



August 28, 2018

South Florida Water Management District
80 S Hoagland Blvd
Kissimmee, FL 34741

RE: 7-Eleven Poinciana
SFWMD Letter of Minor Modification
Reference SFWMD Permit No. 49-00094-S
Kissimmee, Florida

To Whom It May Concern:

This letter serves as a request for a major modification of SFWMD Permit No. 49-00094-S, obtained for the construction of the Heatherstone at Crescent Lakes residential neighborhood. This permit allowed for the construction of a 51.30 acre residential neighborhood, and while flows from the 7.24 acre commercial parcel at the corner of South Poinciana Blvd and Crescent Lakes Way are included in the system, no evidence is available to suggest that treatment volume is provided for in the master pond. As such, treatment must be provided on-site for the proposed 7-Eleven development.

The proposed project will result in 56,429 square feet of impervious area, resulting in a required water quality treatment volume of 5,878 cubic feet. This volume is held within the pond at elevation 72.16'. This data is tabulated below, as well as in the attached ICPR reports.

SITE CALCULATIONS						
Land Use	PRE-DEVELOPED			POST-DEVELOPED		
	Area (sf)	Area (ac)	CN Value	Area (sf)	Area (ac)	CN Value
Impervious	1,754	0.04	98	56,429	1.30	98
Pervious	76,781	1.76	84	22,106	0.50	80
Composite	78,535	1.80	84.31	78,535	1.80	92.93

Dry Retention

WQV = .5" x basin	3,272	cf
1.25" x impervious	5,878	cf

POND A				
Elevation	Area		Volume (CF)	
	SF	Acres	Incremental	Cumulative
74	8,070	0.185	7,508	18,619
73	6,945	0.159	6,235	11,112
72	5,525	0.127	4,877	4,877
71	4,228	0.097	0	0

Pre- vs. Post- Flows		
	10-year 72-hour	25-year 24-hour
Pre-Developed	3.06 cfs	6.91 cfs
Post Development	2.81 cfs	6.12 cfs

Treatment Volume Recovery	
Time (hrs)	32

As demonstrated above and in the attached ICPR reports, the required treatment volume is held within the dry retention pond, and off-site flows are kept at or below the existing flows via the dry retention pond. The stormwater system has been designed to meet applicable County and SFWMD requirements, and will have no adverse effects to the subject property or its neighbors.

Sincerely,

S&ME, Inc.

Jason Bullard, P.E.
Senior Project Manager



PRE-DEVELOPMENT ICPR MODEL

Manual Basin: Pre-10

Scenario: Scenario1
 Node: Boundary-Pre
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 15.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH256
 Peaking Factor: 256.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.7600	Pervious	D	~FLMOD
0.0400	Impervious	D	~FLMOD

Comment:

Node: Boundary-Pre

Scenario: Scenario1
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 64.00 ft
 Warning Stage: 67.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	64.00
0	0	0	72.0000	66.03

Comment:

Simulation: 010YR-072HR

Scenario: Scenario1
 Run Date/Time: 8/28/2018 4:18:47 PM
 Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000

Max Calculation Time: 30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set: Pre

Green-Ampt Set:

Vertical Layers Set:

Impervious Set: Pre

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Manual Basin Rain Opt: Global

Rainfall Name: ~FLMOD

Rainfall Amount: 8.06 in

Storm Duration: 72.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area 100 ft2

(1D):

Energy Switch (1D): Energy

Comment:

Simulation: 025Yr-024Hr

Scenario: Scenario1
 Run Date/Time: 8/28/2018 4:19:22 PM
 Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
 Extern Hydrograph Set:
 Curve Number Set: Pre

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set: Pre

Tolerances & Options

Time Marching: SAOR
 Max Iterations: 6
 Over-Relax Weight 0.5 dec
 Fact:
 dZ Tolerance: 0.0010 ft

IA Recovery Time: 24.0000 hr

 Manual Basin Rain Opt: Global

Max dZ: 1.0000 ft
 Link Optimizer Tol: 0.0001 ft
 Edge Length Option: Automatic

Rainfall Name: ~FLMOD
 Rainfall Amount: 8.50 in
 Storm Duration: 24.0000 hr
 Dflt Damping (1D): 0.0050 ft
 Min Node Srf Area (1D): 100 ft2
 Energy Switch (1D): Energy

Comment:

Simulation: 100Yr-024Hr

Scenario: Scenario1
 Run Date/Time: 8/27/2018 4:45:20 PM
 Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Lookup Tables

Rainfall Folder:

Unit Hydrograph
Folder:

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set: Pre

Green-Ampt Set:

Vertical Layers Set:

Impervious Set: Pre

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Manual Basin Rain Opt: Global

Rainfall Name: ~SFWMD-72

Rainfall Amount: 11.50 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area 100 ft2

(1D):

Energy Switch (1D): Energy

Comment:

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Boundary-Pre	010YR-072HR	67.00	66.03	0.0002	3.06	0.00	0
Boundary-Pre	025Yr-024Hr	67.00	64.68	0.0002	6.91	0.00	0
Boundary-Pre	100Yr-024Hr	67.00	66.03	0.0002	12.80	0.00	0

POST-DEVELOPMENT ICPR MODEL

Manual Basin: Site

Scenario: Scenario1
 Node: Pond-10
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 20.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH323
 Peaking Factor: 323.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.3000	Impervious	D	~FLMOD
0.5000	Pervious	D	~FLMOD

Comment:

Node: Boundary

Scenario: Scenario1
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 64.00 ft
 Warning Stage: 67.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	64.00
0	0	0	72.0000	66.00

Comment:

Node: GWT

Scenario: Scenario1
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 70.00 ft
 Warning Stage: 0.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	9999.0000	0.00

Comment:

Node: Pond-10

Scenario: Scenario1
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 71.00 ft
 Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
71.00	0.0970	4225
71.50	0.1120	4879
72.50	0.1430	6229
73.50	0.1770	7710
74.00	0.1850	8059

Comment:

Drop Structure Link: DS-10

Scenario: Scenario1
 From Node: Pond-10
 To Node: Boundary
 Link Count: 1
 Flow Direction: Both
 Solution: Combine
 Increments: 10
 Pipe Count: 1
 Damping: 0.0000 ft
 Length: 75.00 ft
 FHWA Code: 0
 Entr Loss Coef: 0.00
 Exit Loss Coef: 0.00
 Bend Loss Coef: 0.00
 Bend Location: 0.00 ft
 Energy Switch: Energy

Upstream Pipe

Invert: 63.00 ft
 Manning's N: 0.0130
 Geometry: Circular
 Max Depth: 1.50 ft
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Manning's N: 0.0000
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Manning's N: 0.0000

Downstream Pipe

Invert: 62.00 ft
 Manning's N: 0.0130
 Geometry: Circular
 Max Depth: 1.50 ft
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Manning's N: 0.0000
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Manning's N: 0.0000

Bottom Clip

Top Clip

Pipe Comment:

Weir Component

Weir: 1
 Weir Count: 1
 Weir Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Horizontal
 Geometry Type: Rectangular
 Invert: 73.25 ft
 Control Elevation: 73.25 ft
 Max Depth: 3.00 ft
 Max Width: 4.00 ft
 Fillet: 0.00 ft

Bottom Clip

Default: 0.00 ft
 Op Table:
 Ref Node:

Top Clip

Default: 0.00 ft
 Op Table:
 Ref Node:

Discharge Coefficients

Weir Default: 3.200
 Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment:

Weir Component

Weir: 2
 Weir Count: 1
 Weir Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Sharp Crested Vertical
 Geometry Type: Rectangular
 Invert: 72.16 ft
 Control Elevation: 72.16 ft
 Max Depth: 9999.00 ft
 Max Width: 1.25 ft
 Fillet: 0.00 ft

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 3.200

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment:

Drop Structure Comment:

Percolation Link: POND 10 Perc

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area
From Node:	Pond-10		Table
To Node:	GWT	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	372.00 ft
Flow Direction:	Both	Perimeter 2:	665.00 ft
Aquifer Base Elevation:	66.00 ft	Perimeter 3:	4745.00 ft
Water Table Elevation:	70.00 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	650.00 ft
Horizontal Conductivity:	9.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	6.000 fpd	# of Cells P2 to P3:	65
Fillable Porosity:	0.200		
Layer Thickness:	0.00 ft		

Comment:

Simulation: 100YR-24HR

Scenario: Scenario1
 Run Date/Time: 8/27/2018 2:48:13 PM
 Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set: 1

Green-Ampt Set:

Vertical Layers Set:

Impervious Set: 1

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Manual Basin Rain Opt: Global

Rainfall Name: ~SFWMD-72

Rainfall Amount: 11.50 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area 100 ft2

(1D):
Energy Switch (1D): Energy

Comment:

Simulation: 10YR-72HR

Scenario: Scenario1
Run Date/Time: 8/28/2018 4:23:45 PM
Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1

Tolerances & Options

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 6	
Over-Relax Weight 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Manual Basin Rain Opt: Global
Max dZ: 1.0000 ft	
Link Optimizer Tol: 0.0001 ft	Rainfall Name: ~FLMOD
	Rainfall Amount: 8.06 in
Edge Length Option: Automatic	Storm Duration: 72.0000 hr
	Dflt Damping (1D): 0.0050 ft
	Min Node Srf Area 100 ft2
	(1D):
	Energy Switch (1D): Energy

Comment:

Simulation: 25YR-24HR

Scenario: Scenario1
Run Date/Time: 8/28/2018 4:24:30 PM
Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
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Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set: 1

Green-Ampt Set:

Vertical Layers Set:

Impervious Set: 1

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Manual Basin Rain Opt: Global

Rainfall Name: ~FLMOD

Rainfall Amount: 8.50 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area 100 ft2

(1D):

Energy Switch (1D): Energy

Comment:

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Boundary	100YR-24HR	67.00	66.00	0.0002	11.60	0.00	0
GWT	100YR-24HR	0.00	0.00	0.0000	0.12	0.00	0
Pond-10	100YR-24HR	73.50	73.50	0.0010	13.10	11.73	7703
Boundary	10YR-72HR	67.00	66.00	0.0002	2.81	0.00	0
GWT	10YR-72HR	0.00	0.00	0.0000	0.07	0.00	0
Pond-10	10YR-72HR	73.50	72.95	0.0010	3.29	2.88	6896
Boundary	25YR-24HR	67.00	66.00	0.0002	6.12	0.00	0
GWT	25YR-24HR	0.00	0.00	0.0000	0.13	0.00	0
Pond-10	25YR-24HR	73.50	73.33	0.0010	7.47	6.25	7461

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	0.0000	71.00
Scenario1	10YR-72HR	Pond-10	0.2511	71.00
Scenario1	10YR-72HR	Pond-10	0.5050	71.00
Scenario1	10YR-72HR	Pond-10	0.7527	71.00
Scenario1	10YR-72HR	Pond-10	1.0027	71.00
Scenario1	10YR-72HR	Pond-10	1.2527	71.00
Scenario1	10YR-72HR	Pond-10	1.5027	71.00
Scenario1	10YR-72HR	Pond-10	1.7527	71.00
Scenario1	10YR-72HR	Pond-10	2.0027	71.00
Scenario1	10YR-72HR	Pond-10	2.2527	71.00
Scenario1	10YR-72HR	Pond-10	2.5027	71.00
Scenario1	10YR-72HR	Pond-10	2.7527	71.00
Scenario1	10YR-72HR	Pond-10	3.0027	71.00
Scenario1	10YR-72HR	Pond-10	3.2527	71.00
Scenario1	10YR-72HR	Pond-10	3.5027	71.00
Scenario1	10YR-72HR	Pond-10	3.7527	71.00
Scenario1	10YR-72HR	Pond-10	4.0027	71.00
Scenario1	10YR-72HR	Pond-10	4.2527	71.00
Scenario1	10YR-72HR	Pond-10	4.5027	71.00
Scenario1	10YR-72HR	Pond-10	4.7527	71.00
Scenario1	10YR-72HR	Pond-10	5.0027	71.01
Scenario1	10YR-72HR	Pond-10	5.2527	71.01
Scenario1	10YR-72HR	Pond-10	5.5027	71.01
Scenario1	10YR-72HR	Pond-10	5.7527	71.01
Scenario1	10YR-72HR	Pond-10	6.0027	71.01
Scenario1	10YR-72HR	Pond-10	6.2527	71.02
Scenario1	10YR-72HR	Pond-10	6.5027	71.02
Scenario1	10YR-72HR	Pond-10	6.7527	71.03
Scenario1	10YR-72HR	Pond-10	7.0027	71.03

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	7.2527	71.03
Scenario1	10YR-72HR	Pond-10	7.5027	71.04
Scenario1	10YR-72HR	Pond-10	7.7527	71.04
Scenario1	10YR-72HR	Pond-10	8.0027	71.05
Scenario1	10YR-72HR	Pond-10	8.2527	71.05
Scenario1	10YR-72HR	Pond-10	8.5027	71.06
Scenario1	10YR-72HR	Pond-10	8.7527	71.06
Scenario1	10YR-72HR	Pond-10	9.0027	71.07
Scenario1	10YR-72HR	Pond-10	9.2527	71.07
Scenario1	10YR-72HR	Pond-10	9.5027	71.08
Scenario1	10YR-72HR	Pond-10	9.7527	71.08
Scenario1	10YR-72HR	Pond-10	10.0027	71.09
Scenario1	10YR-72HR	Pond-10	10.2527	71.09
Scenario1	10YR-72HR	Pond-10	10.5027	71.10
Scenario1	10YR-72HR	Pond-10	10.7527	71.11
Scenario1	10YR-72HR	Pond-10	11.0027	71.11
Scenario1	10YR-72HR	Pond-10	11.2527	71.12
Scenario1	10YR-72HR	Pond-10	11.5027	71.13
Scenario1	10YR-72HR	Pond-10	11.7527	71.13
Scenario1	10YR-72HR	Pond-10	12.0027	71.14
Scenario1	10YR-72HR	Pond-10	12.2527	71.14
Scenario1	10YR-72HR	Pond-10	12.5027	71.15
Scenario1	10YR-72HR	Pond-10	12.7527	71.16
Scenario1	10YR-72HR	Pond-10	13.0027	71.17
Scenario1	10YR-72HR	Pond-10	13.2527	71.17
Scenario1	10YR-72HR	Pond-10	13.5027	71.18
Scenario1	10YR-72HR	Pond-10	13.7527	71.19
Scenario1	10YR-72HR	Pond-10	14.0027	71.20
Scenario1	10YR-72HR	Pond-10	14.2527	71.20

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	14.5027	71.21
Scenario1	10YR-72HR	Pond-10	14.7527	71.22
Scenario1	10YR-72HR	Pond-10	15.0027	71.23
Scenario1	10YR-72HR	Pond-10	15.2527	71.24
Scenario1	10YR-72HR	Pond-10	15.5027	71.24
Scenario1	10YR-72HR	Pond-10	15.7527	71.25
Scenario1	10YR-72HR	Pond-10	16.0027	71.26
Scenario1	10YR-72HR	Pond-10	16.2527	71.27
Scenario1	10YR-72HR	Pond-10	16.5027	71.28
Scenario1	10YR-72HR	Pond-10	16.7527	71.29
Scenario1	10YR-72HR	Pond-10	17.0027	71.30
Scenario1	10YR-72HR	Pond-10	17.2527	71.31
Scenario1	10YR-72HR	Pond-10	17.5027	71.31
Scenario1	10YR-72HR	Pond-10	17.7527	71.32
Scenario1	10YR-72HR	Pond-10	18.0027	71.33
Scenario1	10YR-72HR	Pond-10	18.2527	71.34
Scenario1	10YR-72HR	Pond-10	18.5027	71.35
Scenario1	10YR-72HR	Pond-10	18.7527	71.36
Scenario1	10YR-72HR	Pond-10	19.0027	71.37
Scenario1	10YR-72HR	Pond-10	19.2527	71.38
Scenario1	10YR-72HR	Pond-10	19.5027	71.39
Scenario1	10YR-72HR	Pond-10	19.7527	71.40
Scenario1	10YR-72HR	Pond-10	20.0027	71.42
Scenario1	10YR-72HR	Pond-10	20.2527	71.43
Scenario1	10YR-72HR	Pond-10	20.5027	71.44
Scenario1	10YR-72HR	Pond-10	20.7527	71.45
Scenario1	10YR-72HR	Pond-10	21.0027	71.46
Scenario1	10YR-72HR	Pond-10	21.2527	71.47
Scenario1	10YR-72HR	Pond-10	21.5027	71.48

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	21.7527	71.49
Scenario1	10YR-72HR	Pond-10	22.0027	71.51
Scenario1	10YR-72HR	Pond-10	22.2527	71.52
Scenario1	10YR-72HR	Pond-10	22.5027	71.53
Scenario1	10YR-72HR	Pond-10	22.7527	71.55
Scenario1	10YR-72HR	Pond-10	23.0027	71.56
Scenario1	10YR-72HR	Pond-10	23.2527	71.57
Scenario1	10YR-72HR	Pond-10	23.5027	71.58
Scenario1	10YR-72HR	Pond-10	23.7527	71.60
Scenario1	10YR-72HR	Pond-10	24.0027	71.61
Scenario1	10YR-72HR	Pond-10	24.2527	71.62
Scenario1	10YR-72HR	Pond-10	24.5027	71.64
Scenario1	10YR-72HR	Pond-10	24.7527	71.65
Scenario1	10YR-72HR	Pond-10	25.0027	71.67
Scenario1	10YR-72HR	Pond-10	25.2527	71.68
Scenario1	10YR-72HR	Pond-10	25.5027	71.70
Scenario1	10YR-72HR	Pond-10	25.7527	71.71
Scenario1	10YR-72HR	Pond-10	26.0027	71.73
Scenario1	10YR-72HR	Pond-10	26.2527	71.75
Scenario1	10YR-72HR	Pond-10	26.5027	71.76
Scenario1	10YR-72HR	Pond-10	26.7527	71.78
Scenario1	10YR-72HR	Pond-10	27.0027	71.80
Scenario1	10YR-72HR	Pond-10	27.2527	71.82
Scenario1	10YR-72HR	Pond-10	27.5027	71.84
Scenario1	10YR-72HR	Pond-10	27.7527	71.85
Scenario1	10YR-72HR	Pond-10	28.0027	71.87
Scenario1	10YR-72HR	Pond-10	28.2527	71.89
Scenario1	10YR-72HR	Pond-10	28.5027	71.91
Scenario1	10YR-72HR	Pond-10	28.7527	71.93

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	29.0027	71.95
Scenario1	10YR-72HR	Pond-10	29.2527	71.97
Scenario1	10YR-72HR	Pond-10	29.5027	71.99
Scenario1	10YR-72HR	Pond-10	29.7527	72.01
Scenario1	10YR-72HR	Pond-10	30.0027	72.04
Scenario1	10YR-72HR	Pond-10	30.2527	72.06
Scenario1	10YR-72HR	Pond-10	30.5027	72.08
Scenario1	10YR-72HR	Pond-10	30.7527	72.11
Scenario1	10YR-72HR	Pond-10	31.0027	72.14
Scenario1	10YR-72HR	Pond-10	31.2527	72.17
Scenario1	10YR-72HR	Pond-10	31.5027	72.19
Scenario1	10YR-72HR	Pond-10	31.7527	72.21
Scenario1	10YR-72HR	Pond-10	32.0027	72.24
Scenario1	10YR-72HR	Pond-10	32.2527	72.26
Scenario1	10YR-72HR	Pond-10	32.5027	72.27
Scenario1	10YR-72HR	Pond-10	32.7527	72.28
Scenario1	10YR-72HR	Pond-10	33.0027	72.29
Scenario1	10YR-72HR	Pond-10	33.2527	72.30
Scenario1	10YR-72HR	Pond-10	33.5027	72.31
Scenario1	10YR-72HR	Pond-10	33.7527	72.31
Scenario1	10YR-72HR	Pond-10	34.0027	72.32
Scenario1	10YR-72HR	Pond-10	34.2527	72.34
Scenario1	10YR-72HR	Pond-10	34.5027	72.36
Scenario1	10YR-72HR	Pond-10	34.7522	72.40
Scenario1	10YR-72HR	Pond-10	35.0003	72.50
Scenario1	10YR-72HR	Pond-10	35.2522	72.60
Scenario1	10YR-72HR	Pond-10	35.5014	72.69
Scenario1	10YR-72HR	Pond-10	35.7504	72.81
Scenario1	10YR-72HR	Pond-10	36.0016	72.91

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	36.2526	72.95
Scenario1	10YR-72HR	Pond-10	36.5032	72.89
Scenario1	10YR-72HR	Pond-10	36.7522	72.83
Scenario1	10YR-72HR	Pond-10	37.0010	72.76
Scenario1	10YR-72HR	Pond-10	37.2508	72.68
Scenario1	10YR-72HR	Pond-10	37.5001	72.61
Scenario1	10YR-72HR	Pond-10	37.7535	72.55
Scenario1	10YR-72HR	Pond-10	38.0026	72.50
Scenario1	10YR-72HR	Pond-10	38.2554	72.46
Scenario1	10YR-72HR	Pond-10	38.5001	72.43
Scenario1	10YR-72HR	Pond-10	38.7501	72.41
Scenario1	10YR-72HR	Pond-10	39.0001	72.39
Scenario1	10YR-72HR	Pond-10	39.2501	72.37
Scenario1	10YR-72HR	Pond-10	39.5001	72.36
Scenario1	10YR-72HR	Pond-10	39.7501	72.35
Scenario1	10YR-72HR	Pond-10	40.0001	72.34
Scenario1	10YR-72HR	Pond-10	40.2501	72.33
Scenario1	10YR-72HR	Pond-10	40.5001	72.33
Scenario1	10YR-72HR	Pond-10	40.7501	72.32
Scenario1	10YR-72HR	Pond-10	41.0001	72.32
Scenario1	10YR-72HR	Pond-10	41.2501	72.31
Scenario1	10YR-72HR	Pond-10	41.5001	72.31
Scenario1	10YR-72HR	Pond-10	41.7501	72.30
Scenario1	10YR-72HR	Pond-10	42.0001	72.30
Scenario1	10YR-72HR	Pond-10	42.2501	72.30
Scenario1	10YR-72HR	Pond-10	42.5001	72.29
Scenario1	10YR-72HR	Pond-10	42.7501	72.29
Scenario1	10YR-72HR	Pond-10	43.0001	72.29
Scenario1	10YR-72HR	Pond-10	43.2501	72.29

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	43.5001	72.28
Scenario1	10YR-72HR	Pond-10	43.7501	72.28
Scenario1	10YR-72HR	Pond-10	44.0001	72.28
Scenario1	10YR-72HR	Pond-10	44.2501	72.28
Scenario1	10YR-72HR	Pond-10	44.5001	72.27
Scenario1	10YR-72HR	Pond-10	44.7501	72.27
Scenario1	10YR-72HR	Pond-10	45.0001	72.27
Scenario1	10YR-72HR	Pond-10	45.2501	72.27
Scenario1	10YR-72HR	Pond-10	45.5001	72.27
Scenario1	10YR-72HR	Pond-10	45.7501	72.27
Scenario1	10YR-72HR	Pond-10	46.0001	72.26
Scenario1	10YR-72HR	Pond-10	46.2501	72.26
Scenario1	10YR-72HR	Pond-10	46.5001	72.26
Scenario1	10YR-72HR	Pond-10	46.7501	72.26
Scenario1	10YR-72HR	Pond-10	47.0001	72.26
Scenario1	10YR-72HR	Pond-10	47.2501	72.26
Scenario1	10YR-72HR	Pond-10	47.5001	72.26
Scenario1	10YR-72HR	Pond-10	47.7501	72.25
Scenario1	10YR-72HR	Pond-10	48.0001	72.25
Scenario1	10YR-72HR	Pond-10	48.2501	72.25
Scenario1	10YR-72HR	Pond-10	48.5001	72.25
Scenario1	10YR-72HR	Pond-10	48.7501	72.25
Scenario1	10YR-72HR	Pond-10	49.0001	72.25
Scenario1	10YR-72HR	Pond-10	49.2501	72.25
Scenario1	10YR-72HR	Pond-10	49.5001	72.25
Scenario1	10YR-72HR	Pond-10	49.7501	72.25
Scenario1	10YR-72HR	Pond-10	50.0001	72.25
Scenario1	10YR-72HR	Pond-10	50.2501	72.24
Scenario1	10YR-72HR	Pond-10	50.5001	72.24

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	50.7501	72.24
Scenario1	10YR-72HR	Pond-10	51.0001	72.24
Scenario1	10YR-72HR	Pond-10	51.2501	72.24
Scenario1	10YR-72HR	Pond-10	51.5001	72.24
Scenario1	10YR-72HR	Pond-10	51.7501	72.24
Scenario1	10YR-72HR	Pond-10	52.0001	72.24
Scenario1	10YR-72HR	Pond-10	52.2501	72.24
Scenario1	10YR-72HR	Pond-10	52.5001	72.24
Scenario1	10YR-72HR	Pond-10	52.7501	72.24
Scenario1	10YR-72HR	Pond-10	53.0001	72.24
Scenario1	10YR-72HR	Pond-10	53.2501	72.24
Scenario1	10YR-72HR	Pond-10	53.5001	72.23
Scenario1	10YR-72HR	Pond-10	53.7501	72.23
Scenario1	10YR-72HR	Pond-10	54.0001	72.23
Scenario1	10YR-72HR	Pond-10	54.2501	72.23
Scenario1	10YR-72HR	Pond-10	54.5001	72.23
Scenario1	10YR-72HR	Pond-10	54.7501	72.23
Scenario1	10YR-72HR	Pond-10	55.0001	72.23
Scenario1	10YR-72HR	Pond-10	55.2501	72.23
Scenario1	10YR-72HR	Pond-10	55.5001	72.23
Scenario1	10YR-72HR	Pond-10	55.7501	72.23
Scenario1	10YR-72HR	Pond-10	56.0001	72.23
Scenario1	10YR-72HR	Pond-10	56.2501	72.23
Scenario1	10YR-72HR	Pond-10	56.5001	72.23
Scenario1	10YR-72HR	Pond-10	56.7501	72.23
Scenario1	10YR-72HR	Pond-10	57.0001	72.23
Scenario1	10YR-72HR	Pond-10	57.2501	72.23
Scenario1	10YR-72HR	Pond-10	57.5001	72.23
Scenario1	10YR-72HR	Pond-10	57.7501	72.23

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	58.0001	72.23
Scenario1	10YR-72HR	Pond-10	58.2501	72.23
Scenario1	10YR-72HR	Pond-10	58.5001	72.23
Scenario1	10YR-72HR	Pond-10	58.7501	72.23
Scenario1	10YR-72HR	Pond-10	59.0001	72.23
Scenario1	10YR-72HR	Pond-10	59.2501	72.23
Scenario1	10YR-72HR	Pond-10	59.5001	72.23
Scenario1	10YR-72HR	Pond-10	59.7501	72.22
Scenario1	10YR-72HR	Pond-10	60.0001	72.22
Scenario1	10YR-72HR	Pond-10	60.2501	72.22
Scenario1	10YR-72HR	Pond-10	60.5001	72.22
Scenario1	10YR-72HR	Pond-10	60.7501	72.22
Scenario1	10YR-72HR	Pond-10	61.0001	72.22
Scenario1	10YR-72HR	Pond-10	61.2501	72.22
Scenario1	10YR-72HR	Pond-10	61.5001	72.22
Scenario1	10YR-72HR	Pond-10	61.7501	72.22
Scenario1	10YR-72HR	Pond-10	62.0001	72.22
Scenario1	10YR-72HR	Pond-10	62.2501	72.22
Scenario1	10YR-72HR	Pond-10	62.5001	72.22
Scenario1	10YR-72HR	Pond-10	62.7501	72.22
Scenario1	10YR-72HR	Pond-10	63.0001	72.22
Scenario1	10YR-72HR	Pond-10	63.2501	72.22
Scenario1	10YR-72HR	Pond-10	63.5001	72.22
Scenario1	10YR-72HR	Pond-10	63.7501	72.22
Scenario1	10YR-72HR	Pond-10	64.0001	72.22
Scenario1	10YR-72HR	Pond-10	64.2501	72.22
Scenario1	10YR-72HR	Pond-10	64.5001	72.22
Scenario1	10YR-72HR	Pond-10	64.7501	72.22
Scenario1	10YR-72HR	Pond-10	65.0001	72.22

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	65.2501	72.22
Scenario1	10YR-72HR	Pond-10	65.5001	72.22
Scenario1	10YR-72HR	Pond-10	65.7501	72.22
Scenario1	10YR-72HR	Pond-10	66.0001	72.22
Scenario1	10YR-72HR	Pond-10	66.2501	72.22
Scenario1	10YR-72HR	Pond-10	66.5001	72.22
Scenario1	10YR-72HR	Pond-10	66.7501	72.22
Scenario1	10YR-72HR	Pond-10	67.0001	72.22
Scenario1	10YR-72HR	Pond-10	67.2501	72.22
Scenario1	10YR-72HR	Pond-10	67.5001	72.22
Scenario1	10YR-72HR	Pond-10	67.7501	72.22
Scenario1	10YR-72HR	Pond-10	68.0001	72.22
Scenario1	10YR-72HR	Pond-10	68.2501	72.21
Scenario1	10YR-72HR	Pond-10	68.5001	72.21
Scenario1	10YR-72HR	Pond-10	68.7501	72.21
Scenario1	10YR-72HR	Pond-10	69.0001	72.21
Scenario1	10YR-72HR	Pond-10	69.2501	72.21
Scenario1	10YR-72HR	Pond-10	69.5001	72.21
Scenario1	10YR-72HR	Pond-10	69.7501	72.21
Scenario1	10YR-72HR	Pond-10	70.0001	72.21
Scenario1	10YR-72HR	Pond-10	70.2501	72.21
Scenario1	10YR-72HR	Pond-10	70.5001	72.21
Scenario1	10YR-72HR	Pond-10	70.7501	72.21
Scenario1	10YR-72HR	Pond-10	71.0001	72.21
Scenario1	10YR-72HR	Pond-10	71.2501	72.21
Scenario1	10YR-72HR	Pond-10	71.5001	72.21
Scenario1	10YR-72HR	Pond-10	71.7501	72.21
Scenario1	10YR-72HR	Pond-10	72.0001	72.21
Scenario1	10YR-72HR	Pond-10	72.2501	72.20

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	72.5001	72.20
Scenario1	10YR-72HR	Pond-10	72.7501	72.20
Scenario1	10YR-72HR	Pond-10	73.0001	72.19
Scenario1	10YR-72HR	Pond-10	73.2501	72.19
Scenario1	10YR-72HR	Pond-10	73.5001	72.18
Scenario1	10YR-72HR	Pond-10	73.7501	72.18
Scenario1	10YR-72HR	Pond-10	74.0001	72.18
Scenario1	10YR-72HR	Pond-10	74.2501	72.17
Scenario1	10YR-72HR	Pond-10	74.5001	72.17
Scenario1	10YR-72HR	Pond-10	74.7501	72.17
Scenario1	10YR-72HR	Pond-10	75.0001	72.17
Scenario1	10YR-72HR	Pond-10	75.2501	72.16
Scenario1	10YR-72HR	Pond-10	75.5001	72.16
Scenario1	10YR-72HR	Pond-10	75.7501	72.16
Scenario1	10YR-72HR	Pond-10	76.0001	72.16
Scenario1	10YR-72HR	Pond-10	76.2501	72.16
Scenario1	10YR-72HR	Pond-10	76.5001	72.15
Scenario1	10YR-72HR	Pond-10	76.7501	72.15
Scenario1	10YR-72HR	Pond-10	77.0001	72.15
Scenario1	10YR-72HR	Pond-10	77.2501	72.15
Scenario1	10YR-72HR	Pond-10	77.5001	72.15
Scenario1	10YR-72HR	Pond-10	77.7501	72.15
Scenario1	10YR-72HR	Pond-10	78.0001	72.14
Scenario1	10YR-72HR	Pond-10	78.2501	72.14
Scenario1	10YR-72HR	Pond-10	78.5001	72.14
Scenario1	10YR-72HR	Pond-10	78.7501	72.14
Scenario1	10YR-72HR	Pond-10	79.0001	72.14
Scenario1	10YR-72HR	Pond-10	79.2501	72.14
Scenario1	10YR-72HR	Pond-10	79.5001	72.13

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	79.7501	72.13
Scenario1	10YR-72HR	Pond-10	80.0001	72.13
Scenario1	10YR-72HR	Pond-10	80.2501	72.13
Scenario1	10YR-72HR	Pond-10	80.5001	72.13
Scenario1	10YR-72HR	Pond-10	80.7501	72.12
Scenario1	10YR-72HR	Pond-10	81.0001	72.12
Scenario1	10YR-72HR	Pond-10	81.2501	72.12
Scenario1	10YR-72HR	Pond-10	81.5001	72.12
Scenario1	10YR-72HR	Pond-10	81.7501	72.12
Scenario1	10YR-72HR	Pond-10	82.0001	72.12
Scenario1	10YR-72HR	Pond-10	82.2501	72.11
Scenario1	10YR-72HR	Pond-10	82.5001	72.11
Scenario1	10YR-72HR	Pond-10	82.7501	72.11
Scenario1	10YR-72HR	Pond-10	83.0001	72.11
Scenario1	10YR-72HR	Pond-10	83.2501	72.11
Scenario1	10YR-72HR	Pond-10	83.5001	72.11
Scenario1	10YR-72HR	Pond-10	83.7501	72.10
Scenario1	10YR-72HR	Pond-10	84.0001	72.10
Scenario1	10YR-72HR	Pond-10	84.2501	72.10
Scenario1	10YR-72HR	Pond-10	84.5001	72.10
Scenario1	10YR-72HR	Pond-10	84.7501	72.10
Scenario1	10YR-72HR	Pond-10	85.0001	72.10
Scenario1	10YR-72HR	Pond-10	85.2501	72.09
Scenario1	10YR-72HR	Pond-10	85.5001	72.09
Scenario1	10YR-72HR	Pond-10	85.7501	72.09
Scenario1	10YR-72HR	Pond-10	86.0001	72.09
Scenario1	10YR-72HR	Pond-10	86.2501	72.09
Scenario1	10YR-72HR	Pond-10	86.5001	72.09
Scenario1	10YR-72HR	Pond-10	86.7501	72.09

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	87.0001	72.08
Scenario1	10YR-72HR	Pond-10	87.2501	72.08
Scenario1	10YR-72HR	Pond-10	87.5001	72.08
Scenario1	10YR-72HR	Pond-10	87.7501	72.08
Scenario1	10YR-72HR	Pond-10	88.0001	72.08
Scenario1	10YR-72HR	Pond-10	88.2501	72.08
Scenario1	10YR-72HR	Pond-10	88.5001	72.07
Scenario1	10YR-72HR	Pond-10	88.7501	72.07
Scenario1	10YR-72HR	Pond-10	89.0001	72.07
Scenario1	10YR-72HR	Pond-10	89.2501	72.07
Scenario1	10YR-72HR	Pond-10	89.5001	72.07
Scenario1	10YR-72HR	Pond-10	89.7501	72.07
Scenario1	10YR-72HR	Pond-10	90.0001	72.07
Scenario1	10YR-72HR	Pond-10	90.2501	72.06
Scenario1	10YR-72HR	Pond-10	90.5001	72.06
Scenario1	10YR-72HR	Pond-10	90.7501	72.06
Scenario1	10YR-72HR	Pond-10	91.0001	72.06
Scenario1	10YR-72HR	Pond-10	91.2501	72.06
Scenario1	10YR-72HR	Pond-10	91.5001	72.06
Scenario1	10YR-72HR	Pond-10	91.7501	72.05
Scenario1	10YR-72HR	Pond-10	92.0001	72.05
Scenario1	10YR-72HR	Pond-10	92.2501	72.05
Scenario1	10YR-72HR	Pond-10	92.5001	72.05
Scenario1	10YR-72HR	Pond-10	92.7501	72.05
Scenario1	10YR-72HR	Pond-10	93.0001	72.05
Scenario1	10YR-72HR	Pond-10	93.2501	72.05
Scenario1	10YR-72HR	Pond-10	93.5001	72.04
Scenario1	10YR-72HR	Pond-10	93.7501	72.04
Scenario1	10YR-72HR	Pond-10	94.0001	72.04

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]
Scenario1	10YR-72HR	Pond-10	94.2501	72.04
Scenario1	10YR-72HR	Pond-10	94.5001	72.04
Scenario1	10YR-72HR	Pond-10	94.7501	72.04
Scenario1	10YR-72HR	Pond-10	95.0001	72.04
Scenario1	10YR-72HR	Pond-10	95.2501	72.03
Scenario1	10YR-72HR	Pond-10	95.5001	72.03
Scenario1	10YR-72HR	Pond-10	95.7501	72.03
Scenario1	10YR-72HR	Pond-10	96.0001	72.03

POST-DEVELOPMENT PONDS 3.3 MODEL

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

Project Data

Project Name: 7-11 Poinciana
Simulation Description:
Project Number: 527118002
Engineer : GG
Supervising Engineer: JB
Date: 08-28-2018

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 66.00
Water Table Elevation, [WT] (ft datum): 70.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 9.00
Fillable Porosity, [n] (%): 20.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 6.0
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 8070.0

Geometry Data

Equivalent Pond Length, [L] (ft): 274.0
Equivalent Pond Width, [W] (ft): 112.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft²)
71.00	4228.0
72.00	5525.0
73.00	6945.0
74.00	8070.0

Ditch Data

Ditch (or interceptor trench) parallel to length axis is inactive
Ditch (or interceptor trench) parallel to width axis is inactive

Discharge Structures

Discharge Structure #1 is inactive

Discharge Structure #2 is inactive

Discharge Structures (cont'd.)

Discharge Structure #3 is inactive

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

Scenario Input Data

Scenario 1 :: 5878 ft³ slug load

Hydrograph Type: Slug Load
Modflow Routing: Routed with infiltration

Treatment Volume (ft³) 5878

Initial ground water level (ft datum) 70.00 (default)

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

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Modflow Log

MODFLOW CONTROL PARAMETERS

Perimeter boundary condition: constant head

Maximum iterations of outer loop: 150

Maximum iterations of inner loop: 60

Horizontal conductivity within pond: 1000000 (if ground water mound is expected to intersect pond bottom)

Instantaneous storage coefficient: Volumetric balance

Default head closure tolerance: .01

Default residual closure tolerance: .5

Target water budget error: 1

On failure to converge: Rerun limiting inner loop to one iteration

> Maximum number of iterations of outer loop: 500

Running Average Porosity is active

> Starting on pass: 2

> When outer iteration reaches: 50

> Number of data points: 4

Running Average Pond Stage (for discharge structures with tailwater) is active

> Starting on pass: 2

> When outer iteration reaches: 50

> Number of data points: 4

Grid size: 1000 ft (from pond centerline)

Mound Output: none

Begin Scenario 1 8/28/2018 11:53:11

End Scenario 1 8/28/2018 11:53:12

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Detailed Results :: Scenario 1 :: 5878 ft³ slug load

Elapsed Time	Instantaneous Inflow Rate	Outside Recharge	Stage Elevation	Infiltration Rate	Combined Instantaneous Discharge	Cumulative Inflow	Cumulative Infiltration	Combined Cumulative	
0.000	979.6667	0.00000	70.00000	0.00000	0	0.000	0.00000	0	N.A.
0.002	979.6667	0.00000	72.17681	0.40118	0	5878.000	2.40695	0	U/P
2.400	0.0000	0.00000	71.46265	0.28206	0	5878.000	3783.08000	0	U/S
6.000	0.0000	0.00000	71.33101	0.04003	0	5878.000	4407.43100	0	S
12.000	0.0000	0.00000	71.20615	0.02260	0	5878.000	4978.84700	0	S
24.000	0.0000	0.00000	71.05987	0.01041	0	5878.000	5622.54500	0	S
36.000	0.0000	0.00000	70.96851	0.00296	0	5878.000	5878.00000	0	S
48.000	0.0000	0.00000	70.91022	0.00000	0	5878.000	5878.00000	0	S
60.000	0.0000	0.00000	70.86250	0.00000	0	5878.000	5878.00000	0	S
72.000	0.0000	0.00000	70.82224	0.00000	0	5878.000	5878.00000	0	S
84.000	0.0000	0.00000	70.78753	0.00000	0	5878.000	5878.00000	0	S
96.000	0.0000	0.00000	70.75706	----	----	5878.000	5878.00000	0	N.A.

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Summary of Results :: Scenario 1 :: 5878 ft³ slug load

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	70.00		
Maximum	0.002	72.18		
Inflow				
Rate - Maximum - Positive	0.002		979.6667	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	0.002			5878.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			5878.0
Infiltration				
Rate - Maximum - Positive	0.002		0.4012	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	36.000			5878.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			5878.0
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	36.000	70.97		5878.0
72 Hour Stage and Infiltration Volume	72.000	70.82		5878.0

