Appendix B

Wekiva Parkway Section 8 - 15% Line and Grade Plans (Attached)

Appendix C

SJ1 Basin (Wilson Road)
Calculations
Closed Basin

Basin SJ1 Pre-Development Basin Summary

Project:	Wekiva Parkway	**Condition:**	**Pre Development**		
Location:	Seminole	**Date:**	2/9/2016	**Date:**	3/15/2016
		Prepared:	*NEG*	**Checked:**	*AKC*

POND SJ1-S1 BASIN AND RUNOFF VOLUME SUMMARY									
Sub-Basin	**Total Area (ac)**	**Tc (min)**	**CCN**	**Storage S (in) [1]**	**Initial Abstration I (in) [2]**	**Runoff Volume (in) [3,5]**	**Runoff Volume (ac-ft) [4]**	**Runoff Volume (in) [3,6]**	**Runoff Volume (ac-ft) [4]**
						25YR/96HR		**100YR/240HR**	
SJ1-S1	18.26	15	52.8	8.9	1.8	5.3	8.1	10.9	16.6
Wilson Road Sub Basin	131.62	15	63.0	5.9	1.2	6.8	75.1	12.9	142.0

Notes:

1. Watershed Storage (in) = S= (1000/CCN)-10
2. Initial Abstration (in) = I =0.2xS
3. Runoff (in) = Q = (P-I)^2 / (P-I)+S
4. Runoff Volume (ac-ft) =Area x Runoff, Q x (1/12)
5. Rainfall (P) SJRWMD 25 year / 96 hour = 11.8 in
6. Rainfall (P) FDOT 100 year / 240 hour = 18.5 in

Basin SJ1 Pre-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Pre Development**		
Location:	Seminole	**Date:**	2/23/2016	**Date:**	3/15/2016
		Prepared:	*NEG*	**Checked:**	*AKC*

SJ1-S1				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway (paved with open ditches)		0.64	83	53.12
Open Space / Pasture (Fair condition)	A	16.64	49	815.36
Impervious		0.98	98	96.04
SFR >= 1/2 acre lots	A	0	51	0.00
SFR < 1/2 acre lots	A	0	77	0.00
Total		**18.26**		**964.52**

Proposed CN = **52.8**
S=(1000/CN)-10 = **8.9**

Wilson Road Sub Basin				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway (paved with open ditches)		14.45	83	1199.35
Open Space / Pasture (Fair condition)	A	41.69	49	2042.81
Impervious		3.24	98	317.52
SFR >= 1/2 acre lots	A	31.84	51	1623.84
SFR < 1/2 acre lots	A	40.4	77	3110.80
Total		**131.62**		**8294.32**

Proposed CN = **63.0**
S=(1000/CN)-10 = **5.9**

Notes:
1. CN = Sum (CN x Area) / Total Area
2. Reference: FDOT Hydrology Handbook Table T-7
3. SFR = Single Family Residential

Pre-Development Summary Tables

Project:	Wekiva Parkway - Section 8	**Condition:**	**Pre Development**		
Location:	Seminole	**Date:**	2/23/2016	**Date:**	3/15/2016
		Prepared:	*NEG*	**Checked:**	*AKC*

Basin SJ1 Pre-Development Characteristics		
Sub-Basin Name	Area (ac)	CCN
SJ1-S1	18.26	52.8
Wilson Road	131.62	63.0
Total	**149.88**	

Basin SJ1 Pre-Development Routing Results				
Storm Event	Rainfall Distribution	UH Peak Factor	Rainfall Depth (in)	Peak Stage Lake 21 (ft-NAVD)
10-year, 24-hour	Florida Mod.	323	7.5	69.83
25-year, 96-hour	SJRWMD96	323	11.8	70.86
100-year, 240-hour	FDOT-240	323	18.5	72.20

Basin SJ1 Pre-Development Runoff Volume			
Sub-Basin Name	Area (ac)	25YR-96HR (ac-ft) Runoff Volume	100YR-240HR (ac-ft) Runoff Volume
SJ1-S1	18.26	8.1	16.6
Wilson Road	131.62	75.1	142.0
Total	**149.88**	**83.14**	**158.53**

Basin SJ1 Post-Development Basin Summary

Project: Wekiva Parkway
Location: Seminole

Condition: **Post Development**
Date: 2/1/2016 **Date:** 3/15/2016
Prepared: *NEG* **Checked:** *AKC*

POND SJ1-S1 BASIN AND RUNOFF VOLUME SUMMARY									
Sub-Basin	**Total Area (ac)**	**Tc (min)**	**CCN**	**Storage S (in) [5]**	**Initial Abstration I (in) [6]**	**Runoff Volume (in) [3,5]**	**Runoff Volume (ac-ft) [4]**	**Runoff Volume (in) [3,6]**	**Runoff Volume (ac-ft) [4]**
						25YR/96HR		**100YR/240HR**	
SJ1-S1	25.01	15	70.5	4.2	0.8	7.9	16.5	14.3	29.8
Wilson Road East	76.01	15	64.7	5.4	1.1	7.1	45.0	13.3	84.0
Wilson Road West	41.64	15	63.0	5.9	1.2	6.8	23.7	12.9	44.9

Notes:

1. Watershed Storage (in) = S= (1000/CCN)-10
2. Initial Abstration (in) = I =0.2xS
3. Runoff (in) = Q = (P-I)^2 / (P-I)+S
4. Runoff Volume (ac-ft) =Area x Runoff, Q x (1/12)
5. Rainfall (P) SJRWMD 25 year / 96 hour = 11.8 in
6. Rainfall (P) FDOT 100 year / 240 hour = 18.5 in

Post-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post Development**		
Location:	Seminole	**Date:**	2/23/2016	**Date:**	3/15/2016
		Prepared:	*NEG*	**Checked:**	*AKC*

SJ1-S1				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good Condition)	A	11.47	39	447.33
Open Space (Good Condition)	D	0.80	80	64.00
Impervious		10.93	98	1071.14
Water Surface		1.81	100	181.00
Total		**25.01**		**1763.47**

Proposed CN = 70.5
S=(1000/CN)-10 = 4.2

Wilson Road East				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway (paved with open ditches)		9.65	83	800.95
Open Space / Pasture (Fair condition)	A	24.12	49	1181.88
Impervious		4.18	98	409.64
SFR >= 1/2 acre lots	A	15.46	51	788.46
SFR < 1/2 acre lots	A	22.6	77	1740.20
Total		**76.01**		**4921.13**

Proposed CN = 64.7
S=(1000/CN)-10 = 5.4

Wilson Road West				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway (paved with open ditches)		4.50	83	373.50
Open Space / Pasture (Fair condition)	A	7.81	49	382.69
Impervious		0.5	98	49.00
SFR >= 1/2 acre lots	A	15.49	51	789.99
SFR < 1/2 acre lots	A	13.34	77	1027.18
Total		**41.64**		**2622.36**

Proposed CN = 63.0
S=(1000/CN)-10 = 5.9

1. CN = Sum (CN x Area) / Total Area
2. Reference: FDOT Hydrology Handbook Table T-7
3. SFR = Single Family Residential

Water Quality and Volume Summary

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post-Development**		
Location:	Lake	**Date:**	2/9/2016	**Date:**	3/15/206
Sub-Basin:	**SJ1-S-1**	**Prepared:**	*NEG*	**Checked:**	*AKC*

1. Calculate Water Quality Volume per SJRWMD requirements 40C-42 FAC

Provide the greater of one (1) inch of runoff from the entire basin area or 2.5 inches of runoff from the impervious area.

A. Total Drainage Area to SJ1-S-1 =	25.01	ac
B. Tota Drainage Area for Treatment =	25.01	ac
Total Impervious Area =	10.93	ac
*Does not include pond area		
Total Pond Area =	1.81	ac
Total Pervious Area =	12.27	ac

C. Treatment Calculations

1" x Drainage Area =	2.08	ac-ft
2.5" x Imp. Area =	2.28	ac-ft, GOVERNS

2. Calculate the Required Pre -Post Runoff Storage Volume for the 25 year / 96 hour storms and 100 year / 240 hour (Closed Basin Criteria) * See Basin Summary Tables for calculations

	25YR/96HR	**100YR/240HR**	
Pre-Development Runoff Volume =	8.05	16.58	ac-ft
Post-Development Runoff Volume =	16.54	29.77	ac-ft
Pre-Post Runoff Volume =	**8.49**	**13.19**	**ac-ft**
Water Quality Volume =	**2.28**		**ac-ft**
Storage Provided in Pond SJ1-S-1 @ EL. 76.0=	**13.65**		**ac-ft**

Proposed Stage Storage

Project: Wekiva Parkway
Location: Seminole

Date: 3/3/2016
Prepared: *NEG*
Checked: *AKC*

POND SJ1-S-1			
Stage (ft-el)	Area (ac)	Storage (ac-ft)	Remarks
70	1.81	0.00	V-Notch El @ SHGWT
71	1.96	1.89	
72	2.12	3.93	
73	2.27	6.12	
74	2.43	8.47	
75	2.59	10.98	
76	2.75	13.65	Weir Elevation
78.5	3.17	21.05	Low Edge Maint. Berm
79.5	3.82	24.55	High Edge Maint. Berm

PRE - DEVELOPMENT LAKE 21		
Stage (ft-el)	Area (ac)	Storage (ac-ft)
65	1.85	0
66	2.45	2.15
67	2.72	4.74
68	7.91	10.05
69	14.59	21.30
70	31.96	44.58
71	47.22	84.17
72	71.47	**143.51**

POST - DEVELOPMENT LAKE 21*		
Stage (ft-el)	Area (ac)	Storage (ac-ft)
65	1.85	0
66	2.45	2.15
67	2.72	4.74
68	15.52	13.86
69	21.06	32.15
70	34.71	60.03
71	45.30	100.04
72	64.31	**154.84**

Notes:

*Total floodplain compensation volume provided (154.84 ac-ft) is greater than existing floodplain volume (143.51 ac-ft).

Permanent Pool Volume

Project: Wekiva Parkway
Pond: Pond SJ1-S-1
Computed by: *NEG* **Checked by:** *AKC*
Date: 3/3/2016

Wet Season Rainfall	
Month	**Days**
June	30
July	31
August	31
September	30
October	31
Total	**153**

31 " of rainfall over wet season[1]

Permanent Pool Volume			
Depth	**Elevation**	**Area (ac)**	**Volume (ac-ft)**
-6.00	64.00	0.96	0.00
-5.00	65.00	1.10	1.03
-4.00	66.00	1.23	2.20
-3.00	67.00	1.38	3.50
-2.00	68.00	1.52	4.95
-1.00	69.00	1.67	6.55
0.00	70.00	1.81	8.29

RT = PPV/FR where;

RT = Residence Time
PPV = Permanent Pool Volume
FR = Flow Rate

The flow rate is defined as the runoff from the site over the wet period:
FR = Area*C*P/Time

Area (acres)					C	P (in)	Time (days)	FR (ac-ft/day)
Total	**Impervious[2]**	**Woods[2]**	**Business[2]**	**Grass[2]**				
25.01	10.93	0.0	0.0	14.1	0.70	31	153	0.298

PPV required for 14 day residence time: PPV = RT*FR

PPV_{req} = 4.17 Acre-ft

Volume Available = 8.29 Acre-ft sufficient PPV

Volume = 1.99 x PPV_{req}

Notes:
1. Rainfall data from National Climatic Data Center (Long T
2. C = 0.98 for impervious area, 0.15 for wooded area, 0.70 for business and 0.20 for grassed area.
3. Littoral shelf not provided. 1.5x PPV required.

POND SJ1-S1 - Recovery Calculations

Recover 1/2 Treatment Volume in 24-30 Hours
Recover Closed Basin Volume in 14 Days (25YR/96HR)

Orifice Eq: Q = CA(2gH)^0.5; Weir Eq. Q = CLH^1.5

Dimension of Orifice: input units in inches.

Diameter 2.75

Disch C= 0.6
Area sq.ft. = 0.04 =PI()*(B8/24)^2
inflow elev= 70.00
Number Orif 1

Elevation	acres	acre-ft
70.00	1.81	0.00
71.00	1.96	1.89
72.00	2.12	3.93
73.00	2.27	6.12
74.00	2.43	8.47
75.00	2.59	10.98
76.00	2.75	13.65

2.28
then weir crest
71.19
Set weir at 76.0 =13.65 ac-ft
for pre/post vol 13.19 ac-ft

Treatment volume = **2.28** **1.14** =1/2 Treatment Vol.

=IF(A17<$B$7,$B$13*2.5*$B$11*(B17-$B$12)^2.5,(((B17-($B$12+$B$7*0.333))*64.4)^0.5)*$D$7/2*$B$7*0.6) : orifice flow above top of notch

H	Stage	Q (cfs)	Average Q (cfs)	Incremental Vol. (Acre-ft)	Cumulative Vol Recovered (ac-ft)	Time in Sec	Time in Hr.	Total Recovery Time (hours)	Recovery
0.10	70.10	0.02	0.01	0.20	13.39	793133	220.31	845	100/240 Volume
0.21	70.21	0.06	0.04	0.18	13.19	182355	50.65	624	100/240 = 13.19AF
0.30	70.30	0.09	0.07	0.19	13.01	109971	30.55	574	
0.40	70.40	0.11	0.10	0.19	12.82	85701	23.81	543	
0.50	70.50	0.12	0.11	0.38	12.63	143175	39.77	519	
0.70	70.70	0.15	0.14	0.38	12.25	119324	33.15	480	
0.90	70.90	0.18	0.16	0.41	11.88	108380	30.11	446	
1.10	71.10	0.20	0.19	0.41	11.47	95254	26.46	416	
1.30	71.30	0.22	0.21	0.41	11.06	85985	23.88	390	
1.50	71.50	0.23	0.22	0.55	10.65	106636	29.62	366	
1.77	71.77	0.26	0.24	0.27	10.10	47220	13.12	336	
1.90	71.90	0.27	0.26	0.41	9.84	68237	18.95	323	
2.10	72.10	0.28	0.27	0.41	9.43	65194	18.11	304	Recovery 25/96
2.30	72.30	0.29	0.29	0.53	9.02	80581	22.38	286	Volume @ 18.8 days
2.56	72.56	0.31	0.30	0.29	8.49	41183	11.44	264	25/96 = 8.49AF
2.70	72.70	0.32	0.31	0.41	8.20	56428	15.67	252	
2.90	72.90	0.33	0.33	0.47	7.80	62917	17.48	237	
3.10	73.10	0.34	0.34	0.47	7.33	60696	16.86	219	
3.30	73.30	0.35	0.35	0.47	6.86	58695	16.30	202	
3.50	73.50	0.37	0.36	0.47	6.39	56879	15.80	186	
3.70	73.70	0.38	0.37	0.47	5.92	55223	15.34	170	
3.90	73.90	0.39	0.38	0.50	5.45	57359	15.93	155	
4.10	74.10	0.40	0.39	0.50	4.95	55863	15.52	139	
4.30	74.30	0.41	0.40	0.50	4.44	54478	15.13	123	
4.50	74.50	0.42	0.41	0.50	3.94	53191	14.78	108	
4.70	74.70	0.43	0.42	0.50	3.44	51991	14.44	94	
4.90	74.90	0.43	0.43	0.53	2.94	54112	15.03	79	
5.10	75.10	0.44	0.44	0.53	2.40	52992	14.72	64	Recovery
5.30	75.30	0.45	0.45	0.73	1.87	70638	19.62	49	1/2 TV Volume
5.57	75.57	0.46	0.46	0.34	1.14	32497	9.03	30	1/2 TV= 1.14AF
5.70	75.70	0.47	0.47	0.53	0.80	49845	13.85	21	
5.90	75.90	0.48	0.47	0.27	0.27	24561	6.82	7	
6.00	76.00								

Lake 21 Floodplain Stages

Project:	Wekiva Parkway	**Date:**	2/9/2016
Location:	Seminole	**Prepared:**	*NEG*
		Checked:	*AKC*

Lake 21 Floodplain Impact Summary			
Storm Event	Existing Stage (FT)	Proposed Stage (FT)	Difference (FT)
10YR/24HR	69.83	69.11	0.72
25YR/96HR	70.86	70.28	0.58
100YR/240HR	72.20	71.90	0.30

Notes:
Sufficient floodplain compensation provided.

Post-Development Summary Tables

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post Development**		
Location:	Seminole	**Date:**	2/23/2016	**Date:**	3/15/2016
		Prepared:	*NEG*	**Checked:**	*AKC*

Basin SJ1 Post-Development Characteristics		
Sub-Basin Name	Area (ac)	CN
SJ1-S1	25.01	70.5
Wilson Road East	76.01	64.7
Wilson Road West	41.64	63.0
Total	**142.66**	

Basin SJ1 Post-Development Routing Results					
Storm Event	Rainfall Distribution	UH Peak Factor	Rainfall Depth (in)	Pond SJ1-S1 Peak Stage (ft-NAVD)	Lake 21 Peak Stage (ft-NAVD)
10-year, 24-hour	Florida Mod.	323	7.5	74.07	69.11
25-year, 96-hour	SJRWMD96	323	11.8	76.17	70.28
100-year, 240-hour	FDOT-240	323	18.5	77.21	72.20

Basin SJ1 Post-Development Runoff Volume			
Sub-Basin Name	Area (ac)	25YR-96HR (ac-ft) Runoff Volume	100YR-240HR (ac-ft) Runoff Volume
SJ1-S1	25.01	29.8	16.5
Wilson Road East	76.01	84.0	45.0
Wilson Road West	41.64	44.9	23.7
Total	**142.66**	**158.7**	**85.3**

PRE

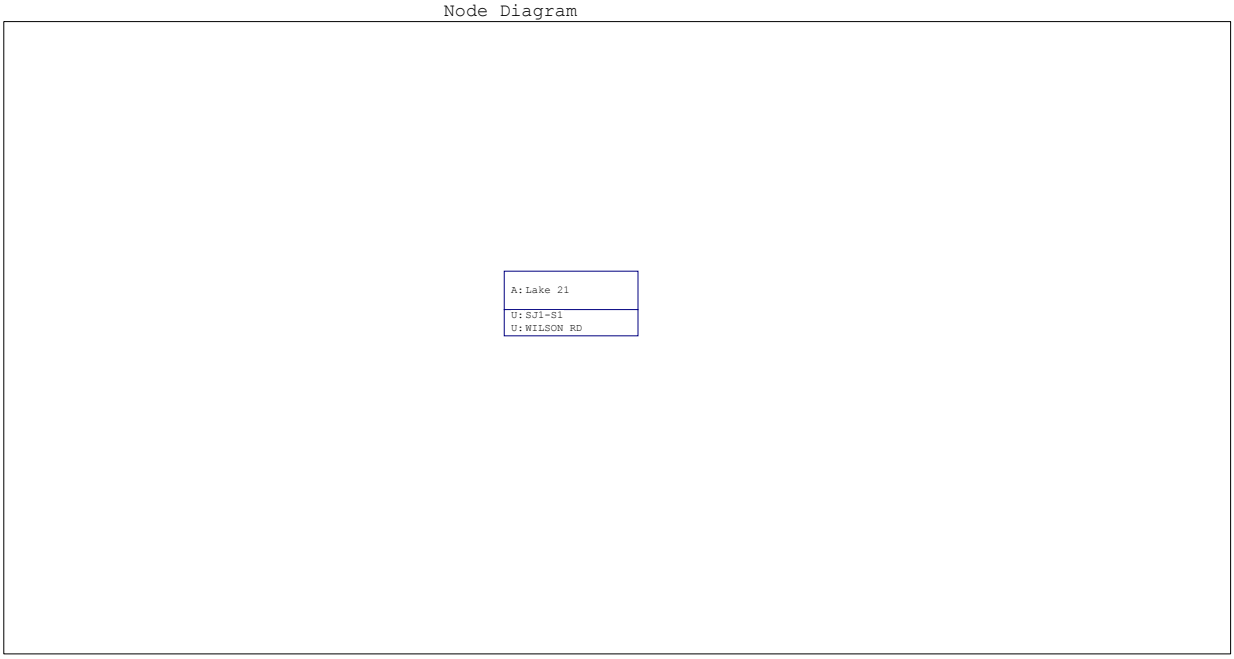
ICPR MODEL

Pre-Development Conditions
Basin SJ1
Node Diagram

Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



Pre-Development Conditions
Basin SJ1
Input Report

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: SJ1-S1                  Node: Lake 21               Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 15.00
              Area(ac): 18.260                Time Shift(hrs): 0.00
          Curve Number: 52.80             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: WILSON RD               Node: Lake 21               Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 15.00
              Area(ac): 131.620               Time Shift(hrs): 0.00
          Curve Number: 63.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



================================================================================
==== Nodes =====================================================================
================================================================================

      Name: Lake 21             Base Flow(cfs): 0.000          Init Stage(ft): 65.000
     Group: BASE                                               Warn Stage(ft): 72.000
      Type: Stage/Area

NATURAL FLOOD AREA

      Stage(ft)        Area(ac)
--------------- ---------------
         65.000          1.8500
         66.000          2.4500
         67.000          2.7200
         68.000          7.9100
         69.000         14.5900
         70.000         31.9600
         71.000         47.2200
         72.000         71.4700

================================================================================
==== Hydrology Simulations =====================================================
================================================================================

         Name: 010YR-024HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\010YR-024HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
    Rainfall Amount(in): 7.50

Time(hrs)       Print Inc(min)
--------------- ---------------
30.000          5.00

--------------------------------------------------------------------------------------------------------
         Name: 025YR-096HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\025YR-096HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 96.00
          Rainfall File: Sjrwmd96
    Rainfall Amount(in): 11.30

Time(hrs)       Print Inc(min)
--------------- ---------------
120.000         5.00

--------------------------------------------------------------------------------------------------------
         Name: 100Y1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y1H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
```

Rainfall Amount(in): 4.50

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 100Y24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 10.60

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 100Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 5.60

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 100Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 6.64

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 100Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y72H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 13.80

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 100Y8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 7.84

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 100YR-240HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100YR-240HR.R32

Override Defaults: Yes
Storm Duration(hrs): 240.00
Rainfall File: Fdot-240
Rainfall Amount(in): 18.50

Time(hrs)	Print Inc(min)
264.000	5.00

Name: 10Y1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.20

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 10Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 3.90

Time(hrs)	Print Inc(min)
4.000	5.00

Name: 10Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 4.60

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 10Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y72H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 9.00

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 10Y8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 5.56

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 25Y1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.70

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 25Y24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.60

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 25Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 4.50

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 25Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 5.30

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 25Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y72H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 10.90

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 25Y8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.32

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 2Y1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 2.40

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 2Y24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 4.75

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 2Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 2.85

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 2Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 3.30

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 2Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y72H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 6.00

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 2Y8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 4.00

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 50Y1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 4.00

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 50Y24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 9.50

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 50Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 50Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 6.00

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 50Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y72H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 12.70

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 50Y8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 7.20

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 5Y1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 2.90

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 5Y24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 6.25

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 5Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 3.40

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 5Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 4.00

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 5Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y72H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 7.60

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 5Y8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 4.72

Time(hrs)	Print Inc(min)
16.000	2.50

==========
==== Routing Simulations ==========
==========

Name: 010YR-024HR Hydrology Sim: 010YR-024HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\010YR-024HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 025YR-096HR Hydrology Sim: 025YR-096HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\025YR-096HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 180.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 100Y1H_R Hydrology Sim: 100Y1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y1H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 2.00

```
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 100Y24H_R           Hydrology Sim: 100Y24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y24H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 100Y2H_R            Hydrology Sim: 100Y2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y2H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 100Y4H_R            Hydrology Sim: 100Y4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y4H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
```

```
         Name: 100Y72H_R           Hydrology Sim: 100Y72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y72H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 100Y8H_R            Hydrology Sim: 100Y8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100Y8H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 10.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 30.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 100YR-240HR         Hydrology Sim: 100YR-240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\100YR-240HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 360.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 10Y1H_R             Hydrology Sim: 10Y1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y1H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
```

999.000	5.000

Group	Run
BASE	Yes

Name: 10Y2H_R Hydrology Sim: 10Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y2H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 4.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 10Y4H_R Hydrology Sim: 10Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y4H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 8.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 10Y72H_R Hydrology Sim: 10Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y72H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 80.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	60.000

Group	Run
BASE	Yes

Name: 10Y8H_R Hydrology Sim: 10Y8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\10Y8H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

```
        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 16.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
         Name: 25Y1H_R            Hydrology Sim: 25Y1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y1H_R.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
         Name: 25Y24H_R           Hydrology Sim: 25Y24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y24H_R.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
30.000          15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
         Name: 25Y2H_R            Hydrology Sim: 25Y2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y2H_R.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes
```

```
         Name: 25Y4H_R             Hydrology Sim: 25Y4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y4H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes
```

```
         Name: 25Y72H_R            Hydrology Sim: 25Y72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y72H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes
```

```
         Name: 25Y8H_R             Hydrology Sim: 25Y8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\25Y8H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 16.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes
```

```
         Name: 2Y1H_R              Hydrology Sim: 2Y1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y1H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:
```

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 2Y24H_R Hydrology Sim: 2Y24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y24H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 2Y2H_R Hydrology Sim: 2Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y2H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 4.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 2Y4H_R Hydrology Sim: 2Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y4H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 8.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 2Y72H_R Hydrology Sim: 2Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y72H_R.I32

```
     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 80.00
    Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: 2Y8H_R             Hydrology Sim: 2Y8H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\2Y8H_R.I32

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 16.00
    Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: 50Y1H_R            Hydrology Sim: 50Y1H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y1H_R.I32

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 2.00
    Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: 50Y24H_R           Hydrology Sim: 50Y24H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y24H_R.I32

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 30.00
    Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000
```

Group	Run
BASE	Yes

Name: 50Y2H_R Hydrology Sim: 50Y2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y2H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 4.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 50Y4H_R Hydrology Sim: 50Y4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y4H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 8.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 50Y72H_R Hydrology Sim: 50Y72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y72H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 80.00
Min Calc Time(sec): 0.0250 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	60.000

Group	Run
BASE	Yes

Name: 50Y8H_R Hydrology Sim: 50Y8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\50Y8H_R.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 16.00

```
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5Y1H_R              Hydrology Sim: 5Y1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y1H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5Y24H_R             Hydrology Sim: 5Y24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y24H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5Y2H_R              Hydrology Sim: 5Y2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y2H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
```

```
         Name: 5Y4H_R              Hydrology Sim: 5Y4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y4H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5Y72H_R             Hydrology Sim: 5Y72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y72H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5Y8H_R              Hydrology Sim: 5Y8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Existing\5Y8H_R.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 16.00
     Min Calc Time(sec): 0.0250              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes
```

Pre-Development Conditions
Basin SJ1
Basin Max Report

Simulation	Basin	Group	Time Max hrs	Flow Max cfs	Volume in	Volume ft3
010YR-024HR	SJ1-S1	BASE	12.10	25.17	2.228	147673
025YR-096HR	SJ1-S1	BASE	60.07	51.88	4.906	325170
100Y1H	SJ1-S1	BASE	0.80	22.25	0.632	41863
100Y24H	SJ1-S1	BASE	12.03	9.60	4.376	290079
100Y2H	SJ1-S1	BASE	0.93	20.67	1.140	75572
100Y4H	SJ1-S1	BASE	2.57	21.11	1.708	113199
100Y72H	SJ1-S1	BASE	60.00	9.61	6.890	456682
100Y8H	SJ1-S1	BASE	4.07	24.78	2.444	162017
100YR-240HR	SJ1-S1	BASE	184.00	9.78	10.893	722002
10Y1H	SJ1-S1	BASE	0.87	7.30	0.193	12774
10Y2H	SJ1-S1	BASE	1.10	6.46	0.404	26767
10Y4H	SJ1-S1	BASE	2.60	8.68	0.673	44624
10Y72H	SJ1-S1	BASE	60.00	5.08	3.222	213551
10Y8H	SJ1-S1	BASE	4.07	11.05	1.120	74227
25Y1H	SJ1-S1	BASE	0.83	12.34	0.337	22343
25Y24H	SJ1-S1	BASE	12.03	6.32	2.947	195359
25Y2H	SJ1-S1	BASE	1.07	10.59	0.632	41862
25Y4H	SJ1-S1	BASE	2.60	12.62	0.991	65691
25Y72H	SJ1-S1	BASE	60.00	6.85	4.602	305010
25Y8H	SJ1-S1	BASE	4.07	15.33	1.525	101106
2Y1H	SJ1-S1	BASE	0.90	1.66	0.039	2601
2Y24H	SJ1-S1	BASE	15.03	1.47	0.738	48887
2Y2H	SJ1-S1	BASE	1.53	1.79	0.113	7479
2Y4H	SJ1-S1	BASE	3.03	3.37	0.219	14507
2Y72H	SJ1-S1	BASE	60.00	2.45	1.350	89457
2Y8H	SJ1-S1	BASE	4.10	3.70	0.439	29099
50Y1H	SJ1-S1	BASE	0.83	15.80	0.439	29099
50Y24H	SJ1-S1	BASE	12.03	7.76	3.573	236856
50Y2H	SJ1-S1	BASE	0.97	14.78	0.849	56304
50Y4H	SJ1-S1	BASE	2.57	16.91	1.350	89458
50Y72H	SJ1-S1	BASE	60.00	8.56	6.001	397753
50Y8H	SJ1-S1	BASE	4.07	20.68	2.042	135340
5Y1H	SJ1-S1	BASE	0.87	4.83	0.123	8160
5Y24H	SJ1-S1	BASE	12.07	2.91	1.486	98519
5Y2H	SJ1-S1	BASE	1.27	3.69	0.246	16333
5Y4H	SJ1-S1	BASE	3.03	6.03	0.439	29099
5Y72H	SJ1-S1	BASE	60.00	3.82	2.291	151852
5Y8H	SJ1-S1	BASE	4.07	6.80	0.724	48023

Pre-Development Conditions
Basin SJ1
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
Lake 21	BASE	010YR-024HR	25.26	69.83	72.00	0.0050	1263639	12.08	310.70	0.00	0.00
Lake 21	BASE	025YR-096HR	97.25	70.86	72.00	0.0050	1965471	60.08	521.67	0.00	0.00
Lake 21	BASE	100YR-240HR	241.25	72.20	72.00	0.0050	3328501	183.92	86.58	0.00	0.00

POST

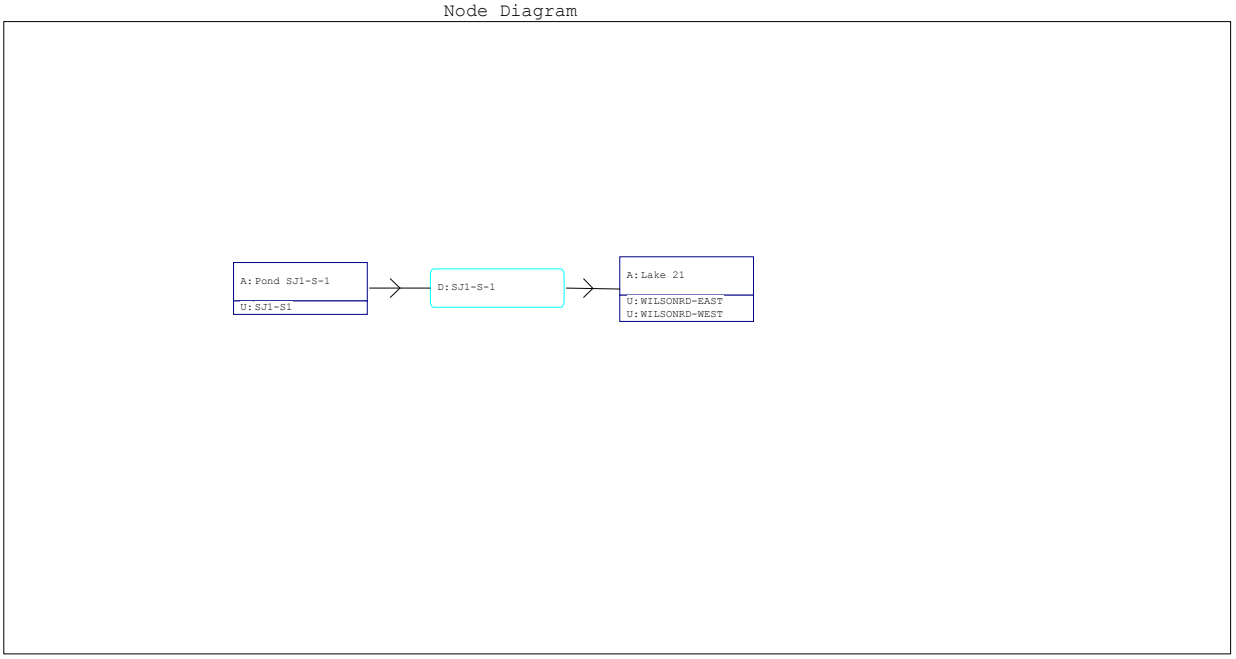
ICPR MODEL

Post Development
Basin SJ1
Node Diagram

Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



Post Development
Basin SJ1
Input Report

==========
==== Basins ==========
==========

Name: SJ1-S1 Node: Pond SJ1-S-1 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 15.00
Area(ac): 25.010 Time Shift(hrs): 0.00
Curve Number: 72.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: WILSONRD-EAST Node: Lake 21 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 15.00
Area(ac): 76.010 Time Shift(hrs): 0.00
Curve Number: 64.70 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: WILSONRD-WEST Node: Lake 21 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 15.00
Area(ac): 41.640 Time Shift(hrs): 0.00
Curve Number: 63.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: Lake 21 Base Flow(cfs): 0.000 Init Stage(ft): 65.000
Group: BASE Warn Stage(ft): 72.360
Type: Stage/Area

Stage(ft)	Area(ac)
65.000	1.8500
66.000	2.4500
67.000	2.7200
68.000	15.5200
69.000	21.0600
70.000	34.7100
71.000	45.3000
72.000	64.3100

Name: Pond SJ1-S-1 Base Flow(cfs): 0.000 Init Stage(ft): 70.000
Group: BASE Warn Stage(ft): 77.500
Type: Stage/Area

Stage(ft)	Area(ac)
70.000	1.8100
71.000	1.9600
72.000	2.1200
73.000	2.2700
74.000	2.4300
75.000	2.5900
76.000	2.7500
78.500	3.1700
79.500	3.8200

==========
==== Drop Structures ==========
==========

```
        Name: SJ1-S-1             From Node: Pond SJ1-S-1       Length(ft): 300.00
       Group: BASE                  To Node: Lake 21                Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
    Geometry: Circular       Circular                 Solution Algorithm: Most Restrictive
    Span(in): 18.00          18.00                                Flow: Both
    Rise(in): 18.00          18.00                  Entrance Loss Coef: 0.500
  Invert(ft): 70.000         69.000                     Exit Loss Coef: 1.000
 Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000          0.000                       Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


*** Weir 1 of 3 for Drop Structure SJ1-S-1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 2.800
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 37.00                       Invert(ft): 77.500
              Rise(in): 49.00                  Control Elev(ft): 77.500

*** Weir 2 of 3 for Drop Structure SJ1-S-1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 30.00                       Invert(ft): 76.000
              Rise(in): 18.00                  Control Elev(ft): 76.000

*** Weir 3 of 3 for Drop Structure SJ1-S-1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular              Orifice Disc Coef: 0.600

              Span(in): 2.75                        Invert(ft): 70.000
              Rise(in): 2.75                   Control Elev(ft): 70.000


================================================================================
==== Hydrology Simulations =====================================================
================================================================================

         Name: 010YR-024HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Proposed\010YR-024HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
    Rainfall Amount(in): 7.50

Time(hrs)       Print Inc(min)
--------------- ---------------
30.000          5.00

------------------------------------------------------------------------------------------------------
         Name: 025YR-096HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Proposed\025YR-096HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 96.00
          Rainfall File: Sjrwmd96
    Rainfall Amount(in): 11.30

Time(hrs)       Print Inc(min)
--------------- ---------------
120.000         5.00

------------------------------------------------------------------------------------------------------
         Name: 100YR-240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Proposed\100YR-240HR.R32

      Override Defaults: Yes
```

```
    Storm Duration(hrs): 240.00
          Rainfall File: Fdot-240
    Rainfall Amount(in): 18.50

Time(hrs)       Print Inc(min)
--------------- ---------------
264.000         5.00

================================================================================
==== Routing Simulations ======================================================
================================================================================

         Name: 010YR-024HR         Hydrology Sim: 010YR-024HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Proposed\010YR-024HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


--------------------------------------------------------------------------------------------------------
         Name: 025YR-096HR         Hydrology Sim: 025YR-096HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Proposed\025YR-096HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 192.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


--------------------------------------------------------------------------------------------------------
         Name: 100YR-240HR         Hydrology Sim: 100YR-240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Pond SJ1-S-1\ICPR\Proposed\100YR-240HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 340.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes
```

Post Development
Basin SJ1
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
Lake 21	BASE	010YR-024HR	47.99	69.11	72.36	0.0050	980179	12.08	265.84	0.00	0.00
Lake 21	BASE	025YR-096HR	192.00	70.28	72.36	0.0042	1641147	60.08	429.93	0.00	0.00
Lake 21	BASE	100YR-240HR	340.00	71.90	72.36	0.0050	2719891	183.99	79.87	0.00	0.00
Pond SJ1-S-1	BASE	010YR-024HR	24.44	74.07	77.50	0.0031	106323	12.08	72.93	24.44	0.39
Pond SJ1-S-1	BASE	025YR-096HR	96.08	76.17	77.50	0.0050	121055	60.00	105.20	96.08	1.05
Pond SJ1-S-1	BASE	100YR-240HR	184.20	77.21	77.50	0.0050	128648	183.92	15.34	184.19	10.97

Appendix D

Lake Sten Basin Calculations
Closed Basin

Lake Sten & Borrow Pit Pre-Development Basin Summary

Project: Wekiva Parkway - Section 8
Location: Seminole

Condition: **Pre Development**
Date: 1/21/2016 **Date:** 3/5/2016
Prepared: *CLT* **Checked:** *AKC*

LAKE STEN Basin and Runoff Volume Summary											
Basin	**Total Area (ac)**	**Pervious (ac)**	**Impervious (ac)**	**Tc (min)**	**CCN**	**Storage S (in) [1]**	**Initial Abstraction I (in) [2]**	**25yr-96hr Runoff (in) [3]**	**25yr-96hr Runoff Volume (ac-ft) [4,5]**	**100yr-240hr Runoff (in) [3]**	**100yr-240hr Runoff Volume (ac-ft) [4,6]**
To Borrow Pit Pond											
Borrow Pit	36.30	26.50	9.80	35	51.3	9.5	1.9	5.1	15.3	10.6	32.0
To Lake Sten Direct											
Lake Sten	28.32	14.51	13.81	15	66.4	5.1	1.0	7.3	17.3	13.6	32.0
Offsite-S	4.49	4.49	0.00	32	33.0	20.3	4.1	2.1	0.8	6.0	2.2
SJ2-S1 (Offsite-W)	11.92	11.92	0.00	32	32.6	20.7	4.1	2.1	2.1	5.9	5.8
To Pond A then Lake Sten											
Basin A	2.26	2.26	0.00	15	59.3	6.9	1.4	6.3	1.2	12.2	2.3
To Pond 2 or Apartment Pond then Lake Sten											
Basin 2*	17.03	6.44	10.59	30	75.5	3.2	0.6	8.6	12.3	15.1	21.4
Offsite 1*	24.84	23.93	0.91	35	31.9	21.3	4.3	2.0	4.1	5.7	11.8
E1**	1.07	-	-	10	72.6	3.8	0.8	8.2	0.7	14.6	1.3
E2**	1.66	-	-	10	72.6	3.8	0.8	8.2	1.1	14.6	2.0
Pointe-E**	7.46	-	-	15	73.7	3.6	0.7	8.4	5.2	14.8	9.2
Pointe-W*	8.57	-	-	15	72.6	3.8	0.8	8.2	5.9	14.6	10.5
W1*	1.06	-	-	10	72.6	3.8	0.8	8.2	0.7	14.6	1.3
W2*	2.76	-	-	10	72.6	3.8	0.8	8.2	1.9	14.6	3.4
W3*	0.37	-	-	10	72.6	3.8	0.8	8.2	0.3	14.6	0.5
To Trues Lake [9]											
Trues Lake	51.21	49.35	1.86	87.8	36.5	17.4	3.5	2.7	11.5	-	-

Notes:

1. Watershed Storage (in) = S= (1000/CN)-10
2. Initial Abstraction (in) = I =0.2xS
3. Runoff (in) = Q = (P-I)^2 / (P-I)+S
4. Runoff Volume (ac-ft) =Area x Runoff, Q x (1/12)
5. Rainfall (P) SJRWMD 25 year / 96 hour = 11.8 in
6. Rainfall (P) FDOT 100 year / 240 hour = 18.5 in
7. Pre development Trues Lake Basin with updated CCN and rainfall depth for 25YR/96HR event.
8. Basin E1, E2, Pointe-E, Pointe-W, W1, W2, and W3 taken from exsting SJRWMD permit #72228-1
9. Trues Lake basin shown to establish pre-development runoff volume for the 25YR/96HR storm. Taken from SJRWMD Permit #22295-3. Trues Lake is now Pond 2. Not shown on drainage maps

* To Pond 2, ** To Apartment Pond

Borrow Pit Pond Pre-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Pre Development**		
Location:	Seminole	**Date:**	1/21/2016	**Date:**	3/5/2016
		Prepared:	*CLT*	**Checked:**	*AKC*

Borrow Pit				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space / Pasture (Fair condition)	A	5.00	39	195.00
Lake Surface @ El 65.0 (NWL)		9.80	100	980.00
Woods (Good Cover)	A	21.50	32	688.00
Total		**36.30**		**1863.00**

Proposed CN = 51.3
S=(1000/CN)-10 = 9.5

Notes:
1. CN = Sum (CN x Area) / Total Area

Lake Sten Pre-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Pre Development**		
Location:	Seminole	**Date:**	1/21/2016	**Date:**	3/5/2016
		Prepared:	*CLT*	**Checked:**	*AKC*

Lake Sten				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		0.19	98	18.62
Open Space / Pasture (Good condition)	A	5.14	39	200.46
Lake Surface @ El 65.0 (NWL)		13.62	100	1362.00
Woods (Good Cover)	A	9.37	32	299.84
Total		**28.32**		**1880.92**

Proposed CN = **66.4**
S=(1000/CN)-10 = **5.1**

Offsite-S (drains under SR 417 Ramps to Lake Sten)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good condition)	A	0.63	39	24.57
Woods (Good Cover)	A	3.86	32	123.52
Total		**4.49**		**148.09**

Proposed CN = **33.0**
S=(1000/CN)-10 = **20.3**

Basin SJ2-S1 (Offsite-W) (drains under Intl. Pkwy. to Lake Sten)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good condition)	A	1	39	39.00
Woods (Good Cover)	A	10.92	32	349.44
Total		**11.92**		**388.44**

Proposed CN = **32.6**
S=(1000/CN)-10 = **20.7**

Notes:
1. CN = Sum (CN x Area) / Total Area

Basin A Pre-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Pre Development**		
Location:	Seminole	**Date:**	1/21/2016	**Date:**	3/5/2016
		Prepared:	*CLT*	**Checked:**	*AKC*

Basin A (To SR 417 Ramps Pond A)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Wood Grass Comb. (Good Cover)	A	0.72	32	23.04
Dirt	A	1.54	72	110.88
Total		**2.26**		**133.92**

Proposed CN = **59.3**
S=(1000/CN)-10 = **6.9**

Notes:

1. CN = Sum (CN x Area) / Total Area
2. Pre Development characteristics taken from pre development calcs for the SR417/International Parkway Project. SJRWMD Permit No. 40-117-22514-7 (2009 submittal)

Basin 2 Pre-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Pre Development**		
Location:	Seminole	**Date:**	1/21/2016	**Date:**	3/5/2016
		Prepared:	*CLT*	**Checked:**	*AKC*

Basin 2 (To Pond 2)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		6.33	98	620.34
Open Space (Good condition)	A	4.83	39	188.37
Pond Surface (Pond 2)		4.26	100	426.00
Woods (Good Cover)	A	0.56	32	17.92
Wood Grass Comb. (Good Cover)	A	1.05	32	33.60
Total		**17.03**		**1286.23**

Proposed CN = **75.5**
S=(1000/CN)-10 = **3.2**

Offsite (To Pond 2)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		0.21	98	20.58
Impervious		0.70		
Open Space (Good condition)	A	1.00	39	39.00
Woods (Good Cover)	A	22.93	32	733.76
Total		**24.84**		**793.34**

Proposed CN = **31.9**
S=(1000/CN)-10 = **21.3**

Trues Lake [4]				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Impervious Area		0.51	98	49.98
Pond Surface (Trues Lake)		1.35	100	135.00
Pasture, grassland (Good Cover)	A	14.98	39	584.22
Wood Grass Comb. (Good Cover)	A	34.37	32	1099.84
Total		**51.21**		**1869.04**

Proposed CN = **36.5**
S=(1000/CN)-10 = **17.4**

Notes:

1. CN = Sum (CN x Area) / Total Area
2. Pre Development characteristics taken from post development calcs for the SR417/International Parkway Project. SJRWMD Permit No. 40-117-22514-7 (2008 submittal) and the Grantline Road (International Parkway) permit 4-117-22295-3
3. Hydrologic Soils Groups (HSG) have been re-classified since the original project submittals. Therefore, the calculations have been updated with the re-classified HSG groupings, survey land use, and associated CN's, based on the Land Use vs. CN tables included in TR-55
4. Trues Lake CCN revised per note 3 to re-establish pre condition for this project.

Lake Sten & Borrow Pit Post-Development Basin Summary

Project: Wekiva Parkway - Section 8
Location: Seminole

Condition: **Post Development**
Date: 2/26/2016 **Date:** 3/17/2016
Prepared: *AKC* **Checked:** *SPW*

LAKE STEN Basin and Runoff Volume Summary

Basin	Total Area (ac)	Pervious (ac)	Impervious (ac)	Tc (min)	CCN	Storage S (in) [1]	Initial Abstraction I (in) [2]	25yr-96hr Runoff (in) [3]	25yr-96hr Runoff Volume (ac-ft) [4,5]	100yr-240hr Runoff (in) [3]	100yr-240hr Runoff Volume (ac-ft) [4,6]
To Borrow Pit Pond											
Borrow Pit[1]	-	-	-	-	-	-	-	-	-	-	-
To Lake Sten Direct											
Lake Sten	9.67	3.28	6.39	15	79.2	2.6	0.5	9.1	7.4	15.7	12.6
FP-SJ2	28.02	15.79	12.23	15	65.6	5.2	1.0	7.2	16.9	13.4	31.3
Offsite-S	4.18	4.18	0.00	32	32.5	20.7	4.1	2.1	0.7	5.9	2.0
To Pond SJ2-S1											
SJ2-S1 (Offsite-W)	19.92	7.95	11.97	32	74.8	3.4	0.7	8.5	14.2	15.0	24.9
To Pond SJ2-S2											
SJ2-S2	6.47	5.22	1.25	20	50.5	9.8	2.0	4.9	2.7	10.4	5.6
To Pond A then Lake Sten											
Basin A	3.03	1.44	1.59	15	70.0	4.3	0.9	7.9	2.0	14.2	3.6
To Pond 2 or Apartment Pond then Lake Sten											
Basin 2*	16.99	5.65	11.34	30	78.5	2.7	0.5	9.1	12.8	15.6	22.1
Offsite 1*	24.84	23.93	0.91	35	31.9	21.3	4.3	2.0	4.1	5.7	11.8
E1**	1.07	-	-	10	72.6	3.8	0.8	8.2	0.7	14.6	1.3
E2**	1.66	-	-	10	72.6	3.8	0.8	8.2	1.1	14.6	2.0
Pointe-E**	7.46	-	-	15	73.7	3.6	0.7	8.4	5.2	14.8	9.2
Pointe-W*	8.57	-	-	15	72.6	3.8	0.8	8.2	5.9	14.6	10.5
W1*	1.06	-	-	10	72.6	3.8	0.8	8.2	0.7	14.6	1.3
W2*	2.76	-	-	10	72.6	3.8	0.8	8.2	1.9	14.6	3.4
W3*	0.37	-	-	10	72.6	3.8	0.8	8.2	0.3	14.6	0.5

Notes:

1. Watershed Storage (in) = S= (1000/CN)-10
2. Initial Abstraction (in) = I =0.2xS
3. Runoff (in) = Q = (P-I)^2 / (P-I)+S
4. Runoff Volume (ac-ft) =Area x Runoff, Q x (1/12)
5. Rainfall (P) SJRWMD 25 year / 96 hour = 11.8 in
6. Rainfall (P) FDOT 100 year / 240 hour = 18.5 in
7. Borrow Pit Basin has been combined with floodplain compensation for Lake Sten.
8. Basin E1, E2, Pointe-E, Pointe-W, W1, W2, and W3 taken from exsting SJRWMD permit #72228-1

* To Pond 2, ** To Apartment Pond

Lake Sten Post-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post Development**		
Location:	Seminole	**Date:**	2/26/2016	**Date:**	3/17/2016
		Prepared:	*AKC*	**Checked:**	*SPW*

Lake Sten				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		0.56	98	54.88
Open Space (Good condition)	A	3.28	39	127.92
Lake Surface @ EL 65.0 (NWL)		5.83	100	583.00
Total		**9.67**		**765.80**

Proposed CN = 79.2
S=(1000/CN)-10 = 2.6

FP-SJ2				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		0.00	98	0.00
Open Space (Good condition)	A	15.79	39	615.81
Lake Surface @ EL 65.0 (NWL)		12.23	100	1223.00
Total		**28.02**		**1838.81**

Proposed CN = 65.6
S=(1000/CN)-10 = 5.2

Offsite-S (drains under SR 417 Ramps to Lake Sten)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good condition)	A	0.32	39	12.48
Woods (Good Cover)	A	3.86	32	123.52
Total		**4.18**		**136.00**

Proposed CN = 32.5
S=(1000/CN)-10 = 20.7

Basin SJ2-S1 (Offsite-W)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good condition)	A	7.95	39	310.05
Pond Surface @ EL 73.0		3.63	100	363.00
Roadway		8.34	98	817.32
Total		**19.92**		**1490.37**

Proposed CN = 74.8
S=(1000/CN)-10 = 3.4

Basin SJ2-S2				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good condition)	A	5.22	39	203.58
Pond Surface @ EL 73.0		0.44	100	44.00
Roadway		0.81	98	79.38
Total		**6.47**		**326.96**

Proposed CN = 50.5
S=(1000/CN)-10 = 9.8

Notes:
1. CN = Sum (CN x Area) / Total Area

Basin A Post-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post Development**		
Location:	Seminole	**Date:**	2/26/2016	**Date:**	3/17/2016
		Prepared:	*AKC*	**Checked:**	*SPW*

Basin A (To SR 417 Ramps Pond A)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		1.59	98	155.82
Open Space (Good Cover)	A	1.44	39	56.16
Total		**3.03**		**211.98**

Proposed CN = **70.0**
S=(1000/CN)-10 = **4.3**

Notes:

1. CN = Sum (CN x Area) / Total Area

Basin 2 Post-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post Development**		
Location:	Seminole	**Date:**	2/26/2016	**Date:**	3/17/2016
		Prepared:	*AKC*	**Checked:**	*SPW*

Basin 2 (To Pond 2)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		7.08	98	693.84
Open Space (Good condition)	A	4.84	39	188.76
Pond Surface (Pond 2)		4.26	100	426.00
Woods (Good Cover)	A	0.81	32	25.92
Wood Grass Comb. (Good Cover)	A	0.00	32	0.00
Total		**16.99**		**1334.52**

Proposed CN = **78.5**
S=(1000/CN)-10 = **2.7**

Offsite 1 (To Pond 2)				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		0.21	98	20.58
Impervious		0.70		
Open Space (Good condition)	A	1.00	39	39.00
Woods (Good Cover)	A	22.93	32	733.76
Total		**24.84**		**793.34**

Proposed CN = **31.9**
S=(1000/CN)-10 = **21.3**

Notes:

1. CN = Sum (CN x Area) / Total Area

Water Quality and Volume Summary

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post-Development**		
Location:	Seminole	**Date:**	3/2/2016	**Date:**	3/17/206
Basin:	**SJ2-S1**	**Prepared:**	*AKC*	**Prepared:**	*SPW*

1. Calculate Water Quality Volume per SJRWMD requirements 40C-42 FAC

Provide the greater of one (1) inch of runoff from the entire basin area or 2.5 inches of runoff from the impervious area.

A. Total Drainage Area to SJ2-S1 =	19.92	ac
B. Total Drainage Area for Treatment =	19.92	ac
Total Impervious Area =	8.34	ac
*Does not include pond area		
Pond Area =	3.63	ac
Total Pervious Area =	7.95	ac

C. Treatment Calculations

1" x Drainage Area =	1.66	ac-ft
2.5" x Impervious Area =	1.74	ac-ft, GOVERNS

2. Calculate the Required Pre -Post Runoff Storage Volume for the 25 year / 96 hour storms and 100 year / 240 hour (Closed Basin Criteria) * See Basin Summary Tables for calculations

	25YR/96HR	**100YR/240HR**	
Pre-Development Runoff Volume =	2.06	5.85	ac-ft
Post-Development Runoff Volume =	14.18	24.89	ac-ft
Pre-Post Runoff Volume =	**12.12**	**19.05**	**ac-ft**
Water Quality Volume =	**1.74**		**ac-ft**
Storage Provided in Pond SJ2-S1=	**19.11**		**ac-ft**

Water Quality and Volume Summary

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post-Development**		
Location:	Seminole	**Date:**	3/2/2016	**Date:**	3/17/206
Basin:	**SJ2-S2**	**Prepared:**	*AKC*	**Prepared:**	*SPW*

1. Calculate Water Quality Volume per SJRWMD requirements 40C-42 FAC

Provide the greater of one (1) inch of runoff from the entire basin area or 2.5 inches of runoff from the impervious area.

A. Total Drainage Area to SJ2-S2 =	6.47	ac
B. Total Drainage Area for Treatment =	6.47	ac
Total Impervious Area =	0.81	ac
*Does not include pond area		
Pond Area =	0.44	ac
Total Pervious Area =	5.22	ac

C. Treatment Calculations

1" x Drainage Area =	0.54	ac-ft, GOVERNS
2.5" x Impervious Area =	0.17	ac-ft

2. Calculate the Required Pre -Post Runoff Storage Volume for the 25 year / 96 hour storms and 100 year / 240 hour (Closed Basin Criteria) * See Basin Summary Tables for calculations

	25YR/96HR	100YR/240HR	
Pre-Development Runoff Volume =	0.00	0.00	ac-ft
Post-Development Runoff Volume =	2.66	5.60	ac-ft
Pre-Post Runoff Volume =	**2.66**	**5.60**	**ac-ft**

*Post runoff volume difference routed directly to FP-SJ2

Water Quality Volume =	**0.54**	**ac-ft**
Storage Provided in Pond SJ2-S2=	**0.54**	**ac-ft**

Water Quality and Volume Summary

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post-Development**		
Location:	Seminole	**Date:**	3/2/2016	**Date:**	3/17/206
Basin:	**Basin A**	**Prepared:**	*AKC*	**Prepared:**	*SPW*

1. Calculate Water Quality Volume per SJRWMD requirements 40C-42 FAC

Provide the greater of one (1) inch of runoff from the entire basin area or 2.5 inches of runoff from the impervious area.

A. Total Drainage Area to Pond A =	3.03	ac
B. Total Drainage Area for Treatment =	3.03	ac
Total Impervious Area =	1.59	ac
Total Pervious Area =	1.44	ac

C. Treatment Calculations

1" x Drainage Area =	0.25	ac-ft
2.5" x Impervious Area =	0.33	ac-ft, GOVERNS

2. Calculate the Required Pre -Post Runoff Storage Volume for the 25 year / 96 hour storms and 100 year / 240 hour (Closed Basin Criteria) * See Basin Summary Tables for calculations

	25YR/96HR	**100YR/240HR**	
Pre-Development Runoff Volume =	1.18	2.30	ac-ft
Post-Development Runoff Volume =	1.98	3.58	ac-ft
Pre-Post Runoff Volume =	**0.80**	**1.28**	**ac-ft**
Water Quality Volume =	**0.33**		**ac-ft**
Storage Provided in Pond A=	**0.81**		**ac-ft**

Water Quality and Volume Summary

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post-Development**		
Location:	Seminole	**Date:**	3/2/2016	**Date:**	3/17/206
Basin:	**Pond 2**	**Prepared:**	*AKC*	**Prepared:**	*SPW*

1. Calculate Water Quality Volume per SJRWMD requirements 40C-42 FAC

Provide the greater of one (1) inch of runoff from the entire basin area or 2.5 inches of runoff from the impervious area.

A. Total Drainage Area to Pond 2 =	50.40	ac**
B. Total Drainage Area for Treatment =	50.40	ac
Total Impervious Area =	17.33	ac
*Does not include pond area		
Pond Area =	4.26	ac
Total Pervious Area =	33.07	

C. Treatment Calculations

1" x Drainage Area =	4.20	ac-ft, GOVERNS
2.5" x Impervious Area =	3.61	ac-ft

2. Calculate the Required Pre -Post Runoff Storage Volume for the 25 year / 96 hour storm (Closed Basin Criteria)

	25YR/96HR	
Pre-Development Runoff Volume[1] =	11.49	ac-ft
Post-Development Runoff Volume* =	22.78	ac-ft
Pre-Post Runoff Volume =	**11.29**	ac-ft
Water Quality Volume =	**4.20**	**ac-ft**

****** Basin 2, Offsite 1, and Pointe-W.

Notes:

1. Pre-development runoff volume from revised Trues Lake Basin.

Stage Storage Curves

Project: Wekiva Parkway - Section 8 **Date:** 1/19/2016
Location: Seminole **Prepared:** *CLT*
Checked: *AKC*

POND SJ2-S1			
Stage (ft-el)	**Area (ac)**	**Storage (ac-ft)**	**Remarks**
73.00	3.63	0.00	NWL / SHGWT
74.00	3.80	3.72	
75.00	3.96	7.60	
76.00	4.12	11.64	
77.00	4.29	15.84	
77.75	4.42	19.11	Weir Elevation
78.00	4.46	20.22	
79.00	4.64	24.77	Inside edge of Maint. Berm
80.00	5.30	29.74	TOB

POND SJ2-S2			
Stage (ft-el)	**Area (ac)**	**Storage (ac-ft)**	**Remarks**
73.00	0.50	0.00	Pond Bottom
74.00	0.57	0.54	Weir Elevation
75.00	0.74	1.19	

POND 2			
Stage (ft-el)	**Area (ac)**	**Storage (ac-ft)**	**Remarks**
65.00	4.12	0	NWL/SHGWT
70.55	4.64	24.30	Weir Elevation
71.00	4.68	26.40	
72.00	5.30	31.39	TOB

POND A			
Stage (ft-el)	**Area (ac)**	**Storage (ac-ft)**	**Remarks**
70.90	0.34	0	Pond Bottom
72.65	0.58	0.81	Weir Elevation
73.00	0.63	1.02	Inside edge of Maint. Berm
73.50	0.83	1.38	TOB

Stage Storage Curves

Project: Wekiva Parkway - Section 8 **Date:** 1/19/2016
Location: Seminole **Prepared:** *CLT*

LAKE STEN			
Stage (ft-el)	**Area (ac)**	**Storage (ac-ft)**	**Remarks**
65.00	5.77	0.00	NWL / SHGWT
66.00	5.94	5.86	
67.00	6.11	11.88	
68.00	6.28	18.08	
69.00	6.45	24.44	
70.00	6.63	30.98	
71.00	6.80	37.70	Inside edge of Maint. Berm
72.00	7.49	44.84	TOB

FP-SJ2			
Stage (ft-el)	**Area (ac)**	**Storage (ac-ft)**	**Remarks**
65.00	12.23	0.00	NWL / SHGWT
66.00	12.54	12.39	
67.00	12.86	25.09	
68.00	13.18	38.11	
69.00	13.50	51.45	
70.00	13.82	65.11	
71.00	14.15	79.09	
72.00	14.48	93.41	Inside edge of Maint. Berm
73.00	15.74	108.52	TOB

LAKE STEN & FP-SJ2 COMBINED			
Stage (ft-el)	**Area (ac)**	**Storage (ac-ft)**	**Remarks**
65.00	18.00	0.00	NWL / SHGWT
66.00	18.48	18.24	
67.00	18.97	36.97	
68.00	19.46	56.18	
69.00	19.95	75.89	
69.50	20.20	85.92	
70.00	20.45	96.09	

Lake Sten Floodplain

Project:	Wekiva Parkway - Section 8	**Date:**	8/21/2012
Location:	Seminole	**Prepared:**	*AKC*
		Checked:	*SPW*

Lake Sten Existing Floodplain Volume				
	Elevation (FT) (NAVD)	**Area (AC)**	**Incremental Volume (AC-FT)**	**Total Volume (AC-FT)**
NWL	65.00	13.15	0.00	0.00
	66.00	14.35	13.75	13.75
	67.00	15.33	14.84	28.59
	68.00	16.46	15.90	44.49
	69.00	17.46	16.96	61.45
100YR	69.50	18.48	8.99	70.43
			TOTAL =	**70.43**

*Note: Total floodplain storage for Lake Sten prior to impacts.

Floodplain Comparison Summary				
	Elevation (FT) (NAVD)	**Existing Storage Volume (AC-FT)**	**Proposed Storage Volume (AC-FT)**	**Total Difference (AC-FT)**
NWL	65.00	0.00	0.00	0.00
	66.00	13.75	18.24	4.49
	67.00	28.59	36.97	8.38
	68.00	44.49	56.18	11.70
	69.00	61.45	75.89	14.44
100YR	69.50	70.43	85.92	15.49

*Note: 5.60ac-ft of 100YR/240HR runoff from Basin SJ2-S2 accomodated in floodplain compensation.

	A	B	C	D	E	F	G	H	I	J
1	**POND SJ2-S1 - Recovery Calculations**									
2										
3	**Recover 1/2 Treatment Volume in 24-30 Hours**								1.74	
4	**Recover Closed Basin Volume in 14 Days (25YR/96HR)**					**Stage-Storage**				
5						**Elevation**	**acres**	**acre-ft**	then weir crest	
6	Orifice Eq: Q = CA(2gH)^0.5; Weir Eq. Q = CLH^1.5					73.00	3.63	0.00	73.50	
7	Dimension of Orifice: input units in inches.					74.00	3.80	3.72	**Set weir at 77.75**	=19.11 ac-ft
8	Diameter	2.75				76.00	4.12	11.64	**for pre/post vol**	
9						77.75	4.42	19.11	**100yr/240hr**	19.05 ac-ft
10	Disch C=	0.6				78.00	4.46	20.22		
11	Area sq.ft. =	0.04	=3.14159*(B7/24)^2			79.00	4.64	24.77		
12	inflow elev=	73								
13	Number Orif	1		Treatment volume =		**1.74**	**0.87**	=1/2 Treatment Vol.		
14	Q=IF(B16>$B$11+($B$7/12),$B$12*$B$9*$B$10*((B16-($B$11+$B$7/24))*64.4)^0.5,($B$12*3*$B$7/12*(B16-$B$11)^1.5))									
15										
16	**H**	**Stage**	**Q (cfs)**	**Average Q (cfs)**	**Incremental Vol. (Acre-ft)**	**Cumulative Vol Recovered**	**Time in Sec**	**Time in Hr.**	**Total Recovery Time (hours)**	**Recovery**
17	**0.02**	**73.02**	**0.00**	**0.0010**	***0.30***	**19.03**	13315239	3698.68	**5109**	**100/240 Volume**
18	**0.10**	**73.10**	**0.02**	**0.0118**	***0.37***	**18.73**	1366468	379.57	**1410**	100/240 = 19.03AF
19	**0.20**	**73.20**	**0.06**	**0.0416**	***0.37***	**18.36**	388851	108.01	**1031**	
20	**0.30**	**73.30**	**0.09**	**0.0735**	***0.37***	**17.99**	220155	61.15	**923**	
21	**0.40**	**73.40**	**0.11**	**0.0958**	***0.37***	**17.62**	168901	46.92	**862**	
22	**0.50**	**73.50**	**0.12**	**0.1147**	***1.11***	**17.25**	423258	117.57	**815**	
23	**0.80**	**73.80**	**0.16**	**0.1439**	***0.74***	**16.13**	224976	62.49	**697**	
24	**1.00**	**74.00**	**0.19**	**0.1757**	***0.79***	**15.39**	196409	54.56	**635**	
25	**1.20**	**74.20**	**0.21**	**0.1969**	***0.79***	**14.60**	175217	48.67	**580**	
26	**1.40**	**74.40**	**0.23**	**0.2160**	***0.79***	**13.81**	159690	44.36	**531**	**Recovery**
27	**1.60**	**74.60**	**0.24**	**0.2336**	***0.89***	**13.01**	166139	46.15	**487**	**25/96 Volume**
28	**1.83**	**74.83**	**0.26**	**0.2509**	***0.69***	**12.12**	120317	33.42	**441**	25/96 = 12.12AF
29	**2.00**	**75.00**	**0.27**	**0.2662**	***0.79***	**11.43**	129590	36.00	**407**	
30	**2.20**	**75.20**	**0.29**	**0.2798**	***0.81***	**10.64**	126404	35.11	**371**	
31	**2.41**	**75.41**	**0.30**	**0.2937**	***0.77***	**9.83**	114534	31.82	**336**	EL @ Day 14 = 75.41
32	**2.60**	**75.60**	**0.31**	**0.3068**	***0.79***	**9.05**	112436	31.23	**305**	
33	**2.80**	**75.80**	**0.33**	**0.3193**	***0.79***	**8.26**	108054	30.02	**273**	
34	**3.00**	**76.00**	**0.34**	**0.3314**	***0.85***	**7.47**	112216	31.17	**243**	
35	**3.20**	**76.20**	**0.35**	**0.3431**	***0.85***	**6.62**	108390	30.11	**212**	
36	**3.40**	**76.40**	**0.36**	**0.3544**	***0.85***	**5.76**	104931	29.15	**182**	
37	**3.60**	**76.60**	**0.37**	**0.3654**	***0.85***	**4.91**	101782	28.27	**153**	
38	**3.80**	**76.80**	**0.38**	**0.3760**	***0.85***	**4.06**	98902	27.47	**125**	
39	**4.00**	**77.00**	**0.39**	**0.3864**	***0.85***	**3.20**	96253	26.74	**97**	**Recovery**
40	**4.20**	**77.20**	**0.40**	**0.3965**	***1.48***	**2.35**	162284	45.08	**70**	**1/2 Volume**
41	**4.55**	**77.55**	**0.42**	**0.4098**	***0.23***	**0.87**	24505	6.81	**25**	1/2 TV= .87AF
42	**4.60**	**77.60**	**0.42**	**0.4193**	***0.64***	**0.64**	66513	18.48	**18**	
43	**4.75**	**77.75**	**0.43**	**0.4241**						
44										
45										

POND SJ2-S1 Second 25YR/96HR Storm

Project: Wekiva Parkway - Section 8 **Date:** 5/18/2016
Location: Seminole **Prepared:** *AKC*
Checked: *SPW*

POND SJ2-S1			
Stage (ft-el)	**Area (ac)**	**Storage (ac-ft)**	**Remarks**
73	3.63	0.00	NWL / SHGWT
74	3.80	3.72	
75	3.96	7.60	
75.41	4.03	9.23	Elevation @ Day 14
76	4.12	11.64	
77	4.29	15.84	
77.75	4.42	19.11	Weir Elevation
78	4.46	20.22	
79	4.64	24.77	Inside edge of Maint. Berm
80	5.30	29.74	TOB

Volume available at Day 14 =	15.53	ac-ft
25YR/96HR Required Volume =	12.12	ac-ft

Elevation at Day 14 taken from recovery calculations. Pond SJ2-S1 has sufficient storage available for second 25YR/96HR storm event.

Permanent Pool Volume

Project: Wekiva Parkway - Section 8
Pond: **Pond 2**
Computed by: AKC **Checked by:** SPW
Date: 3/16/2016

Wet Season Rainfall	
Month	**Days**
June	30
July	31
August	31
September	30
October	31
Total	**153**

Equivalent C Values[3]		
Basin 2	Offsite	Point - W
0.77	0.17	0.70

31 " of rainfall over wet season[1]

RT = PPV/FR where;

RT = Residence Time
PPV = Permanent Pool Volume
FR = Flow Rate

The flow rate is defined as the runoff from the site over the wet period:
FR = Area*C*P/Time

Area (acres)					Comp.	P (in)	Time	FR
Total	**Basin 2**	**Offsite**	**Point-W**		C		**(days)**	**(ac-ft/day)**
50.40	16.99	24.84	8.57		0.46	30	92	0.629

PPV required for 14 day residence time: PPV = RT*FR

PPV_{req} = **8.81** **Acre-ft**

Volume Available = **16.61** **Acre-ft** (From Grantline Road Permit)

Volume = **1.9** **x** **PPV_{req}** **sufficient PPV**

Notes:
1. Rainfall data from National Climatic Data Center (Long Term Average).
2. Littoral shelf not provided. 1.5x PPV required.
3. Equivalent C- for Rational Method is from Eq. 5-10 FDOT drainage manual Volume II, Johnson & Meadows. Using the 25yr/96hr rainfall.

Permanent Pool Volume

Project: Wekiva Parkway - Section 8
Pond: **Pond SJ2-S1**
Computed by: AKC **Checked by:** SPW
Date: 8/28/2012

Wet Season Rainfall	
Month	**Days**
June	30
July	31
August	31
September	30
October	31
Total	**153**

31 " of rainfall over wet season[1]

Permanent Pool Volume			
Depth	**Elevation**	**Area (ac)**	**Volume (ac-ft)**
-5.00	68.00	3.09	0.00
-2.00	71.00	3.32	9.62
0.00	73.00	3.63	16.57

RT = PPV/FR where;
PPV = Permanent Pool Volume
FR = Flow Rate

The flow rate is defined as the runoff from the site over the wet period:
FR = Area*C*P/Time

Area (acres)					C	P (in)	Time (days)	FR (ac-ft/day)
Total	**Impervious[2]**	**Woods[2]**	**Business[2]**	**Grass[2]**				
19.92	12.0	0.0	0.0	8.0	0.65	30	92	0.352

PPV required for 14 day residence time: PPV = RT*FR

PPV_{req} = 4.93 Acre-ft

Volume Available = 16.57 Acre-ft

Volume = 3.4 x PPV_{req} sufficient PPV

Notes:
1. Rainfall data from National Climatic Data Center (Long Term Average).
2. C = 0.98 for impervious area, 0.15 for wooded area, 0.70 for business and 0.20 for grassed area.
3. Littoral shelf not provided. 1.5x PPV required.

Lake Sten Basin - Summary Tables

Project: Wekiva Parkway - Section 8 **Date:** 3/15/2016
Location: Seminole **Prepared:** *AKC* **Checked:** *SPW*

Lake Sten Basin - Pond Summaries						
Storm Event	**SJ2-SJ1 (Offsite-W)**					
	Detention Volume		Max Q Out (CFS)		Peak Stage (FT)	
	Required (AC-FT)	Provided (AC-FT)	Existing	Post	Existing	Post
25 YR / 96 HR	12.12	19.11	5.78	0.35	-	76.14
100 YR / 240 HR	19.05	19.11	4.23	0.72	-	77.88
	SJ2-S2					
	Detention Volume		Max Q Out (CFS)		Peak Stage (FT)	
	Required (AC-FT)	Provided (AC-FT)	Existing	Post	Existing	Post
25 YR / 96 HR	2.66	0.54	-	8.06	-	74.31
100 YR / 240 HR	5.60	0.54	-	3.36	-	74.17
	Pond A					
	Detention Volume		Max Q Out (CFS)		Peak Stage (FT)	
	Required (AC-FT)	Provided (AC-FT)	Pre	Post	Pre	Post
25 YR / 96 HR	0.80	0.81	1.66	2.50	72.62	73.01
100 YR / 240 HR	1.28	0.81	1.22	1.83	72.49	72.92
	Pond 2 [2]					
	Detention Volume		Max Q Out (CFS)		Peak Stage (FT)	
	Required (AC-FT)	Provided (AC-FT)	Existing	Post	Existing	Post
25 YR / 96 HR	11.29	24.30	0.50	0.50	70.44	70.53
	Lake Sten & FP-SJ2 [3]					
	Floodplain Volume		Max Q Out (CFS)		Peak Stage (FT)	
	Required (AC-FT)	Provided (AC-FT)	Existing	Post	Existing	Post
100 YR / 240 HR	70.43	85.92	-	-	69.47	69.95

1. Existing values taken from revised Existing ICPR calculations for the Lake Sten Basin.
2. Pond 2 summary for the 25year/96hour event shown only. Pond 2 is not a FDOT facility.
3. Lake Sten values shown for the 100year/240hour event since this is the largest storm event for design.

PRE

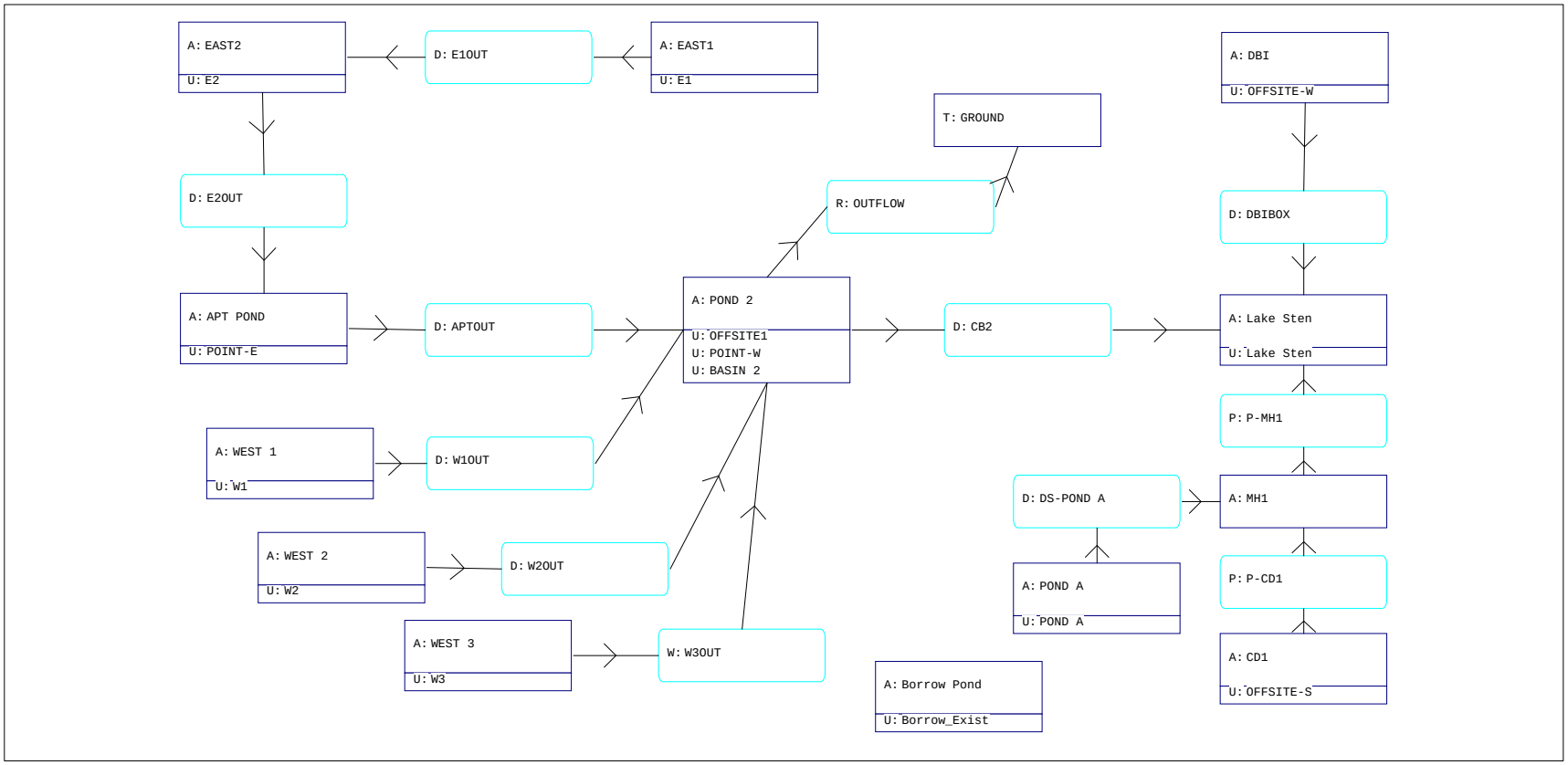
ICPR MODEL

Pre-Development Conditions
Node Diagram

Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



Elevations are in NAVD

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: BASIN 2                 Node: POND 2                Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Sjrwmd96           Storm Duration(hrs): 100.00
    Rainfall Amount(in): 12.330               Time of Conc(min): 30.00
              Area(ac): 17.030                  Time Shift(hrs): 0.00
           Curve Number: 75.50              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Based on 72228-1 Point at Lake Mary Apts Permit Basin Map,
Basin data modified to match best available information, using
new LiDAR data and soils mapping

--------------------------------------------------------------------------------------------------
         Name: Borrow_Exist            Node: Borrow Pond           Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 35.00
              Area(ac): 36.300                  Time Shift(hrs): 0.00
           Curve Number: 51.30              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00



--------------------------------------------------------------------------------------------------
         Name: E1                      Node: EAST1                 Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod              Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600               Time of Conc(min): 10.00
              Area(ac): 1.070                   Time Shift(hrs): 0.00
           Curve Number: 72.60              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

--------------------------------------------------------------------------------------------------
         Name: E2                      Node: EAST2                 Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod              Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600               Time of Conc(min): 10.00
              Area(ac): 1.660                   Time Shift(hrs): 0.00
           Curve Number: 72.60              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

--------------------------------------------------------------------------------------------------
         Name: Lake Sten               Node: Lake Sten             Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Sjrwmd96           Storm Duration(hrs): 100.00
    Rainfall Amount(in): 12.330               Time of Conc(min): 15.00
              Area(ac): 28.320                  Time Shift(hrs): 0.00
           Curve Number: 66.40              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Based on 72228-1 Point at Lake Mary Apts Permit Basin Map,
Basin data modified to match best available information, using
new LiDAR data and soils mapping.

--------------------------------------------------------------------------------------------------
         Name: OFFSITE-S               Node: CD1                   Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 32.00
              Area(ac): 4.490                   Time Shift(hrs): 0.00
           Curve Number: 33.00              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
------------------------------------------------------------------------------------------------
        Name: OFFSITE-W               Node: DBI                     Status: Onsite
       Group: BASE                    Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File: Flmod            Storm Duration(hrs): 100.00
   Rainfall Amount(in): 10.600             Time of Conc(min): 32.00
            Area(ac): 11.920               Time Shift(hrs): 0.00
        Curve Number: 32.60             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00

Based on 72228-1 Point at Lake Mary Apts Permit Basin Map node OFFSITE.
Basin data modified to match best available information, using new LiDAR
data and soils mapping
*BASIN SJ2-S1

------------------------------------------------------------------------------------------------
        Name: OFFSITE1                Node: POND 2                  Status: Onsite
       Group: BASE                    Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File: Flmod            Storm Duration(hrs): 100.00
   Rainfall Amount(in): 10.600             Time of Conc(min): 35.00
            Area(ac): 24.840               Time Shift(hrs): 0.00
        Curve Number: 31.90             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00

Based on 72228-1 Point at Lake Mary Apts Permit Basin Map,
Basin data modified to match best available information, using
new LiDAR data and soils mapping

------------------------------------------------------------------------------------------------
        Name: POINT-E                 Node: APT POND                Status: Onsite
       Group: BASE                    Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File: Flmod            Storm Duration(hrs): 100.00
   Rainfall Amount(in): 10.600             Time of Conc(min): 15.00
            Area(ac): 7.460                Time Shift(hrs): 0.00
        Curve Number: 73.70             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

------------------------------------------------------------------------------------------------
        Name: POINT-W                 Node: POND 2                  Status: Onsite
       Group: BASE                    Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File: Flmod            Storm Duration(hrs): 100.00
   Rainfall Amount(in): 10.600             Time of Conc(min): 15.00
            Area(ac): 8.570                Time Shift(hrs): 0.00
        Curve Number: 72.60             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00

Based on 72228-1 Point at Lake Mary Apts Permit data

------------------------------------------------------------------------------------------------
        Name: POND A                  Node: POND A                  Status: Onsite
       Group: BASE                    Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh323                  Peaking Factor: 323.0
         Rainfall File:                Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000              Time of Conc(min): 15.00
            Area(ac): 2.260                Time Shift(hrs): 0.00
        Curve Number: 59.30             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00

From 22514-7 Int. Pkwy Interchange Permit, pre-development calculations

------------------------------------------------------------------------------------------------
        Name: W1                      Node: WEST 1                  Status: Onsite
       Group: BASE                    Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File: Flmod            Storm Duration(hrs): 100.00
   Rainfall Amount(in): 10.600             Time of Conc(min): 10.00
            Area(ac): 1.060                Time Shift(hrs): 0.00
        Curve Number: 72.60             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

------------------------------------------------------------------------------------------------
        Name: W2                      Node: WEST 2                  Status: Onsite
       Group: BASE                    Type: SCS Unit Hydrograph CN
```

Elevations are in NAVD

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod               Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600                Time of Conc(min): 10.00
                Area(ac): 2.760                  Time Shift(hrs): 0.00
           Curve Number: 72.60               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

-------------------------------------------------------------------------------------------------
         Name: W3                       Node: WEST 3                Status: Onsite
        Group: BASE                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod               Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600                Time of Conc(min): 10.00
                Area(ac): 0.370                  Time Shift(hrs): 0.00
           Curve Number: 72.60               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

=================================================================================================
==== Nodes ======================================================================================
=================================================================================================

      Name: APT POND            Base Flow(cfs): 0.000          Init Stage(ft): 69.200
     Group: BASE                                               Warn Stage(ft): 74.000
      Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88


      Stage(ft)        Area(ac)
--------------- ---------------
         69.200          1.0700
         70.000          1.0800
         72.000          1.0900
         73.000          1.1000
         74.000          1.1100

-------------------------------------------------------------------------------------------------
      Name: Borrow Pond         Base Flow(cfs): 0.000          Init Stage(ft): 65.000
     Group: BASE                                               Warn Stage(ft): 70.000
      Type: Stage/Area



      Stage(ft)        Area(ac)
--------------- ---------------
         65.000          9.8000
         66.000         10.0500
         67.000         10.3200
         68.000         10.5900
         69.000         10.8500

-------------------------------------------------------------------------------------------------
      Name: CD1                 Base Flow(cfs): 0.000          Init Stage(ft): 71.700
     Group: BASE                                               Warn Stage(ft): 75.000
      Type: Stage/Area

Areas based on NAVD88 DEM Contours

      Stage(ft)        Area(ac)
--------------- ---------------
         71.700          0.0000
         74.000          0.4000
         75.000          1.0000
         76.000          1.6000
         77.000          2.7000

-------------------------------------------------------------------------------------------------
      Name: DBI                 Base Flow(cfs): 0.000          Init Stage(ft): 72.200
     Group: BASE                                               Warn Stage(ft): 73.500
      Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

      Stage(ft)        Area(ac)
--------------- ---------------
         72.000          0.0100
         73.190          0.0100
         73.200          0.1000
         73.500          0.1000

Elevations are in NAVD
```

Name: EAST1 Base Flow(cfs): 0.000 Init Stage(ft): 74.500
Group: BASE Warn Stage(ft): 77.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Stage(ft)	Area(ac)
74.500	0.0000
75.000	0.0200
76.000	0.0940
77.000	0.2350
78.000	0.3600

Name: EAST2 Base Flow(cfs): 0.000 Init Stage(ft): 71.800
Group: BASE Warn Stage(ft): 75.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Stage(ft)	Area(ac)
71.800	0.0000
72.000	0.0030
73.000	0.0140
74.000	0.0320
75.000	0.0600

Name: GROUND Base Flow(cfs): 0.000 Init Stage(ft): 1.000
Group: BASE Warn Stage(ft): 1.000
Type: Time/Stage

From 72228-1 Point at Lake Mary Apts Permit Data

Time(hrs)	Stage(ft)
0.00	1.000
500.00	1.000

Name: Lake Sten Base Flow(cfs): 0.000 Init Stage(ft): 65.000
Group: BASE Warn Stage(ft): 72.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Stage(ft)	Area(ac)
65.000	13.1500
66.000	14.3500
67.000	15.3300
68.000	16.4600
69.000	17.4600
70.000	19.1600
71.000	21.3600
72.000	24.9500

Name: MH1 Base Flow(cfs): 0.000 Init Stage(ft): 71.480
Group: BASE Warn Stage(ft): 76.500
Type: Stage/Area

From 22514-7 Plans

Stage(ft)	Area(ac)

Name: POND 2 Base Flow(cfs): 0.000 Init Stage(ft): 65.000
Group: BASE Warn Stage(ft): 72.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data
and 22514-7 SR 417 Int. Pkwy Interchange Data

Stage(ft)	Area(ac)
65.000	4.1200
71.000	4.6800
72.000	5.3000

Elevations are in NAVD

```
-------------------------------------------------------------------------------------------
      Name: POND A              Base Flow(cfs): 0.000          Init Stage(ft): 70.900
     Group: BASE                                              Warn Stage(ft): 73.500
      Type: Stage/Area

From 22514-7 Int. Pkwy Interchange Permit Plans

      Stage(ft)        Area(ac)
--------------- ---------------
         70.900          0.3900
         73.000          0.5300
         73.500          0.5700

-------------------------------------------------------------------------------------------
      Name: WEST 1              Base Flow(cfs): 0.000          Init Stage(ft): 75.000
     Group: BASE                                              Warn Stage(ft): 78.000
      Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88


      Stage(ft)        Area(ac)
--------------- ---------------
         75.000          0.0100
         76.000          0.0300
         77.000          0.0600
         78.000          0.1100

-------------------------------------------------------------------------------------------
      Name: WEST 2              Base Flow(cfs): 0.000          Init Stage(ft): 75.000
     Group: BASE                                              Warn Stage(ft): 78.000
      Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88


      Stage(ft)        Area(ac)
--------------- ---------------
         75.000          0.0200
         76.000          0.0900
         77.000          0.3000
         78.000          0.6300

-------------------------------------------------------------------------------------------
      Name: WEST 3              Base Flow(cfs): 0.000          Init Stage(ft): 78.000
     Group: BASE                                              Warn Stage(ft): 80.000
      Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88


      Stage(ft)        Area(ac)
--------------- ---------------
         78.000          0.0700
         79.000          0.1300
         80.000          0.1900

===========================================================================================
==== Operating Tables =====================================================================
===========================================================================================

      Name: SEEP                Group: BASE
      Type: Rating Curve
  Function: Time vs. Discharge

From 72228-1 Point at Lake Mary Apts Permit Data
and 22514-7 SR 417 Int. Pkwy Interchange Data

      Time(hrs)  Discharge(cfs)
--------------- ---------------
           0.00            0.00
          10.06            0.00
          12.06            0.00
          23.06            0.01
          29.06            0.01
          31.06            0.01
          33.06            0.02
          35.06            0.02
          37.06            0.02
          39.06            0.03
          41.06            0.03
          43.06            0.03
          45.06            0.04
          47.06            0.04
          49.06            0.05
```

Elevations are in NAVD

51.06	0.05
53.06	0.06
55.06	0.07
57.06	0.09
59.06	0.20
61.11	0.34
63.11	0.42
67.22	0.47
69.26	0.49
71.38	0.50
73.39	0.50
75.41	0.50
77.41	0.50
79.41	0.50
81.41	0.50
83.41	0.50
85.41	0.49
87.41	0.49
89.41	0.48
91.41	0.48
93.41	0.48
95.41	0.47
97.41	0.46
99.41	0.45
101.66	0.44
103.66	0.43
115.66	0.37
127.66	0.34
139.66	0.31
151.66	0.29
163.66	0.27
175.66	0.25
187.66	0.24
199.66	0.22
211.66	0.21

==========
==== Pipes ====
==========

Name:	P-CD1	From Node:	CD1	Length(ft):	43.00
Group:	BASE	To Node:	MH1	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.50
Invert(ft):	71.700	71.500		Bend Loss Coef:	0.00
Manning's N:	0.120000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 22514-7 Int. Pkwy Interchange Permit Plans

Name:	P-MH1	From Node:	MH1	Length(ft):	48.00
Group:	BASE	To Node:	Lake Sten	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.20
Invert(ft):	71.480	71.200		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 22514-7 Int. Pkwy Interchange Permit Plans

==========

Elevations are in NAVD

==== Drop Structures ==========

```
         Name: APTOUT              From Node: APT POND          Length(ft): 125.00
        Group: BASE                  To Node: POND 2               Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Automatic
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                     Entrance Loss Coef: 0.500
   Invert(ft): 61.250         60.000                        Exit Loss Coef: 1.000
  Manning's N: 0.012000       0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 3 for Drop Structure APTOUT ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 1.00                        Invert(ft): 70.330
               Rise(in): 2.00                 Control Elev(ft): 70.330

*** Weir 2 of 3 for Drop Structure APTOUT ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Circular              Orifice Disc Coef: 0.600

               Span(in): 3.33                        Invert(ft): 69.200
               Rise(in): 3.33                 Control Elev(ft): 69.200

*** Weir 3 of 3 for Drop Structure APTOUT ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 24.00                       Invert(ft): 73.950
               Rise(in): 37.00                Control Elev(ft): 73.950


-------------------------------------------------------------------------------------------------------
         Name: CB2                 From Node: POND 2            Length(ft): 208.00
        Group: BASE                  To Node: Lake Sten              Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Automatic
     Span(in): 18.00          18.00                                Flow: Both
     Rise(in): 18.00          18.00                     Entrance Loss Coef: 0.500
   Invert(ft): 64.500         64.000                        Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure CB2 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 37.00                       Invert(ft): 70.550
               Rise(in): 24.00                Control Elev(ft): 70.550
```

Elevations are in NAVD

```
-------------------------------------------------------------------------------------------------
        Name: DBIBOX              From Node: DBI               Length(ft): 160.00
       Group: BASE                  To Node: Lake Sten             Count: 1

              UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 30.00          30.00                                 Flow: Both
    Rise(in): 30.00          30.00                    Entrance Loss Coef: 0.600
   Invert(ft): 65.000        64.000                       Exit Loss Coef: 0.000
  Manning's N: 0.013000      0.013000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 2 for Drop Structure DBIBOX ***
                                                                                      TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                     Weir Disc Coef: 3.130
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 54.00                       Invert(ft): 72.200
              Rise(in): 12.00                  Control Elev(ft): 72.200

*** Weir 2 of 2 for Drop Structure DBIBOX ***
                                                                                      TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Horizontal                 Top Clip(in): 0.000
                   Flow: Both                     Weir Disc Coef: 3.130
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 54.00                       Invert(ft): 73.200
              Rise(in): 72.00                  Control Elev(ft): 73.200


-------------------------------------------------------------------------------------------------
        Name: DS-POND A           From Node: POND A            Length(ft): 108.00
       Group: BASE                  To Node: MH1                   Count: 1

              UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 18.00          18.00                                 Flow: Both
    Rise(in): 12.00          12.00                    Entrance Loss Coef: 0.500
   Invert(ft): 71.700        71.500                       Exit Loss Coef: 1.000
  Manning's N: 0.012000      0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000         0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 22514-7 Int. Pkwy Interchange Permit

*** Weir 1 of 2 for Drop Structure DS-POND A ***
                                                                                      TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Horizontal                 Top Clip(in): 0.000
                   Flow: Both                     Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 37.00                       Invert(ft): 73.100
              Rise(in): 49.00                  Control Elev(ft): 73.100

*** Weir 2 of 2 for Drop Structure DS-POND A ***
                                                                                      TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                     Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 48.00                       Invert(ft): 72.100
              Rise(in): 12.00                  Control Elev(ft): 72.100


-------------------------------------------------------------------------------------------------
        Name: E1OUT               From Node: EAST1             Length(ft): 326.00
```

Elevations are in NAVD

```
       Group: BASE                To Node: EAST2                 Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                  Solution Algorithm: Automatic
    Span(in): 24.00          24.00                                Flow: Both
    Rise(in): 24.00          24.00                     Entrance Loss Coef: 0.000
   Invert(ft): 70.300        66.300                        Exit Loss Coef: 0.000
  Manning's N: 0.012000      0.012000                    Outlet Ctrl Spec: Use dn or tw
 Top Clip(in): 0.000         0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000         0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure E1OUT ***
                                                                                    TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Horizontal                Top Clip(in): 0.000
                  Flow: Both                    Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 49.00                       Invert(ft): 76.770
              Rise(in): 37.00                  Control Elev(ft): 76.770


-------------------------------------------------------------------------------------------------
        Name: E2OUT              From Node: EAST2             Length(ft): 190.00
       Group: BASE                To Node: APT POND                Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                  Solution Algorithm: Automatic
    Span(in): 24.00          24.00                                Flow: Both
    Rise(in): 24.00          24.00                     Entrance Loss Coef: 0.000
   Invert(ft): 62.000        60.000                        Exit Loss Coef: 0.000
  Manning's N: 0.012000      0.012000                    Outlet Ctrl Spec: Use dn or tw
 Top Clip(in): 0.000         0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure E2OUT ***
                                                                                    TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Horizontal                Top Clip(in): 0.000
                  Flow: Both                    Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 49.00                       Invert(ft): 74.300
              Rise(in): 37.00                  Control Elev(ft): 74.300


-------------------------------------------------------------------------------------------------
        Name: W1OUT              From Node: WEST 1            Length(ft): 180.00
       Group: BASE                To Node: POND 2                  Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                  Solution Algorithm: Automatic
    Span(in): 18.00          18.00                                Flow: Both
    Rise(in): 18.00          18.00                     Entrance Loss Coef: 0.000
   Invert(ft): 64.000        62.000                        Exit Loss Coef: 0.000
  Manning's N: 0.012000      0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure W1OUT ***
                                                                                    TABLE
                 Count: 1                      Bottom Clip(in): 0.000
```

Elevations are in NAVD

```
                 Type: Horizontal               Top Clip(in): 0.000
                 Flow: Both                   Weir Disc Coef: 3.200
           Geometry: Rectangular          Orifice Disc Coef: 0.600

           Span(in): 24.00                      Invert(ft): 77.300
           Rise(in): 37.00                Control Elev(ft): 77.300


-------------------------------------------------------------------------------------------------
         Name: W2OUT               From Node: WEST 2            Length(ft): 450.00
        Group: BASE                  To Node: POND 2                 Count: 1

              UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Automatic
     Span(in): 18.00          18.00                                Flow: Both
     Rise(in): 18.00          18.00                     Entrance Loss Coef: 0.000
   Invert(ft): 71.500         60.000                        Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure W2OUT ***
                                                                                  TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
             Geometry: Rectangular          Orifice Disc Coef: 0.600

             Span(in): 54.00                      Invert(ft): 77.620
             Rise(in): 36.00                Control Elev(ft): 77.620


=================================================================================
==== Weirs ======================================================================
=================================================================================

         Name: W3OUT               From Node: WEST 3
        Group: BASE                  To Node: POND 2
         Flow: Both                    Count: 1
         Type: Vertical: Mavis      Geometry: Rectangular

                    Span(in): 4800.00
                    Rise(in): 999.00
                  Invert(ft): 80.000
       Control Elevation(ft): 80.000
                                       TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
      Orifice Discharge Coef: 0.600

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

=================================================================================
==== Rating Curves ==============================================================
=================================================================================

         Name: OUTFLOW             From Node: POND 2                 Count: 1
        Group: BASE                  To Node: GROUND                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
          #1: SEEP            0.000           0.000
          #2:                 0.000           0.000
          #3:                 0.000           0.000
          #4:                 0.000           0.000



=================================================================================
==== Hydrology Simulations ======================================================
=================================================================================

         Name: 100YR-240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\100YR-240HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 240.00
          Rainfall File: Fdot-240
```

Elevations are in NAVD

```
    Rainfall Amount(in): 18.50

Time(hrs)       Print Inc(min)
--------------- ---------------
240.000         5.00

------------------------------------------------------------------------------------------------------
         Name: 100yr_24hr
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\100yr_24hr.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
    Rainfall Amount(in): 10.60

Time(hrs)       Print Inc(min)
--------------- ---------------
24.000          5.00

------------------------------------------------------------------------------------------------------
         Name: 10yr_24hr
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\10yr_24hr.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
    Rainfall Amount(in): 7.50

Time(hrs)       Print Inc(min)
--------------- ---------------
24.000          5.00

------------------------------------------------------------------------------------------------------
         Name: 25YR_96HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\25YR_96HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 96.00
          Rainfall File: Sjrwmd96
    Rainfall Amount(in): 11.30

Time(hrs)       Print Inc(min)
--------------- ---------------
96.000          5.00

------------------------------------------------------------------------------------------------------
         Name: 25YR_96HR_orig
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\25YR_96HR_orig.R32

      Override Defaults: Yes
    Storm Duration(hrs): 96.00
          Rainfall File: Sjrwmd96
    Rainfall Amount(in): 12.33

Time(hrs)       Print Inc(min)
--------------- ---------------
96.000          5.00

==============================================================================================
==== Routing Simulations ======================================================================
==============================================================================================

         Name: 100YR-240HR         Hydrology Sim: 100YR-240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\100YR-240HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 480.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
       Boundary Stages:                          Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------------
```

```
         Name: 100yr_24hr          Hydrology Sim: 100yr_24hr
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\100yr_24hr.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 100.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 10yr_24hr           Hydrology Sim: 10yr_24hr
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\10yr_24hr.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 100.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR_96HR           Hydrology Sim: 25YR_96HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\25YR_96HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 300.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR_96HR_orig      Hydrology Sim: 25YR_96HR_orig
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Pre\25YR_96HR_orig.I32

      Execute: No          Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 200.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:
```

Elevations are in NAVD

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Pre-Development Conditions
Lake Sten Basin
Offsite-W / Basin SJ2-S1 Basin Max Report

Simulation	Basin	Group	Time Max hrs	Flow Max cfs	Volume in	Volume ft3
100YR-240HR	OFFSITE-W	BASE	183.96	4.23	5.887	254730
25YR_96HR	OFFSITE-W	BASE	60.23	5.78	1.843	79762

Elevations are in NAVD

Pre-Development Conditions
Lake Sten Basin
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
APT POND	BASE	100YR-240HR	184.26	74.18	74.00	0.0026	48431	183.92	6.26	184.25	4.18
APT POND	BASE	100yr_24hr	24.00	73.94	74.00	0.0050	48327	12.09	42.29	19.77	0.73
APT POND	BASE	10yr_24hr	24.00	71.96	74.00	0.0031	47473	12.08	24.54	24.00	0.55
APT POND	BASE	25YR_96HR	72.28	73.46	74.00	0.0050	48118	60.08	39.81	70.86	0.70
Borrow Pond	BASE	100YR-240HR	240.00	68.12	70.00	0.0006	462684	184.00	18.93	0.00	0.00
Borrow Pond	BASE	100yr_24hr	24.00	66.24	70.00	0.0006	440593	12.42	54.79	0.00	0.00
Borrow Pond	BASE	10yr_24hr	24.00	65.62	70.00	0.0009	433660	12.42	25.09	0.00	0.00
Borrow Pond	BASE	25YR_96HR	96.00	66.41	70.00	0.0007	442568	60.25	53.77	0.00	0.00
CD1	BASE	100YR-240HR	184.10	72.58	75.00	-0.0032	6673	184.00	1.61	184.10	2.61
CD1	BASE	100yr_24hr	13.15	72.62	75.00	0.0019	6966	12.50	1.96	13.15	2.78
CD1	BASE	10yr_24hr	15.21	72.08	75.00	0.0012	2884	12.75	0.35	15.15	0.58
CD1	BASE	25YR_96HR	60.88	72.66	75.00	0.0032	7271	60.25	2.28	60.88	2.94
DBI	BASE	100YR-240HR	184.00	72.65	73.50	-0.0043	436	184.00	4.23	184.00	4.23
DBI	BASE	100yr_24hr	12.51	72.70	73.50	-0.0044	436	12.50	4.94	12.51	4.93
DBI	BASE	10yr_24hr	12.84	72.35	73.50	-0.0045	436	12.83	0.84	12.84	0.84
DBI	BASE	25YR_96HR	60.26	72.75	73.50	-0.0045	436	60.25	5.77	60.26	5.75
EAST1	BASE	100YR-240HR	183.98	76.83	77.00	0.0025	9186	183.92	0.66	183.98	0.66
EAST1	BASE	100yr_24hr	12.24	76.97	77.00	0.0043	10050	12.08	5.18	12.24	4.09
EAST1	BASE	10yr_24hr	12.62	76.86	77.00	0.0032	9366	12.08	3.18	12.62	1.20
EAST1	BASE	25YR_96HR	60.09	76.98	77.00	0.0044	10097	60.00	4.71	60.09	4.33
EAST2	BASE	100YR-240HR	183.93	74.41	75.00	0.0050	1894	183.92	1.67	183.93	1.67
EAST2	BASE	100yr_24hr	12.15	74.68	75.00	0.0050	2229	12.13	10.96	12.15	10.93
EAST2	BASE	10yr_24hr	12.09	74.53	75.00	0.0050	2035	12.08	4.94	12.09	4.92
EAST2	BASE	25YR_96HR	60.04	74.69	75.00	0.0050	2240	60.01	11.36	60.04	11.32
GROUND	BASE	100YR-240HR	0.00	1.00	1.00	0.0000	0	71.38	0.50	0.00	0.00
GROUND	BASE	100yr_24hr	0.00	1.00	1.00	0.0000	0	71.38	0.50	0.00	0.00
GROUND	BASE	10yr_24hr	0.00	1.00	1.00	0.0000	0	71.40	0.50	0.00	0.00
GROUND	BASE	25YR_96HR	0.00	1.00	1.00	0.0000	0	71.38	0.50	0.00	0.00
Lake Sten	BASE	100YR-240HR	480.01	69.47	72.00	0.0006	795104	184.00	37.25	0.00	0.00
Lake Sten	BASE	100yr_24hr	100.00	66.26	72.00	0.0010	636272	12.08	107.08	0.00	0.00
Lake Sten	BASE	10yr_24hr	100.00	65.70	72.00	0.0007	609188	12.08	60.22	0.00	0.00
Lake Sten	BASE	25YR_96HR	300.00	66.40	72.00	0.0011	642319	60.08	102.85	0.00	0.00
MH1	BASE	100YR-240HR	184.09	72.38	76.50	-0.0050	180	184.09	3.84	184.08	2.82
MH1	BASE	100yr_24hr	13.10	72.42	76.50	0.0050	179	13.15	4.37	13.10	3.03
MH1	BASE	10yr_24hr	15.18	71.88	76.50	-0.0050	172	15.28	0.99	15.18	0.65
MH1	BASE	25YR_96HR	60.93	72.46	76.50	-0.0050	179	60.88	4.60	60.93	3.25
POND 2	BASE	100YR-240HR	184.88	71.82	72.00	0.0023	225887	184.00	30.44	184.38	13.64
POND 2	BASE	100yr_24hr	67.62	70.21	72.00	0.0031	200631	12.25	112.21	71.38	0.50
POND 2	BASE	10yr_24hr	61.73	68.07	72.00	0.0030	191941	12.17	62.37	71.40	0.50
POND 2	BASE	25YR_96HR	161.02	70.42	72.00	0.0036	201490	60.08	107.55	71.38	0.50
POND A	BASE	100YR-240HR	184.08	72.49	73.50	0.0017	21599	183.92	1.28	184.07	1.22
POND A	BASE	100yr_24hr	13.14	72.58	73.50	0.0032	21854	12.08	10.26	13.10	1.60
POND A	BASE	10yr_24hr	15.33	72.20	73.50	0.0019	20769	12.08	6.39	15.33	0.42
POND A	BASE	25YR_96HR	60.88	72.62	73.50	0.0032	21977	60.00	8.98	60.74	1.66
WEST 1	BASE	100YR-240HR	183.95	77.37	78.00	0.0032	3427	183.92	0.65	183.95	0.65
WEST 1	BASE	100yr_24hr	12.09	77.59	78.00	0.0050	3897	12.08	5.13	12.09	5.07
WEST 1	BASE	10yr_24hr	12.13	77.50	78.00	0.0050	3702	12.08	3.15	12.13	2.91
WEST 1	BASE	25YR_96HR	60.03	77.57	78.00	0.0037	3853	60.00	4.67	60.03	4.54

Elevations are in NAVD

Pre-Development Conditions
Lake Sten Basin
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
WEST 2	BASE	100YR-240HR	184.00	77.73	78.00	0.0029	23525	183.92	1.69	184.00	1.69
WEST 2	BASE	100yr_24hr	12.38	77.93	78.00	0.0048	26401	12.08	13.37	12.38	8.19
WEST 2	BASE	10yr_24hr	12.88	77.73	78.00	0.0036	23570	12.08	8.21	12.88	1.76
WEST 2	BASE	25YR_96HR	60.16	77.95	78.00	0.0049	26694	60.00	12.16	60.16	9.01
WEST 3	BASE	100YR-240HR	183.93	80.00	80.00	0.0012	8285	183.92	0.23	183.93	0.23
WEST 3	BASE	100yr_24hr	24.00	79.77	80.00	0.0026	7686	12.08	1.79	0.00	0.00
WEST 3	BASE	10yr_24hr	24.00	79.24	80.00	0.0014	6288	12.08	1.10	0.00	0.00
WEST 3	BASE	25YR_96HR	96.00	79.89	80.00	0.0028	7983	60.00	1.63	0.00	0.00

Elevations are in NAVD

POST

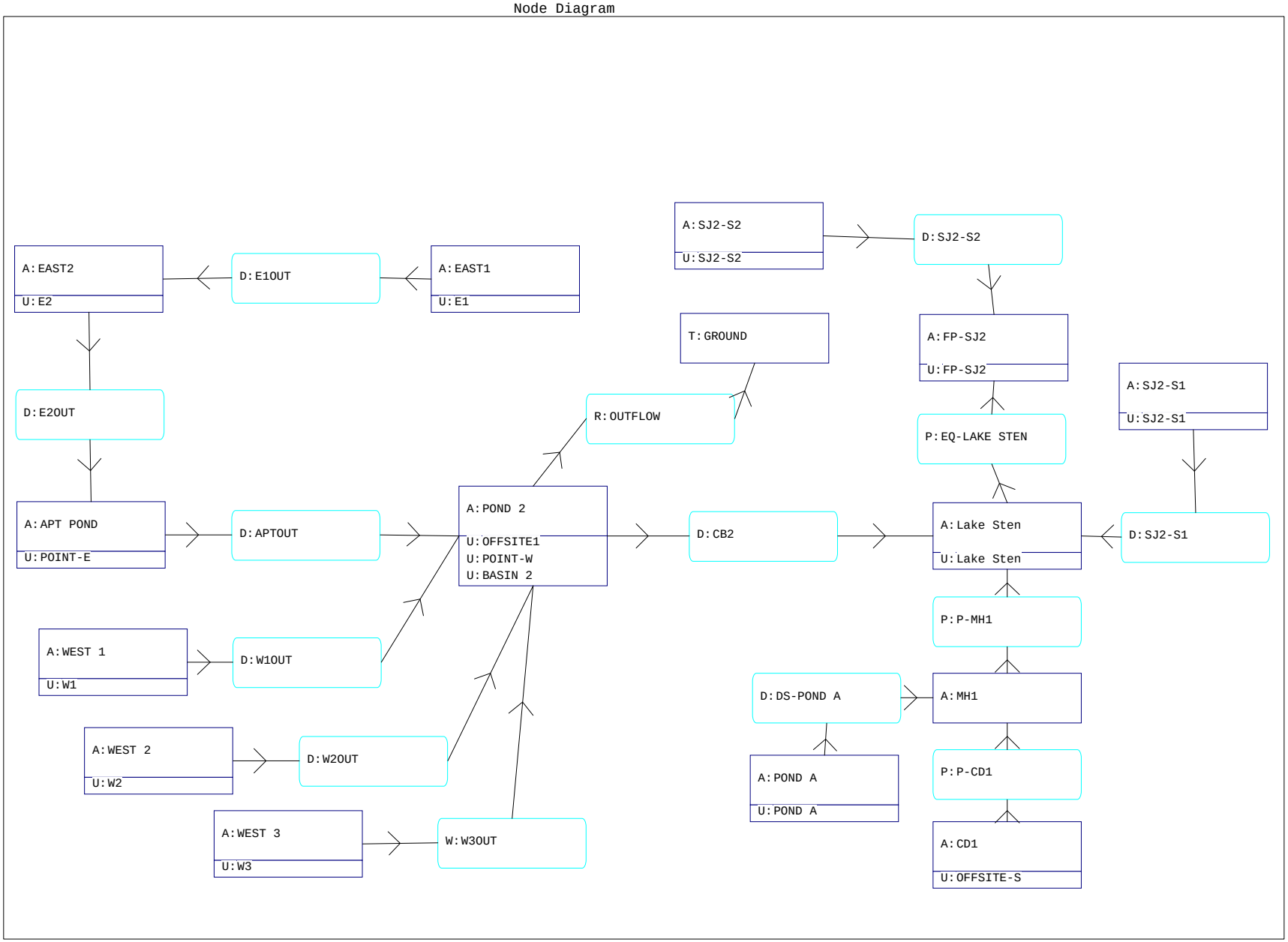
ICPR MODEL

Post-Development Conditions
Lake Sten Basin
Node Diagram

Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



Elevations are in NAVD

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: BASIN 2                 Node: POND 2                Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Sjrwmd96          Storm Duration(hrs): 100.00
    Rainfall Amount(in): 12.330              Time of Conc(min): 30.00
              Area(ac): 16.990                 Time Shift(hrs): 0.00
          Curve Number: 78.50              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: E1                      Node: EAST1                 Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod             Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600              Time of Conc(min): 10.00
              Area(ac): 1.070                  Time Shift(hrs): 0.00
          Curve Number: 72.60              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

--------------------------------------------------------------------------------------------------------
         Name: E2                      Node: EAST2                 Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod             Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600              Time of Conc(min): 10.00
              Area(ac): 1.660                  Time Shift(hrs): 0.00
          Curve Number: 72.60              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

--------------------------------------------------------------------------------------------------------
         Name: FP-SJ2                  Node: FP-SJ2                Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                   Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 15.00
              Area(ac): 28.020                 Time Shift(hrs): 0.00
          Curve Number: 65.60              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: Lake Sten               Node: Lake Sten             Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Sjrwmd96          Storm Duration(hrs): 100.00
    Rainfall Amount(in): 12.330              Time of Conc(min): 15.00
              Area(ac): 9.670                  Time Shift(hrs): 0.00
          Curve Number: 79.20              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: OFFSITE-S               Node: CD1                   Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                   Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 32.00
              Area(ac): 4.180                  Time Shift(hrs): 0.00
          Curve Number: 32.50              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: OFFSITE1                Node: POND 2                Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN
```

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod              Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600               Time of Conc(min): 35.00
                Area(ac): 24.840                Time Shift(hrs): 0.00
           Curve Number: 31.90             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Based on 72228-1 Point at Lake Mary Apts Permit Basin Map,
Basin data modified to match best available information, using
new LiDAR data and soils mapping

-------------------------------------------------------------------------------------------------
         Name: POINT-E                  Node: APT POND               Status: Onsite
        Group: BASE                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod              Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600               Time of Conc(min): 15.00
                Area(ac): 7.460                 Time Shift(hrs): 0.00
           Curve Number: 73.70             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

-------------------------------------------------------------------------------------------------
         Name: POINT-W                  Node: POND 2                 Status: Onsite
        Group: BASE                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod              Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600               Time of Conc(min): 15.00
                Area(ac): 8.570                 Time Shift(hrs): 0.00
           Curve Number: 72.60             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Based on 72228-1 Point at Lake Mary Apts Permit data

-------------------------------------------------------------------------------------------------
         Name: POND A                   Node: POND A                 Status: Onsite
        Group: BASE                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 15.00
                Area(ac): 3.030                 Time Shift(hrs): 0.00
           Curve Number: 70.00             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: SJ2-S1                   Node: SJ2-S1                 Status: Onsite
        Group: BASE                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod              Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600               Time of Conc(min): 32.00
                Area(ac): 19.920                Time Shift(hrs): 0.00
           Curve Number: 74.80             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Formerly Offsite-W

-------------------------------------------------------------------------------------------------
         Name: SJ2-S2                   Node: SJ2-S2                 Status: Onsite
        Group: BASE                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 20.00
                Area(ac): 6.470                 Time Shift(hrs): 0.00
           Curve Number: 50.50             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: W1                       Node: WEST 1                 Status: Onsite
        Group: BASE                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File: Flmod              Storm Duration(hrs): 100.00
    Rainfall Amount(in): 10.600               Time of Conc(min): 10.00
                Area(ac): 1.060                 Time Shift(hrs): 0.00
           Curve Number: 72.60             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

Elevations are in NAVD

From 72228-1 Point at Lake Mary Apts Permit Data

Name: W2 Node: WEST 2 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Flmod Storm Duration(hrs): 100.00
Rainfall Amount(in): 10.600 Time of Conc(min): 10.00
Area(ac): 2.760 Time Shift(hrs): 0.00
Curve Number: 72.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

Name: W3 Node: WEST 3 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Flmod Storm Duration(hrs): 100.00
Rainfall Amount(in): 10.600 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 72.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

From 72228-1 Point at Lake Mary Apts Permit Data

==========
==== Nodes ==========
==========

Name: APT POND Base Flow(cfs): 0.000 Init Stage(ft): 69.200
Group: BASE Warn Stage(ft): 74.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Stage(ft)	Area(ac)
69.200	1.0700
70.000	1.0800
72.000	1.0900
73.000	1.1000
74.000	1.1100

Name: CD1 Base Flow(cfs): 0.000 Init Stage(ft): 71.700
Group: BASE Warn Stage(ft): 75.000
Type: Stage/Area

Areas based on NAVD88 DEM Contours

Stage(ft)	Area(ac)
71.700	0.0000
74.000	0.4000
75.000	1.0000
76.000	1.6000
77.000	2.7000

Name: EAST1 Base Flow(cfs): 0.000 Init Stage(ft): 74.500
Group: BASE Warn Stage(ft): 77.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Stage(ft)	Area(ac)
74.500	0.0000
75.000	0.0200
76.000	0.0940
77.000	0.2350
78.000	0.3600

Name: EAST2 Base Flow(cfs): 0.000 Init Stage(ft): 71.800
Group: BASE Warn Stage(ft): 75.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Elevations are in NAVD

Stage(ft)	Area(ac)
71.800	0.0000
72.000	0.0030
73.000	0.0140
74.000	0.0320
75.000	0.0600

Name: FP-SJ2 Base Flow(cfs): 0.000 Init Stage(ft): 65.000
Group: BASE Warn Stage(ft): 71.000
Type: Stage/Area

Lake Sten Floodplain Compensation Pond

Stage(ft)	Area(ac)
65.000	12.2300
66.000	12.5400
67.000	12.8600
68.000	13.1800
69.000	13.5000
70.000	13.8200
71.000	14.1500
72.000	14.4800

Name: GROUND Base Flow(cfs): 0.000 Init Stage(ft): 1.000
Group: BASE Warn Stage(ft): 1.000
Type: Time/Stage

From 72228-1 Point at Lake Mary Apts Permit Data

Time(hrs)	Stage(ft)
0.00	1.000
500.00	1.000

Name: Lake Sten Base Flow(cfs): 0.000 Init Stage(ft): 65.000
Group: BASE Warn Stage(ft): 69.500
Type: Stage/Area

Stage(ft)	Area(ac)
65.000	5.7700
66.000	5.9400
67.000	6.1100
68.000	6.2800
69.000	6.4500
70.000	6.6300
71.000	6.8000
72.000	7.4900

Name: MH1 Base Flow(cfs): 0.000 Init Stage(ft): 71.480
Group: BASE Warn Stage(ft): 76.500
Type: Stage/Area

From 22514-7 Plans

Stage(ft)	Area(ac)

Name: POND 2 Base Flow(cfs): 0.000 Init Stage(ft): 65.000
Group: BASE Warn Stage(ft): 72.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data
and 22514-7 SR 417 Int. Pkwy Interchange Data

Stage(ft)	Area(ac)
65.000	4.1200
71.000	4.6800
72.000	5.3000

Name: POND A Base Flow(cfs): 0.000 Init Stage(ft): 70.900
Group: BASE Warn Stage(ft): 73.500
Type: Stage/Area

Elevations are in NAVD

Stage(ft)	Area(ac)
70.900	0.3400
72.650	0.5800
73.000	0.6300
73.500	0.8300

Name: SJ2-S1 Base Flow(cfs): 0.000 Init Stage(ft): 73.000
Group: BASE Warn Stage(ft): 78.000
Type: Stage/Area

Stage(ft)	Area(ac)
73.000	3.6300
74.000	3.8000
75.000	3.9600
76.000	4.1200
77.000	4.2900
78.000	4.4600
79.000	4.6400
80.000	5.3000

Name: SJ2-S2 Base Flow(cfs): 0.000 Init Stage(ft): 73.000
Group: BASE Warn Stage(ft): 74.500
Type: Stage/Area

Treatment Swale

Stage(ft)	Area(ac)
73.000	0.5000
74.000	0.5700
75.000	0.7400

Name: WEST 1 Base Flow(cfs): 0.000 Init Stage(ft): 75.000
Group: BASE Warn Stage(ft): 78.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Stage(ft)	Area(ac)
75.000	0.0100
76.000	0.0300
77.000	0.0600
78.000	0.1100

Name: WEST 2 Base Flow(cfs): 0.000 Init Stage(ft): 75.000
Group: BASE Warn Stage(ft): 78.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Stage(ft)	Area(ac)
75.000	0.0200
76.000	0.0900
77.000	0.3000
78.000	0.6300

Name: WEST 3 Base Flow(cfs): 0.000 Init Stage(ft): 78.000
Group: BASE Warn Stage(ft): 80.000
Type: Stage/Area

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

Stage(ft)	Area(ac)
78.000	0.0700
79.000	0.1300
80.000	0.1900

==========

Elevations are in NAVD

==== Operating Tables ==
==

Name: SEEP Group: BASE
Type: Rating Curve
Function: Time vs. Discharge

From 72228-1 Point at Lake Mary Apts Permit Data
and 22514-7 SR 417 Int. Pkwy Interchange Data

Time(hrs)	Discharge(cfs)
0.00	0.00
10.06	0.00
12.06	0.00
23.06	0.01
29.06	0.01
31.06	0.01
33.06	0.02
35.06	0.02
37.06	0.02
39.06	0.03
41.06	0.03
43.06	0.03
45.06	0.04
47.06	0.04
49.06	0.05
51.06	0.05
53.06	0.06
55.06	0.07
57.06	0.09
59.06	0.20
61.11	0.34
63.11	0.42
67.22	0.47
69.26	0.49
71.38	0.50
73.39	0.50
75.41	0.50
77.41	0.50
79.41	0.50
81.41	0.50
83.41	0.50
85.41	0.49
87.41	0.49
89.41	0.48
91.41	0.48
93.41	0.48
95.41	0.47
97.41	0.46
99.41	0.45
101.66	0.44
103.66	0.43
115.66	0.37
127.66	0.34
139.66	0.31
151.66	0.29
163.66	0.27
175.66	0.25
187.66	0.24
199.66	0.22
211.66	0.21

==
==== Pipes ===
==

Name: EQ-LAKE STEN From Node: Lake Sten Length(ft): 1100.00
Group: BASE To Node: FP-SJ2 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	36.00	36.00	Flow:	Both
Rise(in):	36.00	36.00	Entrance Loss Coef:	0.00
Invert(ft):	60.000	60.000	Exit Loss Coef:	1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Elevations are in NAVD

```
----------------------------------------------------------------------------------------------------
        Name: P-CD1              From Node: CD1               Length(ft): 43.00
       Group: BASE                 To Node: MH1                    Count: 1
                                                       Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM               Solution Algorithm: Automatic
    Geometry: Circular       Circular                               Flow: Both
    Span(in): 18.00          18.00                    Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                        Exit Loss Coef: 0.50
  Invert(ft): 71.700         71.500                       Bend Loss Coef: 0.00
 Manning's N: 0.120000       0.012000                   Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 22514-7 Int. Pkwy Interchange Permit Plans

----------------------------------------------------------------------------------------------------
        Name: P-MH1              From Node: MH1               Length(ft): 48.00
       Group: BASE                 To Node: Lake Sten              Count: 1
                                                       Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM               Solution Algorithm: Automatic
    Geometry: Circular       Circular                               Flow: Both
    Span(in): 18.00          18.00                    Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                        Exit Loss Coef: 0.20
  Invert(ft): 71.480         71.200                       Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 22514-7 Int. Pkwy Interchange Permit Plans

==========================================================================================
==== Drop Structures =====================================================================
==========================================================================================

        Name: APTOUT             From Node: APT POND          Length(ft): 125.00
       Group: BASE                 To Node: POND 2                 Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 24.00          24.00                                  Flow: Both
    Rise(in): 24.00          24.00                    Entrance Loss Coef: 0.500
  Invert(ft): 61.250         60.000                       Exit Loss Coef: 1.000
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                         Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 3 for Drop Structure APTOUT ***
                                                                                     TABLE
                 Count: 1                    Bottom Clip(in): 0.000
                  Type: Vertical: Mavis         Top Clip(in): 0.000
                  Flow: Both                  Weir Disc Coef: 3.200
              Geometry: Rectangular         Orifice Disc Coef: 0.600

              Span(in): 1.00                      Invert(ft): 70.330
              Rise(in): 2.00               Control Elev(ft): 70.330

*** Weir 2 of 3 for Drop Structure APTOUT ***
                                                                                     TABLE
                 Count: 1                    Bottom Clip(in): 0.000
```

```
                 Type: Vertical: Mavis           Top Clip(in): 0.000
                 Flow: Both                   Weir Disc Coef: 3.200
             Geometry: Circular             Orifice Disc Coef: 0.600

             Span(in): 3.33                       Invert(ft): 69.200
             Rise(in): 3.33                Control Elev(ft): 69.200

*** Weir 3 of 3 for Drop Structure APTOUT ***
                                                                  TABLE
                Count: 1                     Bottom Clip(in): 0.000
                 Type: Horizontal               Top Clip(in): 0.000
                 Flow: Both                   Weir Disc Coef: 3.200
             Geometry: Rectangular          Orifice Disc Coef: 0.600

             Span(in): 24.00                      Invert(ft): 73.950
             Rise(in): 37.00               Control Elev(ft): 73.950


-------------------------------------------------------------------------------------------------
         Name: CB2                From Node: POND 2            Length(ft): 208.00
        Group: BASE                 To Node: Lake Sten              Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 18.00          18.00                                Flow: Both
     Rise(in): 18.00          18.00                    Entrance Loss Coef: 0.500
   Invert(ft): 64.500         64.000                       Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                         Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure CB2 ***
                                                                  TABLE
                Count: 1                     Bottom Clip(in): 0.000
                 Type: Horizontal               Top Clip(in): 0.000
                 Flow: Both                   Weir Disc Coef: 3.200
             Geometry: Rectangular          Orifice Disc Coef: 0.600

             Span(in): 37.00                      Invert(ft): 70.550
             Rise(in): 24.00               Control Elev(ft): 70.550


-------------------------------------------------------------------------------------------------
         Name: DS-POND A          From Node: POND A            Length(ft): 108.00
        Group: BASE                 To Node: MH1                    Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 18.00          18.00                                Flow: Both
     Rise(in): 12.00          12.00                    Entrance Loss Coef: 0.500
   Invert(ft): 71.700         71.500                       Exit Loss Coef: 1.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                         Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 22514-7 Int. Pkwy Interchange Permit

*** Weir 1 of 2 for Drop Structure DS-POND A ***
                                                                  TABLE
                Count: 1                     Bottom Clip(in): 0.000
                 Type: Horizontal               Top Clip(in): 0.000
                 Flow: Both                   Weir Disc Coef: 3.200
             Geometry: Rectangular          Orifice Disc Coef: 0.600

             Span(in): 37.00                      Invert(ft): 73.100
             Rise(in): 49.00               Control Elev(ft): 73.100

*** Weir 2 of 2 for Drop Structure DS-POND A ***
                                                                  TABLE
                Count: 1                     Bottom Clip(in): 0.000
                 Type: Vertical: Mavis          Top Clip(in): 0.000
                 Flow: Both                   Weir Disc Coef: 3.200
```

```
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 48.00                      Invert(ft): 72.650
              Rise(in): 12.00                Control Elev(ft): 72.650


-------------------------------------------------------------------------------------------------
        Name: E1OUT               From Node: EAST1             Length(ft): 326.00
       Group: BASE                  To Node: EAST2                  Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 24.00          24.00                                Flow: Both
    Rise(in): 24.00          24.00                    Entrance Loss Coef: 0.000
  Invert(ft): 70.300         66.300                       Exit Loss Coef: 0.000
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dn or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000          0.000                         Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure E1OUT ***
                                                                                        TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Horizontal                Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 49.00                      Invert(ft): 76.770
              Rise(in): 37.00                Control Elev(ft): 76.770


-------------------------------------------------------------------------------------------------
        Name: E2OUT               From Node: EAST2             Length(ft): 190.00
       Group: BASE                  To Node: APT POND               Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 24.00          24.00                                Flow: Both
    Rise(in): 24.00          24.00                    Entrance Loss Coef: 0.000
  Invert(ft): 62.000         60.000                       Exit Loss Coef: 0.000
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dn or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                         Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure E2OUT ***
                                                                                        TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Horizontal                Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 49.00                      Invert(ft): 74.300
              Rise(in): 37.00                Control Elev(ft): 74.300


-------------------------------------------------------------------------------------------------
        Name: SJ2-S1              From Node: SJ2-S1            Length(ft): 1250.00
       Group: BASE                  To Node: Lake Sten              Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
    Geometry: Circular       Circular                 Solution Algorithm: Most Restrictive
    Span(in): 24.00          24.00                                Flow: Both
    Rise(in): 24.00          24.00                    Entrance Loss Coef: 0.000
  Invert(ft): 68.000         59.000                       Exit Loss Coef: 1.000
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000          0.000                         Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall
```

Elevations are in NAVD

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Type D Modified

*** Weir 1 of 3 for Drop Structure SJ2-S1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	24.00	Invert(ft):	77.750
Rise(in):	12.00	Control Elev(ft):	77.750

*** Weir 2 of 3 for Drop Structure SJ2-S1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	49.00	Invert(ft):	78.750
Rise(in):	37.00	Control Elev(ft):	78.750

*** Weir 3 of 3 for Drop Structure SJ2-S1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Circular	Orifice Disc Coef:	0.600
Span(in):	2.75	Invert(ft):	73.000
Rise(in):	2.75	Control Elev(ft):	73.000

Name:	SJ2-S2	From Node:	SJ2-S2
Group:	BASE	To Node:	FP-SJ2

Length(ft): 1100.00
Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Automatic
Span(in):	24.00	24.00	Solution Algorithm:	Most Restrictive
Rise(in):	24.00	24.00	Flow:	Both
Invert(ft):	68.000	59.000	Entrance Loss Coef:	0.000
Manning's N:	0.012000	0.012000	Exit Loss Coef:	1.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Type D

*** Weir 1 of 1 for Drop Structure SJ2-S2 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	49.00	Invert(ft):	74.000
Rise(in):	37.00	Control Elev(ft):	74.000

Name:	W1OUT	From Node:	WEST 1
Group:	BASE	To Node:	POND 2

Length(ft): 180.00
Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	18.00	18.00	Solution Algorithm:	Automatic
Rise(in):	18.00	18.00	Flow:	Both
Invert(ft):	64.000	62.000	Entrance Loss Coef:	0.000
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Elevations are in NAVD

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure W1OUT ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	24.00	Invert(ft):	77.300
Rise(in):	37.00	Control Elev(ft):	77.300

Name:	W2OUT	From Node:	WEST 2
Group:	BASE	To Node:	POND 2
Length(ft):	450.00		
Count:	1		

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	18.00	18.00	Solution Algorithm:	Automatic
Rise(in):	18.00	18.00	Flow:	Both
Invert(ft):	71.500	60.000	Entrance Loss Coef:	0.000
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

*** Weir 1 of 1 for Drop Structure W2OUT ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	54.00	Invert(ft):	77.620
Rise(in):	36.00	Control Elev(ft):	77.620

==========
==== Weirs ==========
==========

Name:	W3OUT	From Node:	WEST 3
Group:	BASE	To Node:	POND 2
Flow:	Both	Count:	1
Type:	Vertical: Mavis	Geometry:	Rectangular
Span(in):	4800.00		
Rise(in):	999.00		
Invert(ft):	80.000		
Control Elevation(ft):	80.000		

TABLE

Bottom Clip(in):	0.000
Top Clip(in):	0.000
Weir Discharge Coef:	3.200
Orifice Discharge Coef:	0.600

From 72228-1 Point at Lake Mary Apts Permit Data, adjusted to NAVD88

==========
==== Rating Curves ==========
==========

Name:	OUTFLOW	From Node:	POND 2	Count:	1
Group:	BASE	To Node:	GROUND	Flow:	Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	SEEP	0.000	0.000
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

==========
==== Hydrology Simulations ==========
==========

Elevations are in NAVD

```
         Name: 100YR-240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Post\100YR-240HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 240.00
          Rainfall File: Fdot-240
    Rainfall Amount(in): 18.50

Time(hrs)       Print Inc(min)
--------------- ---------------
240.000         5.00

------------------------------------------------------------------------------------------------
         Name: 100yr_24hr
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Post\100yr_24hr.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
    Rainfall Amount(in): 10.60

Time(hrs)       Print Inc(min)
--------------- ---------------
24.000          5.00

------------------------------------------------------------------------------------------------
         Name: 25YR_96HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Post\25YR_96HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 96.00
          Rainfall File: Sjrwmd96
    Rainfall Amount(in): 11.30

Time(hrs)       Print Inc(min)
--------------- ---------------
96.000          5.00

================================================================================
==== Routing Simulations ======================================================
================================================================================

         Name: 100YR-240HR         Hydrology Sim: 100YR-240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Post\100YR-240HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 480.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------
         Name: 100yr_24hr          Hydrology Sim: 100yr_24hr
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Post\100yr_24hr.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 100.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
```

Elevations are in NAVD

BASE Yes

Name: 25YR_96HR Hydrology Sim: 25YR_96HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Lake Sten Basin\ICPR\Post\25YR_96HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 300.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Post-Development Conditions
Lake Sten Basin
Node Max Report

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
APT POND	100YR-240HR	74.18	74.00	0.0026	48432	6.26	4.21
APT POND	100yr_24hr	73.95	74.00	0.0050	48328	42.29	0.73
APT POND	25YR_96HR	73.47	74.00	0.0050	48119	39.81	0.70
CD1	100YR-240HR	72.67	75.00	-0.0014	7348	1.48	2.98
CD1	100yr_24hr	72.66	75.00	0.0017	7333	1.71	2.97
CD1	25YR_96HR	72.71	75.00	0.0030	7693	2.00	3.16
EAST1	100YR-240HR	76.83	77.00	0.0025	9186	0.66	0.66
EAST1	100yr_24hr	76.97	77.00	0.0043	10050	5.18	4.09
EAST1	25YR_96HR	76.98	77.00	0.0044	10097	4.71	4.33
EAST2	100YR-240HR	74.41	75.00	0.0050	1894	1.67	1.67
EAST2	100yr_24hr	74.68	75.00	0.0050	2229	10.96	10.93
EAST2	25YR_96HR	74.69	75.00	0.0050	2240	11.36	11.32
FP-SJ2	100YR-240HR	69.95	71.00	0.0007	601359	28.11	0.00
FP-SJ2	100yr_24hr	66.42	71.00	0.0011	552218	101.19	0.00
FP-SJ2	25YR_96HR	66.77	71.00	0.0012	557035	93.06	0.00
GROUND	100YR-240HR	1.00	1.00	0.0000	0	0.50	0.00
GROUND	100yr_24hr	1.00	1.00	0.0000	0	0.50	0.00
GROUND	25YR_96HR	1.00	1.00	0.0000	0	0.50	0.00
Lake Sten	100YR-240HR	69.95	69.50	0.0007	288480	22.82	9.03
Lake Sten	100yr_24hr	66.42	69.50	0.0011	261961	45.29	0.80
Lake Sten	25YR_96HR	66.77	69.50	0.0012	264519	40.50	0.85
MH1	100YR-240HR	72.47	76.50	-0.0050	178	4.81	3.32
MH1	100yr_24hr	72.47	76.50	0.0050	178	5.20	3.30
MH1	25YR_96HR	72.52	76.50	0.0050	177	5.54	3.57
POND 2	100YR-240HR	71.89	72.00	0.0024	227828	30.60	13.35
POND 2	100yr_24hr	70.30	72.00	0.0032	201012	114.58	0.50
POND 2	25YR_96HR	70.51	72.00	0.0037	201854	109.30	0.50
POND A	100YR-240HR	72.92	73.50	0.0021	26968	1.84	1.83
POND A	100yr_24hr	72.97	73.50	0.0041	27282	13.79	2.33
POND A	25YR_96HR	73.01	73.50	0.0040	27587	12.26	2.50
SJ2-S1	100YR-240HR	77.88	78.00	0.0018	193355	12.29	0.72
SJ2-S1	100yr_24hr	76.05	78.00	0.0022	179815	58.98	0.34
SJ2-S1	25YR_96HR	76.14	78.00	0.0025	180533	52.51	0.35
SJ2-S2	100YR-240HR	74.17	74.50	0.0019	26123	3.36	3.35
SJ2-S2	100yr_24hr	74.30	74.50	0.0028	27039	12.78	7.48
SJ2-S2	25YR_96HR	74.31	74.50	0.0031	27152	13.03	8.06
WEST 1	100YR-240HR	77.37	78.00	0.0032	3427	0.65	0.65
WEST 1	100yr_24hr	77.59	78.00	0.0050	3897	5.13	5.07
WEST 1	25YR_96HR	77.57	78.00	0.0037	3853	4.67	4.54
WEST 2	100YR-240HR	77.73	78.00	0.0029	23525	1.69	1.69
WEST 2	100yr_24hr	77.93	78.00	0.0048	26402	13.37	8.19
WEST 2	25YR_96HR	77.95	78.00	0.0049	26694	12.16	9.01
WEST 3	100YR-240HR	80.00	80.00	0.0012	8285	0.23	0.23
WEST 3	100yr_24hr	79.77	80.00	0.0026	7686	1.79	0.00
WEST 3	25YR_96HR	79.89	80.00	0.0028	7983	1.63	0.00

Elevations are in NAVD

Post-Development Conditions
Lake Sten Basin
Node Input Report 2nd 25YR/96HR Storm

Name: SJ2-S1 Base Flow(cfs): 0.000 Init Stage(ft): 75.410
Group: BASE Warn Stage(ft): 78.000
Type: Stage/Area

Stage(ft)	Area(ac)
73.000	3.6300
74.000	3.8000
75.000	3.9600
76.000	4.1200
77.000	4.2900
78.000	4.4600
79.000	4.6400
80.000	5.3000

Elevations are in NAVD

Post-Development Conditions
Lake Sten Basin
Node Max Report 2nd 25YR/96HR Storm

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
SJ2-S1	25YR_96HR	77.87	78.00	0.0022	193331	52.51	0.71

Elevations are in NAVD

Appendix E

Seminole Towne Center
Basin Calculations
Open Basin

Seminole Towne Center Basin Pre-Development Basin Summary

Project:	Wekiva Parkway - Section 8	**Condition:**	**Pre Development**		
Location:	Seminole	**Date:**	2/25/2016	**Date:**	3/15/2016
		Prepared:	*LBF*	**Checked:**	*AKC*

POND 4A, 4B, 8						
Basin	**Total Area (ac)**	**Pervious (ac)**	**Impervious (ac)**	**Pond Surface (ac)**	**Tc (min)**	**CCN**
Basin 4A	30.17	14.57	4.48	11.12	30	70.2
Basin 4B	28.96	18.75	7.66	2.55	15	60.0
Basin 8	14.28	4.67	6.50	3.11	17	79.1
B_821 [2]	4.55	3.02	1.53	0.00	10	58.9
B_808 [2]	1.71	1.01	0.70	0.00	10	63.1
B_807 [2]	2.77	1.80	0.97	0.00	10	59.7
B_846 [2]	2.67	1.06, 1.06	0.55	0.00	10	65.0
B_842 [2]	3.51	2.52	0.99	0.00	10	80.8
B_843 [2]	1.21	0.00	1.21	0.00	10	98.0

Pond 4A, 4B, 8 Curve Number Summary				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		24.59	98	2409.82
Open Space	A	48.46	39	1889.94
Pond Surface		16.78	100	1678.00
Total		**89.83**		**5977.76**

Pre-Development CN = **66.5**
S=(1000/CN)-10 = **5.03**

Notes:

1. All Values were taken from SJRWMD Permit #4-117-22514-3.
2. Basin characteristics are from previous permitted calculations.

Seminole Towne Center Basin Post-Development Basin Summary

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post Development**		
Location:	Seminole	**Date:**	2/25/2016	**Date:**	3/15/2016
		Prepared:	*LBF*	**Checked:**	*AKC*

POND 4A, 4B, 8, 8A						
Basin	**Total Area (ac)**	**Pervious (ac)**	**Impervious (ac)**	**Pond Surface (ac)**	**Tc (min)**	**CCN**
Basin 4A [2]	56.20	17.51	27.44	11.25	30	80.0
Basin 4B	35.42	19.80	11.90	3.72	15	65.2
Basin 8	39.00	17.55	18.19	3.26	15	71.6
Basin 8A	15.10	11.50	3.60	0.00	15	53.1
TOTAL	145.72	66.36	61.13	18.23		

Notes:

1. Values were taken from SJRWMD Permit #4-117-22514-3.
2. Basin 4A includes 9.60 ac of proposed pavement to account for the permitted ultimate I-4 design.

Seminole Towne Center Basin Post-Development CN Calculations

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post Development**		
Location:	Seminole	**Date:**	2/25/2016	**Date:**	3/15/2016
		Prepared:	*LBF*	**Checked:**	*AKC*

Basin 4A				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good Condition)	A	17.51	39	682.89
Impervious		27.44	98	2689.12
Water Surface		11.25	100	1125.00
Total		**56.20**		**4497.01**

Proposed CN = **80.0**
S=(1000/CN)-10 = **2.5**

Basin 4B				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good Condition)	A	19.80	39	772.20
Impervious		11.90	98	1166.20
Water Surface		3.72	100	372.00
Total		**35.42**		**2310.40**

Proposed CN = **65.2**
S=(1000/CN)-10 = **5.3**

Basin 8				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good Condition)	A	17.55	39	684.45
Impervious		18.19	98	1782.62
Water Surface		3.26	100	326.00
Total		**39.00**		**2793.07**

Proposed CN = **71.6**
S=(1000/CN)-10 = **4.0**

Basin 8A				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Open Space (Good Condition)	A	11.50	39	448.50
Impervious		3.60	98	352.80
Water Surface		0.00	100	0.00
Total		**15.10**		**801.30**

Proposed CN = **53.1**
S=(1000/CN)-10 = **8.8**

Pond 4A, 4B, 8A Curve Number Summary				
Land Use Description	**HSG**	**Area (ac)**	**CN**	**Product**
Roadway		61.13	98	5990.74
Open Space	A	66.36	39	2588.04
Pond Surface		18.23	100	1823.00
Total		**145.72**		**10401.78**

Proposed CN = **71.4**
S=(1000/CN)-10 = **4.01**

1. CN = Sum (CN x Area) / Total Area
2. Reference: FDOT Hydrology Handbook Table T-7
3. SFR = Single Family Residential

Water Quality and Volume Summary

Project:	Wekiva Parkway - Section 8	**Condition:**	**Post-Development**		
Location:	Seminole	**Date:**	2/26/2015	**Date:**	3/15/2016
Basin:	**POND 4A, 4B, 8, 8A**	**Prepared:**	*LBF*	**Checked:**	*AKC*

1. Calculate Water Quality Volume per SJRWMD requirements 40C-42 FAC

Provide the greater of one (1) inch of runoff from the entire basin area or 2.5 inches of runoff from the impervious area.

A. Total Drainage Area to POND 8 =	145.72	ac
B. Total Drainage Area for Treatment =	145.72	ac
Total Impervious Area =	61.13	ac
*Does not Include pond area		
Total Pond Area =	18.23	
Total Pervious Area =	66.36	
C. Treatment Calculations		
1" x Drainage Area =	12.14	ac-ft
2.5" x Imp. Area =	12.74	ac-ft, GOVERNS
Total Treatment Provided =	**23.57**	ac-ft

Proposed Stage Storage

Project: Wekiva Parkway
Location: Seminole
Date: 2/9/2016
Prepared: *LBF*
Checked: *AKC*

Pond 4A			
Stage (ft-el)	Area (ac)	Storage (ac-ft)	Remarks
54.77	9.72	0.00	Pond Bottom
61.34	11.26	68.92	NWL
62.54	11.57	82.61	Weir
66.00	12.45	124.15	
67.00	12.70	136.73	Inside Edge of Berm
68.00	13.70	149.93	Top of Maint. Berm

Pond 4B			
Stage (ft-el)	Area (ac)	Storage (ac-ft)	Remarks
54.77	2.60	0.00	Pond Bottom
61.34	3.72	20.76	NWL
62.54	3.98	25.38	Weir
66.00	4.74	40.48	
67.00	4.96	45.33	Inside Edge of Berm
68.00	5.71	50.66	Top of Maint. Berm

Pond 8			
Stage (ft-el)	Area (ac)	Storage (ac-ft)	Remarks
54.77	2.35	0.00	Pond Bottom
61.34	3.26	18.44	NWL
62.54	3.48	22.48	Weir
66.00	4.12	35.63	Inside Edge of Berm
67.00	4.73	40.06	Top of Maint. Berm

Pond 8A (Dry Pond)			
Stage (ft-el)	Area (ac)	Storage (ac-ft)	Remarks
62.50	1.92	0.00	Pond Bottom
63.00	2.02	0.98	
66.00	2.59	7.89	
67.00	2.78	10.58	Inside Edge of Berm
68.00	3.53	13.73	Top of Maint. Berm

TOTALS Pond 4A, 4B, 8, 8A			
Stage (ft-el)	Area (ac)	Storage (ac-ft)	Remarks
54.77	14.67	0.00	Pond Bottom
61.34	18.24	108.12	NWL
62.54	21.05	131.69	Weir
66.00	23.89	209.44	Inside Edge of Berm
67.00	20.44	231.60	Top of Maint. Berm

Total treatment volume available[1]= **23.57** ac-ft

Note:
1. Difference between the NWL and Weir for the combined volume of the ponds.

Permanent Pool Volume

Project: Wekiva Parkway - Section 8
Pond: Ponds 4A, 4B, 8
Computed by: LBF **Checked by:** AKC
Date: 2/26/2015

Permanent Pool Volume			
Depth	**Elevation**	**Area (ac)**	**Volume (ac-ft)**
-6.57	54.77	14.67	0.00
0.00	61.34	18.24	108.12

Wet Season Rainfall	
Month	**Days**
June	30
July	31
August	31
September	30
October	31
Total	**153**

31 " of rainfall over wet season[1]

RT = PPV/FR where;

RT = Residence Time
PPV = Permanent Pool Volume
FR = Flow Rate

The flow rate is defined as the runoff from the site over the wet period:
FR = Area*C*P/Time

Area (acres)					C	P (in)	Time	FR
Total	**Impervious[2]**	**Woods[2]**	**Business[2]**	**Grass[2]**			**(days)**	**(ac-ft/day)**
145.72	61.1	0.0	0.0	66.4	0.49	31	153	1.205

PPV required for 14 day residence time: PPV = RT*FR

PPV_{req} = 16.86 Acre-ft

Volume Available = 108.12 Acre-ft

Volume = 6.4 x PPV_{req} sufficient PPV

Notes:
1. Rainfall data from National Climatic Data Center (Long Term Average).
2. C = 0.98 for impervious area, 0.15 for wooded area, 0.70 for business and 0.20 for grassed area.
3. Littoral shelf not provided. 1.5x PPV required.
4. Pond 8A not included in PPV calculations.

PONDS 4A, 4B, & 8 - Recovery Calculations

Recover 1/2" Treatment Volume in 24 -30 Hours

V-Notch Equation: Q = 2.5 (Tan (angle/2))^2.5

Dimension of Notch: input Height in Feet; Angle in Degrees

Height	1	top width (ft)	1.15
Angle	60		
Disch C=	2.5		
1/2 Angle=	30.00	0.52	Radians
Tan A/2 =	0.58		
Invert	61.34		
Number of Notches	1		

Stage-Storage		
Elevation	acres	acre-ft
61.34	18.24	0.00
62.54	21.05	23.57
66.00	23.89	101.32
67.00	20.44	123.49

Treatment volume = **12.74** **6.37** =1/2 Treatment Vol.

=IF(A17<$B$7,$B$13*2.5*$B$11*(B17-$B$12)^2.5,(((B17-($B$12+$B$7*0.333))*64.4)^0.5)*$D$7/2*$B$7*0.6) : orifice flow above top of notch

H	Stage	Q (cfs)	Average Q (cfs)	Incremental Vol. (Acre-ft)	Cumulative Vol Recovered	Time in Sec	Time in Hr.	Total Recovery Time (hours)	
0.05	61.39	0.00	0.00	*0.98*	25.27	106051855	29458.85	36496	
0.10	61.44	0.00	0.00	0.98	24.29	15931227	4425.34	7037	
0.20	61.54	0.03	0.02	1.96	23.30	5632539	1564.59	2612	
0.30	61.64	0.07	0.05	1.96	21.34	1764860	490.24	1047	
0.40	61.74	0.15	0.11	1.96	19.38	787901	218.86	557	
0.50	61.84	0.26	0.20	1.96	17.41	426556	118.49	338	
0.60	61.94	0.40	0.33	1.96	15.45	260231	72.29	220	
0.70	62.04	0.59	0.50	2.25	13.48	196900	54.69	148	Recovery
0.90	62.24	1.11	0.85	4.49	11.24	230191	63.94	93	1/2 Volume
0.92	62.26	1.17	1.14	0.45	6.74	17165	4.77	29	1/2 TV= 6.37AF
1.00	62.34	2.27	1.72	1.80	6.29	45498	12.64	24	
1.10	62.44	2.43	2.35	2.25	4.49	41607	11.56	12	
1.20	62.54	2.59	2.51	2.25	2.25			0	

Seminole Town Center Pre vs. Post Discharge (FDOT Storms)

Project: Wekiva Parkway
Location: Seminole
Date: 3/1/2016
Prepared: *LBF*
Checked: *AKC*

PRE vs POST Modeling Summary - Critical Duration				
STORM EVENT		PRE-DISCHARGE (CFS)	POST-DISCHARGE (CFS)	DELTA Q (Pre vs Post)
2 YR	1 HR	0.00	0.00	0.00
2 YR	2 HR^2	0.00	1.96	-1.96
2 YR	4 HR	2.65	2.65	0.00
2 YR	8 HR^2	4.14	4.48	-0.34
2 YR	24 HR	6.03	5.41	0.62
2 YR	72 HR	9.04	8.34	0.70
5 YR	1 HR	0.00	0.00	0.00
5 YR	2 HR^2	0.35	2.59	-2.24
5 YR	4 HR^2	4.25	4.94	-0.69
5 YR	8 HR^2	7.31	7.50	-0.19
5 YR	24 HR	13.80	11.83	1.97
5 YR	72 HR	16.07	13.76	2.31
10 YR	1 HR	0.00	0.00	0.00
10 YR	2 HR^2	3.32	4.48	-1.16
10 YR	4 HR^2	6.82	8.30	-1.48
10 YR	8 HR	12.69	11.76	0.93
10 YR	24 HR	20.96	17.74	3.22
10 YR	72 HR	21.77	18.22	3.55
25 YR	1 HR	0.00	0.00	0.00
25 YR	2 HR^2	6.24	7.81	-1.57
25 YR	4 HR^2	11.74	12.83	-1.09
25 YR	8 HR	18.44	16.05	2.39
25 YR	24 HR	28.40	22.07	6.33
25 YR	72 HR	29.66	27.65	2.01
50 YR	1 HR^2	0.00	0.91	-0.91
50 YR	2 HR^2	9.49	11.15	-1.66
50 YR	4 HR	17.99	17.36	0.63
50 YR	8 HR	27.49	21.00	6.49
50 YR	24 HR	36.90	27.14	9.76
50 YR	72 HR	39.92	37.38	2.54
100 YR	1 HR^2	0.01	6.67	-6.66
100 YR	2 HR^2	14.22	15.27	-1.05
100 YR	4 HR	25.63	21.77	3.86
100 YR	8 HR	36.59	25.43	11.16
100 YR	24 HR	44.99	34.72	10.27
100 YR	72 HR	45.69	44.00	1.69

Notes:
1. Post discharge rates compared to pre-development rates from replicated ICPR model from SJRWMD Permit #4-117-22514-3.
2. Post discharge rates for some smaller storms are greater than pre-development conditions, and discharge rates are less than peak discharge for all storms.
3. FDOT critical duration storms using FDOT rainfall distributions.

Seminole Towne Center Basin Pre vs. Post Discharge

Project: Wekiva Parkway
Location: Seminole

Date: 3/1/2016
Prepared: *LBF*
Checked: *AKC*

PRE vs POST DISCHARGE RATE COMPARISON						
	MEAN ANNUAL			25YR/24HR		
NODE	PRE Q (CFS)	Exist Q	POST Q (CFS)	PRE Q (CFS)	Exist Q	POST Q (CFS)
Junc3-4	4.80	2.61	4.40	30.04	21.74	22.07

Notes:
1. Pre Q established using the replicated ICPR model from SJRWMD Permit #4-117-22514-3.
2. Discharge rates are compared at node Junc3-4 before outfall to Lockhart-Smith Canal.

Ponds 3A & 3B Existing Conditions

Project:	Wekiva Parkway	**Date:**	2/1/2016	**Date:**	3/15/2016
Location:	Seminole	**Prepared:**	*LBF*	**Checked:**	*AKC*

Pond 3A Permitted Characteristics - Original Basin						
Impervious (ac)	Pervious (ac)	Total Area (ac)	Treatment Required (ac-ft)	Treatment Provided (ac-ft)	PPV Required (ac-ft)	PPV Provided (ac-ft)
36.19	6.51	42.70	7.54	7.76	16.55	17.56

Pond 3A Existing Characteristics - SR 417 and I-4 Interchange Modifications						
Impervious (ha)	Pervious (ha)	Total Area (ha)	Treatment Required (m^3)	Treatment Provided (m^3)	PPV Required (m^3)	PPV Provided (m^3)
6.99	2.88	9.87	4,438.65	9,430.40	9,110.00	16,954.00
Impervious (ac)	Pervious (ac)	Total Area (ac)	Treatment Required (ac-ft)	Treatment Provided (ac-ft)	PPV Required (ac-ft)	PPV Provided (ac-ft)
17.27	7.12	24.39	3.60	7.76	7.39	13.74

Pond 3B Permitted Characteristics - Original Basin (Dry)						
Impervious (ac)	Pervious (ac)	Total Area (ac)	Treatment Required (ac-ft)	Treatment Provided (ac-ft)	PPV Required (ac-ft)	PPV Provided (ac-ft)
5.88	7.66	13.54	0.81	1.66	N/A	N/A

Pond 3B Existing Characteristics - SR 417 and I-4 Interchange Modifications (Dry)						
Impervious (ha)	Pervious (ha)	Total Area (ha)	Treatment Required (m^3)	Treatment Provided (m^3)	PPV Required (m^3)	PPV Provided (m^3)
1.58	2.53	4.11	1,043.94	1,990.86	N/A	N/A
Impervious (ac)	Pervious (ac)	Total Area (ac)	Treatment Required (ac-ft)	Treatment Provided (ac-ft)	PPV Required (ac-ft)	PPV Provided (ac-ft)
3.90	6.25	10.16	0.85	1.61	N/A	N/A

Notes:
1. Original basin values from SJRWMD permit No. 22391-2.
2. SR 417 & I-4 interchange modification values from SR 417 Greeneway, Project 2, Section 3, Drainage & Stormwater Management Calculations Vol. 2 of 2 (March 1999). FPID 242593-2-52-01.

Ponds 3A & 3B Treatment Volume

Project: Wekiva Parkway **Date:** 2/1/2016 **Date:** 3/15/2016
Location: Seminole **Prepared:** *LBF* **Checked:** *AKC*

Pond 3A Permitted Treatment Volume

Stage (NGVD)	Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)	Remarks
53.00	52.00	2.20	0.00	0.00	4.5" Orifice EL
53.99	52.99	2.39	2.27	2.27	
55.00	54.00	2.59	2.51	4.79	
55.99	54.99	2.79	2.66	7.45	
56.10	**55.10**	**2.81**	**0.31**	**7.76**	1' Orifice EL
57.00	56.00	3.00	2.61	10.37	
58.00	57.00	3.21	3.11	13.48	
59.00	58.00	3.43	3.32	16.80	
60.00	59.00	3.66	3.55	20.34	

Pond 3A Proposed Treatment Volume

Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)	Remarks
52.00	1.70	0.00	0.00	4.5" Orifice EL
53.00	1.84	1.77	1.77	
54.00	1.97	1.91	3.68	
55.00	2.11	2.04	5.72	
55.10	**2.12**	**0.21**	**5.93**	1' Orifice EL
56.00	2.25	1.97	7.90	
57.00	2.41	2.33	10.23	
58.00	2.59	2.50	12.73	

Pond 3B Permitted Treatment Volume

Stage (NGVD)	Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)	Remarks
48.00	47.00	1.98	0.00	0.00	Orifice EL
48.80	**47.80**	**2.17**	**1.66**	**1.66**	Weir EL
49.00	48.00	2.22	0.44	2.10	
50.00	49.00	2.41	2.32	4.42	
51.00	50.00	2.62	2.52	6.93	
52.00	51.00	2.82	2.72	9.65	
53.00	52.00	3.06	2.94	12.59	
54.00	53.00	3.18	3.12	15.71	

Pond 3B Proposed Treatment Volume

Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)	Remarks
47.00	1.66	0.00	0.00	Orifice EL
47.60	**1.74**	**1.02**	**1.02**	Weir EL
48.00	1.79	0.71	1.73	
49.00	1.96	1.88	3.60	
50.00	2.11	2.03	5.64	
51.00	2.26	2.18	7.82	
52.00	2.42	2.34	10.16	
53.00	2.58	2.50	12.66	

Notes:
1. Permitted Treatment Volume from Pre-ICPR calculations, SJRWMD Permit # 22514-3

Pond 3A Permanent Pool Volume

Project: Wekiva Parkway **Date:** 2/1/2016
Location: Seminole **Prepared:** *LBF*

Pond 3A Permitted PPV				
Stage (NGVD)	Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)
41.00	40.00	1.08	0.00	0.00
49.00	48.00	1.49	10.28	10.28
50.00	49.00	1.66	1.58	11.86
51.00	50.00	1.83	1.75	13.60
52.00	51.00	2.02	1.93	15.53
53.00	52.00	2.20	2.11	17.64

Pond 3A Proposed PPV			
Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)
40.00	0.01	0.00	0.00
41.00	0.05	0.03	0.03
42.00	0.11	0.08	0.11
43.00	0.18	0.14	0.25
44.00	0.50	0.34	0.59
45.00	0.66	0.58	1.17
46.00	0.83	0.74	1.92
47.00	1.00	0.91	2.83
48.00	1.17	1.08	3.91
49.00	1.35	1.26	5.16
50.00	1.48	1.42	6.58
51.00	1.59	1.54	8.12
52.00	1.70	1.64	9.76

Pond 3A-3B Recovery Analysis

Project:	Wekiva Parkway	**Date:**	2/29/2016	**Date:**	3/15/2016
Location:	Seminole	**Prepared:**	*LBF*	**Checked:**	*AKC*

Orifice Sizing Pond 3A Check Existing		
Required TV=	3.60	ac-ft
1/2 TV =	1.80	ac-ft
Orifice Coefficient (C) =	0.6	
Exist. Diameter =	**4.5**	inch
Orifice Area (A)=	0.11	ft^2
FL EL =	52	FT (NAVD)
EL @ TV =	53.96	FT (NAVD)
EL @ 1/2 TV =	53.02	FT (NAVD)
Depth TV to flowline h1 =	1.96	ft
Depth 1/2TV to flowline h2 =	1.02	ft
Average Depth (h) =	1.49	ft
Recovery time (t) =	**33.54**	hours

Orifice Sizing Pond 3B Check Existing		
Required TV=	0.85	ac-ft
1/2 TV =	0.42	ac-ft
Orifice Coefficient (C) =	0.6	
Exist. Diameter =	**6.0**	inch
Orifice Area (A)=	0.20	ft^2
FL EL =	47	FT (NAVD)
EL @ TV =	47.5	FT (NAVD)
EL @ 1/2 TV =	47.25	FT (NAVD)
Depth TV to flowline h1 =	0.5	ft
Depth 1/2TV to flowline h2 =	0.25	ft
Average Depth (h) =	0.38	ft
Recovery time (t) =	**8.84**	hours

Orifice Sizing Pond 3A Calculation Proposed		
Required TV =	3.60	ac-ft
1/2 TV =	1.80	ac-ft
Orifice Coefficient (C) =	0.6	
Prop. Diameter =	**5.0**	inch
Orifice Area (A)=	0.14	ft^2
FL EL =	52	FT (NAVD)
EL @ TV =	53.96	FT (NAVD)
EL @ 1/2 TV =	53.02	FT (NAVD)
Depth TV to flowline h1 =	1.96	ft
Depth 1/2TV to flowline h2 =	1.02	ft
Average Depth (h) =	1.49	ft
Recovery time (t) =	**27.17**	hours

Orifice Sizing Pond 3B Calculation Proposed		
Required TV =	0.85	ac-ft
1/2 TV =	0.42	ac-ft
Orifice Coefficient (C) =	0.6	
Prop. Diameter =	**3.5**	inch
Orifice Area (A)=	0.07	ft^2
FL EL =	47	FT (NAVD)
EL @ TV =	47.5	FT (NAVD)
EL @ 1/2 TV =	47.25	FT (NAVD)
Depth TV to flowline h1 =	0.5	ft
Depth 1/2TV to flowline h2 =	0.25	ft
Average Depth (h) =	0.38	ft
Recovery time (t) =	**25.99**	hours

Pond	Existing Orifice (in)	Proposed Orifice (in)
Pond 3A	4.5	5.0
Pond 3B	6.0	3.5

t = TV*43560 / (2*3600sec/hr*C*A*(2*32.2*h)^0.5)

Notes:

1. Pond 3A, the existing orifice recovers half of the treatment volume after the 30 hour maximum criteria set by SJRWMD. Modify orifice to 5".
2. Pond 3B, the existing orifice recovers half of the treatment volume before the 24 hour minimum criteria set by SJRWMD. Modify orifice to 3.5".

Ponds 3A & 3B Proposed Conditions

Project:	Wekiva Parkway	**Date:**	2/1/2016	**Date:**	3/15/2016
Location:	Seminole	**Prepared:**	*LBF*	**Checked:**	*AKC*

Pond 3A Proposed Characteristics							
Impervious (ac)	Pervious (ac)	Total Area (ac)	Composite CN	Treatment Required (ac-ft)	Treatment Provided (ac-ft)	PPV Required (ac-ft)	PPV Provided (ac-ft)
17.27	7.12	24.39	80.78	3.60	5.93	7.39	9.76

Pond 3B Proposed Characteristics					
Impervious (ac)	Pervious (ac)	Total Area (ac)	Composite CN	Treatment Required (ac-ft)	Treatment Provided (ac-ft)
3.90	6.25	10.16	61.68	0.85	1.02

Notes:

1.Pervious CN = 39, Impervious CN = 98

2. Required treatement values taken from Seminole Towne Center Basin Calcs - #22514-3

Pond 4 Summary

Project:	Wekiva Parkway	**Date:**	2/1/2016	**Date:**	3/16/2016
Location:	Seminole	**Prepared:**	*LBF*	**Prepared:**	*AKC*

Basin 4/Pond 4 Existing Characteristics						
Impervious (ac)	Pervious (ac)	Total Area (ac)	Treatment Required (ac-ft)	Treatment Provided (ac-ft)	PPV Required (ac-ft)	PPV Provided (ac-ft)
24.10	9.05	33.15	5.02	7.71	8.30	14.25

Basin 4/Pond 4 Proposed Characteristics						
Impervious (ac)	Pervious (ac)	Total Area (ac)	Treatment Required (ac-ft)	Treatment Provided (ac-ft)	PPV Required (ac-ft)	PPV Provided (ac-ft)
24.10	9.05	33.15	5.02	5.17	8.30	8.64

Notes:
1. Existing characteristic values from SJRWMD permit No. 22391-1

Pond 4 Treatment Volume

Project: Wekiva Parkway **Date:** 2/1/2016 **Date:** 3/16/2016

Location: Seminole **Prepared:** *LBF* **Checked:** *AKC*

Pond 4 Permitted Treatment Volume					
Stage (NGVD)	Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)	Remarks
51.62	50.62	1.73	0.00	0.00	NWL
52.00	51.00	1.78	0.67	0.67	
53.00	52.00	1.94	1.86	2.53	
54.00	53.00	2.09	2.02	4.54	
55.00	54.00	2.25	2.17	6.71	
55.45	**54.45**	**2.33**	**1.03**	**7.74**	Weir Elevation
55.50	54.50	2.34	0.12	7.86	
56.00	55.00	2.42	1.19	9.05	
57.00	56.00	2.59	2.51	11.55	
58.00	57.00	2.77	2.68	14.23	
59.00	58.00	2.95	2.86	17.09	
60.00	59.00	3.14	3.05	20.14	
61.00	60.00	3.36	3.25	23.39	Maint. Berm
62.00	61.00	3.58	3.47	26.86	

Pond 4 Proposed Treatment Volume				
Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)	Remarks
51.00	1.32	0.00	0.00	NWL
52.00	1.41	1.36	1.36	
53.00	1.53	1.47	2.83	
54.00	1.65	1.59	4.42	
54.45	**1.71**	**0.75**	**5.17**	Weir Elevation
54.50	1.71	0.09	5.26	
55.00	1.77	0.87	6.13	
56.00	1.89	1.83	7.96	
57.00	2.02	1.96	9.92	
58.00	2.16	2.09	12.01	
59.00	2.31	2.23	14.24	
60.00	2.49	2.40	16.64	Maint. Berm

Notes:

1. Permitted treatment volume values taken from SJRWMD permit No. 22391-1
2. Provided treatment volume reduced to 5.17 ac-ft. Value greater than 5.02 ac-ft required.

Pond 4 Permanent Pool Volume & Orifice Calculation

Project: Wekiva Parkway **Date:** 2/1/2016 **Date:** 3/16/2016
Location: Seminole **Prepared:** *LBF* **Checked:** *AKC*

Pond 4 Permitted PPV					
Stage (NGVD)	Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)	Remarks
40.00	39.00	0.95	0.00	0.00	Bottom
48.00	47.00	1.26	8.84	8.84	
51.62	50.62	1.73	5.41	14.25	NWL

Pond 4 Proposed PPV				
Stage (NAVD)	Area (ac)	Incremental Storage (ac-ft)	Cumulative Storage (ac-ft)	Remarks
39.00	0.07	0.00	0.00	Pond Bottom
40.00	0.30	0.18	0.18	
41.00	0.38	0.34	0.52	
42.00	0.46	0.42	0.94	
43.00	0.54	0.50	1.44	
44.00	0.63	0.59	2.03	
45.00	0.71	0.67	2.70	
46.00	0.80	0.75	3.45	
47.00	0.89	0.84	4.29	
48.00	0.98	0.93	5.22	
49.00	1.08	1.03	6.25	
50.00	1.19	1.13	7.38	
51.00	**1.32**	**1.26**	**8.64**	Orifice EL / NWL
51.00	1.32	0.00	8.64	

Orifice Sizing Check Existing		
Required TV =	5.02	ac-ft
1/2 TV =	2.51	ac-ft
Orifice Coefficient (C) =	0.6	
Exist. Diameter =	6.0	inch
Orifice Area (A)=	0.20	ft^2
FL EL =	50.8	FT (NAVD)
EL @ TV =	54.45	FT (NAVD)
EL @ 1/2 TV =	52.67	FT (NAVD)
Depth TV to flowline h1 =	3.65	ft
Depth 1/2TV to flowline h2 =	1.87	ft
Average Depth (h) =	2.76	ft
Recovery time (t) =	19.34	hours

Orifice Sizing Calculation Proposed		
Required TV =	5.02	ac-ft
1/2 TV =	2.51	ac-ft
Orifice Coefficient (C) =	0.6	
Exist. Diameter =	5.5	inch
Orifice Area (A)=	0.16	ft^2
FL EL =	51	FT (NAVD)
EL @ TV =	54.45	FT (NAVD)
EL @ 1/2 TV =	52.50	FT (NAVD)
Depth TV to flowline h1 =	3.45	ft
Depth 1/2TV to flowline h2 =	1.50	ft
Average Depth (h) =	2.48	ft
Recovery time (t) =	24.30	hours

t = TV*43560 / (2*3600sec/hr*C*A*(2*32.2*h)^0.5)

Note: The existing orifice recovers half of the treatment volume before the 24 hour minimum criteria set by SJRWMD. Modify orifice to 5.5" to meet recovery criteria.

PRE

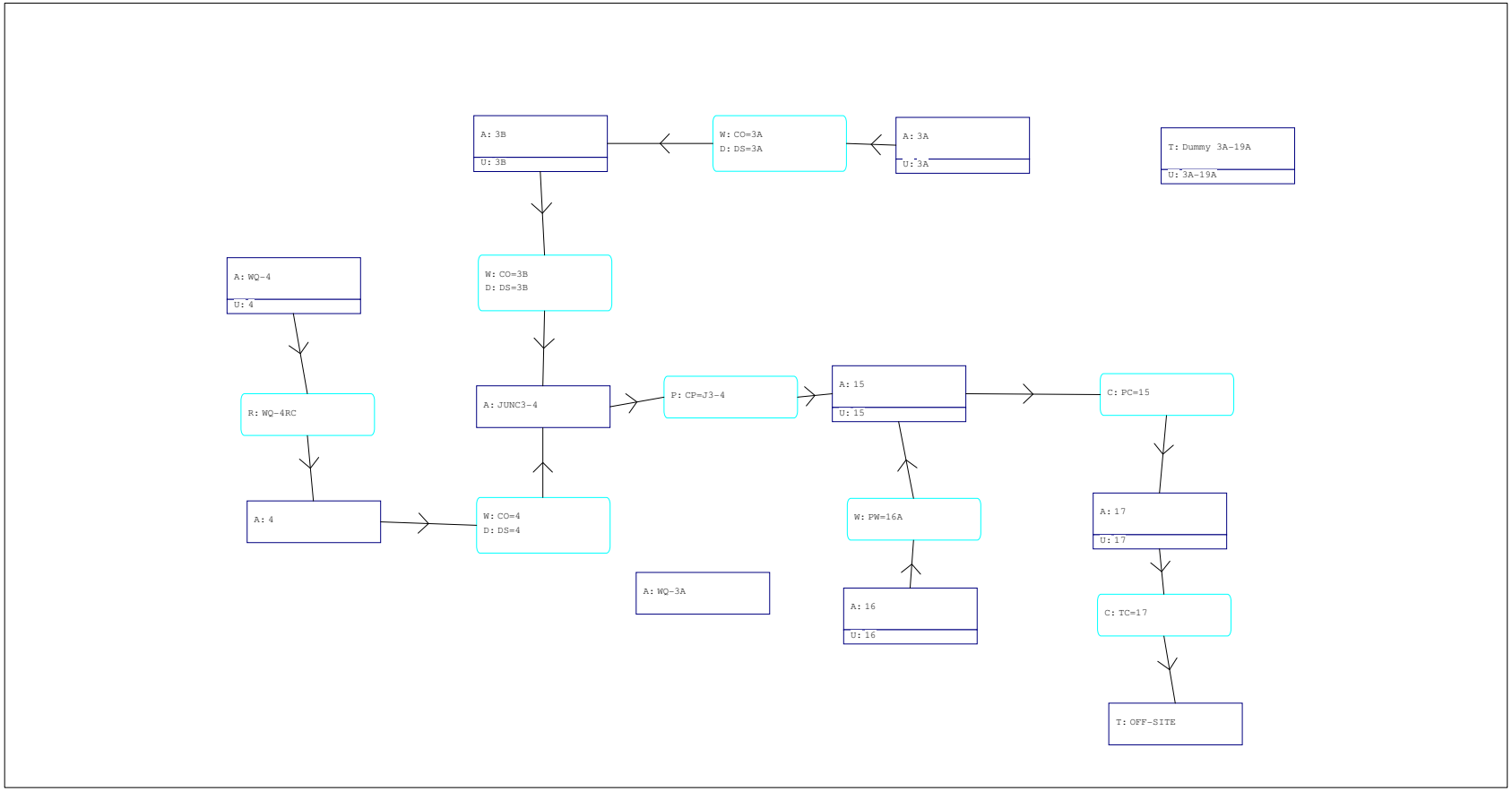
ICPR MODEL

Pre Development
Seminole Towne Center Basin
Node Diagram

Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: 15                      Node: 15                      Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                   Peaking Factor: 323.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 38.00
              Area(ac): 30.100                 Time Shift(hrs): 0.00
          Curve Number: 72.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: 16                      Node: 16                      Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                   Peaking Factor: 323.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 39.00
              Area(ac): 31.800                 Time Shift(hrs): 0.00
          Curve Number: 77.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: 17                      Node: 17                      Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                   Peaking Factor: 323.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 20.00
              Area(ac): 18.210                 Time Shift(hrs): 0.00
          Curve Number: 73.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: 3A                      Node: 3A                      Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh484                   Peaking Factor: 484.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 20.00
              Area(ac): 42.700                 Time Shift(hrs): 0.00
          Curve Number: 90.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: 3A-19A                  Node: Dummy 3A-19A            Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh484                   Peaking Factor: 484.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 20.00
              Area(ac): 5.050                  Time Shift(hrs): 0.00
          Curve Number: 39.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Area assumed to be pervious to be conservative.

--------------------------------------------------------------------------------------------------------
         Name: 3B                      Node: 3B                      Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh484                   Peaking Factor: 484.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 13.540                 Time Shift(hrs): 0.00
          Curve Number: 91.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------------------------------
         Name: 4                       Node: WQ-4                    Status: Onsite
        Group: BASE                    Type: SCS Unit Hydrograph CN
```

```
        Unit Hydrograph: Uh484                  Peaking Factor: 484.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 20.00
              Area(ac): 54.710                Time Shift(hrs): 0.00
          Curve Number: 83.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


================================================================================
==== Nodes =====================================================================
================================================================================

      Name: 15                  Base Flow(cfs): 0.000         Init Stage(ft): 44.010
     Group: BASE                                             Warn Stage(ft): 46.010
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
         42.010          0.1500
         44.010          2.3000
         45.000          5.2100
         46.010          6.9400

--------------------------------------------------------------------------------
      Name: 16                  Base Flow(cfs): 0.000         Init Stage(ft): 44.510
     Group: BASE                                             Warn Stage(ft): 46.010
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
         43.000          0.2200
         44.010          1.3100
         45.000          3.6100
         46.010          5.5100

--------------------------------------------------------------------------------
      Name: 17                  Base Flow(cfs): 0.000         Init Stage(ft): 40.010
     Group: BASE                                             Warn Stage(ft): 43.950
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
         40.010          0.2500
         43.950          0.2500

--------------------------------------------------------------------------------
      Name: 3A                  Base Flow(cfs): 0.000         Init Stage(ft): 51.990
     Group: BASE                                             Warn Stage(ft): 59.010
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
         52.000          2.2000
         52.990          2.3900
         54.000          2.5900
         54.990          2.7900
         55.100          2.8100
         56.000          3.0000
         57.000          3.2100
         58.000          3.4300
         59.000          3.6600

--------------------------------------------------------------------------------
      Name: 3B                  Base Flow(cfs): 0.000         Init Stage(ft): 47.000
     Group: BASE                                             Warn Stage(ft): 53.000
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
         47.000          1.9800
         47.800          2.1700
         48.000          2.2200
         49.000          2.4100
         50.000          2.6200
         51.000          2.8200
```

All elevations in NAVD

52.000	3.0600
53.000	3.1800

Name: 4 Base Flow(cfs): 0.000 Init Stage(ft): 51.000
Group: BASE Warn Stage(ft): 61.010
Type: Stage/Area

Stage(ft)	Area(ac)
51.000	1.7800
52.000	1.9400
53.000	2.0900
54.000	2.2500
54.450	2.3300
54.500	2.3400
55.000	2.4200
56.000	2.5900
57.000	2.7700
58.000	2.9500
59.000	3.1400
60.000	3.3600
61.000	3.5800

Name: Dummy 3A-19A Base Flow(cfs): 0.000 Init Stage(ft): 61.500
Group: BASE Warn Stage(ft): 61.500
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	61.500
999.00	61.500

Name: JUNC3-4 Base Flow(cfs): 0.000 Init Stage(ft): 44.010
Group: BASE Warn Stage(ft): 53.990
Type: Stage/Area

Stage(ft)	Area(ac)
44.010	0.2500
53.990	0.2500

Name: OFF-SITE Base Flow(cfs): 0.000 Init Stage(ft): 39.490
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	39.490
999.00	39.490

Name: WQ-3A Base Flow(cfs): 0.000 Init Stage(ft): 57.990
Group: BASE Warn Stage(ft): 59.000
Type: Stage/Area

Stage(ft)	Area(ac)
57.990	2.4000
59.010	2.4000

Name: WQ-4 Base Flow(cfs): 0.000 Init Stage(ft): 59.990
Group: BASE Warn Stage(ft): 61.000
Type: Stage/Area

Stage(ft)	Area(ac)
59.990	3.0400
61.010	3.0400

All elevations in NAVD

Pre Development
Seminole Towne Center Basin
Input Report

==========
==== Operating Tables ==========
==========

Name: GWFLOWOT Group: BASE
Type: Rating Curve
Function: Time vs. Discharge

Time(hrs)	Discharge(cfs)
0.00	0.16
40.00	0.16

Name: WQ-4OT Group: BASE
Type: Rating Curve
Function: US Stage vs. Discharge

US Stage(ft)	Discharge(cfs)
61.010	0.00
61.110	1000.13

==========
==== Pipes ==========
==========

Name: CP=J3-4 From Node: JUNC3-4 Length(ft): 299.05
Group: BASE To Node: 15 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	46.640	46.310
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==========
==== Channels ==========
==========

Name: PC=15 From Node: 15 Length(ft): 500.00
Group: BASE To Node: 17 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Contraction Coef: 0.000
Expansion Coef: 0.000
Entrance Loss Coef: 0.100
Exit Loss Coef: 0.000
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Parabolic	Parabolic
Invert(ft):	44.010	42.010
TClpInitZ(ft):	9999.000	9999.000
Manning's N:	0.035000	0.035000
Top Clip(ft):	0.000	0.000
Bot Clip(ft):	0.000	0.000
Main XSec:		
AuxElev1(ft):		
Aux XSec1:		
AuxElev2(ft):		
Aux XSec2:		
Top Width(ft):	15.000	15.000
Depth(ft):	1.500	1.500
Bot Width(ft):		
LtSdSlp(h/v):		
RtSdSlp(h/v):		

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

Name: TC=17 From Node: 17 Length(ft): 1150.00
Group: BASE To Node: OFF-SITE Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Trapezoidal	Trapezoidal

All elevations in NAVD

```
    Invert(ft): 40.010         38.990                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.000
   Manning's N: 0.022000       0.022000                   Expansion Coef: 0.000
  Top Clip(ft): 0.000          0.000                   Entrance Loss Coef: 0.100
  Bot Clip(ft): 0.000          0.000                       Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 10.000         10.000
  LtSdSlp(h/v): 2.00           2.00
  RtSdSlp(h/v): 2.00           2.00

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

================================================================================================
==== Drop Structures ===========================================================================
================================================================================================

        Name: DS=3A              From Node: 3A                Length(ft): 129.99
       Group: BASE                 To Node: 3B                     Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 36.00          36.00                                Flow: Both
    Rise(in): 36.00          36.00                   Entrance Loss Coef: 0.500
   Invert(ft): 47.490        47.000                      Exit Loss Coef: 0.000
  Manning's N: 0.012000      0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                        Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

*** Weir 1 of 2 for Drop Structure DS=3A ***
                                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 44.98                       Invert(ft): 57.500
              Rise(in): 44.98                  Control Elev(ft): 57.500

*** Weir 2 of 2 for Drop Structure DS=3A ***
                                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular              Orifice Disc Coef: 0.600

              Span(in): 12.00                       Invert(ft): 55.100
              Rise(in): 12.00                  Control Elev(ft): 55.100


------------------------------------------------------------------------------------------------
        Name: DS=3B              From Node: 3B                Length(ft): 27.99
       Group: BASE                 To Node: JUNC3-4                Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 24.00          24.00                                Flow: Both
    Rise(in): 24.00          24.00                   Entrance Loss Coef: 0.500
   Invert(ft): 46.700        46.640                      Exit Loss Coef: 0.000
  Manning's N: 0.012000      0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                        Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

*** Weir 1 of 2 for Drop Structure DS=3B ***
                                                                                    TABLE
```

```
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 44.98                       Invert(ft): 51.200
              Rise(in): 44.98                  Control Elev(ft): 51.200

*** Weir 2 of 2 for Drop Structure DS=3B ***
                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 10.00                       Invert(ft): 47.790
              Rise(in): 40.94                  Control Elev(ft): 47.790


-------------------------------------------------------------------------------------------------
         Name: DS=4               From Node: 4                 Length(ft): 557.74
        Group: BASE                 To Node: JUNC3-4                Count: 1

              UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Automatic
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                     Entrance Loss Coef: 0.500
   Invert(ft): 48.970         46.640                        Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

*** Weir 1 of 2 for Drop Structure DS=4 ***
                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 44.98                       Invert(ft): 58.190
              Rise(in): 44.98                  Control Elev(ft): 58.190

*** Weir 2 of 2 for Drop Structure DS=4 ***
                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 9.02                        Invert(ft): 54.710
              Rise(in): 41.73                  Control Elev(ft): 54.710


=================================================================================================
==== Weirs ======================================================================================
=================================================================================================

         Name: CO=3A              From Node: 3A
        Group: BASE                 To Node: 3B
         Flow: Both                    Count: 1
         Type: Vertical: Mavis     Geometry: Circular

                    Span(in): 4.49
                    Rise(in): 4.49
                  Invert(ft): 51.990
       Control Elevation(ft): 51.990
                                       TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
         Weir Discharge Coef: 3.200
      Orifice Discharge Coef: 0.600

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

-------------------------------------------------------------------------------------------------
         Name: CO=3B              From Node: 3B
        Group: BASE                 To Node: JUNC3-4
         Flow: Both                    Count: 1
```

All elevations in NAVD

```
         Type: Vertical: Mavis      Geometry: Circular

                    Span(in): 6.00
                    Rise(in): 6.00
                  Invert(ft): 47.000
       Control Elevation(ft): 47.000
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
      Orifice Discharge Coef: 0.600

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

-------------------------------------------------------------------------------------------------
         Name: CO=4                From Node: 4
        Group: BASE                  To Node: JUNC3-4
         Flow: Both                    Count: 1
         Type: Vertical: Mavis      Geometry: Circular

                    Span(in): 6.00
                    Rise(in): 6.00
                  Invert(ft): 51.000
       Control Elevation(ft): 51.000
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
      Orifice Discharge Coef: 0.600

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

-------------------------------------------------------------------------------------------------
         Name: PW=16A              From Node: 16
        Group: BASE                  To Node: 15
         Flow: Both                    Count: 1
         Type: Vertical: Mavis      Geometry: Parabolic

               Top Width(ft): 139.99
            Corres Depth(ft): 1.50
                  Invert(ft): 45.490
       Control Elevation(ft): 45.490
      Struct Opening Dim(ft): 9999.00
                                          TABLE
             Bottom Clip(ft): 0.000
                Top Clip(ft): 0.000
          Weir Discharge Coef: 2.800
      Orifice Discharge Coef: 0.600

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

=================================================================================================
==== Hydrology Simulations =====================================================================
=================================================================================================

         Name: 025YR_096HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\025YR_096HR.

       Override Defaults: Yes
    Storm Duration(hrs): 96.00
          Rainfall File: Sjrwmd96
    Rainfall Amount(in): 11.30

Time(hrs)       Print Inc(min)
--------------- ---------------
96.000          5.00

-------------------------------------------------------------------------------------------------
         Name: 100YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_1H.R32

       Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 4.50

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           2.50

-------------------------------------------------------------------------------------------------
         Name: 100YR_240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_240HR.

       Override Defaults: Yes
    Storm Duration(hrs): 240.00
```

Rainfall File: Fdot-240
Rainfall Amount(in): 18.50

Time(hrs)	Print Inc(min)
240.000	5.00

Name: 100YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_24H.R3

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 10.60

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 100YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 5.60

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 100YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 6.64

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 100YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_72H.R3

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 13.80

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 100YR_8HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_8HR.R3

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 7.84

Time(hrs)	Print Inc(min)
16.000	5.00

Name: 10YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.20

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 10YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_24HR.R3

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 7.50

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 10YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 3.90

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 10YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 4.60

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 10YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_72H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 9.00

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 10YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 5.56

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 25YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.70

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 25YR_24H_SJRWMD
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_24H_SJR

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 8.60

All elevations in NAVD

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 25YR_24HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_24HR.R3

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.60

Time(hrs)	Print Inc(min)
24.000	5.00

Name: 25YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 4.50

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 25YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 5.30

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 25YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_72HR.R3

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 10.90

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 25YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.32

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 2YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_1H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-1
Rainfall Amount(in): 2.40

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 2YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_24H.R32

All elevations in NAVD

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 4.75

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 2YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 2.85

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 2YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 3.30

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 2YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_72HR.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 6.00

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 2YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_8HR.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 4.00

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 3YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\3YR_1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 2.70

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 3YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\3YR_2HR.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 3.30

Time(hrs)	Print Inc(min)
4.000	2.50

All elevations in NAVD

```
---------------------------------------------------------------------------------------------------
         Name: 50YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_1H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 4.00

Time(hrs)       Print Inc(min)
--------------- ---------------
302.000         2.50

---------------------------------------------------------------------------------------------------
         Name: 50YR_24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_24H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 9.50

Time(hrs)       Print Inc(min)
--------------- ---------------
30.000          5.00

---------------------------------------------------------------------------------------------------
         Name: 50YR_2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_2H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 2.00
          Rainfall File: Fdot-2
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
4.000           2.50

---------------------------------------------------------------------------------------------------
         Name: 50YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_4H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 4.00
          Rainfall File: Fdot-4
    Rainfall Amount(in): 6.00

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           2.50

---------------------------------------------------------------------------------------------------
         Name: 50YR_72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50yR_72H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Fdot-72
    Rainfall Amount(in): 12.70

Time(hrs)       Print Inc(min)
--------------- ---------------
80.000          5.00

---------------------------------------------------------------------------------------------------
         Name: 50YR_8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_8HR.R32

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 7.20

Time(hrs)       Print Inc(min)
--------------- ---------------
16.000          2.50

---------------------------------------------------------------------------------------------------
         Name: 5YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_1H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
```

All elevations in NAVD

Rainfall Amount(in): 2.90

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 5YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 6.25

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 5YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 3.40

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 5YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 4.00

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 5YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_72HR.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 7.60

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 5YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 4.72

Time(hrs)	Print Inc(min)
16.000	2.50

Name: MEAN_ANNUAL
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\MEAN_ANNUAL.

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 4.50

Time(hrs)	Print Inc(min)
24.000	5.00

Name: MEANANNUAL_SJRW

All elevations in NAVD

```
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\MEANANNUAL_S

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
    Rainfall Amount(in): 4.50

Time(hrs)       Print Inc(min)
--------------- ---------------
30.000          5.00

================================================================================================
==== Routing Simulations ======================================================================
================================================================================================

         Name: 025YR_096HR         Hydrology Sim: 025YR_096HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\025YR_096HR.

      Execute: No          Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 96.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------
         Name: 100YR_1HR           Hydrology Sim: 100YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_1HR.I3

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------
         Name: 100YR_240HR         Hydrology Sim: 100YR_240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_240HR.

      Execute: No          Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 240.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes
```

```
-------------------------------------------------------------------------------------------------
         Name: 100YR_24HR          Hydrology Sim: 100YR_24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_24HR.I

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 24.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 100YR_2HR           Hydrology Sim: 100YR_2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_2HR.I3

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 100YR_4H            Hydrology Sim: 100YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_4H.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 100YR_72HR          Hydrology Sim: 100YR_72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_72HR.I

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:
```

All elevations in NAVD

Time(hrs) Print Inc(min)
--- ---
999.000 60.000

Group Run
--- ---
BASE Yes

Name: 100YR_8HR Hydrology Sim: 100YR_8HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\100YR_8HR.I3

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 24.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)
--- ---
999.000 15.000

Group Run
--- ---
BASE Yes

Name: 10YR_1HR Hydrology Sim: 10YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_1HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 2.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)
--- ---
999.000 5.000

Group Run
--- ---
BASE Yes

Name: 10YR_24HR Hydrology Sim: 10YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_24HR.I3

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)
--- ---
999.000 15.000

Group Run
--- ---
BASE Yes

Name: 10YR_2HR Hydrology Sim: 10YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_2HR.I32

```
     Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
        Name: 10YR_4HR            Hydrology Sim: 10YR_4H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_4HR.I32

     Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
        Name: 10YR_72HR           Hydrology Sim: 10YR_72H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_72HR.I3

     Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
        Name: 10YR_8HR            Hydrology Sim: 10YR_8H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\10YR_8HR.I32

     Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 16.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000
```

All elevations in NAVD

Group	Run
BASE	Yes

Name: 25YR_1HR Hydrology Sim: 25YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_1HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 1.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 25YR_24HR Hydrology Sim: 25YR_24HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_24HR.I3

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 25YR_24HR_SJRWM Hydrology Sim: 25YR_24H_SJRWMD
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_24HR_SJ

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 25YR_2HR Hydrology Sim: 25YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_2HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500

All elevations in NAVD

```
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR_4HR            Hydrology Sim: 25YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_4HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 8.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR_72HR           Hydrology Sim: 25YR_72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_72HR.I3

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 80.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR_8HR            Hydrology Sim: 25YR_8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\25YR_8HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 16.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes
```

All elevations in NAVD

```
--------------------------------------------------------------------------------------------------
         Name: 2YR_1HR             Hydrology Sim: 2YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_1HR.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


--------------------------------------------------------------------------------------------------
         Name: 2YR_24HR            Hydrology Sim: 2YR_24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_24HR.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


--------------------------------------------------------------------------------------------------
         Name: 2YR_2HR             Hydrology Sim: 2YR_2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_2HR.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


--------------------------------------------------------------------------------------------------
         Name: 2YR_4HR             Hydrology Sim: 2YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_4HR.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:
```

All elevations in NAVD

Time(hrs) Print Inc(min)
--- ---
999.000 5.000

Group Run
--- ---
BASE Yes

Name: 2YR_72HR Hydrology Sim: 2YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_72HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 80.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)
--- ---
999.000 60.000

Group Run
--- ---
BASE Yes

Name: 2YR_8HR Hydrology Sim: 2YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\2YR_8HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 16.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)
--- ---
999.000 5.000

Group Run
--- ---
BASE Yes

Name: 3YR_1HR Hydrology Sim: 3YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\3YR_1HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 2.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)
--- ---
999.000 5.000

Group Run
--- ---
BASE Yes

Name: 3YR_2HR Hydrology Sim: 3YR_2H

```
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\3YR_.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------
         Name: 50YR_1HR            Hydrology Sim: 50YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_1HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------
         Name: 50YR_24HR           Hydrology Sim: 50YR_24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_24HR.I3

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------
         Name: 50YR_2HR            Hydrology Sim: 50YR_2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_2HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
```

999.000	5.000

Group	Run
BASE	Yes

Name: 50YR_4HR Hydrology Sim: 50YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_4HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 8.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 50YR_72HR Hydrology Sim: 50YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_72HR.I3

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 80.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	60.000

Group	Run
BASE	Yes

Name: 50YR_8HR Hydrology Sim: 50YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\50YR_8HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 16.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 5YR_1HR Hydrology Sim: 5YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_1HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

All elevations in NAVD

```
        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5YR_24HR            Hydrology Sim: 5YR_24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_24HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5YR_2HR             Hydrology Sim: 5YR_2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_2HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5YR_4HR             Hydrology Sim: 5YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_4HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
```

```
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5YR_72HR            Hydrology Sim: 5YR_72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_72HR.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 5YR_8HR             Hydrology Sim: 5YR_8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\5YR_8HR.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 16.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: MEAN_ANNUAL         Hydrology Sim: MEAN_ANNUAL
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\MEAN_ANNUAL.

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 24.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: MEANANNUAL_SJRW     Hydrology Sim: MEANANNUAL_SJRW
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Pre\MEANANNUAL_S

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
```

Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Pre Development
Seminole Towne Center Basin
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
3A	BASE	25YR_24HR_SJRWM	13.06	58.06	59.01	0.0050	150089	12.08	223.62	13.06	27.27
3A	BASE	MEANANNUAL_SJRW	20.61	55.84	59.01	0.0050	128899	12.08	106.82	20.61	2.59
3B	BASE	25YR_24HR_SJRWM	16.75	51.09	53.00	0.0031	123829	12.00	83.86	17.35	13.50
3B	BASE	MEANANNUAL_SJRW	24.04	48.64	53.00	0.0034	101970	12.00	40.58	24.04	3.05
4	BASE	25YR_24HR_SJRWM	14.33	58.13	61.01	0.0050	129341	12.09	262.89	14.33	17.69
4	BASE	MEANANNUAL_SJRW	24.16	54.70	61.01	0.0049	103576	12.09	112.08	24.16	1.75
JUNC3-4	BASE	100YR_1HR	2.00	46.69	53.99	0.0032	10994	1.57	6.84	2.00	0.01
JUNC3-4	BASE	100YR_24HR	18.30	50.62	53.99	0.0050	11003	17.48	45.01	18.30	44.99
JUNC3-4	BASE	100YR_2HR	2.87	48.38	53.99	0.0040	11324	2.18	15.23	2.87	14.22
JUNC3-4	BASE	100YR_4H	4.47	49.11	53.99	0.0039	11244	4.24	25.83	4.47	25.63
JUNC3-4	BASE	100YR_72HR	61.17	50.67	53.99	0.0050	11002	60.74	45.76	61.17	45.69
JUNC3-4	BASE	100YR_8HR	7.44	49.99	53.99	-0.0049	11010	7.21	36.94	7.44	36.59
JUNC3-4	BASE	10YR_1HR	2.00	45.15	53.99	0.0026	10912	1.38	2.86	0.00	0.00
JUNC3-4	BASE	10YR_24HR	21.50	48.82	53.99	0.0047	11292	21.30	20.99	21.50	20.96
JUNC3-4	BASE	10YR_2HR	4.00	47.47	53.99	0.0031	11275	2.40	4.27	4.00	3.32
JUNC3-4	BASE	10YR_4HR	5.41	47.82	53.99	0.0040	11314	4.17	7.21	5.41	6.82
JUNC3-4	BASE	10YR_72HR	64.35	48.87	53.99	0.0050	11285	64.20	21.82	64.35	21.77
JUNC3-4	BASE	10YR_8HR	8.32	48.28	53.99	0.0049	11327	8.16	12.74	8.32	12.69
JUNC3-4	BASE	25YR_1HR	1.00	44.32	53.99	0.0007	10912	1.00	3.64	0.00	0.00
JUNC3-4	BASE	25YR_24HR	21.15	49.30	53.99	0.0048	11198	21.03	28.40	21.15	28.40
JUNC3-4	BASE	25YR_24HR_SJRWM	15.83	49.42	53.99	0.0035	11154	15.56	30.06	15.83	30.04
JUNC3-4	BASE	25YR_2HR	4.01	47.77	53.99	0.0039	11310	2.50	6.72	4.01	6.24
JUNC3-4	BASE	25YR_4HR	4.63	48.21	53.99	0.0040	11327	4.15	12.05	4.63	11.74
JUNC3-4	BASE	25YR_72HR	64.29	49.39	53.99	0.0050	11166	64.12	29.76	64.29	29.66
JUNC3-4	BASE	25YR_8HR	8.26	48.66	53.99	0.0041	11308	8.14	18.49	8.26	18.44
JUNC3-4	BASE	2YR_1HR	2.00	44.26	53.99	0.0024	10912	2.00	1.34	0.00	0.00
JUNC3-4	BASE	2YR_24HR	24.21	47.75	53.99	0.0050	11308	24.06	6.03	24.21	6.03
JUNC3-4	BASE	2YR_2HR	4.00	45.97	53.99	0.0031	10912	2.38	2.19	0.00	0.00
JUNC3-4	BASE	2YR_4HR	7.67	47.38	53.99	0.0031	11261	4.17	3.00	7.67	2.65
JUNC3-4	BASE	2YR_72HR	64.91	48.01	53.99	0.0035	11323	64.43	9.07	64.91	9.04
JUNC3-4	BASE	2YR_8HR	9.00	47.56	53.99	0.0035	11288	8.24	4.17	9.00	4.14
JUNC3-4	BASE	50YR_1HR	2.00	45.89	53.99	0.0027	10912	1.67	4.56	0.00	0.00
JUNC3-4	BASE	50YR_24HR	19.50	50.01	53.99	0.0050	11010	19.23	37.06	19.50	36.90
JUNC3-4	BASE	50YR_2HR	3.35	48.04	53.99	0.0047	11325	2.29	10.46	3.35	9.49
JUNC3-4	BASE	50YR_4HR	4.47	48.63	53.99	0.0042	11311	4.21	18.16	4.47	17.99
JUNC3-4	BASE	50YR_72HR	63.35	50.24	53.99	0.0050	11008	63.20	40.02	63.35	39.92
JUNC3-4	BASE	50YR_8HR	8.07	49.23	53.99	0.0042	11215	7.80	27.51	8.07	27.49
JUNC3-4	BASE	5YR_1HR	2.00	44.91	53.99	0.0026	10912	1.45	2.29	0.00	0.00
JUNC3-4	BASE	5YR_24HR	22.13	48.35	53.99	0.0050	11325	22.03	13.81	22.13	13.80
JUNC3-4	BASE	5YR_2HR	4.00	46.93	53.99	0.0030	11141	2.27	3.22	4.00	0.35
JUNC3-4	BASE	5YR_4HR	6.49	47.58	53.99	0.0033	11289	4.33	4.49	6.49	4.25
JUNC3-4	BASE	5YR_72HR	64.37	48.50	53.99	0.0035	11319	64.17	16.12	64.37	16.07
JUNC3-4	BASE	5YR_8HR	8.58	47.87	53.99	0.0037	11316	8.28	7.37	8.58	7.31
JUNC3-4	BASE	MEANANNUAL_SJRW	24.21	47.63	53.99	0.0034	11296	24.06	4.81	24.21	4.80

All elevations in NAVD

POST

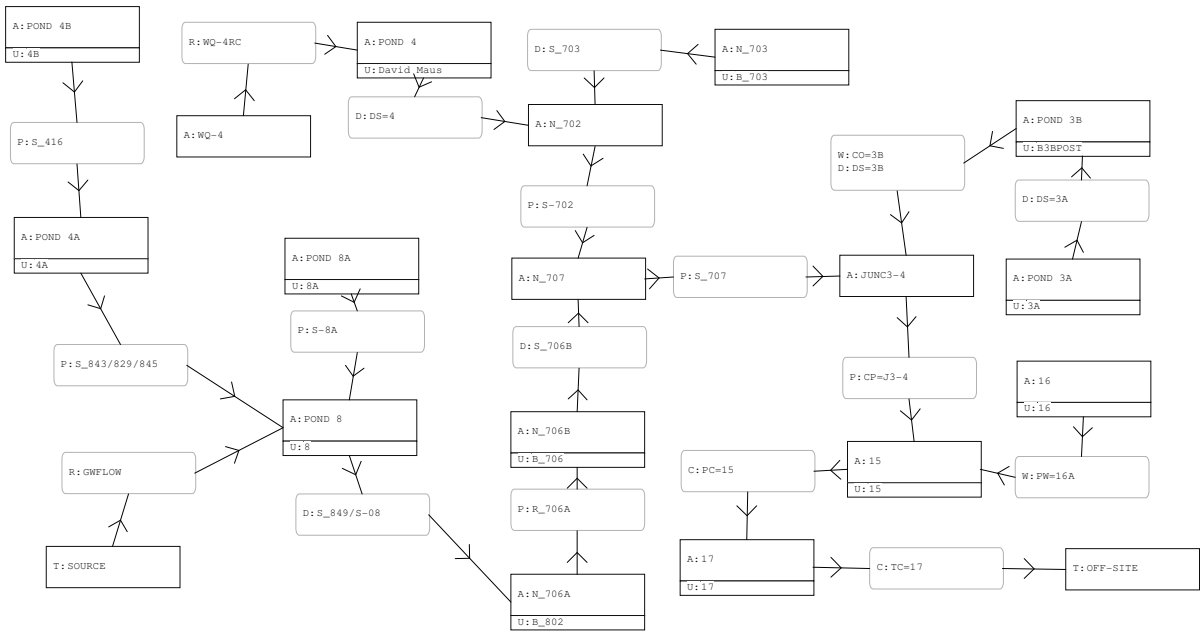
ICPR MODEL

Post Development
Seminole Towne Center Basin
Nodal Diagram

Nodes
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins
O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links
P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



==========
==== Basins ==========
==========

Name: 15 Node: 15 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 38.00
Area(ac): 30.100 Time Shift(hrs): 0.00
Curve Number: 72.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: 16 Node: 16 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 39.00
Area(ac): 31.800 Time Shift(hrs): 0.00
Curve Number: 77.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: 17 Node: 17 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 20.00
Area(ac): 18.210 Time Shift(hrs): 0.00
Curve Number: 73.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: 3A Node: POND 3A Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh484 Peaking Factor: 484.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 20.00
Area(ac): 24.390 Time Shift(hrs): 0.00
Curve Number: 80.78 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: 4A Node: POND 4A Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 30.00
Area(ac): 56.200 Time Shift(hrs): 0.00
Curve Number: 80.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: 4B Node: POND 4B Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 15.00
Area(ac): 35.420 Time Shift(hrs): 0.00
Curve Number: 65.20 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: 8 Node: POND 8 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

```
       Unit Hydrograph: Uh323                  Peaking Factor: 323.0
         Rainfall File:                  Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000              Time of Conc(min): 15.00
              Area(ac): 39.000               Time Shift(hrs): 0.00
          Curve Number: 71.60            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: 8A                     Node: POND 8A               Status: Onsite
       Group: BASE                   Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh323                  Peaking Factor: 323.0
         Rainfall File:                  Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000              Time of Conc(min): 15.00
              Area(ac): 15.100               Time Shift(hrs): 0.00
          Curve Number: 53.10            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: B3BPOST                Node: POND 3B               Status: Onsite
       Group: BASE                   Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh484                  Peaking Factor: 484.0
         Rainfall File:                  Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 10.160               Time Shift(hrs): 0.00
          Curve Number: 92.70            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: B_703                  Node: N_703                 Status: Onsite
       Group: BASE                   Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh323                  Peaking Factor: 323.0
         Rainfall File:                  Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 1.380               Time Shift(hrs): 0.00
          Curve Number: 39.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: B_706                  Node: N_706B                Status: Onsite
       Group: BASE                   Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh323                  Peaking Factor: 323.0
         Rainfall File:                  Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 1.040               Time Shift(hrs): 0.00
          Curve Number: 39.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: B_802                  Node: N_706A                Status: Onsite
       Group: BASE                   Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh323                  Peaking Factor: 323.0
         Rainfall File:                  Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 1.460               Time Shift(hrs): 0.00
          Curve Number: 39.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: David Maus             Node: POND 4                Status: Onsite
       Group: BASE                   Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh484                  Peaking Factor: 484.0
         Rainfall File:                  Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000              Time of Conc(min): 15.00
              Area(ac): 33.150               Time Shift(hrs): 0.00
          Curve Number: 88.80            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Previously Basin 4 in Permit for Seminole Towne Center.  Combined North and South Basins from David Maus Permit (22391-4).

All elevations are in NAVD
```

==========
==== Nodes ==========
==========

Name: 15 Base Flow(cfs): 0.000 Init Stage(ft): 44.010
Group: BASE Warn Stage(ft): 46.010
Type: Stage/Area

Stage(ft)	Area(ac)
42.010	0.1500
44.010	2.3000
45.000	5.2100
46.010	6.9400

Name: 16 Base Flow(cfs): 0.000 Init Stage(ft): 44.510
Group: BASE Warn Stage(ft): 46.010
Type: Stage/Area

Stage(ft)	Area(ac)
43.000	0.2200
44.010	1.3100
45.000	3.6100
46.010	5.5100

Name: 17 Base Flow(cfs): 0.000 Init Stage(ft): 40.010
Group: BASE Warn Stage(ft): 43.950
Type: Stage/Area

Stage(ft)	Area(ac)
40.010	0.2500
43.950	0.2500

Name: JUNC3-4 Base Flow(cfs): 0.000 Init Stage(ft): 44.010
Group: BASE Warn Stage(ft): 53.990
Type: Stage/Area

Stage(ft)	Area(ac)
44.010	0.1200
53.990	0.1200

Name: N_702 Base Flow(cfs): 0.000 Init Stage(ft): 47.230
Group: BASE Warn Stage(ft): 58.060
Type: Stage/Area

Stage(ft)	Area(ac)
47.230	0.1200
58.060	0.1200

Name: N_703 Base Flow(cfs): 0.000 Init Stage(ft): 54.770
Group: BASE Warn Stage(ft): 60.190
Type: Stage/Area

Stage(ft)	Area(ac)
54.770	0.2500
60.190	0.2500

Name: N_706A Base Flow(cfs): 0.000 Init Stage(ft): 54.770
Group: BASE Warn Stage(ft): 61.010
Type: Stage/Area

All elevations are in NAVD

Stage(ft)	Area(ac)
54.770	0.2500
61.010	0.2500

Name: N_706B Base Flow(cfs): 0.000 Init Stage(ft): 53.790
Group: BASE Warn Stage(ft): 59.370
Type: Stage/Area

Stage(ft)	Area(ac)
53.790	0.2500
59.370	0.2500

Name: N_707 Base Flow(cfs): 0.000 Init Stage(ft): 46.470
Group: BASE Warn Stage(ft): 56.910
Type: Stage/Area

Stage(ft)	Area(ac)
46.470	0.1200
56.910	0.1200

Name: OFF-SITE Base Flow(cfs): 0.000 Init Stage(ft): 39.490
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	39.490
999.00	39.490

Name: POND 3A Base Flow(cfs): 0.000 Init Stage(ft): 52.000
Group: BASE Warn Stage(ft): 57.000
Type: Stage/Area

Stage(ft)	Area(ac)
52.000	1.7000
53.000	1.8400
54.000	1.9700
55.000	2.1100
56.000	2.2500
57.000	2.4100
58.000	2.5900

Name: POND 3B Base Flow(cfs): 0.000 Init Stage(ft): 47.000
Group: BASE Warn Stage(ft): 53.000
Type: Stage/Area

Stage(ft)	Area(ac)
47.000	1.6600
48.000	1.7900
49.000	1.9600
50.000	2.1100
51.000	2.2600
52.000	2.4200
53.000	2.5800

Name: POND 4 Base Flow(cfs): 0.000 Init Stage(ft): 50.620
Group: BASE Warn Stage(ft): 59.000
Type: Stage/Area

Stage(ft)	Area(ac)
50.620	1.2800

All elevations are in NAVD

51.000	1.3200
52.000	1.4100
53.000	1.5300
54.000	1.6500
55.000	1.7700
56.000	1.8900
57.000	2.0200
58.000	2.1600
59.000	2.3100
60.000	2.4900

Name: POND 4A Base Flow(cfs): 0.000 Init Stage(ft): 61.340
Group: BASE Warn Stage(ft): 66.000
Type: Stage/Area

Stage(ft)	Area(ac)
61.340	11.2600
66.000	12.4500
67.000	12.7000
68.000	13.7000

Name: POND 4B Base Flow(cfs): 0.000 Init Stage(ft): 61.340
Group: BASE Warn Stage(ft): 66.000
Type: Stage/Area

Stage(ft)	Area(ac)
61.340	3.7200
66.000	4.7400
67.000	4.9600
68.000	5.7100

Name: POND 8 Base Flow(cfs): 0.000 Init Stage(ft): 61.340
Group: BASE Warn Stage(ft): 65.250
Type: Stage/Area

Stage(ft)	Area(ac)
61.340	3.2600
62.540	3.4800
66.000	4.1200
67.000	4.7300

Name: POND 8A Base Flow(cfs): 0.000 Init Stage(ft): 62.500
Group: BASE Warn Stage(ft): 66.000
Type: Stage/Area

Stage(ft)	Area(ac)
62.500	1.9200
67.000	2.7800
68.000	3.5300

Name: SOURCE Base Flow(cfs): 0.000 Init Stage(ft): 64.620
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	64.620
999.00	64.620

Name: WQ-4 Base Flow(cfs): 0.000 Init Stage(ft): 60.000
Group: BASE Warn Stage(ft): 61.000
Type: Stage/Area

Stage(ft)	Area(ac)

All elevations are in NAVD

60.000	2.1600
61.000	2.1600

Operating Tables

Name: GWFLOWOT Group: BASE
Type: Rating Curve
Function: Time vs. Discharge

Time(hrs)	Discharge(cfs)
0.00	0.16
40.00	0.16

Name: WQ-4OT Group: BASE
Type: Rating Curve
Function: US Stage vs. Discharge

US Stage(ft)	Discharge(cfs)
61.000	0.00
61.100	1000.01

Pipes

Name: CP=J3-4 From Node: JUNC3-4 Length(ft): 311.68
Group: BASE To Node: 15 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	36.00	36.00
Rise(in):	36.00	36.00
Invert(ft):	46.340	46.310
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: R_706A From Node: N_706A Length(ft): 370.73
Group: BASE To Node: N_706B Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	30.00	30.00
Rise(in):	30.00	30.00
Invert(ft):	54.770	53.790
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Increased pipe size to 30".

Name: S-702 From Node: N_702 Length(ft): 180.45
Group: BASE To Node: N_707 Count: 1
Friction Equation: Average Conveyance
Solution Algorithm: Automatic
Flow: Both

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular

All elevations are in NAVD

Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.00
Invert(ft):	47.230	46.470	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S-8A From Node: POND 8A Length(ft): 533.00
Group: BASE To Node: POND 8 Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM	
			Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	36.00	36.00	Entrance Loss Coef: 0.50
Rise(in):	36.00	36.00	Exit Loss Coef: 0.00
Invert(ft):	62.500	61.340	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S_416 From Node: POND 4B Length(ft): 346.00
Group: BASE To Node: POND 4A Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM	
			Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	36.00	36.00	Entrance Loss Coef: 0.50
Rise(in):	36.00	36.00	Exit Loss Coef: 0.00
Invert(ft):	54.770	54.770	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S_707 From Node: N_707 Length(ft): 229.66
Group: BASE To Node: JUNC3-4 Count: 1
Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM	
			Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00	Exit Loss Coef: 0.00
Invert(ft):	46.470	46.340	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Note: This pipe was permitted as having a mannings n = 0.12 for the upstream end. It has been modified to be 0.012. Increased pipe size to 30".

All elevations are in NAVD

```
---------------------------------------------------------------------------------------------------
         Name: S_843/829/845       From Node: POND 4A            Length(ft): 1266.00
        Group: BASE                  To Node: POND 8                 Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                        Exit Loss Coef: 0.00
   Invert(ft): 58.880         57.890                       Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


===============================================================================================
==== Channels =================================================================================
===============================================================================================

          Name: PC=15              From Node: 15                Length(ft): 500.00
         Group: BASE                 To Node: 17                     Count: 1

                UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
      Geometry: Parabolic      Parabolic                 Solution Algorithm: Automatic
    Invert(ft): 44.010         42.010                           Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.000
   Manning's N: 0.035000       0.035000                     Expansion Coef: 0.000
  Top Clip(ft): 0.000          0.000                     Entrance Loss Coef: 0.100
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                           Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                            Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft): 15.000         15.000
     Depth(ft): 1.500          1.500
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

---------------------------------------------------------------------------------------------------
          Name: TC=17              From Node: 17                Length(ft): 1150.00
         Group: BASE                 To Node: OFF-SITE               Count: 1

                UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Automatic
    Invert(ft): 40.010         38.990                           Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.000
   Manning's N: 0.022000       0.022000                     Expansion Coef: 0.000
  Top Clip(ft): 0.000          0.000                     Entrance Loss Coef: 0.100
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                           Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                            Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 10.000         10.000
  LtSdSlp(h/v): 2.00           2.00
  RtSdSlp(h/v): 2.00           2.00

Taken from Post ICPR Calculations for SJRWMD Permit #22514-3.

===============================================================================================
==== Drop Structures ==========================================================================
===============================================================================================

         Name: DS=3A              From Node: POND 3A           Length(ft): 148.99
        Group: BASE                 To Node: POND 3B                Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Automatic
     Span(in): 36.00          36.00                            Flow: Both
     Rise(in): 36.00          36.00                     Entrance Loss Coef: 0.500
```

All elevations are in NAVD

```
   Invert(ft): 47.600         47.000                      Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                       Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Pond 3A control structure modified to match SJRWMD Permit #4-117-22391-2.

*** Weir 1 of 3 for Drop Structure DS=3A ***
                                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 54.00                      Invert(ft): 57.600
              Rise(in): 36.00                Control Elev(ft): 57.600

*** Weir 2 of 3 for Drop Structure DS=3A ***
                                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular             Orifice Disc Coef: 0.600

              Span(in): 12.00                      Invert(ft): 55.100
              Rise(in): 12.00                Control Elev(ft): 55.100

*** Weir 3 of 3 for Drop Structure DS=3A ***
                                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular             Orifice Disc Coef: 0.600

              Span(in): 5.00                       Invert(ft): 52.000
              Rise(in): 5.00                 Control Elev(ft): 52.000


-------------------------------------------------------------------------------------------------
         Name: DS=3B               From Node: POND 3B           Length(ft): 28.00
        Group: BASE                  To Node: JUNC3-4               Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 24.00          24.00                                Flow: Both
    Rise(in): 24.00          24.00                    Entrance Loss Coef: 0.500
   Invert(ft): 46.710        46.650                       Exit Loss Coef: 0.000
  Manning's N: 0.012000      0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                        Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall



*** Weir 1 of 3 for Drop Structure DS=3B ***
                                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 54.00                      Invert(ft): 51.200
              Rise(in): 36.00                Control Elev(ft): 51.200

*** Weir 2 of 3 for Drop Structure DS=3B ***
                                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 10.00                      Invert(ft): 48.210
              Rise(in): 36.00                Control Elev(ft): 48.210

*** Weir 3 of 3 for Drop Structure DS=3B ***
```

All elevations are in NAVD

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Circular	Orifice Disc Coef:	0.600
Span(in):	3.50	Invert(ft):	47.000
Rise(in):	3.50	Control Elev(ft):	47.000

Name:	DS=4	From Node:	POND 4
Group:	BASE	To Node:	N_702
Length(ft):	164.04		
Count:	1		

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	24.00	24.00	Solution Algorithm:	Automatic
Rise(in):	24.00	24.00	Flow:	Both
Invert(ft):	48.970	47.230	Entrance Loss Coef:	0.500
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 3 for Drop Structure DS=4 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	54.00	Invert(ft):	57.900
Rise(in):	36.00	Control Elev(ft):	57.900

*** Weir 2 of 3 for Drop Structure DS=4 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	9.00	Invert(ft):	54.450
Rise(in):	41.40	Control Elev(ft):	54.450

*** Weir 3 of 3 for Drop Structure DS=4 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Circular	Orifice Disc Coef:	0.600
Span(in):	5.50	Invert(ft):	51.000
Rise(in):	5.50	Control Elev(ft):	51.000

Name:	S_703	From Node:	N_703
Group:	BASE	To Node:	N_702
Length(ft):	541.34		
Count:	1		

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	23.62	23.62	Solution Algorithm:	Automatic
Rise(in):	23.62	23.62	Flow:	Both
Invert(ft):	54.770	53.460	Entrance Loss Coef:	0.500
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure S_703 ***

TABLE

Count:	1	Bottom Clip(in):	0.000

All elevations are in NAVD

```
                 Type: Horizontal               Top Clip(in): 0.000
                 Flow: Both                   Weir Disc Coef: 3.130
            Geometry: Rectangular          Orifice Disc Coef: 0.600

            Span(in): 44.98                      Invert(ft): 59.700
            Rise(in): 44.98                Control Elev(ft): 59.700


-------------------------------------------------------------------------------------------------
         Name: S_706B             From Node: N_706B            Length(ft): 623.36
        Group: BASE                 To Node: N_707                 Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 30.00          30.00                               Flow: Both
     Rise(in): 30.00          30.00                    Entrance Loss Coef: 0.500
   Invert(ft): 53.790         50.350                       Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                         Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Increased pipe size to 30".

*** Weir 1 of 1 for Drop Structure S_706B ***
                                                                                    TABLE
                 Count: 1                    Bottom Clip(in): 0.000
                  Type: Horizontal              Top Clip(in): 0.000
                  Flow: Both                  Weir Disc Coef: 3.130
            Geometry: Rectangular          Orifice Disc Coef: 0.600

            Span(in): 44.98                      Invert(ft): 58.380
            Rise(in): 44.98                Control Elev(ft): 58.380


-------------------------------------------------------------------------------------------------
         Name: S_849/S-08         From Node: POND 8            Length(ft): 164.37
        Group: BASE                 To Node: N_706A                Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 30.00          30.00                               Flow: Both
     Rise(in): 30.00          30.00                    Entrance Loss Coef: 0.500
   Invert(ft): 56.580         54.770                       Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                         Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


*** Weir 1 of 3 for Drop Structure S_849/S-08 ***
                                                                                    TABLE
                 Count: 1                    Bottom Clip(in): 0.000
                  Type: Vertical: Mavis         Top Clip(in): 0.000
                  Flow: Both                  Weir Disc Coef: 3.200
            Geometry: Rectangular          Orifice Disc Coef: 0.600

            Span(in): 40.00                      Invert(ft): 64.000
            Rise(in): 12.00                Control Elev(ft): 64.000

*** Weir 2 of 3 for Drop Structure S_849/S-08 ***
                                                                                    TABLE
                 Count: 1                    Bottom Clip(in): 0.000
                  Type: Horizontal              Top Clip(in): 0.000
                  Flow: Both                  Weir Disc Coef: 3.200
            Geometry: Rectangular          Orifice Disc Coef: 0.600

            Span(in): 37.00                      Invert(ft): 65.000
            Rise(in): 49.00                Control Elev(ft): 65.000

*** Weir 3 of 3 for Drop Structure S_849/S-08 ***
                                                                                    TABLE
                 Count: 1                    Bottom Clip(ft): 0.000
                  Type: Vertical: Mavis         Top Clip(ft): 0.000
                  Flow: Both                  Weir Disc Coef: 3.200
```

All elevations are in NAVD

```
               Geometry: Trapezoidal          Orifice Disc Coef: 0.600

       Bottom Width(ft): 0.00                       Invert(ft): 61.340
       Left Sd Slp(h/v): 0.58                 Control Elev(ft): 61.340
      Right Sd Slp(h/v): 0.58            Struct Opening Dim(ft): 1.00


================================================================================
==== Weirs =====================================================================
================================================================================

         Name: CO=3B              From Node: POND 3B
        Group: BASE                 To Node: JUNC3-4
         Flow: Both                   Count: 1
         Type: Vertical: Mavis     Geometry: Circular

                     Span(in): 6.00
                     Rise(in): 6.00
                   Invert(ft): 47.000
       Control Elevation(ft): 47.000
                                      TABLE
              Bottom Clip(in): 0.000
                 Top Clip(in): 0.000
           Weir Discharge Coef: 3.200
      Orifice Discharge Coef: 0.600



--------------------------------------------------------------------------------------------------------
         Name: PW=16A             From Node: 16
        Group: BASE                 To Node: 15
         Flow: Both                   Count: 1
         Type: Vertical: Mavis     Geometry: Parabolic

               Top Width(ft): 139.99
          Corres Depth(ft): 1.50
                 Invert(ft): 45.490
       Control Elevation(ft): 45.490
      Struct Opening Dim(ft): 9999.00
                                      TABLE
               Bottom Clip(ft): 0.000
                  Top Clip(ft): 0.000
           Weir Discharge Coef: 2.800
      Orifice Discharge Coef: 0.600



================================================================================
==== Rating Curves =============================================================
================================================================================

         Name:                    From Node:                        Count: 1
        Group: BASE                 To Node:                         Flow: Both

               TABLE          ELEV ON(ft)     ELEV OFF(ft)
            #1:               0.000           0.000
            #2:               0.000           0.000
            #3:               0.000           0.000
            #4:               0.000           0.000



================================================================================
==== Hydrology Simulations =====================================================
================================================================================

         Name: 025YR_096HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\025YR_096HR

       Override Defaults: Yes
    Storm Duration(hrs): 96.00
          Rainfall File: Sjrwmd96
    Rainfall Amount(in): 11.30

Time(hrs)       Print Inc(min)
--------------- ---------------
96.000          5.00

--------------------------------------------------------------------------------------------------------
         Name: 100YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_1H.R3

       Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 4.50

All elevations are in NAVD
```

Time(hrs) Print Inc(min)
--- ---
2.000 2.50

Name: 100YR_240HR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_240HR

Override Defaults: Yes
Storm Duration(hrs): 240.00
Rainfall File: Fdot-240
Rainfall Amount(in): 18.50

Time(hrs) Print Inc(min)
--- ---
240.000 5.00

Name: 100YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_24HR.

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 10.60

Time(hrs) Print Inc(min)
--- ---
30.000 5.00

Name: 100YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_2H.R3

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 5.60

Time(hrs) Print Inc(min)
--- ---
4.000 2.50

Name: 100YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_4H.R3

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 6.64

Time(hrs) Print Inc(min)
--- ---
8.000 2.50

Name: 100YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_72HR.

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 13.80

Time(hrs) Print Inc(min)
--- ---
80.000 5.00

Name: 100YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_8HR.R

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 7.84

Time(hrs) Print Inc(min)
--- ---
16.000 2.50

Name: 10YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_1H.R32

All elevations are in NAVD

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.20

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 10YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_24H.R3

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 7.50

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 10YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 3.90

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 10YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 4.60

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 10YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_72H.R3

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 9.00

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 10YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 5.56

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 25YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.70

Time(hrs)	Print Inc(min)

All elevations are in NAVD

2.000 2.50

Name: 25YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_24H.R3

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.60

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 25YR_24H_SJRWM
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_24HR.R

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Flmod
Rainfall Amount(in): 8.60

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 25YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 4.50

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 25YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 5.30

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 25YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_72H.R3

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 10.90

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 25YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.32

Time(hrs)	Print Inc(min)
16.000	2.50

Name: 2YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00

All elevations are in NAVD

```
          Rainfall File: Fdot-1
    Rainfall Amount(in): 2.40

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           2.50

-------------------------------------------------------------------------------------------------------
         Name: 2YR_24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_24H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 4.75

Time(hrs)       Print Inc(min)
--------------- ---------------
30.000          5.00

-------------------------------------------------------------------------------------------------------
         Name: 2YR_2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_2H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 2.00
          Rainfall File: Fdot-2
    Rainfall Amount(in): 2.85

Time(hrs)       Print Inc(min)
--------------- ---------------
4.000           2.50

-------------------------------------------------------------------------------------------------------
         Name: 2YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_4H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 4.00
          Rainfall File: Fdot-4
    Rainfall Amount(in): 3.30

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           2.50

-------------------------------------------------------------------------------------------------------
         Name: 2YR_72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_72H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Fdot-72
    Rainfall Amount(in): 6.00

Time(hrs)       Print Inc(min)
--------------- ---------------
80.000          5.00

-------------------------------------------------------------------------------------------------------
         Name: 2YR_8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_8H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 4.00

Time(hrs)       Print Inc(min)
--------------- ---------------
16.000          2.50

-------------------------------------------------------------------------------------------------------
         Name: 3YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\3YR_1H.R32

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 2.70

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           2.50

-------------------------------------------------------------------------------------------------------
```

Name: 3YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\3YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 3.30

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 50YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 4.00

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 50YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_24H.R3

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 9.50

Time(hrs)	Print Inc(min)
30.000	5.00

Name: 50YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
4.000	2.50

Name: 50YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 6.00

Time(hrs)	Print Inc(min)
8.000	2.50

Name: 50YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_72H.R3

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 12.70

Time(hrs)	Print Inc(min)
80.000	5.00

Name: 50YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 7.20

All elevations are in NAVD

Time(hrs) Print Inc(min)
--- ---
16.000 2.50

Name: 5YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_1H.R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 2.90

Time(hrs) Print Inc(min)
--- ---
2.000 2.50

Name: 5YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_24H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 6.25

Time(hrs) Print Inc(min)
--- ---
30.000 5.00

Name: 5YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_2H.R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: Fdot-2
Rainfall Amount(in): 3.40

Time(hrs) Print Inc(min)
--- ---
4.000 2.50

Name: 5YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_4H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: Fdot-4
Rainfall Amount(in): 4.00

Time(hrs) Print Inc(min)
--- ---
8.000 2.50

Name: 5YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_72H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Fdot-72
Rainfall Amount(in): 7.60

Time(hrs) Print Inc(min)
--- ---
80.000 2.50

Name: 5YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_8H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 4.72

Time(hrs) Print Inc(min)
--- ---
16.000 2.50

Name: MEAN_ANNUAL_SJR
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\MEAN_ANNUAL

All elevations are in NAVD

```
      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Flmod
    Rainfall Amount(in): 4.50

Time(hrs)       Print Inc(min)
--------------- ---------------
30.000          5.00

------------------------------------------------------------------------------------------------
         Name: MEANANNUAL
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\MEANANNUAL.

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 4.50

Time(hrs)       Print Inc(min)
--------------- ---------------
30.000          5.00

================================================================================================
==== Routing Simulations ======================================================================
================================================================================================

         Name: 025YR_096HR         Hydrology Sim: 025YR_096HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\025YR_096HR

      Execute: No          Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 96.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------
         Name: 100YR_1HR           Hydrology Sim: 100YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_1HR.I

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


------------------------------------------------------------------------------------------------
         Name: 100YR_240HR         Hydrology Sim: 100YR_240HR
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_240HR

      Execute: No          Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 240.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:
```

All elevations are in NAVD

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 100YR_24HR Hydrology Sim: 100YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_24HR.

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 100YR_2HR Hydrology Sim: 100YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_2H.I3

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 4.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 100YR_4HR Hydrology Sim: 100YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_4HR.I

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 8.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 100YR_72HR Hydrology Sim: 100YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_72HR.

All elevations are in NAVD

```
     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 80.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: 100YR_8HR           Hydrology Sim: 100YR_8H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\100YR_8HR.I

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 16.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: 10YR_1HR            Hydrology Sim: 10YR_1H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_1HR.I3

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 2.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: 10YR_24HR           Hydrology Sim: 10YR_24H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_24H.I3

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 30.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
```

All elevations are in NAVD

```
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-----------------------------------------------------------------------------------------------
         Name: 10YR_2HR           Hydrology Sim: 10YR_2H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_2HR.I3

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-----------------------------------------------------------------------------------------------
         Name: 10YR_4HR           Hydrology Sim: 10YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_4H.I32

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-----------------------------------------------------------------------------------------------
         Name: 10YR_72HR          Hydrology Sim: 10YR_72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_72HR.I

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-----------------------------------------------------------------------------------------------
         Name: 10YR_8HR           Hydrology Sim: 10YR_8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\10YR_8HR.I3

      Execute: Yes         Restart: No           Patch: No
  Alternative: No
```

All elevations are in NAVD

```
        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 16.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
         Name: 25YR_1HR           Hydrology Sim: 25YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_1HR.I3

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
         Name: 25YR_24HR          Hydrology Sim: 25YR_24H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_24HR.I

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------------
         Name: 25YR_24HR_SJRWM    Hydrology Sim: 25YR_24H_SJRWM
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_24HR.I

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 30.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
```

All elevations are in NAVD

BASE Yes

Name: 25YR_2HR Hydrology Sim: 25YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_2HR.I3

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 4.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 25YR_4H Hydrology Sim: 25YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_4H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 8.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 25YR_72HR Hydrology Sim: 25YR_72H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_72HR.I

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 80.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	60.000

Group	Run
BASE	Yes

Name: 25YR_8HR Hydrology Sim: 25YR_8H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\25YR_8H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 16.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000

All elevations are in NAVD

Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 2YR_1HR Hydrology Sim: 2YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_1HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 2.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 2YR_24HR Hydrology Sim: 2YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_24H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 2YR_2HR Hydrology Sim: 2YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_2Hr.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 4.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

All elevations are in NAVD

```
         Name: 2YR_4HR             Hydrology Sim: 2YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_4HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 2YR_72HR            Hydrology Sim: 2YR_72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_72HR.I3

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 2YR_8HR             Hydrology Sim: 2YR_8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\2YR_8HR.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 16.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
         Name: 3YR_1HR             Hydrology Sim: 3YR_1H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\3YR_1H.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 2.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:
```

All elevations are in NAVD

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 3YR_2HR Hydrology Sim: 3YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\3YR_2HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 4.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 50YR_1HR Hydrology Sim: 50YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_1H.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 2.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 50YR_24HR Hydrology Sim: 50YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_24H.I3

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 50YR_2HR Hydrology Sim: 50YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_2H.I32

Execute: Yes Restart: No Patch: No

All elevations are in NAVD

```
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 4.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-----------------------------------------------------------------------------------------------
         Name: 50YR_4HR           Hydrology Sim: 50YR_4H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_4H.I32

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 8.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-----------------------------------------------------------------------------------------------
         Name: 50YR_72HR          Hydrology Sim: 50YR_72H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_72H.I3

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 80.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-----------------------------------------------------------------------------------------------
         Name: 50YR_8HR           Hydrology Sim: 50YR_8H
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\50YR_8HR.I3

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 16.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000
```

All elevations are in NAVD

Group	Run
BASE	Yes

Name: 5YR_1HR Hydrology Sim: 5YR_1H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_1HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 2.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 5YR_24HR Hydrology Sim: 5YR_24H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_24HR.I3

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 30.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	15.000

Group	Run
BASE	Yes

Name: 5YR_2HR Hydrology Sim: 5YR_2H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_2HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 4.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
999.000	5.000

Group	Run
BASE	Yes

Name: 5YR_4HR Hydrology Sim: 5YR_4H
Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_4HR.I32

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000

All elevations are in NAVD

```
       Start Time(hrs): 0.000                  End Time(hrs): 8.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         5.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: 5YR_72HR            Hydrology Sim: 5YR_72H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_72HR.I3

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                   Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                  End Time(hrs): 80.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         60.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: 5YR_8HR             Hydrology Sim: 5YR_8H
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\5YR_8HR.I32

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                   Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                  End Time(hrs): 16.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes


-------------------------------------------------------------------------------------------------
        Name: MEAN_ANNUAL_SJR     Hydrology Sim: MEAN_ANNUAL_SJR
    Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\MEAN_ANNUAL

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                   Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                  End Time(hrs): 30.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                        Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes
```

All elevations are in NAVD

```
-------------------------------------------------------------------------------------------------
         Name: MEANANNUAL          Hydrology Sim: MEANANNUAL
     Filename: T:\PROJECTS\FDOT_D5\Wekiva Line and Grade\Drainage\Calculations\Seminole Towne Center Basin\ICPR\Post\MEANANNUAL.

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

       Max Delta Z(ft): 1.00                     Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                     End Time(hrs): 30.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
999.000         15.000

Group           Run
--------------- -----
BASE            Yes
```

Post Development
Seminole Towne Center Basin
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
JUNC3-4	BASE	100YR_1HR	2.00	47.70	53.99	0.0050	5960	1.76	8.85	2.00	6.67
JUNC3-4	BASE	100YR_24HR	21.51	49.89	53.99	0.0050	5368	21.38	34.73	21.51	34.72
JUNC3-4	BASE	100YR_2HR	2.74	48.39	53.99	0.0050	5876	2.60	15.32	2.74	15.27
JUNC3-4	BASE	100YR_4HR	4.32	48.83	53.99	0.0050	5606	4.20	21.80	4.32	21.77
JUNC3-4	BASE	100YR_72HR	64.52	50.60	53.99	0.0050	5360	64.41	44.02	64.52	44.00
JUNC3-4	BASE	100YR_8HR	6.21	49.10	53.99	0.0050	5526	6.09	25.47	6.21	25.43
JUNC3-4	BASE	10YR_1HR	2.00	45.43	53.99	0.0050	5452	2.00	2.21	0.00	0.00
JUNC3-4	BASE	10YR_24HR	21.49	48.56	53.99	0.0050	5815	21.35	17.75	21.49	17.74
JUNC3-4	BASE	10YR_2HR	3.65	47.47	53.99	0.0050	5944	2.62	5.00	3.65	4.48
JUNC3-4	BASE	10YR_4HR	4.57	47.85	53.99	0.0050	5959	4.39	8.36	4.57	8.30
JUNC3-4	BASE	10YR_72HR	64.36	48.59	53.99	0.0050	5799	64.24	18.23	64.36	18.22
JUNC3-4	BASE	10YR_8HR	7.39	48.13	53.99	0.0050	5934	7.28	11.81	7.39	11.76
JUNC3-4	BASE	25YR_1HR	2.00	46.12	53.99	0.0050	5490	2.00	3.90	0.00	0.00
JUNC3-4	BASE	25YR_24HR	21.29	48.86	53.99	0.0050	5602	21.19	22.08	21.29	22.07
JUNC3-4	BASE25YR_24HR_SJRWM		21.29	48.86	53.99	0.0050	5602	21.19	22.08	21.29	22.07
JUNC3-4	BASE	25YR_2HR	3.05	47.81	53.99	0.0050	5960	2.23	8.01	3.05	7.81
JUNC3-4	BASE	25YR_4H	4.37	48.21	53.99	0.0050	5919	4.24	12.87	4.37	12.83
JUNC3-4	BASE	25YR_72HR	64.67	49.34	53.99	0.0050	5372	64.56	27.66	64.67	27.65
JUNC3-4	BASE	25YR_8HR	7.37	48.44	53.99	0.0050	5860	7.26	16.06	7.37	16.05
JUNC3-4	BASE	2YR_1HR	2.00	45.06	53.99	0.0045	5433	2.00	1.59	0.00	0.00
JUNC3-4	BASE	2YR_24HR	22.03	47.57	53.99	0.0050	5954	21.82	5.41	22.03	5.41
JUNC3-4	BASE	2YR_2HR	4.00	47.13	53.99	0.0050	5878	3.34	2.50	4.00	1.96
JUNC3-4	BASE	2YR_4HR	6.82	47.24	53.99	0.0038	5905	4.32	2.75	6.82	2.65
JUNC3-4	BASE	2YR_72HR	64.83	47.85	53.99	0.0050	5959	64.63	8.36	64.83	8.34
JUNC3-4	BASE	2YR_8HR	8.51	47.47	53.99	0.0050	5944	8.33	4.49	8.51	4.48
JUNC3-4	BASE	50YR_1HR	2.00	46.91	53.99	0.0050	5826	2.00	5.61	2.00	0.91
JUNC3-4	BASE	50YR_24HR	21.73	49.29	53.99	0.0050	5357	21.11	27.21	21.01	27.14
JUNC3-4	BASE	50YR_2HR	2.70	48.08	53.99	0.0050	5940	2.05	11.86	2.70	11.15
JUNC3-4	BASE	50YR_4HR	4.46	48.53	53.99	0.0050	5823	4.33	17.40	4.46	17.36
JUNC3-4	BASE	50YR_72HR	64.62	50.09	53.99	0.0050	5366	64.50	37.40	64.62	37.38
JUNC3-4	BASE	50YR_8HR	7.19	48.78	53.99	0.0050	5672	7.10	21.01	7.19	21.00
JUNC3-4	BASE	5YR_1HR	2.00	45.29	53.99	0.0045	5446	2.00	1.99	0.00	0.00
JUNC3-4	BASE	5YR_24HR	23.45	48.14	53.99	0.0050	5933	23.36	11.87	23.45	11.83
JUNC3-4	BASE	5YR_2HR	4.00	47.23	53.99	0.0050	5903	3.04	2.99	4.00	2.60
JUNC3-4	BASE	5YR_4HR	5.00	47.52	53.99	0.0047	5950	4.74	4.98	5.00	4.94
JUNC3-4	BASE	5YR_72HR	64.35	48.28	53.99	0.0050	5905	64.23	13.77	64.35	13.76
JUNC3-4	BASE	5YR_8HR	8.05	47.78	53.99	0.0050	5961	7.87	7.50	8.05	7.50
JUNC3-4	BASEMEAN_ANNUAL_SJR		19.09	47.46	53.99	0.0039	5943	18.90	4.40	19.09	4.40
POND 3A	BASE25YR_24HR_SJRWM		21.16	56.86	57.00	0.0032	103977	12.00	19.73	21.16	5.68
POND 3A	BASEMEAN_ANNUAL_SJR		23.82	54.77	57.00	0.0025	90534	12.08	57.30	23.82	1.09
POND 3B	BASE25YR_24HR_SJRWM		22.09	50.02	53.00	0.0018	92039	12.00	9.73	23.27	7.08
POND 3B	BASEMEAN_ANNUAL_SJR		22.62	48.49	53.00	0.0020	81578	12.00	31.67	23.53	1.68
POND 4	BASE25YR_24HR_SJRWM		16.21	57.09	59.00	0.0050	88563	12.00	27.16	16.21	12.28
POND 4	BASE	25YR_72HR	60.28	56.97	59.00	0.0050	87843	59.92	17.74	60.28	11.56
POND 4	BASEMEAN_ANNUAL_SJR		17.69	55.08	59.00	0.0050	77515	12.08	85.41	17.69	2.80
POND 4A	BASE	100YR_1HR	2.00	62.36	66.00	0.0015	501948	0.87	176.50	0.00	0.00
POND 4A	BASE	100YR_24HR	24.47	65.04	66.00	0.0027	531725	12.08	55.78	30.00	4.68
POND 4A	BASE	100YR_2HR	4.00	62.88	66.00	0.0014	507653	1.04	163.76	0.00	0.00
POND 4A	BASE	100YR_4HR	8.00	63.36	66.00	0.0013	513053	2.62	134.99	1.04	0.10
POND 4A	BASE	100YR_72HR	68.81	66.00	66.00	0.0022	542403	60.00	43.02	75.68	7.21
POND 4A	BASE	100YR_8HR	12.12	63.90	66.00	0.0015	519068	4.12	147.30	16.00	1.92
POND 4A	BASE	10YR_1HR	2.00	61.90	66.00	0.0017	496779	0.88	100.05	0.00	0.00
POND 4A	BASE	10YR_24HR	24.69	63.74	66.00	0.0017	517293	12.08	34.95	30.00	2.14
POND 4A	BASE	10YR_2HR	4.00	62.20	66.00	0.0011	500102	1.08	90.57	0.00	0.00
POND 4A	BASE	10YR_4HR	7.96	62.50	66.00	0.0009	503439	2.67	78.98	8.00	0.22
POND 4A	BASE	10YR_72HR	72.28	64.25	66.00	0.0025	522907	59.99	26.05	79.99	2.67

Post Development
Seminole Towne Center Basin
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
POND 4A	BASE	10YR_8HR	10.93	62.91	66.00	0.0011	508003	4.12	90.82	16.00	1.39
POND 4A	BASE	25YR_1HR	2.00	62.07	66.00	0.0019	498692	0.88	128.85	0.00	0.00
POND 4A	BASE	25YR_24HR	24.68	64.23	66.00	0.0022	522712	12.08	42.34	30.01	2.50
POND 4A	BASE	25YR_24HR_SJRWM	24.68	64.23	66.00	0.0022	522712	12.08	42.34	30.01	2.50
POND 4A	BASE	25YR_2HR	4.00	62.43	66.00	0.0012	502700	1.06	115.83	0.00	0.00
POND 4A	BASE	25YR_4H	8.00	62.79	66.00	0.0013	506709	2.66	98.00	1.14	0.07
POND 4A	BASE	25YR_72HR	70.75	64.95	66.00	0.0017	530730	60.00	32.51	76.77	4.61
POND 4A	BASE	25YR_8HR	11.66	63.24	66.00	0.0014	511693	4.13	109.62	16.00	1.69
POND 4A	BASE	2YR_1HR	2.00	61.65	66.00	0.0013	494019	0.88	55.29	0.00	0.00
POND 4A	BASE	2YR_24HR	24.72	62.56	66.00	0.0012	504128	12.08	17.01	29.99	1.17
POND 4A	BASE	2YR_2HR	4.00	61.82	66.00	0.0009	495904	1.08	47.87	0.00	0.00
POND 4A	BASE	2YR_4HR	7.27	61.99	66.00	0.0007	497760	2.64	44.76	8.01	0.21
POND 4A	BASE	2YR_72HR	72.25	63.05	66.00	0.0013	509542	60.00	15.55	80.00	1.79
POND 4A	BASE	2YR_8HR	9.85	62.26	66.00	0.0010	500761	4.13	52.99	16.00	0.62
POND 4A	BASE	50YR_1HR	2.00	62.18	66.00	0.0017	499890	0.88	146.53	0.00	0.00
POND 4A	BASE	50YR_24HR	24.55	64.60	66.00	0.0024	526870	12.08	48.39	30.00	3.48
POND 4A	BASE	50YR_2HR	4.00	62.63	66.00	0.0013	504924	1.04	137.43	0.00	0.00
POND 4A	BASE	50YR_4HR	8.00	63.09	66.00	0.0017	510011	2.63	117.27	1.08	0.09
POND 4A	BASE	50YR_72HR	68.98	65.61	66.00	0.0019	538065	60.00	38.80	76.16	6.30
POND 4A	BASE	50YR_8HR	12.10	63.62	66.00	0.0015	515985	4.12	131.46	15.99	1.81
POND 4A	BASE	5YR_1HR	2.00	61.80	66.00	0.0015	495693	0.88	83.25	0.00	0.00
POND 4A	BASE	5YR_24HR	24.66	63.20	66.00	0.0011	511231	12.08	26.64	30.00	1.83
POND 4A	BASE	5YR_2HR	4.00	62.01	66.00	0.0010	498039	1.08	69.85	0.00	0.00
POND 4A	BASE	5YR_4HR	7.55	62.25	66.00	0.0008	500722	2.67	62.99	8.00	0.41
POND 4A	BASE	5YR_72HR	72.28	63.68	66.00	0.0021	516607	60.00	21.12	80.00	2.26
POND 4A	BASE	5YR_8HR	10.23	62.55	66.00	0.0011	504024	4.13	70.26	16.00	1.13
POND 4A	BASE	MEAN_ANNUAL_SJR	24.77	62.44	66.00	0.0010	502854	12.25	71.36	30.00	1.01
POND 4B	BASE	100YR_1HR	2.00	62.31	66.00	0.0010	171090	0.79	85.68	0.90	12.01
POND 4B	BASE	100YR_24HR	24.40	65.04	66.00	0.0026	196656	12.00	26.23	12.07	5.02
POND 4B	BASE	100YR_2HR	4.00	62.87	66.00	0.0013	176405	0.92	80.40	1.09	11.26
POND 4B	BASE	100YR_4HR	8.00	63.36	66.00	0.0012	180954	2.54	62.96	2.67	10.52
POND 4B	BASE	100YR_72HR	68.73	66.00	66.00	0.0020	205677	60.00	21.53	57.15	5.83
POND 4B	BASE	100YR_8HR	12.12	63.90	66.00	0.0012	186013	4.04	72.90	4.15	12.32
POND 4B	BASE	10YR_1HR	2.00	61.87	66.00	0.0013	167009	0.79	40.50	0.85	5.50
POND 4B	BASE	10YR_24HR	24.69	63.74	66.00	0.0017	184522	12.00	15.07	12.03	2.06
POND 4B	BASE	10YR_2HR	4.00	62.20	66.00	0.0011	170071	0.92	35.94	0.99	4.71
POND 4B	BASE	10YR_4HR	7.96	62.50	66.00	0.0009	172880	2.58	32.89	2.64	4.14
POND 4B	BASE	10YR_72HR	72.19	64.25	66.00	0.0024	189244	59.99	12.55	56.85	3.18
POND 4B	BASE	10YR_8HR	10.93	62.91	66.00	0.0011	176715	4.04	40.26	4.12	6.01
POND 4B	BASE	25YR_1HR	2.00	62.03	66.00	0.0011	168509	0.79	56.81	0.87	8.08
POND 4B	BASE	25YR_24HR	24.68	64.23	66.00	0.0022	189076	12.00	18.95	12.04	3.10
POND 4B	BASE	25YR_24HR_SJRWM	24.68	64.23	66.00	0.0022	189076	12.00	18.95	12.04	3.10
POND 4B	BASE	25YR_2HR	4.00	62.43	66.00	0.0010	172250	0.92	50.57	1.03	7.05
POND 4B	BASE	25YR_4H	8.00	62.79	66.00	0.0013	175626	2.54	42.84	2.65	6.34
POND 4B	BASE	25YR_72HR	70.96	64.95	66.00	0.0017	195838	60.00	16.11	56.97	4.29
POND 4B	BASE	25YR_8HR	11.66	63.24	66.00	0.0014	179816	4.04	50.82	4.13	8.18
POND 4B	BASE	2YR_1HR	2.00	61.64	66.00	0.0010	164854	0.83	18.57	0.76	1.20
POND 4B	BASE	2YR_24HR	24.71	62.56	66.00	0.0012	173458	12.00	6.14	21.01	0.39
POND 4B	BASE	2YR_2HR	4.00	61.82	66.00	0.0009	166546	1.00	14.79	0.90	0.50
POND 4B	BASE	2YR_4HR	7.26	61.99	66.00	0.0007	168107	2.58	16.16	2.59	0.50
POND 4B	BASE	2YR_72HR	72.20	63.05	66.00	0.0013	178010	60.00	7.01	56.53	1.43
POND 4B	BASE	2YR_8HR	9.83	62.26	66.00	0.0009	170629	4.04	20.27	4.08	1.67
POND 4B	BASE	50YR_1HR	2.00	62.13	66.00	0.0009	169453	0.79	67.28	0.88	9.58
POND 4B	BASE	50YR_24HR	24.55	64.60	66.00	0.0024	192571	12.00	22.20	12.05	3.96
POND 4B	BASE	50YR_2HR	4.00	62.63	66.00	0.0011	174116	0.92	63.71	1.06	8.99
POND 4B	BASE	50YR_4HR	8.00	63.09	66.00	0.0012	178399	2.54	53.22	2.66	8.54
POND 4B	BASE	50YR_72HR	69.09	65.61	66.00	0.0019	202013	60.00	19.47	57.08	5.24
POND 4B	BASE	50YR_8HR	12.10	63.62	66.00	0.0012	183422	4.04	63.48	4.14	10.62
POND 4B	BASE	5YR_1HR	2.00	61.78	66.00	0.0012	166161	0.79	31.53	0.83	3.90

Post Development
Seminole Towne Center Basin
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
POND 4B	BASE	5YR_24HR	24.66	63.20	66.00	0.0011	179428	12.00	10.83	12.01	0.96
POND 4B	BASE	5YR_2HR	4.00	62.01	66.00	0.0010	168339	0.96	24.98	0.95	2.74
POND 4B	BASE	5YR_4HR	7.53	62.25	66.00	0.0008	170596	2.58	24.86	2.62	2.36
POND 4B	BASE	5YR_72HR	72.22	63.68	66.00	0.0021	183947	60.00	9.94	56.70	2.34
POND 4B	BASE	5YR_8HR	10.23	62.55	66.00	0.0010	173371	4.04	29.14	4.10	3.63
POND 4B	BASEMEAN_ANNUAL_SJR		24.77	62.44	66.00	0.0010	172388	12.08	29.15	12.16	4.32
POND 8	BASE	100YR_1HR	1.58	62.87	65.25	0.0017	154990	0.75	119.14	1.58	2.54
POND 8	BASE	100YR_24HR	22.08	64.80	65.25	0.0019	169909	11.63	27.40	22.08	12.25
POND 8	BASE	100YR_2HR	2.24	63.41	65.25	0.0018	159365	0.88	109.77	2.24	3.25
POND 8	BASE	100YR_4HR	3.81	63.89	65.25	0.0016	163017	2.50	75.83	3.81	3.76
POND 8	BASE	100YR_72HR	64.09	65.22	65.25	0.0024	173173	60.00	28.30	64.09	23.16
POND 8	BASE	100YR_8HR	8.08	64.24	65.25	0.0018	165620	4.00	87.39	8.08	5.33
POND 8	BASE	10YR_1HR	1.58	62.12	65.25	0.0015	148897	0.75	61.29	1.58	0.78
POND 8	BASE	10YR_24HR	24.17	63.70	65.25	0.0016	161606	12.00	17.06	24.17	3.57
POND 8	BASE	10YR_2HR	2.32	62.45	65.25	0.0014	151652	0.92	55.01	2.32	1.76
POND 8	BASE	10YR_4HR	4.09	62.80	65.25	0.0013	154499	2.54	42.16	4.09	2.45
POND 8	BASE	10YR_72HR	68.31	64.14	65.25	0.0021	164949	59.99	12.38	68.31	4.59
POND 8	BASE	10YR_8HR	8.03	63.10	65.25	0.0017	156873	4.04	51.37	8.03	2.87
POND 8	BASE	25YR_1HR	1.58	62.39	65.25	0.0017	151140	0.75	82.48	1.58	1.59
POND 8	BASE	25YR_24HR	24.12	64.17	65.25	0.0020	165146	12.00	21.44	24.12	4.79
POND 8	BASE25YR_24HR_SJRWM		24.12	64.17	65.25	0.0020	165146	12.00	21.44	24.12	4.79
POND 8	BASE	25YR_2HR	2.32	62.80	65.25	0.0016	154459	0.92	73.35	2.32	2.44
POND 8	BASE	25YR_4H	3.97	63.18	65.25	0.0014	157492	2.54	53.51	3.97	2.97
POND 8	BASE	25YR_72HR	64.32	64.69	65.25	0.0021	169051	60.00	16.38	64.32	10.66
POND 8	BASE	25YR_8HR	8.09	63.48	65.25	0.0017	159905	4.04	63.40	8.09	3.33
POND 8	BASE	2YR_1HR	1.59	61.73	65.25	0.0011	145658	0.79	32.01	1.59	0.14
POND 8	BASE	2YR_24HR	24.23	62.55	65.25	0.0010	152427	12.00	7.50	24.23	2.02
POND 8	BASE	2YR_2HR	2.34	61.91	65.25	0.0010	147187	0.92	26.59	2.34	0.36
POND 8	BASE	2YR_4HR	4.11	62.11	65.25	0.0010	148808	2.54	22.69	4.11	0.75
POND 8	BASE	2YR_72HR	68.33	63.00	65.25	0.0015	156052	60.00	7.90	68.33	2.73
POND 8	BASE	2YR_8HR	8.09	62.32	65.25	0.0012	150590	4.04	28.31	8.09	1.39
POND 8	BASE	50YR_1HR	1.58	62.56	65.25	0.0017	152552	0.75	95.88	1.58	2.05
POND 8	BASE	50YR_24HR	22.26	64.48	65.25	0.0018	167380	12.00	24.81	22.26	7.89
POND 8	BASE	50YR_2HR	2.27	63.08	65.25	0.0017	156722	0.92	89.45	2.27	2.84
POND 8	BASE	50YR_4HR	3.86	63.55	65.25	0.0014	160406	2.54	65.25	3.86	3.40
POND 8	BASE	50YR_72HR	64.14	65.10	65.25	0.0023	172247	60.00	22.66	64.14	18.28
POND 8	BASE	50YR_8HR	8.11	63.93	65.25	0.0016	163360	4.04	77.66	8.11	3.80
POND 8	BASE	5YR_1HR	1.59	61.97	65.25	0.0014	147620	0.79	49.67	1.59	0.45
POND 8	BASE	5YR_24HR	24.18	63.16	65.25	0.0013	157390	12.00	12.44	24.18	2.95
POND 8	BASE	5YR_2HR	2.33	62.19	65.25	0.0012	149453	0.92	40.79	2.33	0.95
POND 8	BASE	5YR_4HR	4.09	62.47	65.25	0.0012	151763	2.54	32.88	4.09	1.80
POND 8	BASE	5YR_72HR	68.48	63.61	65.25	0.0017	160867	57.17	10.59	68.48	3.47
POND 8	BASE	5YR_8HR	8.05	62.67	65.25	0.0013	153441	4.04	38.62	8.05	2.24
POND 8	BASEMEAN_ANNUAL_SJR		24.24	62.44	65.25	0.0013	151512	12.08	43.08	24.24	1.71
POND 8A	BASE	100YR_1HR	1.75	62.90	66.00	0.0005	87540	0.83	18.69	2.00	0.56
POND 8A	BASE	100YR_24HR	22.10	64.81	66.00	0.0016	103362	12.00	8.00	22.63	2.59
POND 8A	BASE	100YR_2HR	2.72	63.36	66.00	0.0010	91487	0.96	17.39	3.37	2.63
POND 8A	BASE	100YR_4HR	4.27	63.86	66.00	0.0012	95730	2.58	17.65	5.08	2.93
POND 8A	BASE	100YR_72HR	64.10	65.24	66.00	0.0022	106779	60.00	7.98	64.60	4.99
POND 8A	BASE	100YR_8HR	8.10	64.24	66.00	0.0013	98810	4.04	20.72	8.82	3.05
POND 8A	BASE	10YR_1HR	1.88	62.63	66.00	0.0004	85121	0.83	6.24	1.88	0.05
POND 8A	BASE	10YR_24HR	24.19	63.70	66.00	0.0012	94386	12.00	3.89	15.20	3.32
POND 8A	BASE	10YR_2HR	2.58	62.75	66.00	0.0004	86272	1.08	5.51	2.58	0.32
POND 8A	BASE	10YR_4HR	4.25	62.90	66.00	0.0004	87580	2.58	7.31	4.99	0.71
POND 8A	BASE	10YR_72HR	68.33	64.14	66.00	0.0022	98016	59.99	4.23	72.68	0.67
POND 8A	BASE	10YR_8HR	8.16	63.14	66.00	0.0006	89669	4.08	9.27	9.38	1.24
POND 8A	BASE	25YR_1HR	1.78	62.72	66.00	0.0005	85943	0.83	10.49	1.78	0.22
POND 8A	BASE	25YR_24HR	24.14	64.17	66.00	0.0013	98237	12.00	5.28	24.68	0.99

Post Development
Seminole Towne Center Basin
Node Max Report

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
POND 8A	BASE	25YR_24HR_SJRWM	24.14	64.17	66.00	0.0013	98237	12.00	5.28	24.68	0.99
POND 8A	BASE	25YR_2HR	2.51	62.88	66.00	0.0005	87436	1.04	8.99	3.39	0.66
POND 8A	BASE	25YR_4H	4.21	63.17	66.00	0.0009	89939	2.58	10.60	5.41	2.59
POND 8A	BASE	25YR_72HR	64.37	64.70	66.00	0.0018	102471	60.00	5.70	50.65	3.35
POND 8A	BASE	25YR_8HR	8.12	63.49	66.00	0.0011	92589	4.04	12.81	8.97	2.22
POND 8A	BASE	2YR_1HR	2.00	62.53	66.00	0.0001	84109	0.88	1.46	0.00	0.00
POND 8A	BASE	2YR_24HR	22.08	62.83	66.00	0.0005	86962	15.00	1.24	22.08	0.60
POND 8A	BASE	2YR_2HR	3.15	62.58	66.00	0.0002	84619	1.50	1.55	3.15	0.00
POND 8A	BASE	2YR_4HR	4.57	62.64	66.00	0.0003	85257	3.04	2.87	4.57	0.07
POND 8A	BASE	2YR_72HR	68.69	63.01	66.00	0.0006	88512	60.00	2.05	61.06	0.85
POND 8A	BASE	2YR_8HR	8.24	62.76	66.00	0.0003	86285	4.08	3.16	8.24	0.33
POND 8A	BASE	50YR_1HR	1.73	62.78	66.00	0.0005	86488	0.83	13.38	1.73	0.40
POND 8A	BASE	50YR_24HR	22.30	64.49	66.00	0.0015	100738	12.00	6.48	24.62	1.64
POND 8A	BASE	50YR_2HR	2.66	63.07	66.00	0.0006	89028	0.96	12.52	4.00	1.13
POND 8A	BASE	50YR_4HR	4.30	63.53	66.00	0.0013	92919	2.58	14.19	5.10	2.66
POND 8A	BASE	50YR_72HR	64.18	65.11	66.00	0.0022	105781	60.00	7.11	64.66	3.94
POND 8A	BASE	50YR_8HR	8.14	63.93	66.00	0.0013	96306	4.04	17.29	8.97	2.57
POND 8A	BASE	5YR_1HR	2.00	62.58	66.00	0.0003	84691	0.87	4.14	2.00	0.00
POND 8A	BASE	5YR_24HR	24.20	63.16	66.00	-0.0006	89863	12.08	2.45	20.90	3.78
POND 8A	BASE	5YR_2HR	2.73	62.66	66.00	0.0003	85423	1.13	3.17	2.73	0.11
POND 8A	BASE	5YR_4HR	4.31	62.77	66.00	0.0004	86422	3.04	5.08	4.31	0.38
POND 8A	BASE	5YR_72HR	68.48	63.61	66.00	0.0017	93592	60.00	3.19	57.67	0.64
POND 8A	BASE	5YR_8HR	8.14	62.88	66.00	0.0004	87402	4.08	5.76	8.19	0.75
POND 8A	BASE	MEAN_ANNUAL_SJR	22.68	62.77	66.00	0.0003	86415	12.25	4.26	22.68	0.37