	0.00235	0.00000	50268.8	12193.9	36477.8	S
516.578	0.0000	0.0000	162.170	0.00231	0.00000	50268.8	12294.5	36477.8	S
528.578	0.0000	0.0000	162.159	0.00226	0.00000	50268.8	12393.2	36477.8	S
540.578	0.0000	0.0000	162.148	0.00222	0.00000	50268.8	12490.2	36477.8	S
552.578	0.0000	0.0000	162.137	0.00218	0.00000	50268.8	12585.4	36477.8	S
564.578	0.0000	0.0000	162.127	0.00215	0.00000	50268.8	12678.9	36477.8	S
576.578	0.0000	0.0000	162.117	0.00211	0.00000	50268.8	12770.9	36477.8	S
588.578	0.0000	0.0000	162.106	0.00208	0.00000	50268.8	12861.3	36477.8	S
600.578	0.0000	0.0000	162.096	0.00204	0.00000	50268.8	12950.2	36477.8	S
612.578	0.0000	0.0000	162.086	0.00201	0.00000	50268.8	13037.7	36477.8	S
624.578	0.0000	0.0000	162.076	0.00198	0.00000	50268.8	13123.8	36477.8	S
636.578	0.0000	0.0000	162.067	0.00195	0.00000	50268.8	13208.5	36477.8	S
648.578	0.0000	0.0000	162.057	0.00192	0.00000	50268.8	13292.0	36477.8	S
660.578	0.0000	0.0000	162.048	0.00189	0.00000	50268.8	13374.1	36477.8	S
672.578	0.0000	0.0000	162.039	0.00186	0.00000	50268.8	13455.0	36477.8	S
684.578	0.0000	0.0000	162.030	0.00183	0.00000	50268.8	13534.7	36477.8	S
696.578	0.0000	0.0000	162.021	0.00181	0.00000	50268.8	13613.3	36477.8	S
708.578	0.0000	0.0000	162.012	0.00178	0.00000	50268.8	13690.7	36477.8	S
720.578	0.0000	0.0000	162.003	0.00116	0.00000	50268.8	13767.0	36477.8	S
732.578	0.0000	0.0000	161.980	0.00028	0.00000	50268.8	13791.0	36477.8	S
744.578	0.0000	0.0000	161.953	0.00000	0.00000	50268.8	13791.0	36477.8	S
756.578	0.0000	0.0000	161.928	0.00000	0.00000	50268.8	13791.0	36477.8	S
768.578	0.0000	0.0000	161.904	0.00000	0.00000	50268.8	13791.0	36477.8	S
780.578	0.0000	0.0000	161.882	0.00000	0.00000	50268.8	13791.0	36477.8	S
792.578	0.0000	0.0000	161.860	----	----	50268.8	13791.0	36477.8	N.A.

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Detailed Results (cont,d.) :: Scenario 7 :: SRWMD 100yr-168hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
600.578	0.0000	0.0000	162.257	0.00229	0.00000	58797.6	13942.9	42573.1	S
612.578	0.0000	0.0000	162.247	0.00225	0.00000	58797.6	14041.1	42573.1	S
624.578	0.0000	0.0000	162.236	0.00222	0.00000	58797.6	14137.6	42573.1	S
636.578	0.0000	0.0000	162.225	0.00218	0.00000	58797.6	14232.6	42573.1	S
648.578	0.0000	0.0000	162.215	0.00215	0.00000	58797.6	14326.0	42573.1	S
660.578	0.0000	0.0000	162.205	0.00211	0.00000	58797.6	14417.9	42573.1	S
672.578	0.0000	0.0000	162.195	0.00208	0.00000	58797.6	14508.4	42573.1	S
684.578	0.0000	0.0000	162.185	0.00205	0.00000	58797.6	14597.6	42573.1	S
696.578	0.0000	0.0000	162.175	0.00202	0.00000	58797.6	14685.4	42573.1	S
708.578	0.0000	0.0000	162.165	0.00199	0.00000	58797.6	14771.8	42573.1	S
720.578	0.0000	0.0000	162.156	0.00196	0.00000	58797.6	14857.0	42573.1	S
732.578	0.0000	0.0000	162.146	0.00193	0.00000	58797.6	14941.0	42573.1	S
744.578	0.0000	0.0000	162.137	0.00190	0.00000	58797.6	15023.7	42573.1	S
756.578	0.0000	0.0000	162.128	0.00188	0.00000	58797.6	15105.3	42573.1	S
768.578	0.0000	0.0000	162.119	0.00185	0.00000	58797.6	15185.8	42573.1	S
780.578	0.0000	0.0000	162.110	0.00182	0.00000	58797.6	15265.1	42573.1	S
792.578	0.0000	0.0000	162.101	0.00180	0.00000	58797.6	15343.4	42573.1	S
804.578	0.0000	0.0000	162.092	0.00178	0.00000	58797.6	15420.7	42573.1	S
816.578	0.0000	0.0000	162.083	0.00175	0.00000	58797.6	15496.9	42573.1	S
828.578	0.0000	0.0000	162.075	0.00173	0.00000	58797.6	15572.1	42573.1	S
840.578	0.0000	0.0000	162.066	0.00171	0.00000	58797.6	15646.3	42573.1	S
852.578	0.0000	0.0000	162.058	0.00169	0.00000	58797.6	15719.6	42573.1	S
864.578	0.0000	0.0000	162.050	0.00166	0.00000	58797.6	15792.0	42573.1	S
876.578	0.0000	0.0000	162.042	0.00164	0.00000	58797.6	15863.5	42573.1	S
888.578	0.0000	0.0000	162.033	----	----	58797.6	15934.1	42573.1	N.A.

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Detailed Results (cont,d.) :: Scenario 8 :: SRWMD 100yr-240hr

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
185.822	0.1261	0.0000	163.699	0.01341	0.36753	53916.0	13057.2	23873.7	S
185.845	0.1261	0.0000	163.698	0.01334	0.36717	53926.0	13058.2	23903.1	S
185.867	0.1261	0.0000	163.696	0.01327	0.36680	53936.1	13059.3	23932.4	S
185.889	0.1261	0.0000	163.694	0.01320	0.36643	53946.2	13060.4	23961.8	S
185.911	0.1261	0.0000	163.692	0.01314	0.36607	53956.3	13061.4	23991.1	S
185.933	0.1261	0.0000	163.690	0.01307	0.36570	53966.4	13062.5	24020.3	S
185.956	0.1261	0.0000	163.689	0.01300	0.36534	53976.5	13063.5	24049.6	S
185.978	0.1261	0.0000	163.687	0.01294	0.36497	53986.6	13064.5	24078.8	S
186.000	0.1261	0.0000	163.685	0.01287	0.36461	53996.7	13065.6	24108.0	S
186.022	0.1261	0.0000	163.683	0.01281	0.36424	54006.8	13066.6	24137.1	S
186.044	0.1261	0.0000	163.682	0.01274	0.36388	54016.9	13067.6	24166.3	S
186.067	0.1261	0.0000	163.680	0.01268	0.36351	54026.9	13068.6	24195.4	S
186.089	0.1261	0.0000	163.678	0.01262	0.36315	54037.0	13069.6	24224.4	S
186.111	0.1261	0.0000	163.676	0.01255	0.36278	54047.1	13070.6	24253.5	S
186.133	0.1261	0.0000	163.674	0.01249	0.36242	54057.2	13071.7	24282.5	S
186.156	0.1261	0.0000	163.673	0.01243	0.36205	54067.3	13072.6	24311.4	S
186.178	0.1261	0.0000	163.671	0.01237	0.36169	54077.4	13073.6	24340.4	S
186.200	0.1261	0.0000	163.669	0.01231	0.36132	54087.5	13074.6	24369.3	S
186.222	0.1261	0.0000	163.667	0.01225	0.36096	54097.6	13075.6	24398.2	S
186.244	0.1261	0.0000	163.666	0.01219	0.36060	54107.7	13076.6	24427.1	S
186.267	0.1261	0.0000	163.664	0.01213	0.36023	54117.7	13077.6	24455.9	S
186.289	0.1261	0.0000	163.662	0.01208	0.35987	54127.8	13078.5	24484.7	S
186.311	0.1261	0.0000	163.660	0.01202	0.35951	54137.9	13079.5	24513.5	S
186.333	0.1261	0.0000	163.659	0.01196	0.35915	54148.0	13080.5	24542.2	S
186.356	0.1261	0.0000	163.657	0.01190	0.35878	54158.1	13081.4	24570.9	S
186.378	0.1261	0.0000	163.655	0.01185	0.35842	54168.2	13082.4	24599.6	S
186.400	0.1261	0.0000	163.654	0.01179	0.35806	54178.3	13083.3	24628.3	S
186.422	0.1261	0.0000	163.652	0.01174	0.35770	54188.4	13084.2	24656.9	S
186.444	0.1261	0.0000	163.650	0.01168	0.35733	54198.5	13085.2	24685.5	S
186.467	0.1261	0.0000	163.648	0.01163	0.35697	54208.5	13086.1	24714.1	S
186.489	0.1261	0.0000	163.647	0.01157	0.35661	54218.6	13087.0	24742.6	S
186.511	0.1261	0.0000	163.645	0.01152	0.35625	54228.7	13088.0	24771.2	S
186.533	0.1261	0.0000	163.643	0.01147	0.35589	54238.8	13088.9	24799.6	S
186.556	0.1261	0.0000	163.642	0.01142	0.35553	54248.9	13089.8	24828.1	S
186.578	0.1261	0.0000	163.640	0.01136	0.35516	54259.0	13090.7	24856.5	S
186.600	0.1261	0.0000	163.638	0.01131	0.35480	54269.1	13091.6	24884.9	S
186.622	0.1261	0.0000	163.636	0.01126	0.35444	54279.2	13092.5	24913.3	S
186.644	0.1261	0.0000	163.635	0.01121	0.35408	54289.3	13093.4	24941.6	S
186.667	0.1261	0.0000	163.633	0.01116	0.35372	54299.4	13094.3	24969.9	S
186.689	0.1261	0.0000	163.631	0.01111	0.35336	54309.4	13095.2	24998.2	S
186.711	0.1261	0.0000	163.630	0.01106	0.35300	54319.5	13096.1	25026.5	S
186.733	0.1261	0.0000	163.628	0.01101	0.35264	54329.6	13097.0	25054.7	S
186.756	0.1261	0.0000	163.626	0.01096	0.35228	54339.7	13097.9	25082.9	S
186.778	0.1261	0.0000	163.625	0.01091	0.35192	54349.8	13098.7	25111.1	S
186.800	0.1261	0.0000	163.623	0.01086	0.35156	54359.9	13099.6	25139.2	S
186.822	0.1261	0.0000	163.621	0.01082	0.35120	54370.0	13100.5	25167.3	S
186.845	0.1261	0.0000	163.620	0.01077	0.35084	54380.1	13101.3	25195.4	S
186.867	0.1261	0.0000	163.618	0.01072	0.35048	54390.2	13102.2	25223.5	S
186.889	0.1261	0.0000	163.616	0.01067	0.35013	54400.3	13103.0	25251.5	S
186.911	0.1261	0.0000	163.614	0.01063	0.34977	54410.3	13103.9	25279.5	S
186.933	0.1261	0.0000	163.613	0.01058	0.34941	54420.4	13104.7	25307.4	S
186.956	0.1261	0.0000	163.611	0.01054	0.34905	54430.5	13105.6	25335.4	S
186.978	0.1261	0.0000	163.610	0.01049	0.34869	54440.6	13106.4	25363.3	S
187.000	0.1261	0.0000	163.608	0.01044	0.34833	54450.7	13107.3	25391.2	S
187.022	0.1261	0.0000	163.606	0.01040	0.34798	54460.8	13108.1	25419.0	S
187.044	0.1261	0.0000	163.605	0.01036	0.34762	54470.9	13108.9	25446.9	S
187.067	0.1261	0.0000	163.603	0.01031	0.34726	54481.0	13109.8	25474.6	S
187.089	0.1261	0.0000	163.601	0.01027	0.34690	54491.1	13110.6	25502.4	S
187.111	0.1261	0.0000	163.600	0.01022	0.34655	54501.1	13111.4	25530.2	S
187.133	0.1261	0.0000	163.598	0.01018	0.34619	54511.2	13112.2	25557.9	S
187.156	0.1261	0.0000	163.596	0.01014	0.34583	54521.3	13113.0	25585.5	S
187.178	0.1261	0.0000	163.595	0.01009	0.34548	54531.4	13113.8	25613.2	S
187.200	0.1261	0.0000	163.593	0.01005	0.34512	54541.5	13114.6	25640.8	S
187.222	0.1261	0.0000	163.591	0.01001	0.34476	54551.6	13115.4	25668.4	S
187.244	0.1261	0.0000	163.590	0.00997	0.34441	54561.7	13116.2	25696.0	S
187.267	0.1261	0.0000	163.588	0.00993	0.34405	54571.8	13117.0	25723.5	S
187.289	0.1261	0.0000	163.586	0.00988	0.34369	54581.9	13117.8	25751.0	S
187.311	0.1261	0.0000	163.585	0.00984	0.34334	54592.0	13118.6	25778.5	S
187.333	0.1261	0.0000	163.583	0.00980	0.34298	54602.0	13119.4	25806.0	S
187.356	0.1261	0.0000	163.582	0.00976	0.34263	54612.1	13120.2	25833.4	S
187.378	0.1261	0.0000	163.580	0.00972	0.34227	54622.2	13121.0	25860.8	S
187.400	0.1261	0.0000	163.578	0.00968	0.34192	54632.3	13121.7	25888.2	S
187.422	0.1261	0.0000	163.577	0.00964	0.34156	54642.4	13122.5	25915.5	S
187.444	0.1261	0.0000	163.575	0.00960	0.34121	54652.5	13123.3	25942.8	S

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Detailed Results (cont,d.) :: Scenario 8 :: SRWMD 100yr-240hr

Elapsed Time (hours)	Inflow Rate (ft ³ /s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft ³ /s)	Overflow Discharge (ft ³ /s)	Cumulative Inflow Volume (ft ³)	Cumulative Infiltration Volume (ft ³)	Cumulative Discharge Volume (ft ³)	Flow Type
864.578	0.0000	0.0000	162.126	0.00175	0.00000	66555.1	20016.3	45434.6	S
876.578	0.0000	0.0000	162.118	0.00172	0.00000	66555.1	20091.3	45434.6	S
888.578	0.0000	0.0000	162.109	0.00170	0.00000	66555.1	20165.3	45434.6	S
900.578	0.0000	0.0000	162.101	0.00168	0.00000	66555.1	20238.4	45434.6	S
912.578	0.0000	0.0000	162.093	0.00166	0.00000	66555.1	20310.6	45434.6	S
924.578	0.0000	0.0000	162.085	0.00164	0.00000	66555.1	20381.9	45434.6	S
936.578	0.0000	0.0000	162.077	0.00162	0.00000	66555.1	20452.4	45434.6	S
948.578	0.0000	0.0000	162.069	0.00160	0.00000	66555.1	20522.1	45434.6	S
960.578	0.0000	0.0000	162.061	----	----	66555.1	20591.0	45434.6	N.A.

PONDS Version 3.3.0241
Retention Pond Recovery - Refined Method
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Detailed Results :: Scenario 9 :: WQTV 7,150 CF Slug Load

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
0.000	1191.6670	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	N.A.
0.002	1191.6670	0.0000	162.772	0.34252	0.00000	7150.0	2.1	0.0	U/P
2.400	0.0000	0.0000	162.472	0.30942	0.00000	7150.0	2890.5	0.0	U/P
6.000	0.0000	0.0000	162.085	0.17777	0.00000	7150.0	6412.0	0.0	U/S
12.000	0.0000	0.0000	162.032	0.01629	0.00000	7150.0	6869.9	0.0	S
24.000	0.0000	0.0000	161.903	0.00324	0.00000	7150.0	7150.0	0.0	S
36.000	0.0000	0.0000	161.760	0.00000	0.00000	7150.0	7150.0	0.0	S
48.000	0.0000	0.0000	161.653	0.00000	0.00000	7150.0	7150.0	0.0	S
60.000	0.0000	0.0000	161.567	0.00000	0.00000	7150.0	7150.0	0.0	S
72.000	0.0000	0.0000	161.495	0.00000	0.00000	7150.0	7150.0	0.0	S
84.000	0.0000	0.0000	161.434	0.00000	0.00000	7150.0	7150.0	0.0	S
96.000	0.0000	0.0000	161.380	0.00000	0.00000	7150.0	7150.0	0.0	S
108.000	0.0000	0.0000	161.332	0.00000	0.00000	7150.0	7150.0	0.0	S
120.000	0.0000	0.0000	161.289	0.00000	0.00000	7150.0	7150.0	0.0	S
132.000	0.0000	0.0000	161.249	0.00000	0.00000	7150.0	7150.0	0.0	S
144.000	0.0000	0.0000	161.213	0.00000	0.00000	7150.0	7150.0	0.0	S
156.000	0.0000	0.0000	161.180	0.00000	0.00000	7150.0	7150.0	0.0	S
168.000	0.0000	0.0000	161.150	0.00000	0.00000	7150.0	7150.0	0.0	S
180.000	0.0000	0.0000	161.121	0.00000	0.00000	7150.0	7150.0	0.0	S
192.000	0.0000	0.0000	161.094	0.00000	0.00000	7150.0	7150.0	0.0	S
204.000	0.0000	0.0000	161.069	0.00000	0.00000	7150.0	7150.0	0.0	S
216.000	0.0000	0.0000	161.045	0.00000	0.00000	7150.0	7150.0	0.0	S
228.000	0.0000	0.0000	161.022	0.00000	0.00000	7150.0	7150.0	0.0	S
240.000	0.0000	0.0000	161.001	0.00000	0.00000	7150.0	7150.0	0.0	S
252.000	0.0000	0.0000	160.981	0.00000	0.00000	7150.0	7150.0	0.0	S
264.000	0.0000	0.0000	160.962	0.00000	0.00000	7150.0	7150.0	0.0	S
276.000	0.0000	0.0000	160.943	0.00000	0.00000	7150.0	7150.0	0.0	S
288.000	0.0000	0.0000	160.926	0.00000	0.00000	7150.0	7150.0	0.0	S
300.000	0.0000	0.0000	160.909	0.00000	0.00000	7150.0	7150.0	0.0	S
312.000	0.0000	0.0000	160.893	0.00000	0.00000	7150.0	7150.0	0.0	S
324.000	0.0000	0.0000	160.877	0.00000	0.00000	7150.0	7150.0	0.0	S
336.000	0.0000	0.0000	160.862	----	----	7150.0	7150.0	0.0	N.A.

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Detailed Results :: Scenario 10 :: SRWMD 100yr-168hr Back-to-Back

Elapsed Time (hours)	Inflow Rate (ft³/s)	Outside Recharge (ft/day)	Stage Elevation (ft datum)	Infiltration Rate (ft³/s)	Overflow Discharge (ft³/s)	Cumulative Inflow Volume (ft³)	Cumulative Infiltration Volume (ft³)	Cumulative Discharge Volume (ft³)	Flow Type
0.000	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	N.A.
0.022	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.044	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.067	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.089	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.111	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.133	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.156	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.178	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.200	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.222	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.244	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.267	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.289	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.311	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.333	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.356	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.378	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.400	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.422	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.444	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.467	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.489	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.511	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.533	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.556	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.578	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.600	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.622	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.644	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.667	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.689	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.711	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.733	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.756	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.778	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.800	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.822	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.844	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.867	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.889	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.911	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.933	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.956	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
0.978	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.000	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.022	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.044	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.067	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.089	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.111	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.133	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.156	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.178	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.200	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.222	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.244	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.267	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.289	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.311	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.333	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.356	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.378	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.400	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.422	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.444	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.467	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.489	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.511	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.533	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.556	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.578	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.600	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U
1.622	0.0000	0.0000	159.500	0.00000	0.00000	0.0	0.0	0.0	U

Appendix B

Operation and Maintenance Requirements and
Erosion and Sedimentation Control Requirements

Operation and Maintenance Requirements

Proposed operation and maintenance and soil erosion and sediment control practices are outlined in the following paragraphs.

Stormwater Management Facilities

The man-made stormwater management facilities shall be maintained free of sediments and debris. Areas shall be inspected on a routine basis and nuisance plants shall be removed a minimum of twice annually. Grassed areas shall be mowed a minimum of 6 times per year. The natural systems shall be least disturbed as possible. Minimal maintenance is required for the natural and undisturbed areas. All basins shall be inspected monthly. Monthly documentation shall be noted based upon the inspection findings.

Erosion Control

All erosion damage at spillways, outfall structures, and along basin side slopes shall be repaired (grading and grassing) as conditions occur. All side slopes and other areas disturbed by construction shall be stabilized by sodding, hydro-mulching or other appropriate vegetative or non-vegetative erosion control measures.

Swale/Ditch

All swales, if any, shall be maintained free of debris and sediment. Sediments shall be removed when the depth has been reduced by 20 percent. Sediments removed from swales/ditches should be evenly spread over grassed areas away from the stormwater management facilities.

Culverts, Pipes and Structures

All pipes, if any, shall be inspected bi-annually. Culverts and pipes shall be maintained free of debris and sediment. Sediments removed from culverts and pipes should be evenly spread over grassed areas away from the stormwater management facilities.

The structures and paved flow lines, if any, shall be maintained clear of debris. Remove any debris and silt collected in inlets and pipes as routine inspections dictates.

Underdrains

All underdrains shall be inspected annually. Filter beds shall be maintained free of debris and sediment. Grass clippings shall be removed from the area after cutting and sod shall not be placed over filter material. Place stone or gravel over the filter material for stabilization, if necessary.

Inspection Reporting

Annual inspection reports, prepared by a properly licensed professional engineer, should be submitted to the water management district. The engineer shall inspect the site and report on the status and function of the system. Noted deficiencies and/or maintenance requirements shall be reported to the owner with recommendations for repairs. Repairs shall be executed.

Limerock/Sinkhole

If continuous limerock is encountered during excavation of the swales/basin or if a sinkhole forms in the area of a drainage swale/basin the engineer of record shall be notified by either the contractor or the established operation and maintenance entity. The engineer of record shall inspect the repaired area upon completion of the repair.

Where continuous limerock is encountered during excavation of the swales/basins, the limerock shall be over excavated by 2 feet and replaced with clayey soils that extend 2 feet beyond the perimeter of the limerock outcropping. The clayey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum.

All swales/basins shall be inspected monthly for sinkhole occurrence. Should a sinkhole occur, the area shall be repaired as soon as possible. Repair shall include filling (limerock such as road base material, clay/sand mixture, or concrete if necessary). A 2-foot deep cap that extends 2 feet beyond the perimeter of the sinkhole shall be constructed with clayey soils. The clayey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum. The clay soil cap shall be re-graded to prevent concentration of waters (ponding) and re-vegetated.

Operation & Maintenance Entity:

Usman Mazharrana
Nature Valley Harvest, LTD
632 Turkey Creek Boulevard
Alachua, FL 32615

Appendix C

Geotechnical Report



Engineering & Consulting, Inc.

**SUMMARY REPORT OF A
GEOTECHNICAL SITE EXPLORATION
TAX PARCEL NOS. 05900-004-001 THRU -010
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT No. 13834**

Prepared For:
NATURE VALLEY HARVEST, LTD
DECEMBER 2018

Certificate of Authorization No. 27430



Engineering & Consulting, Inc.

December 13, 2018

Mr. Usman Mazharrana
Nature Valley Harvest, LTD
632 Turkey Creek
Alachua, Florida 32615

Subject: Summary Report of a Geotechnical Site Exploration
Tax Parcel Nos. 05900-004-001 thru -010
Alachua, Alachua County, Florida
GSE Project No. 13834

Dear Mr. Mazharrana:

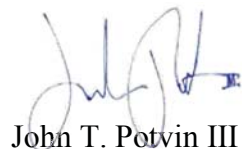
GSE Engineering & Consulting, Inc. (GSE) is pleased to submit this geotechnical site exploration report for the above referenced project.

Presented herein are the findings and conclusions of our exploration, including the geotechnical parameters and recommendations to assist with building foundation, pavement, and stormwater management designs.

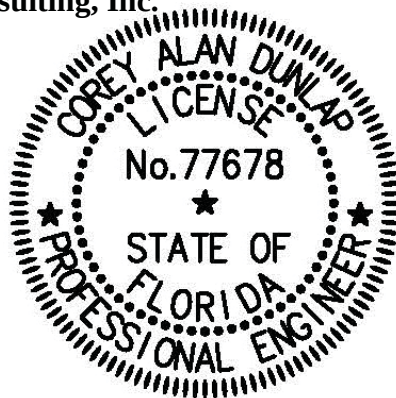
GSE appreciates this opportunity to have assisted you on this project. If you have any questions or comments concerning this report, please contact us.

Sincerely,

GSE Engineering & Consulting, Inc.



John T. Potvin III
Staff Scientist



This item has been digitally signed and sealed by

on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Corey A. Dunlap, P.E.
Senior Geotechnical Engineer
Florida Registration No. 77678

JTP/CAD:ldj

Z:\Projects\13834 Commercial Retail – Tax Parcel Nos. 05900-004-001 thru 010 – Geo\13834 Geo Report.doc

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File (1)

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Certificate of Authorization No. 27430

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Figure

1. Project Site Location Map
2. Site Plan Showing Approximate Locations of Field Tests

1.0 INTRODUCTION

1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed Tax Parcel Nos. 05900-004-001 thru -010 site located in Alachua, Alachua County, Florida. This exploration was performed in accordance with GSE Proposal No. 2018-564 dated November 8, 2018. Mr. Mazharrana of Nature Valley Harvest, LTD authorized our services on November 15, 2018.

1.2 Project Description

This project will consist of a commercial development located in Alachua, Alachua County, Florida (Figure 1). The site is located on the south side of U.S. Highway 441 just east of Turkey Creek Boulevard. According to the Alachua County Property Appraiser (ACPA), the approximately 8.19 acre subject site is listed as Tax Parcel Nos. 05900-004-001 through 05900-004-010. Mr. Craig Brashier, AICP with CHW Professional Consultants, Inc. provided information about the project including a concept site plan illustrating the proposed site layout.

Four single-story structures ranging in size between 3,200 and 5,000 square feet and one two-story 7,500 square feet structure are proposed for the site. The construction types have not been determined, but it is anticipated the buildings will either be wood frame or concrete masonry unit (CMU) construction. Structural loads have not been provided, but it is expected they will be on the order of 2 to 4 kips per foot for load bearing walls and less than 75 kips for columns. The finished floor elevations have not been provided, but it is anticipated they will be set within 1 or 2 feet of existing site grades.

Two stormwater management basins are proposed for the west and east sides of the property. An existing stormwater basin located just south of the site consistently holds water based on aerial photographs. A portion of the property is wetlands that likely cannot be developed. A parking lot will be located south of Buildings 4 and 5 and between/around Buildings 1, 2, and 3. Recently aerial photographs of the site were reviewed to evaluate the site accessibility. The site is heavily wooded with thick underbrush that required lane clearing to access the proposed boring locations.

Mr. John T. Potvin III with GSE conducted a site visit on November 29, 2018. Boring locations were staked on November 29, 2018. In addition to the Conceptual Plan, a recent aerial photograph was also obtained and reviewed. The Conceptual Plan and aerial photograph were used in the preparation of this exploration and report.

1.3 Purpose

The purpose of this geotechnical exploration was to determine the general subsurface conditions, evaluate these conditions with respect to the proposed construction, and prepare geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs.

2.0 FIELD AND LABORATORY TESTS

2.1 General Description

The procedures used for field sampling and testing are in general accordance with industry standards of care and established geotechnical engineering practices for this geographic region. This exploration consisted of performing eight (8) Standard Penetration Test (SPT) borings to depths of 20 feet below land surface (bls) in the area of the proposed buildings, five (5) auger borings to depths of 5 feet bls in the area of the parking lots, and six (6) auger borings to depths of 15 feet bls in the area of the proposed stormwater management facilities.

The soil borings were performed at the approximate locations as shown on Figure 2. The borings were located at the site using the provided site plan, Global Positioning System (GPS) coordinates, and obvious site features as reference. The boring locations should be considered approximate. The soil borings were performed from November 28 to December 4, 2018.

2.2 Auger Borings

The auger borings were performed in accordance with ASTM D1452. The borings were performed with flight auger equipment that was rotated into the ground in a manner that reduces soil disturbance. After penetrating to the required depth, the auger was retracted and the soils collected on the auger flights were field classified and placed in sealed containers. Representative samples of each stratum were retained from the auger boring. Results from the auger borings are provided in Section 5.1.

2.3 Standard Penetration Test Borings

The soil borings were performed with a drill rig employing mud rotary auger drilling techniques and Standard Penetration Testing (SPT) in accordance with ASTM D1586. The SPTs were performed continuously to 10 feet and at 5-foot intervals thereafter. Soil samples were obtained at the depths where the SPTs were performed. The soil samples were classified in the field, placed in sealed containers, and returned to our laboratory for further evaluation.

After drilling to the sampling depth and flushing the borehole, the standard two-inch O.D. split-barrel sampler was seated by driving it 6 inches into the undisturbed soil. Then the sampler was driven an additional 12 inches by blows of a 140-pound hammer falling 30 inches. The number of blows required to produce the next 12 inches of penetration were recorded as the penetration resistance (N-value). These values and the complete SPT boring logs are provided in Section 5.2.

Upon completion of the sampling, the boreholes were abandoned in accordance with Water Management District guidelines.

2.4 Soil Laboratory Tests

The soil samples recovered from the soil borings were returned to our laboratory, and examined to confirm the field descriptions. Representative samples were then selected for laboratory testing. The laboratory tests consisted of fifteen (15) percent soil fines passing the No. 200 sieve determinations, fifteen (15) natural moisture content determinations, seven (7) Atterberg Limits tests, and four (4) constant head hydraulic conductivity tests. These tests were performed in order to aid in classifying the soils and to further evaluate their engineering properties. The laboratory tests are provided in Section 5.3.

3.0 FINDINGS

3.1 Surface Conditions

Mr. John Potvin with GSE visited the site on November 29, 2018 to observe the site conditions and mark the boring locations. Travel lanes were cleared providing access to the boring locations. The property boundaries were estimated in the field based on the provided site plan and physical features in the field, including dirt pathways, survey stakes, and other readily apparent features.

The site is heavily wooded with trees and thick underbrush. The site is bordered by NW US Highway 441 Avenue to the north, Turkey Creek Blvd to the west, and NW 59th Terrace to the east. A wetland area and Turkey Creek residential homes are present south of the site.

The topography at the site is gently to moderately sloping down toward the south from the north. Regional topography is gently sloping towards the southwest from the northeast. The Alachua USGS Topographic Map indicates the ground surface elevations at the site are near elevations 144 to 166 feet¹ NAVD88.

3.2 Subsurface Conditions

The locations of the auger and SPT borings are provided on Figure 2. Complete logs for the borings are provided in Sections 5.1 and 5.2. Descriptions for the soils encountered are accompanied by the Unified Soil Classification System symbol (SM, SP-SM, etc.) and are based on visual examination of the recovered soil samples and the laboratory tests performed. Stratification boundaries between the soil types should be considered approximate, as the actual transition between soil types may be gradual.

The auger borings located in the proposed stormwater management facilities indicate the soils across these areas are relatively consistent. The auger borings initially penetrated 2 to 10 feet of a near-surface sandy stratum consisting of sand with silt and sand with clay (SP-SM, SP-SC). This was underlain by clayey to very clayey sand (SC, SC/CH) with some interbedded strata of sandy clay (CH) to the explored depths of 15 feet bls. The auger boring P-5 encountered very clayey sand (SC/CH) at depths ranging from approximately 1 to 15 feet bls.

The auger borings located in the proposed roadways generally encountered a near-surface sandy stratum consisting of sand with silt and sand with clay (SP-SM, SP-SC) to a depth of 3 to 5 feet bls. This was underlain by very clayey sand (SC/CH) to the boring termination depths of 5 feet bls. The auger boring A-5 encountered sandy clay (CH) at depths ranging from approximately 4 to 5 feet bls.

The SPT borings within the area of the proposed building initially penetrated a 2.5 to 6 feet thick stratum of sand with silt and sand with clay (SP-SM, SP-SC). This was underlain by interbedded strata of clayey to very clayey sand (SC, SC/CH) to depths of 6 to 20 feet bls. SPT borings B-2, B-4, and B-6 encountered clay-rich soils consisting of sandy clay (CH) underlying the clayey sand and very clayey sand beginning at depths of approximately 5.5 to 13.5 feet bls.

¹ United States Geological Survey, Alachua Quadrangle, 2015.

The near-surface soil layers (within 2 to 4 feet of grade) are generally in very loose to medium dense conditions with N-values ranging from 3 to 16 blows per foot. The underlying soils (within 10 feet of grade) are generally in firm to medium dense conditions with N-values ranging from 7 to 29 blows per foot. The deeper soils (10+ feet beneath grade) are generally in medium dense to very dense conditions with N-values ranging from 13 to 54 blows per foot.

The groundwater table was recorded at depths ranging between 4.5 to 7 feet in SPT borings B-1, B-3, and B-4. The groundwater table was also encountered in auger borings A-1, A-2, A-3, A-4, P-1, P-2, P-3, and P-5 from 3.5 to 6.7 feet.

3.3 Review of Published Data

The majority of the site is mapped as two soil series by the Soil Conservation Service (SCS) Soil Survey for Alachua County². The soil series was listed as Millhopper sand and Pelham sand. The following soil descriptions are from the Soil Survey.

Millhopper sand, 0 to 5 percent slopes – This nearly level to gently sloping, moderately well drained soil is in small and large irregularly shaped areas on uplands and on slightly rolling knolls in the broad flatwoods. Slopes are mostly nearly smooth or convex. The areas are variable in size. They range from about 10 to 250 acres.

Typically, the surface layer is dark grayish brown sand about 9 inches thick. The subsurface layer is sand or fine sand about 49 inches thick. The upper 17 inches is yellowish brown, the next 22 inches is light yellowish brown, and the lower 10 inches is very pale brown. The subsoil extends to a depth of 89 inches. The upper 6 inches is yellowish brown loamy sand that has grayish and brownish mottles; the next 22 inches is light gray, mottled sandy clay loam; and the lower 3 inches is light gray, mottled sandy loam.

Included with this soil in mapping are small areas of Arredondo, Bonneau, Fort Meade, Gainesville, Kanapaha, Lochloosa, and Sparr soils. Siliceous limestone boulders and small sinks are within some delineations. Small areas of Millhopper soils that have 5 to 8 percent slopes are also included. About 25 acres mapped as this Millhopper soil along the Santa Fe River is occasionally flooded. Total included areas are about 20 percent or less.

This Millhopper soil has a water table that is at a depth of 40 to 60 inches for 1 to 4 months and at a depth of 60 to 72 inches for 2 to 4 months during most years. The available water capacity is low in the surface and subsurface layers and is low to medium in the subsoil. Permeability is rapid in the surface and subsurface layers, moderately rapid in the upper 6 inches of the subsoil, and slow to moderately slow below this depth. Natural fertility is low. Organic matter content is low to moderately low.

Pelham sand – This nearly level, poorly drained soil is in small and large areas in the flatwoods. Slopes are nearly smooth and range from 0 to 2 percent. The areas are irregular in shape and range from 10 to 50 acres.

² Soil Survey of Alachua County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

Typically, the surface layer is sand about 7 inches thick. The upper 4 inches is very dark gray, and the lower 3 inches is dark gray. The subsurface layer is sand about 22 inches thick. The upper 7 inches is light brownish gray and has gray mottles, and the lower 15 inches is gray. The subsoil extends to a depth of 69 inches. The upper 3 inches is gray sandy loam, and the lower 37 inches is gray, mottled sandy clay loam. Between depths of 69 and 80 inches, the underlying material is gray, mottled sandy loam.

Included with this soil in mapping are small areas of Mulat, Pomona, Riviera, Surrency, and Wauchula soils. Some mapped areas of this soil along Hogtown Creek and its tributaries in the western part of Gainesville are occasionally flooded. Total included areas are less than 15 percent.

This Pelham soil has a water table that is less than 10 inches below the surface for 1 to 4 months during most years. The water table recedes below a depth of 40 inches during dry seasons. Surface runoff is slow. The available water capacity is low in the surface and subsurface layers and medium in the loamy subsoil. Permeability is rapid in the surface and subsurface layers and moderate in the loamy subsoil. Natural fertility is low in the upper 29 inches and medium below 29 inches. The organic matter content is moderately low.

3.4 Laboratory Soil Analysis

Selected soil samples recovered from the soil borings were analyzed for the percent soil fines passing the No. 200 sieve, natural moisture content, Atterberg Limits, and hydraulic conductivity. Samples selected for laboratory testing were collected at depths ranging from near ground surface to 13.5 feet bls. These tests were performed to confirm visual soil classification and evaluate their engineering properties. The complete laboratory report is provided in Section 5.3.

The laboratory tests indicate the tested soils consist of sand with silt, sand with clay, clayey sand, very clayey sand, and sandy clay. The tested sand with silt (SP-SM) contains approximately 8.2 percent soil fines passing the No. 200 sieve with a natural moisture content of about 11 percent. The tested sand with clay (SP-SC) contains approximately 5.7 to 6.9 percent soil fines passing the No. 200 sieve with natural moisture contents of about 5.6 to 6.5 percent. The tested clayey sand (SC) contains approximately 20 to 28 percent soil fines passing the No. 200 sieve with natural moisture contents of about 12 to 19 percent. The tested very clayey sand (SC) contains approximately 33 to 43 percent soil fines passing the No. 200 sieve with natural moisture contents of about 17 to 31 percent. The tested sandy clay (CH) contains approximately 51 percent soil fines passing the No. 200 sieve with a natural moisture content of about 35 percent.

Atterberg Limits tests indicate the tested clayey sand (SC) has a Liquid Limit (LL) value of 41, Plastic Limit (PL) value of 15, and Plasticity Index (PI) value of 26. This corresponds to a material with low to moderate potential ($LL < 50$ and $25 < PI < 35$) for expansive behavior³. The tested very clayey sand (SC/CL, SC/CH) has LL values ranging from 41 to 60, PL values ranging from 17 to 21, and PI values ranging from 24 to 42. This corresponds to a material with low ($LL < 50$, $PI < 25$) to high potential ($LL > 60$ and $PI > 35$) for expansive behavior. The tested sandy clay (CH) has a LL value of 64, PL value of 21, and PI value of 43. This corresponds to a material with high potential ($LL > 60$ and $PI > 35$) for expansive behavior.

³ U.S. Department of the Army USA, 1983, Foundations in Expansive Soils, TM 5-818-7, p. 4-1.

The constant head hydraulic conductivity test results indicate the near-surface sand with silt (SP-SM) has hydraulic conductivity values of 11 feet per day. The tested sand with clay (SP-SC) has hydraulic conductivity values of 22 to 27 feet per day. The tested clayey sand (SC) has a hydraulic conductivity value of 3.4 feet per day.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General

The following recommendations are made based upon our understanding of the proposed construction, a review of the attached soil borings and laboratory test data, and experience with similar projects and subsurface conditions. If plans or the location of proposed construction changes from those discussed previously, GSE requests the opportunity to review and possibly amend our recommendations with respect to those changes.

The final design of a foundation system is dependent upon adequate integration of geotechnical and structural engineering considerations. Consequently, GSE must review the final foundation design in order to evaluate the effectiveness and applicability of our initial analyses, and to determine if additional recommendations may be warranted. Without such a review, the recommendations presented herein could be misinterpreted or misapplied resulting in potentially unacceptable performance of the foundation system.

The performance of site improvements may be sensitive to their post-construction relationship to site groundwater levels, seepage zones, or soil/rock characteristics exposed at final site grades. GSE recommends that use of boring information for final design of all site improvements be predicated on proper horizontal and vertical control of borings.

In this section of the report, we present our geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs as well as our general site preparation guidelines.

4.2 Groundwater

The groundwater table was recorded at depths ranging between 4.5 to 7 feet in SPT borings B-1, B-3, and B-4. The groundwater table was also encountered in auger borings A-1, A-2, A-3, A-4, P-1, P-2, P-3, and P-5 from 3.5 to 6.7 feet. The Alachua County Soil Survey indicates seasonal high groundwater levels are 10 to 72 inches across the site.

Based upon the soil borings performed, review of the provided topographic survey, and the County Soil Survey information, we estimate the seasonal high groundwater table will be approximately 1 to 3 feet beneath grade. The seasonal high water table is expected to become more shallow closer to the wetland area.

4.3 Building Foundations

The soil borings indicate the soils at the building locations are relatively consistent. The borings indicate 2.5 to 6 feet of sand with silt and clay overlies clayey to very clayey sand. SPT borings B-2, B-4, and B-6 encountered sandy clay underlying the clayey to very clayey sands beginning at depths of approximately 5.5 to 13 feet bls.

The laboratory tests indicate the clay-rich soils mostly have marginal to high potential for expansive behavior. These soils expand and contract with changes in moisture content which can result in differential foundation movement. Considering the finished floor elevations are expected to be set within 1 or 2 feet of existing site grades, GSE predicts less than 2 feet of separation will occur between the expansive soils and many of the shallow foundations. The risk of foundation movement as a result of expansive soils is high for this project. We do not recommend using conventionally reinforced shallow foundations to support these buildings.

Considering the presence of the expansive soils, GSE recommends two options be considered to support the structures. Options 1 and 2 consist of supporting the structure with either a post-tensioned slab or a stiffened foundation system that is designed to resist differential movements that can occur as a result of the expansive soils. Foundation bottom elevations have not yet been determined, but GSE believes that undercutting the expansive soils will be required in many areas to provide at least 3 feet of separation between foundation bottoms and expansive soils.

Where clay-rich soils (i.e. soils with greater than 30 percent soil fines) are present at the foundation bearing surface, GSE recommends the foundation limits and a minimum of 2 feet past the foundation edges be undercut to a minimum depth of 3 feet below the foundation bottoms. The foundation undercuts should initially be backfilled with 3 feet of crushed limerock fill materials. Above this depth, the undercuts can be backfilled with on-site sands as described in Section 4.5. The top of the crushed limerock fill should be sloped down away from the building such that water is “shed” away from the structure. Although not expected, a similar undercut should be performed for the slab should expansive soils be present within 2 feet of slab bottom in those areas as well.

Crushed limerock fill should meet FDOT gradation requirements and be placed in approximate 6-inch loose lifts. Limerock fill should be compacted to a minimum of 98 percent of the Modified Proctor maximum dry density (ASTM D1557). Sand fill should be placed in approximate 12-inch loose lifts and compacted to a minimum of 95 percent of the Modified Proctor maximum dry density (ASTM D1557).

We recommend the undercutting and backfilling be performed under the observation of the geotechnical engineer. The geotechnical engineer should inspect the bottom of the undercuts prior to the contractor placing the backfill. Field density tests should be performed on the backfill at a minimum of three tests or one test per 50 linear feet of undercut trench and every other individual footing for each 1-foot lift of fill material.

Due to the mostly sandy nature of the majority of the near-surface soils and the recommended undercutting, we expect settlement to be mostly elastic in nature. The majority of the settlement will occur on application of the loads, during and immediately following construction. Using the recommended maximum bearing pressure, the assumed maximum structural loads, and the field and laboratory test data which we have correlated into the strength and compressibility characteristics of the subsurface soils, we estimate the total settlements of the structure to be 1 inch or less, with approximately half of it occurring upon load application (during construction).

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. For the building pad prepared as recommended, we anticipate differential settlement of less than 1/2 inch.

Post-construction settlement of the structures will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundation; (3) site preparation and earthwork construction techniques used by the contractor, and (4) external factors, including but not limited to vibration from off-site sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present.

Our settlement estimates for the structure are based upon the use of successful adherence to the site preparation recommendations presented later in this report. Any deviation from these recommendations could result in an increase in the estimated post-construction settlement of the structure.

4.3.1 Post-Tensioned Slab/Foundation System

Considering the expansive soils present at the site, GSE recommends two options be considered to support the structures. Option 1 consists of using a post-tensioned slab/foundation system to support the structures that is designed to better resist differential movements that could occur as a result of the expansive soils. GSE believes that undercutting the expansive soils will also likely be required to provide adequate separation.

The post-tensioned slab/foundation should be designed to resist bending moments resulting from foundation movement. It is our experience that the post-tensioned slab/foundation will consist of thickened sections approximately 20 to 24 inches thick around the perimeter and in a grid throughout the interior of the structure spaced no more than about 15 feet apart each direction. A post-tensioned cable is typically placed near the top and bottom of the thickened sections, and post-tensioned cables are also typically placed in the center of the slab spaced 4 to 6 feet apart in each direction. However, the post-tensioned foundation should be designed by an engineer or architect familiar with post-tensioned foundation design specifically intended to resist differential movements resulting from expansive soils.

The post-tensioned foundation design should consider edge moisture variation distances of 4 and 5 feet for center and edge lift, respectively. Maximum anticipated center and edge lift is 1 and 1.5 inches, respectively. A slab/subgrade friction coefficient of 0.45 can be assumed.

We recommend the shallow foundations be designed for a maximum net soil bearing pressure of 3,000 psf. Net bearing pressure is defined as the soil bearing pressure at the base of the foundation in excess of the natural overburden pressure. The foundations should be designed based upon the maximum load that could be imposed by all loading conditions.

All appropriate requirements of the latest edition of the IBC and the Post-Tensioning Institute should be followed in the design and construction of the post-tensioned slab foundations.

We wish to point out that the post-tensioned slab/foundation system will not eliminate differential foundation movement resulting from volume changes of expansive soils. However, the stiffer post-tensioned slab/foundation should help to “bridge” over the subgrade soils and reduce the amount of bending and resulting angular distortion that causes cracking damage compared to conventionally reinforced foundations.

4.3.2 Stiffened Foundation System

Considering the expansive soils present at the site, GSE recommends three options be considered to support the structure. Option 2 consists of using a reinforced stiffened foundation to support the structure that is designed to better resist differential movements that could occur as a result of the expansive soils. GSE believes that undercutting the expansive soils will also likely be required to provide adequate separation.

Based upon the soil conditions encountered, it is our opinion the structure can be supported by continuous shallow foundations that are stiffened to behave as grade beams. The stiffened shallow foundations should be designed as grade beams with top and bottom reinforcement.

Column foundations should be “tied into” the grade beams such that the entire foundation system behaves as one unit. These foundations typically have a minimum thickness of 18 inches, with both top and bottom steel tied with stirrups; however this foundation should be designed by your architect or structural engineer that is familiar with grade beam-type foundation design.

We recommend the shallow foundations be designed for a maximum net soil bearing pressure of 3,000 psf. Net bearing pressure is defined as the soil bearing pressure at the base of the foundation in excess of the natural overburden pressure. The foundations should be designed based upon the maximum load that could be imposed by all loading conditions.

The foundations should be embedded a minimum of 18 inches below the lowest adjacent grade. Interior foundations or thickened sections should be embedded a minimum of 12 inches. The foundations should have minimum widths of 18 inches for strip footings, and 24 inches for columns, even though the maximum soil bearing pressure may not be fully developed.

We wish to point out that the stiffened foundations will not eliminate differential foundation movement resulting from volume changes of expansive soils. However, the stiffer foundations should help to “bridge” over the subgrade soils and reduce the amount of bending and resulting angular distortion that causes cracking damage compared to conventionally reinforced foundations. A reinforced stiffened foundation is considered to be appreciably more effective in resisting differential movements compared to a conventional, shallow foundation system, but less effective compared to the Option 1 post-tensioned foundation.

4.4 Flexible Pavement

Overall soil conditions encountered by our borings at this site are suitable for supporting conventional limerock base and asphalt wearing surface pavements. We have not been provided the anticipated traffic loading conditions; therefore, the following pavement component recommendations should be used only as guidelines.

Expansive clay-rich soils were encountered near ground surface at a few of the boring locations. During site grading and pavement construction efforts, we recommend any surficial clay-rich soils be over excavated and replaced with either on-site or imported sands containing less than 12 percent soil fines passing the No. 200 sieve. The depth of undercutting should be a minimum of 2 feet below the bottom of the limerock base course and it should continue laterally until native sandy soils have been penetrated. The sand backfill should be compacted to a minimum of 95 percent of the Modified Proctor maximum dry density (ASTM D1557).

The intent of the over excavation and replacement is to provide a minimum separation of 24 inches between the bottom of the base course and the top of the expansive soils. This will also provide the necessary minimum separation from the seasonal high groundwater table considering it is a perched condition. The over excavation should be performed on an as-need basis during construction. Based upon the soil profiles encountered, we anticipate over excavation will be limited to the areas near borings A-1, A-3, and A-5. Raising site grades in the pavement areas will help to reduce the amount of over excavation required.

4.4.1 Stabilized Subgrade

The stabilized subgrade should have a minimum Limerock Bearing Ratio (LBR) of 40, with minimum thicknesses of 6 inches for automobile parking areas and 12 inches for driveways. The stabilized subgrade can be imported material or a mixture of imported and on-site material. If a mix is proposed, a mix design should be performed to determine the optimum mix proportions. The stabilized subgrade should be compacted to a minimum of 98 percent of the Modified Proctor maximum dry density (ASTM D1557) for soils with less than 15 percent fines content. Soils with 15 percent or greater fines content should be compacted to 100 percent of the Standard Proctor maximum dry density (ASTM D698).

4.4.2 Base Course

The base course should consist of crushed limerock having a LBR of at least 100. Limerock should be obtained from a FDOT approved source, and should meet FDOT gradation requirements. The base course thickness should be a minimum of 6 inches in automobile parking areas and 8 inches in driveways. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557).

The constructability of differing base course thicknesses may be difficult, and having a uniform 8-inch thick base course may be more practical.

4.4.3 Wearing Surface

The asphalt-wearing surface should consist of an FDOT Type SP Hot Mix Asphalt mixture. For automobile parking areas, the thickness should be a minimum of 1.5 inches. For driveway areas, the thickness should be a minimum of 2 inches. The asphalt-wearing surface should consist of an SP-12.5 mix. The asphalt should be compacted to at least 95 percent of the mix design density.

The constructability of differing asphalt thicknesses may be difficult, and having a uniform 2-inch thick asphalt wearing surface may be more practical.

4.5 Site Preparation

The soils at this site should be suitable for supporting the proposed construction using normal, good practice site preparation procedures. Selective undercutting and replacement of clay-rich soils may be necessary. The following recommendations are our general guidelines for site preparation.

4.5.1 Stripping

Strip the construction limits and 10 feet beyond the perimeter of all grass, roots, topsoil, pavement, and other deleterious materials. You should expect to strip to depths of 12 or more inches. Deeper stripping will likely be necessary due to major root systems present at the site.

4.5.2 Dewatering

Temporary dewatering is not expected to be necessary for this project. However, if needed, we anticipate dewatering can be accomplished with sumps placed near the construction area, or with underdrains connected to a vacuum pump.

In any case, the site should always be graded to promote runoff and limit the amount of ponding. Localized ponding of stormwater is expected without proper grading during construction, and could render previously acceptable surfaces unacceptable.

4.5.3 Proof-Rolling

Proof-roll the subgrade with heavy rubber-tired equipment, such as a loaded front-end loader or dump truck, to identify any loose or soft zones not found by the soil borings. The proof-rolling should be monitored by a geotechnical engineer or qualified technician. Undercut or otherwise treat these zones as recommended by the geotechnical engineer in this report.

4.5.4 Proof Compaction

Compact the subgrade to a density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). The specified compaction should be obtained to a depth of 1 foot below the foundation bottoms and the existing grade prior to placing fill. Vibratory roller equipment should not be used within approximately 100 feet of existing structures. Lighter “walk-behind” compaction equipment may be used to achieve the degree of compaction.

Should clayey sand be encountered at the bearing surface, this material should be probed and visually confirmed to be unyielding in the upper 12 inches in lieu of density testing. If the foundation excavations penetrate the clayey sand, the excavation should be performed in a manner that reduces soil disturbance. Clayey sand soils (with fines content in excess of 15 percent) that are removed and replaced or appreciably disturbed need to be re-compacted to 98 percent of the Standard Proctor maximum dry density (ASTM D698).

4.5.5 Fill Placement

Imported fill placed to raise the site grades should consist of clean sand having less than 10 percent passing the No. 200 sieve. On-site soils meeting the requirements of Section 4.8 may also be used as structural fill. The fill should be placed in maximum 12-inch loose lifts that are compacted to at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). If lighter “walk-behind” compaction equipment is used, this may require lifts of 4 inches or less to achieve the required degree of compaction.

4.6 Quality Control and Construction Materials Testing

It should be noted that the geotechnical engineering design does not end with the advertisement of the construction documents. As the geotechnical engineer of record, GSE is the most qualified to perform the construction materials testing that will be required for this project. The benefits of having the geotechnical engineer of record also perform the construction materials testing are numerous. If GSE continues to be involved with the project through construction, we will be able to constantly re-evaluate and possibly alter our geotechnical recommendations in a timely and cost effective manner once final design and construction techniques are developed. This often results in cost savings for the project.

We recommend performing compaction testing beneath the concrete floor slab and the building foundations. We recommend one test be performed every 50 linear feet of continuous footing and every other column footing, per foot depth of fill or native material. We recommend a compaction test be performed for each 2,500 square feet of floor area or 10,000 square feet of pavement area per foot of fill or native material, or a minimum of three tests each, whichever is greater. Test all footing excavations to a depth of 12 inches at the frequencies stated above.

4.7 Stormwater Management

The soil conditions at the stormwater management facility are relatively consistent; initially penetrating sand with silt and sand with clay overlying clayey to very clayey sand with some interbedded strata of sandy clay.

The groundwater table was encountered in auger borings P-1, P-2, P-3, and P-5 from 4 to 6.7 feet. We anticipate the seasonal high groundwater levels in the western basin will be 3 feet bls and in the eastern basin will be 1.5 feet bls.

The laboratory permeability tests indicate the surficial layer of sand with silt, sand with clay, and clayey sand has hydraulic conductivity values of 3.4 to 27 feet per day. The deeper clayey soils are expected to be confining.

Based upon our findings and test results, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The parameters below do not consider a factor of safety.

West Basin Parameters

1. Base elevation of effective or mobilized aquifer (average depth of confining layer) equal to 7 feet bls.
2. Unsaturated vertical infiltration rate of 15 feet per day.
3. Horizontal hydraulic conductivity equal to 20 feet per day.
4. Specific yield (fillable porosity) of 20 percent.
5. Average seasonal high groundwater table depth equal to 3 feet bls.
6. Average seasonal low groundwater table depth equal to 7 feet bls.

East Basin Parameters

1. Base elevation of effective or mobilized aquifer (average depth of confining layer) equal to 2 feet bls.
2. Unsaturated vertical infiltration rate of 6 feet per day.
3. Horizontal hydraulic conductivity equal to 8 feet per day.
4. Specific yield (fillable porosity) of 20 percent.
5. Average seasonal high groundwater table depth equal to 1.5 feet bls.
6. Average seasonal low groundwater table depth equal to 6 feet bls.

In areas where clay-rich soils are present at the basin bottom, we recommend these soils be undercut a minimum of 2 feet and backfilled with the on-site sands and sands with silt (SP, SP-SM) having a maximum of 12 percent soil fines passing the No. 200 sieve. The intent of this undercutting and replacement is to provide a more uniform sand “blanket” at the basin bottom that allows the migration of water to the deeper deposits of sand. This sand blanket will also reduce the potential for clay-fines leaching out of the soils when water is present in the basin that can result in a thin layer of confining type material on the basin bottom that can reduce the effectiveness of the basin.

4.8 Fill Suitability

The soils encountered at this site within the explored depths range from sands (SP) to clays (CL/CH). A discussion of the suitability for reuse as structural fill for each soil classification according to the Unified Soil Classification System (USCS) designation is provided below.

SP, SP/SM – Sands (SP) and sand with silt (SP/SM) have less than 5 percent and 12 percent soil fines passing the No. 200 sieve, respectively, and are typically well draining soils that are suitable for reuse as structural fill. The sands with silt may require moisture conditioning (drying) to make the material more workable. These soils will require stockpiling and drying before they are reused if they are excavated from below the water table.

SM – Silty sands (SM) can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Silty sands are typically non-plastic or have low plasticity, and can be reused as structural fill with precautions. Silty sands can be moisture sensitive and difficult to work and compact and can rut if the moisture content is near or above the optimum moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable silty sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Silty sands with more than 30 percent soil fines are especially moisture sensitive, and are not recommended for reuse as structural fill. These soils will behave more as sandy silt, and for this reason, very silty sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SM/ML. Silty sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

SC – Clayey sand (SC) soils can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Clayey sands can have a high range of plasticity, varying from a PI of 7 or greater and plotting above the A-line to highly plastic. Friable clayey sands are typically suitable for use as structural fill with precautions. Clayey sands will be moisture sensitive and difficult to work and compact and can rut during placement if the moisture content is near or above the natural moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable clayey sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Clayey sands with more than 30 percent soil fines passing the No. 200 sieve are especially moisture sensitive and are typically highly plastic, and are not recommended for reuse as structural fill. These soils will behave more as sandy clay, and for this reason, very clayey sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SC/CH or SC/CL. Clayey sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

ML, MH, CL, CH – Silts and clays are not suitable materials for reuse as structural fill.

When using on-site soils as fill materials, we recommend the silty and clayey sand soils (SM, SC) be used in the lower depths of the fill. Sand and sand with silt (SP, SP-SM) should be used in the upper portions of the fill. We recommend a minimum of 2 feet of sand (SP, SP-SM) cover the silty and clayey sand fill materials to reduce the potential for soggy surface conditions due to the low permeability characteristics of the silty and clayey sand materials.

4.9 Surface Water Control and Landscaping

Roof gutters should be considered to divert runoff away from the building. The gutter downspouts should discharge a minimum of 10 feet from the structure to reduce the amount of water collecting around the foundations. Where possible, the gutter downspouts should discharge directly into the storm sewer system or onto the asphalt paved areas in order to reduce the amount of water collecting around the foundations. Grading of the site should be such that water is diverted away from the building on all sides to reduce the potential for erosion and water infiltration along the foundation.

With respect to landscaping, it is recommended that existing and planted trees and large “tree-like” shrubbery with potential for developing large root systems be planted a minimum distance of half their mature height, and preferably their expected final height, away from the structure. The purpose of this is to reduce the potential for foundation or slab movements from the growth of root systems as the landscaping matures. Consideration should also be given to using landscaping that has a low water demand, so that excessive irrigation is not conducted around the structures.

If excavations for underground utilities encounter the clay-rich soils, the excavations should be made such that they do not trap water (i.e. “swimming pool” or “bowl” effect). Sloping the excavations, installing underdrains, or extending the excavation to a more pervious area can achieve this. Allowing surface water to become trapped within utility trenches or other excavations (including footings) serves as a potential water source for the clay, which can result in shrink swell of these soils. Furthermore, during construction, surface water within the building areas must be controlled such that the water does not become trapped and represent a source of water for the underlying clay-rich soils. Mismanagement of the surface water during construction within the building footprint could result in subsequent post-construction slab movement.

The above recommendations are intended to maintain relatively consistent moisture contents within the clay-rich expansive soils encountered by the borings. The importance of proper surface water control and landscaping placement cannot be overemphasized in accomplishing this objective.

5.0 FIELD DATA

5.1 Auger Boring Logs



GSE Engineering & Consulting, Inc.
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 Telephone: (352) 377-3233
 Fax: (352) 377-0335

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE PERFORMED 11/28/2018 **BORING NUMBER A-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 4.0 ft CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.0 ft

NOTES

DATE PERFORMED 11/28/2018 **BORING NUMBER A-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 4.0 ft CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SP-SM) Dark brown SAND with silt			AU 1	(SP-SM) Dark brown SAND with silt
1			▽ (SP-SC) Gray SAND with clay	1.0			▽
		AU 2					
2				2			
3				3			
4			▼ (SC/CH) Gray very clayey SAND and trace rock fragments	4.0			▼
		AU 3				AU 2	(SP-SC) Gray SAND with clay
5				5			
			Bottom of borehole at 5.0 feet.				2.5
							5.0
							Bottom of borehole at 5.0 feet.

AB 2 PORTRAIT - GINT STD US.GDT - 12/13/18 14:27 - Q:\PROJECTS\13834 TAX PARCELS 05900-004-001 THRU 01013834 BORINGS\13834 BORINGS.GPJ

(Continued Next Page)



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CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE PERFORMED 11/28/2018 **BORING NUMBER A-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 4.0 ft CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.0 ft

NOTES _____

DATE PERFORMED 11/28/2018 **BORING NUMBER A-4**

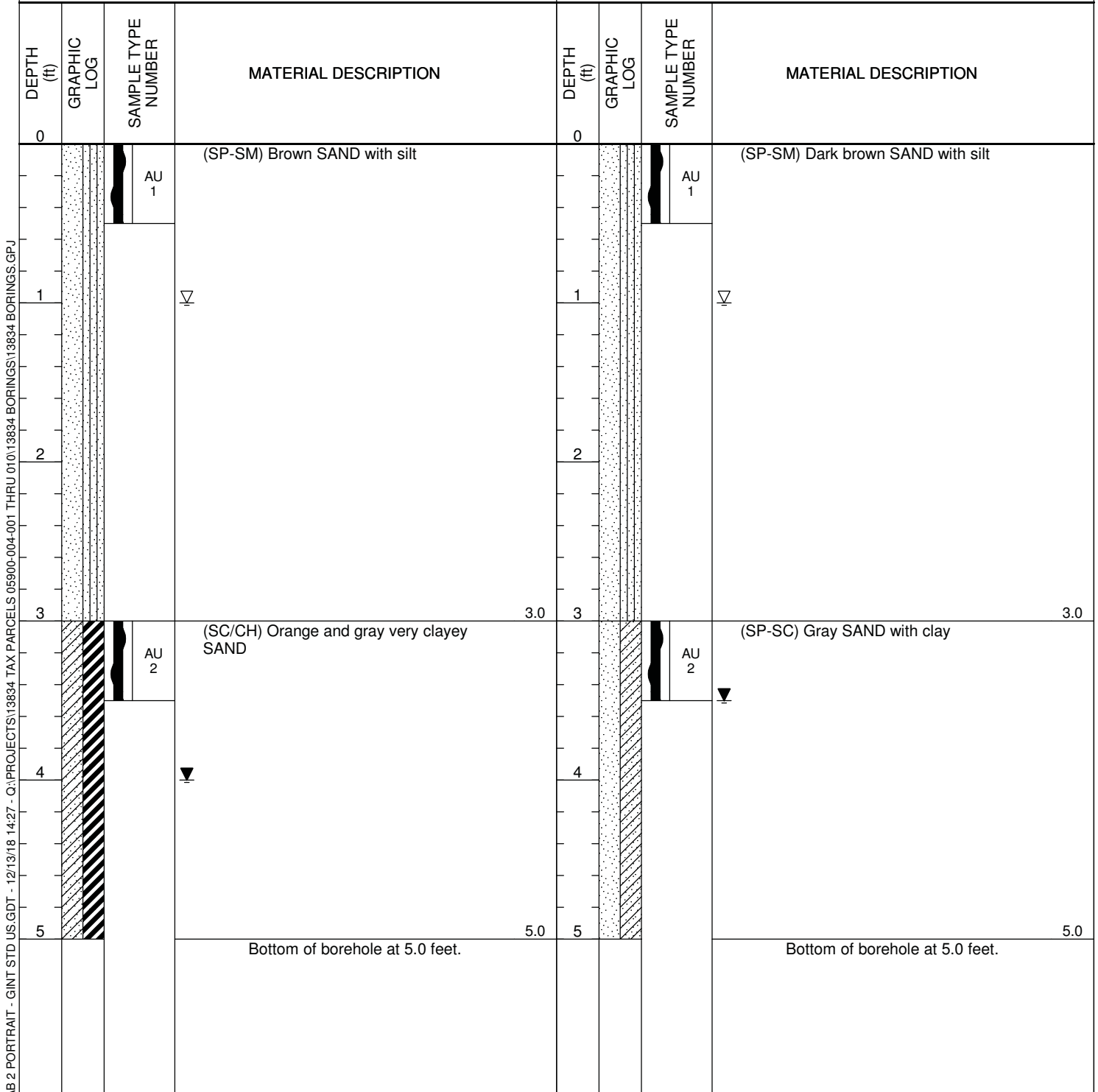
DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 3.5 ft CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.0 ft

NOTES _____



(Continued Next Page)



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CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE PERFORMED 11/28/2018 **BORING NUMBER A-5**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NE CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.0 ft

NOTES _____

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			
		AU 1	(SP-SM) Dark brown and gray SAND with silt
1			▽
2			2.0
		AU 2	(SP-SC) Gray and orange SAND with clay
3			
4			4.0
		AU 3	(CH) Gray and orange sandy CLAY with trace rock fragments
5			5.0
			Bottom of borehole at 5.0 feet.

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CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE PERFORMED 11/28/2018 **BORING NUMBER P-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 5.0 ft CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 3.0 ft

NOTES

DATE PERFORMED 11/28/2018 **BORING NUMBER P-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 5.0 ft CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 3.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0				0.0			
		AU 1	(SP-SM) Dark brown SAND with silt			AU 1	(SP-SM) Dark brown SAND with silt
2.5				2.5			
						AU 2 PS	(SP-SC) Brown and gray SAND with clay %PASS-200 = 5.7 MC = 6.5 k _h = 27 ft/day
3.5				3.5			
		AU 2	(SP-SC) Brown, orange, and gray SAND with clay			AU 3	(SP-SC) Brown and orange SAND with clay
5.0				5.0			
6.0				6.0			
		AU 3	(SP-SC) Gray SAND with clay			AU 4	(SC/CH) Dark gray very clayey SAND
7.5				7.5			
10.0				10.0			
		AU 4	(SC/CH) Gray very clayey SAND			AU 5	(SC/CH) Orange and brown very clayey SAND
12.5				12.5			
15.0				15.0			
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

AB 2 PORTRAIT - GINT STD US.GDT - 12/13/18 14:28 - Q:\PROJECTS\13834 TAX PARCELS 05900-004-001 THRU 01013834 BORINGS.GPJ

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CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE PERFORMED 11/28/2018 **BORING NUMBER P-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 6.7 ft CHECKED BY JTP

 ESTIMATED SEASONAL HIGH 3.0 ft

NOTES

DATE PERFORMED 11/28/2018 **BORING NUMBER P-4**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

AT TIME OF DRILLING NA CHECKED BY JTP

 ESTIMATED SEASONAL HIGH 1.5 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0		AU 1	(SP-SM) Dark brown SAND with silt	0.0		AU 1	(SP-SM) Dark brown SAND with silt
1.0				2.0			
2.5		AU 2 PS	(SP-SC) Gray and brown SAND with clay %PASS-200 = 6.9 MC = 5.6 $k_n = 22 \text{ ft/day}$	2.5		AU 2	(SC) Gray clayey SAND %PASS-200 = 23 MC = 12
4.0		AU 3	(SC) Orange and brown clayey SAND	5.0		AU 3	(SC/CH) Orange and gray very clayey SAND
7.5		AU 4	(CH) Gray sandy CLAY with trace rock fragments	7.5		AU 4	
10.0		AU 5	(SC/CH) Orange and gray very clayey SAND	10.0			
12.5				12.5			
15.0			Bottom of borehole at 15.0 feet.	15.0			Bottom of borehole at 15.0 feet.

(Continued Next Page)



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PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE PERFORMED 11/28/2018 **BORING NUMBER P-5**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 4.0 ft CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 ft

NOTES

DATE PERFORMED 11/28/2018 **BORING NUMBER P-6**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING NA CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 ft

NOTES

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0				0.0			
		AU 1	(SC) Dark brown clayey SAND				(SP-SM) Dark brown SAND with silt
			▽			AU 1 PS	%PASS-200 = 8.2 MC = 11 k _n = 11 ft/day
2.5				2.5		AU 2	(SC/CH) Orange and gray very clayey SAND
		AU 2	▼				
5.0				5.0			
		AU 3 PS	(SC) Gray and orange clayey SAND with trace rock fragments	6.0		AU 3	(SC/CH) Gray very clayey SAND and trace rock fragments
7.5			%PASS-200 = 20 MC = 19 k _n = 3.4 ft/day	7.5			
10.0		AU 4		10.0		AU 4	(SC/CH) Orange and gray very clayey SAND
12.5				12.5		AU 5	
15.0				15.0		AU 6	(CH) Orange and gray sandy CLAY
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.

5.2 Standard Penetration Test Soil Boring Logs



GSE Engineering & Consulting, Inc.
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Telephone: (352) 377-3233
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BORING NUMBER B-1

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE STARTED 12/4/18 **COMPLETED** 12/4/18

GROUND ELEVATION _____ **HOLE SIZE** _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** 4.5 ft

LOGGED BY WDI **CHECKED BY** JTP

▽ **ESTIMATED SEASONAL HIGH** 2.5 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SP-SM) Loose dark brown SAND with silt									
		▽ (SP-SM) Loose to medium dense pale brown SAND with silt	2.5	SPT 1	2-3-5 (8)						
				SPT 2	4-5-5 (10)						
5				SPT 3	5-6-5 (11)						
			6	SPT 4	7-9-10 (19)						
		(SC) Medium dense gray and brown clayey SAND with trace rock fragments		SPT 5	7-8-8 (16)	41	15	26	28	19	
10				SPT 6	9-12-11 (23)						
			12								
		(SC/CH) Medium dense to very dense orange and gray very clayey SAND		SPT 7	6-8-9 (17)						
15											
				SPT 8	8-26-28 (54)						
20		Bottom of borehole at 20.0 feet.	20								

SPT BORINGS - GINT STD US.GDT - 12/13/18 14:25 - Q:\PROJECTS\13834 TAX PARCELS 05900-004-001 THRU 01013834 BORINGS\13834 BORINGS.GPJ



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BORING NUMBER B-2

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE STARTED 12/4/18 **COMPLETED** 12/4/18

GROUND ELEVATION _____ **HOLE SIZE** _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NA

LOGGED BY WDI **CHECKED BY** JTP

▼ **ESTIMATED SEASONAL HIGH** 3.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SP-SM) Loose dark brown SAND with silt									
			2.5	SPT 1	3-4-4 (8)						
		▽ (SP-SM) Medium dense gray SAND with silt	4	SPT 2	5-6-8 (14)						
5		(SC) Medium dense gray clayey SAND	5.5	SPT 3	7-7-5 (12)				21	16	
		(CH) Stiff gray sandy CLAY with trace rock fragments	7	SPT 4	5-5-7 (12)						
		(CH) Very stiff gray sandy CLAY with trace rock fragments		SPT 5	8-9-13 (22)						
10				SPT 6	8-10-8 (18)	64	21	43	51	35	
			12								
		(SC/CH) Medium dense orange and gray very clayey SAND		SPT 7	8-9-9 (18)						
15											
			17								
		(CH) Very stiff gray sandy CLAY		SPT 8	6-11-14 (25)						
20		Bottom of borehole at 20.0 feet.	20								

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GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
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Telephone: (352) 377-3233
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BORING NUMBER B-3

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE STARTED 12/4/18 **COMPLETED** 12/4/18

GROUND ELEVATION _____ **HOLE SIZE** _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** 5.0 ft

LOGGED BY WDI **CHECKED BY** JTP

▽ **ESTIMATED SEASONAL HIGH** 3.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SC) Loose gray SAND with clay									20 40 60 80
2.5		(SC/CH) Medium dense gray and brown very clayey SAND with trace rock fragments	2.5	SPT 1	2-4-5 (9)						
4		(SC/CH) Medium dense orange, brown, and gray very clayey SAND with trace rock fragments	4	SPT 2	4-6-6 (12)						
5		(SC/CH) Medium dense gray and brown very clayey SAND	5	SPT 3	7-8-11 (19)	54	21	33	41	31	
7		(SC/CH) Medium dense gray and brown very clayey SAND	7	SPT 4	9-10-10 (20)						
8.5		(SC/CH) Medium dense gray and brown very clayey SAND with trace rock fragments	8.5	SPT 5	8-6-7 (13)						
10		(SC/CH) Medium dense gray and orange very clayey SAND	10	SPT 6	7-8-7 (15)						
12			12								
15				SPT 7	5-6-8 (14)						
20				SPT 8	10-9-11 (20)						
20		Bottom of borehole at 20.0 feet.	20								

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BORING NUMBER B-4

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE STARTED 12/4/18 **COMPLETED** 12/4/18

GROUND ELEVATION _____ **HOLE SIZE** _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** 7.0 ft

LOGGED BY WDI **CHECKED BY** JTP

▽ **ESTIMATED SEASONAL HIGH** 1.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SM) Loose dark brown SAND with silt									20 40 60 80
		▽									
		(SC/CH) Medium dense gray, orange, and brown very clayey SAND	2.5	SPT 1	2-4-2 (6)				33	17	
			4	SPT 2	5-6-10 (16)						
5		(SC/CH) Medium dense gray very clayey SAND with trace rock fragments		SPT 3	7-9-10 (19)						
			7	SPT 4	7-9-6 (15)						
		(CH) Very stiff orange and gray sandy CLAY with trace rock fragments		SPT 5	6-9-9 (18)						
			8.5	SPT 6	8-10-12 (22)						
10		(SC/CH) Medium dense gray very clayey SAND with trace rock fragments									
			12								
		(SC/CH) Medium dense orange and gray very clayey SAND		SPT 7	7-8-9 (17)	56	17	39	43	25	
15											
				SPT 8	9-12-14 (26)						
20		Bottom of borehole at 20.0 feet.	20								

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Gainesville, Florida 32608
Telephone: (352) 377-3233
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BORING NUMBER B-5

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE STARTED 12/4/18 **COMPLETED** 12/4/18

GROUND ELEVATION _____ **HOLE SIZE** _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NA

LOGGED BY WDI **CHECKED BY** JTP

▽ **ESTIMATED SEASONAL HIGH** 1.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SC) Very loose gray SAND with clay									20 40 60 80
			2.5	SPT 1	2-1-2 (3)						
		(SC/CH) Loose gray very clayey SAND	4	SPT 2	2-3-5 (8)	44	18	26	35	28	
5		(SC/CH) Loose gray and brown very clayey SAND with trace rock fragments	7	SPT 3	3-4-3 (7)						
			8.5	SPT 4	3-3-4 (7)						
		(SC/CH) Medium dense orange and gray very clayey SAND with trace rock fragments		SPT 5	4-6-7 (13)						
10		(SC/CH) Medium dense orange, brown, and gray very clayey SAND		SPT 6	7-7-8 (15)						
			12								
		(SC/CH) Medium dense orange and gray very clayey SAND		SPT 7	5-7-11 (18)						
15											
				SPT 8	6-8-19 (27)						
20		Bottom of borehole at 20.0 feet.	20								

SPT BORINGS - GINT STD US.GDT - 12/13/18 14:25 - Q:\PROJECTS\13834 TAX PARCELS 05900-004-001 THRU 01013834 BORINGS\13834 BORINGS.GPJ



GSE Engineering & Consulting, Inc.
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Gainesville, Florida 32608
Telephone: (352) 377-3233
Fax: (352) 377-0335

BORING NUMBER B-6

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE STARTED 12/4/18 **COMPLETED** 12/4/18

GROUND ELEVATION **HOLE SIZE**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NA

LOGGED BY WDI **CHECKED BY** JTP

▽ **ESTIMATED SEASONAL HIGH** 1.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SM) Very loose dark brown SAND with silt									20 40 60 80
			2.5	SPT 1	2-3-1 (4)						
		(SC) Loose brown and gray clayey SAND	4	SPT 2	3-2-4 (6)				28	19	
5		(SC/CH) Loose brown and gray very clayey SAND	5.5	SPT 3	2-4-4 (8)						
		(SC/CH) Loose to medium dense brown and gray very clayey SAND with trace rock fragments	8.5	SPT 4	3-4-3 (7)	60	18	42	34	31	
		(SC/CH) Medium dense gray very clayey SAND with trace rock fragments		SPT 5	5-5-6 (11)						
10				SPT 6	5-8-12 (20)						
		(SC/CH) Medium dense orange and gray very clayey SAND	12								
15				SPT 7	4-5-8 (13)						
20				SPT 8	8-9-13 (22)						
		Bottom of borehole at 20.0 feet.	20								

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GSE Engineering & Consulting, Inc.
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Fax: (352) 377-0335

BORING NUMBER B-7

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE STARTED 12/4/18 **COMPLETED** 12/4/18

GROUND ELEVATION _____ **HOLE SIZE** _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NA

LOGGED BY WDI **CHECKED BY** JTP

▼ **ESTIMATED SEASONAL HIGH** 2.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0		(SP-SM) Very loose dark brown SAND with silt									20 40 60 80
			2.5	SPT 1	2-2-2 (4)						
		(SC) Loose gray clayey SAND	4	SPT 2	2-3-3 (6)						
5		(SC/CH) Loose gray very clayey SAND	5.5	SPT 3	3-4-5 (9)						
		(SP-SC) Medium dense gray and brown SAND with clay	7	SPT 4	5-5-9 (14)						
		(SC/CH) Medium dense gray and brown very clayey SAND	8.5	SPT 5	7-10-12 (22)						
10		(SC/CL) Medium dense gray and brown very clayey SAND		SPT 6	10-10-13 (23)	41	17	24	34	17	
		(SC/CH) Medium dense gray and orange very clayey SAND	12								
15				SPT 7	7-8-8 (16)						
20				SPT 8	5-9-18 (27)						
		Bottom of borehole at 20.0 feet.	20								

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BORING NUMBER B-8

CLIENT Nature Valley Harvest, LTD

PROJECT NAME Tax Parcel Nos. 05900-004-001 through 05900-004-010

PROJECT NUMBER 13834

PROJECT LOCATION Alachua, Alachua County

DATE STARTED 12/4/18

COMPLETED 12/4/18

GROUND ELEVATION

HOLE SIZE

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ **AT TIME OF DRILLING** NA

LOGGED BY WDI

CHECKED BY JTP

▼ **ESTIMATED SEASONAL HIGH** 2.0 ft

NOTES

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SP-SM) Loose dark brown SAND with silt									
		▽	2.5	SPT 1	2-2-3 (5)						
		(SC/CH) Loose brown and orange very clayey SAND	4	SPT 2	3-4-4 (8)						
5		(SP-SC) Medium dense gray SAND with clay	5.5	SPT 3	3-4-7 (11)						
		(SC/CH) Medium dense gray and brown very clayey SAND		SPT 4	5-6-7 (13)						
				SPT 5	8-10-13 (23)						
10				SPT 6	11-13-16 (29)						
		(SC/CH) Medium dense gray and orange very clayey SAND with trace rock fragments	12								
				SPT 7	4-6-8 (14)						
15											
				SPT 8	7-8-22 (30)						
20		Bottom of borehole at 20.0 feet.	20								

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5.3 Laboratory Results



SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 13834

Project Name: Tax Parcel 05900-004-001 thru 010

Boring Number	Sample Depth (ft)	Soil Description	Natural Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Percent Passing No. 200 Sieve	Organic Content (%)	Hydraulic Conductivity (ft/day)	Unified Soil Classification
P-2	1 - 3	Brown and gray SAND with clay	6.5				5.7		27	SP-SC
P-3	1 - 3	Gray and brown SAND with clay	5.6				6.9		22	SP-SC
P-4	2 - 2.5	Gray clayey SAND	12				23			SC
P-5	5 - 7	Dark brown, orange, and gray clayey SAND	19				20		3.4	SC
P-6	0 - 2	Dark brown SAND with silt	11				8.2		11	SP-SM
B-1	7 - 8.5	Gray and brown clayey SAND with trace rock fragments	19	41	15	26	28			SC
B-2	4 - 5.5	Gray clayey SAND	16				21			SC
B-2	8.5 - 10	Gray sandy CLAY with trace rock fragments	35	64	21	43	51			CH
B-3	4 - 5.5	Orange, brown, and gray very clayey SAND with trace rock fragments	31	54	21	33	41			SC/CH
B-4	2.5 - 4	Gray, orange, and brown very clayey SAND	17				33			SC/CH
B-4	13.5 - 15	Orange and gray very clayey SAND	25	56	17	39	43			SC/CH
B-5	2.5 - 4	Gray very clayey SAND	28	44	18	26	35			SC/CH



Project Name: Tax Parcel 05900-004-001 thru 010

SUMMARY REPORT OF LABORATORY TEST RESULTS

5.4 Key to Soil Classification

KEY TO SOIL CLASSIFICATION CHART

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests				SYMBOLS		GROUP NAME	
				GRAPHIC	LETTER		
COARSE-GRAINED SOILS	Gravels	Clean Gravels	$Cu \geq 4$ and $1 \leq Cc \leq 3$		GW	Well graded GRAVEL	
		More than 50% retained on No. 200 sieve	Less than 5% fines	$Cu < 4$ and/or $1 > Cc > 3$		GP	Poorly graded GRAVEL
			Gravels with fines	Fines classify as ML or MH		GM	Silty GRAVEL
			More than 12% fines	Fines classify as CL or CH		GC	Clayey GRAVEL
	Sands	Clean Sands	$Cu \geq 6$ and $1 \leq Cc \leq 3$		SW	Well graded SAND	
		50% or more of coarse fraction passes No. 4 sieve	Less than 5% fines	$Cu < 6$ and/or $1 > Cc > 3$		SP	Poorly graded SAND
			Sand with fines	Fines classify as ML or MH		SP-SM	SAND with silt
			$5\% \leq \text{fines} < 12\%$	Fines classify as CL or CH		SP-SC	SAND with clay
		Sand with fines	Fines classify as ML or MH		SM	Silty SAND	
		$12\% \leq \text{fines} < 30\%$	Fines classify as CL or CH		SC	Clayey SAND	
		Sand with fines	Fines classify as ML or MH		SM	Very silty SAND	
		30% fines or more	Fines classify as CL or CH		SC	Very clayey SAND	
	FINE-GRAINED SOILS	Clays	inorganic	$50\% \leq \text{fines} < 70\%$		CL/CH	Sandy CLAY
				$70\% \leq \text{fines} < 85\%$		CL/CH	CLAY with sand
$\text{fines} \geq 85\%$					CL/CH	CLAY	
Silts and Clays		inorganic	$PI > 7$ and plots on/above "A" line		CL	Lean CLAY	
			$PI < 4$ or plots below "A" line		ML	SILT	
Liquid Limit less than 50		organic	Liquid Limit - oven dried	< 0.75		OL	Organic clay
			Liquid Limit - not dried			OL	Organic silt
Silts and Clays		inorganic	PI plots on or above "A" line		CH	Fat CLAY	
			PI plots below "A" line		MH	Elastic SILT	
Liquid Limit 50 or more		organic	Liquid Limit - oven dried	< 0.75		OH	Organic clay
	Liquid Limit - not dried				OH	Organic silt	
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor				PT	PEAT	

CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

No. OF BLOWS, N	RELATIVE DENSITY		No. OF BLOWS, N	CONSISTENCY
0 - 4	Very Loose		0 - 2	Very Soft
5 - 10	Loose		3 - 4	Soft
SANDS: 11 - 30	Medium dense	SILTS &	5 - 8	Firm
31 - 50	Dense	CLAYS:	9 - 15	Stiff
OVER 50	Very Dense		16 - 30	Very Stiff
			31 - 50	Hard
			OVER 50	Very Hard

No. OF BLOWS, N	RELATIVE DENSITY
0 - 8	Very Soft
9 - 18	Soft
LIMESTONE: 19 - 32	Moderately Hard
33 - 50	Hard
OVER 50	Very Hard

SAMPLE GRAPHIC TYPE LEGEND



Location
of SPT
Sample



Location
of Auger
Sample

PARTICLE SIZE IDENTIFICATION

BOULDERS:	Greater than 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	Coarse - 19.0 mm to 75 mm
	Fine - 4.75 mm to 19.0 mm
SANDS:	Coarse - 2.00 mm to 4.75 mm
	Medium - 0.425 mm to 2.00 mm
	Fine - 0.075 mm to 0.425 mm
SILTS & CLAYS:	Less than 0.075 mm

LABORATORY TEST LEGEND

LL	=	Liquid Limit, %
PL	=	Plastic Limit, %
PI	=	Plasticity Index, %
% PASS - 200	=	Percent Passing the No. 200 Sieve
MC	=	Moisture Content, %
ORG	=	Organic Content, %
k_h	=	Horizontal Hydraulic Conductivity, ft/day

6.0 LIMITATIONS

6.1 Warranty

This report has been prepared for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

6.2 Auger and SPT Borings

The determination of soil type and conditions was performed from the ground surface to the maximum depth of the borings, only. Any changes in subsurface conditions that occur between or below the borings would not have been detected or reflected in this report.

Soil classifications that were made in the field are based upon identifiable textural changes, color changes, changes in composition or changes in resistance to penetration in the intervals from which the samples were collected. Abrupt changes in soil type, as reflected in boring logs and/or cross sections may not actually occur, but instead, be transitional.

Depth to the water table is based upon observations made during the performance of the auger and SPT borings. This depth is an estimate and does not reflect the annual variations that would be expected in this area due to fluctuations in rainfall and rates of evapotranspiration.

6.3 Site Figures

The measurements used for the preparation of the figures in this report were made using the provided site plan and by estimating distances from existing structures and site features. Figures in this report were not prepared by a licensed land surveyor and should not be interpreted as such.

6.4 Unanticipated Soil Conditions

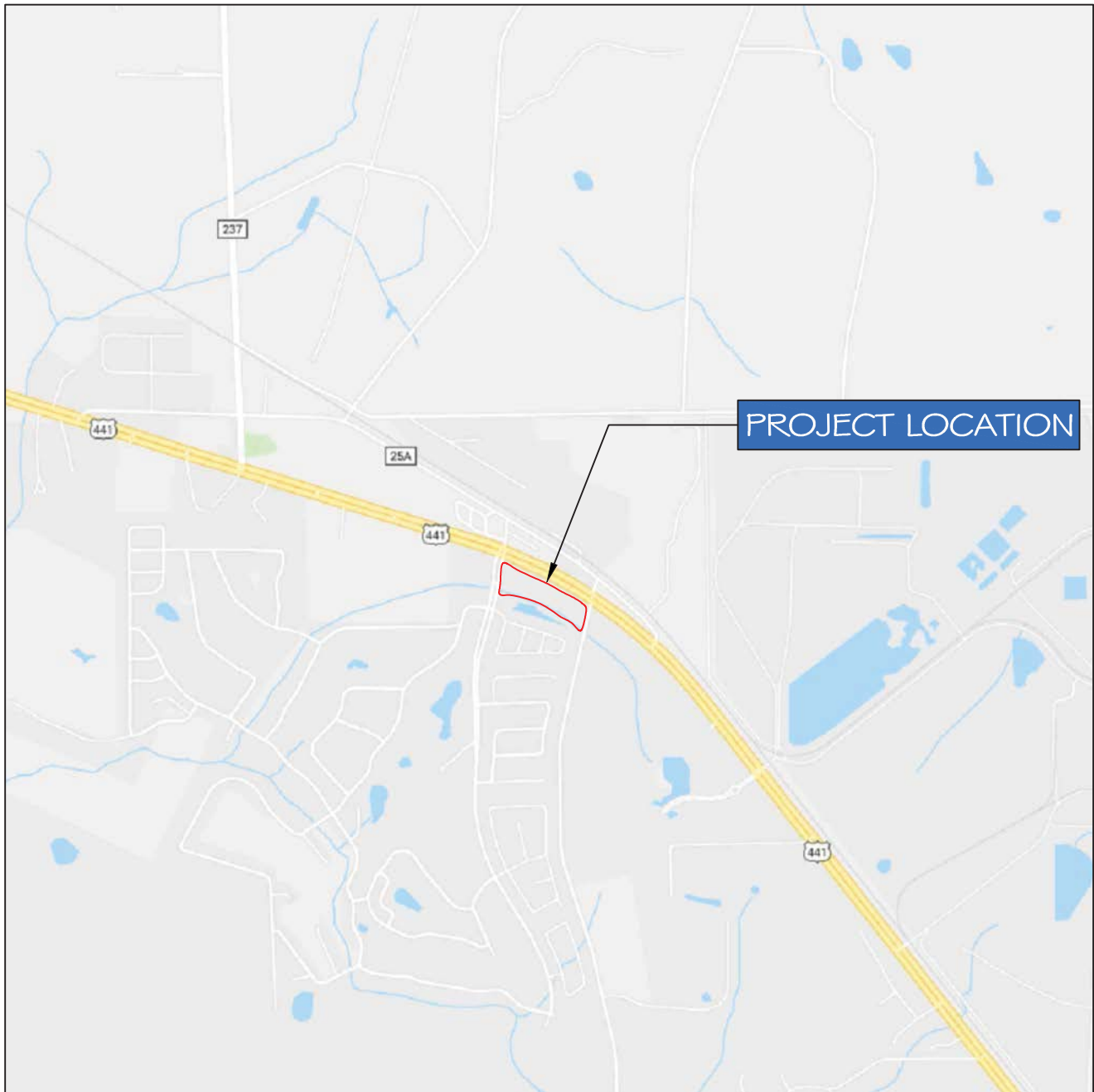
The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

6.5 Misinterpretation of Soil Engineering Report

GSE Engineering & Consulting, Inc. is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If others make the conclusions or recommendations based upon the data presented, those conclusions or recommendations are not the responsibility of GSE.

FIGURES




 NORTH
 NOT TO SCALE

TAX PARCEL NOS.
 05900-004-001 THROUGH 05900-004-010
 ALACHUA, ALACHUA COUNTY, FLORIDA
 GSE PROJECT NO. 13834

PROJECT SITE LOCATION MAP

DESIGNED BY: JTP
 CHECKED BY: CAD
 DRAWN BY: EEW

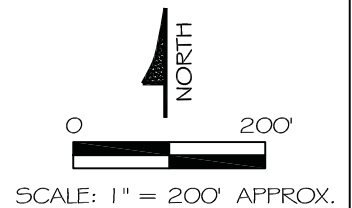


FIGURE
 1



LEGEND:

- ⊕ SPT BORING
- ⊙ AUGER BORING



TAX PARCEL NOS.
05900-004-001 THROUGH 05900-004-010
ALACHUA, ALACHUA COUNTY, FLORIDA
GSE PROJECT NO. 13834

SITE PLAN SHOWING APPROXIMATE LOCATIONS OF BORING LOCATIONS

DESIGNED BY : JTP
CHECKED BY : CAD
DRAWN BY : HAS



FIGURE
2