Drainage Report

Anclote Harbor – Tarpon Springs

Tarpon Springs, Florida 34689

PREPARED FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

Prepared For:
Morgan Group Development, LLC
5606 S. Rice Avenue
Houston, TX 77081

Prepared By:
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Tampa, FL 33602

Revised September 2021
KHA Project Number: 145062001

Kimley»Horn

TABLE OF CONTENTS

1 ENGINEER'S CERTIFICATION

THIS IS TO CERTIFY THAT THE ENCLOSED ENGINEERING CALCULATIONS WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION.

_____

NATHAN Q. LEE, P.E. #69843

Kimley-Horn and Associates, Inc.

655 North Franklin Street, Suite 150

Tampa, Florida 33701

DATE: _____

1 PROJECT SUMMARY

The proposed project consists of the development of 25.48 acres of land located in Tarpon Springs, Florida. The project proposes five (5) multiple-family residential buildings, a clubhouse, associated parking, stormwater system, and utilities. The stormwater will be managed by two (2) interconnected dry retention ponds and a 4.12 AC wet pond to provide treatment and attenuation for the 25 year/24 hour storm event. The project discharges into the wetland to the south of the property. The project is located within the City of Tarpon Springs. Therefore, the proposed stormwater system was designed to meet the stormwater requirements of the City of Tarpon Springs and the Southwest Florida Water Management District (SWFWMD).

2 EXISTING CONDITION

Existing Drainage Patterns

The site is currently vacant with open space and wooded areas. In its existing condition, stormwater runoff in the northern portion of the site sheet flows directly to the Anclote River (located to the north of the site). The southern portions of the site sheet flow to the bordering wetland to the south, which ultimately discharges to the Anclote River to the north as well. The existing is broken into three basins (EX_01, EX_02, and EX_03). Per the geotechnical report provided by Universal Engineer Sciences, the SHWT is located 1.5' above the encountered water elevations of the piezometer readings taken on April 28, 2021 which were averaged for each area on the site. See **Appendix G** for the soil borings table.

Soils

According to the Natural Resource Conservation Service (NRCS), the soils on-site are classified predominately as hydrologic soil group type A soils to the northern portion of the site and hydrologic soil group type A/D soils to the southern portion of the site. Hydrologic soil group (HSG) A/D means that the soil has a high infiltration rate (low runoff potential) (A) or it has a very slow infiltration rate (high runoff potential) (D) when thoroughly wet depending on the depth of the water table below the surface at a given time during the year. Please refer to **Exhibit 2** for a depiction of the NRCS soils survey description information referenced above.

Flood Hazard Determination

Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) number 12103C0036G, effective on 9/3/2003, the project lies in Flood Hazard Zone AE. With that, the site comes with a Base Flood Elevation (BFE) at 9 feet. This means that the Finished Floor Elevation (FFE) of any proposed buildings on site typically must be at least 1 foot higher than these elevations. The flood level is coastal and does not require impact mitigation. Please refer to **Exhibit 3** for a map depicting the FEMA Flood Hazard Areas associated with the site.

The existing conditions were modeled using Advanced Interconnected Channel and Pond Routing (ICPR ver. 4.07.04) to calculate the discharge rate for the 25 year/24 hour design storm (see **Appendix E**). The model matches the 100 year /24 hour maximum stage of Node NA00000 provided in the SWFWMD Watershed Model for Anclote West for a more conservative design.

3 PROPOSED CONDITION

This project proposes the construction of five (5) multiple-family residential buildings, a clubhouse, associated parking, and stormwater system. The project proposes 20.8 acres of impervious area and 4.68 acres of pervious area. See **Exhibits 6 and 8** for the Proposed Condition Impervious Area and Basin Map. The proposed stormwater system utilizes two (2) proposed interconnected dry ponds and a wet pond on-site.

In the proposed condition, the site is broken into four (4) basins, PCM_01, CITY OF TARPON SPRINGS PROPERTY (PCM_01), PCM_03, AND PCM_04. Basins PCM_01, CITY OF TARPON SPRINGS PROPERTY (PCM_01), and PCM_03 drain via sheet flow or stormwater pipes into the two (2) interconnected stormwater ponds. Dry Treatment Area 1 discharges via a control structure and two twin 30" pipes directly into the Wet Pond located to the north of the site. The Wet Pond discharges via a control structure and a 30" pipe into the wetland to the south of the property.

In order to meet the treatment requirement of SWFWMD the bottom elevation of proposed ponds is 5.50 FT. The proposed dry ponds provide approximately 7.91 AC-FT of storage volume. The control water level of the proposed wet pond is set to 3.7 FT (the SHWT provided by Universal Engineering Sciences). The proposed wet pond provides 13.08 AC-FT of permanent pool volume.

The proposed conditions were modeled using Advanced Interconnected Channel and Pond Routing (ICPR ver. 4.07.04) to calculate the discharge rate for the 25 year/24 hour design storm (see **Appendix E**).

4 WATER QUALITY

The water quality standards of SWFWMD require 1" of treatment for dry retention and wet detention systems. The water quality standards also require an extra 0.5" of treatment for systems discharging into impaired water bodies. The combined dry/wet ponds will provide treatment for 1.5" of rainfall over the 25.48 acres of drainage area (1" treatment requirement + 0.5" impaired water body requirement). The total treatment volume required:

Treatment Volume = Project Area * 1.5 in * (1 ft / 12 in)
= (25.48 ac) * (43,560 ft/ 1 ac) * (1.5 in) * (1 ft / 12 in) = 138,739 CF = 3.19 AC-FT

The provided wet pool volume of 16.26 AC-FT corresponds to the treatment elevation of 4.03' using the SWFWMD Conservation Design Alternative 3.

The provided dry treatment volume of 2.104 AC-FT corresponds to the treatment elevation of 6.24'.

The water quality standards of SWFWMD require net improvement of pre-development nutrient discharge. The BMPTrains analysis was used to determine if the post-development nutrients loads were equal to or less than that of the pre-development. For this scenario, the existing site was

modeled as undeveloped upland hardwood (per the FLUCFCS Map - **Exhibit 4**) with a CN of 70 for grassed open space (type A and A/D soils) per TR-55 Table 2-2c. The pre-development nutrient loading for nitrogen was 9.88 kg/yr and 3.28 kg/yr for phosphorus. The post-development was modeled as multi-family with a Non DCIA CN of 72 and a DCIA percentage of 53.20%. The post-development discharged nitrogen load of 9.84 kg/yr and phosphorus load of 1.09 kg/yr, meet SWFWMD's net improvement requirement. See **Appendix I** for the BMPTrains analysis.

5 WATER QUANTITY

Per SWFWMD, the post-development discharge rate is limited to equal or less than the pre-development discharge rate. The post-development conditions were modeled in ICPR to ensure that the storm water system can contain the 25 year/24 hour storm event and the treatment volume such that the post-development discharge rate is limited to the pre- development peak discharge rate. See discharge summary table below.

The proposed dry ponds drawdown via percolation. See **Appendix H** for drawdown calculations. Dry Treatment Areas 1 and 3 drawdown to elevation 5.54' at hour 36, therefore the initial stage for the ponds in the proposed condition is set to 5.54' to account for mounding analysis.

Discharge Summary Table for 25YR/24HR Storm Event		
	Existing Condition	**Proposed Condition**
	(25YR/24HR Storm)	*(25YR/24HR Storm)*
Discharge Rate, cfs	***22.01 (to Wetland)***	***14.95 (to Wetland)***
Pond **Max. Stage, ft**	***N/A***	***7.12 (DRY TREATMENT 1)*** ***7.48 (DRY TREATMENT 3)*** ***5.94 (WET POND)***
Pond **Top, ft**	***N/A***	***8.00***

The supporting documents will show that the proposed stormwater system has a post-development discharge rate less than the pre-development discharge rate for the 25-year 24 hour storm. The system also meets the SWFWMD treatment requirements. Therefore, the proposed system meets all the requirements set forth by the City of Tarpon Springs and SWFWMD with no adverse impacts to the existing stormwater system.

EXHIBIT 1

SITE AERIAL MAP

Site Aerial Map

TARPON SPRINGS, FL

ANCLOTE HARBOR

June 2021

0 80 160 320 Feet

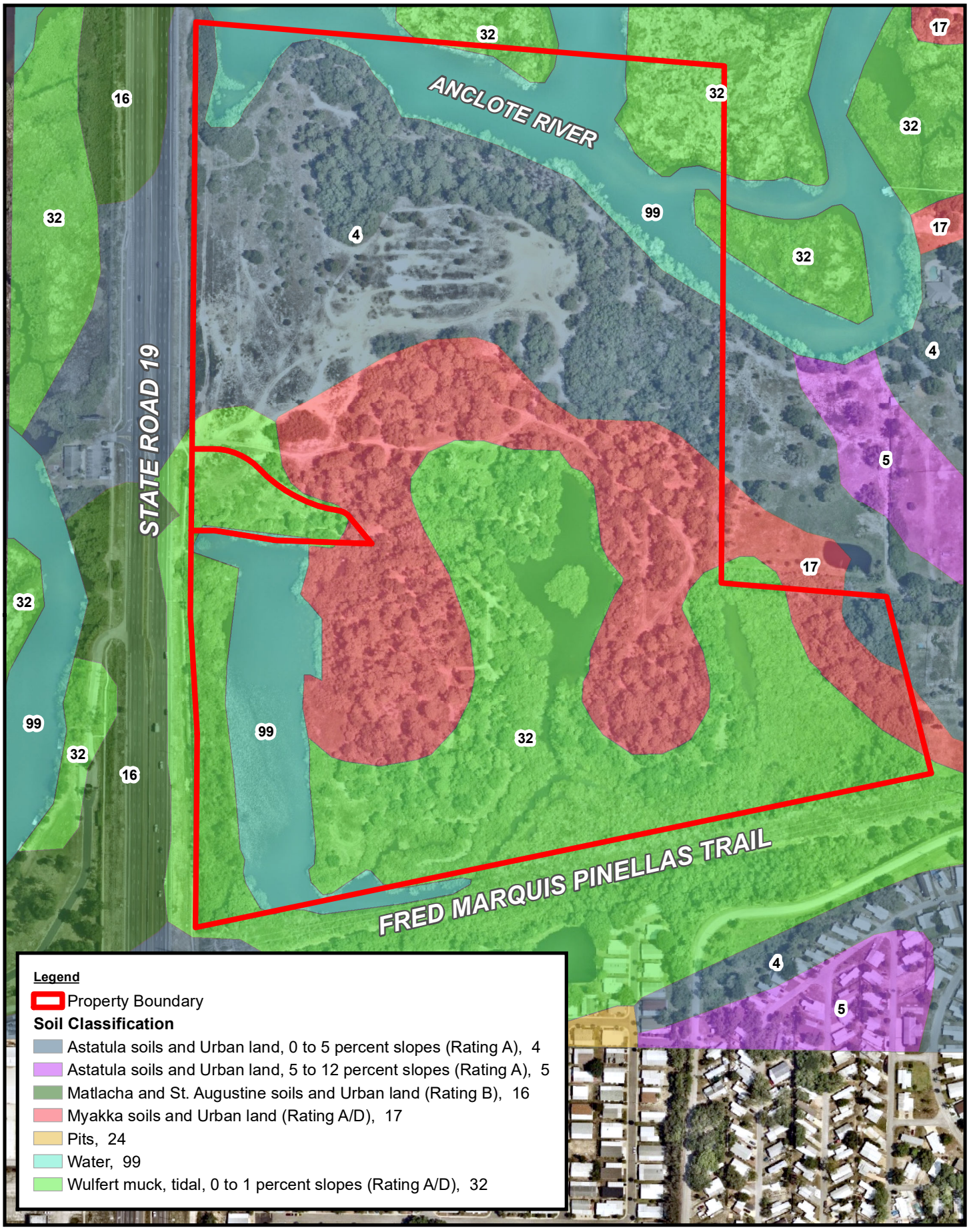
N

Kimley»Horn

EX-1

EXHIBIT 2

NRCS SOILS MAP



NRCS Soils Map

TARPON SPRINGS, FL

ANCLOTE HARBOR

June 2021

0 80 160 320 Feet

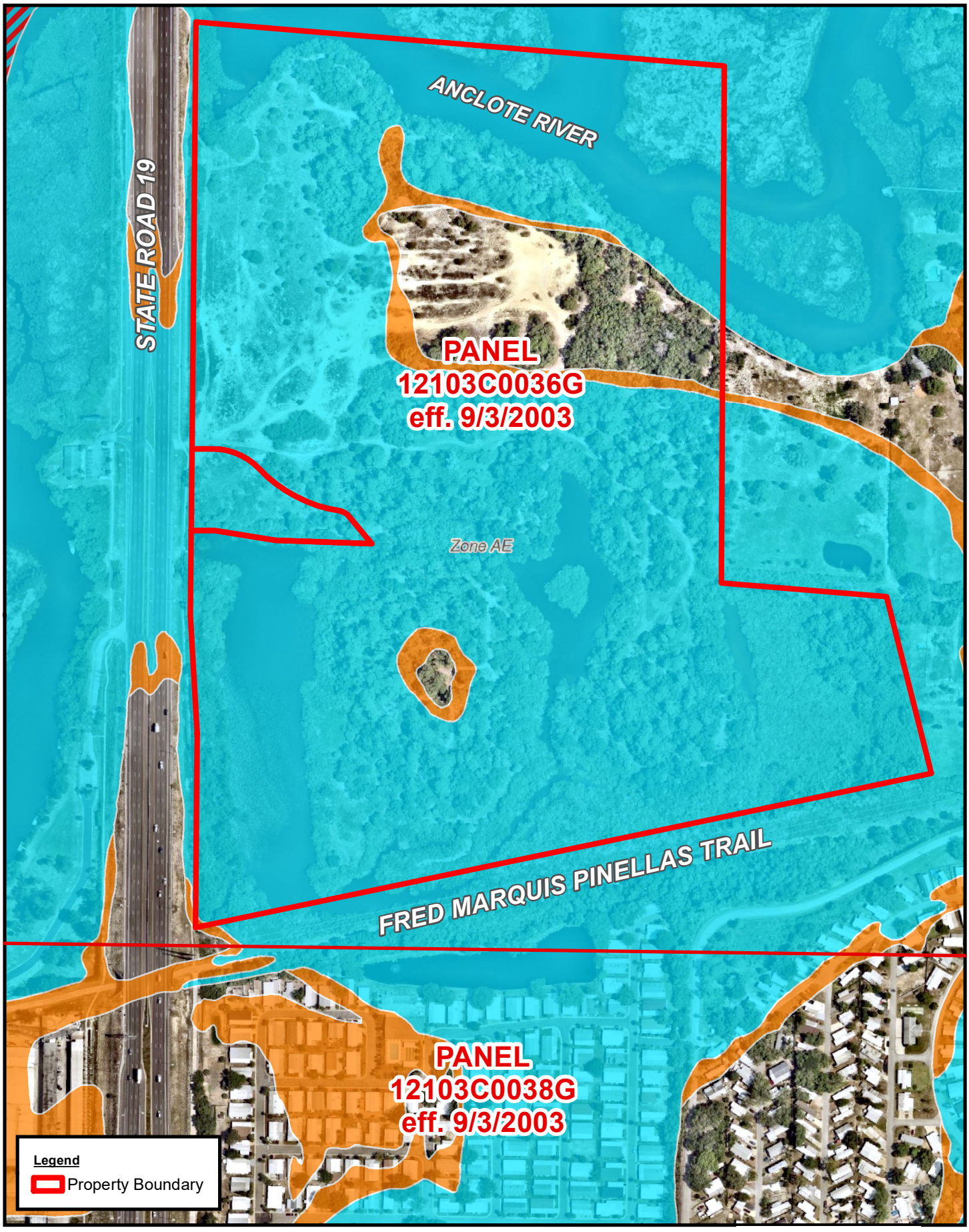
N

Kimley»Horn

EX-2

EXHIBIT 3

FEMA MAP



FEMA Flood Zone Map

TARPON SPRINGS, FL

ANCLOTE HARBOR

June 2021

0 80 160 320 Feet

N

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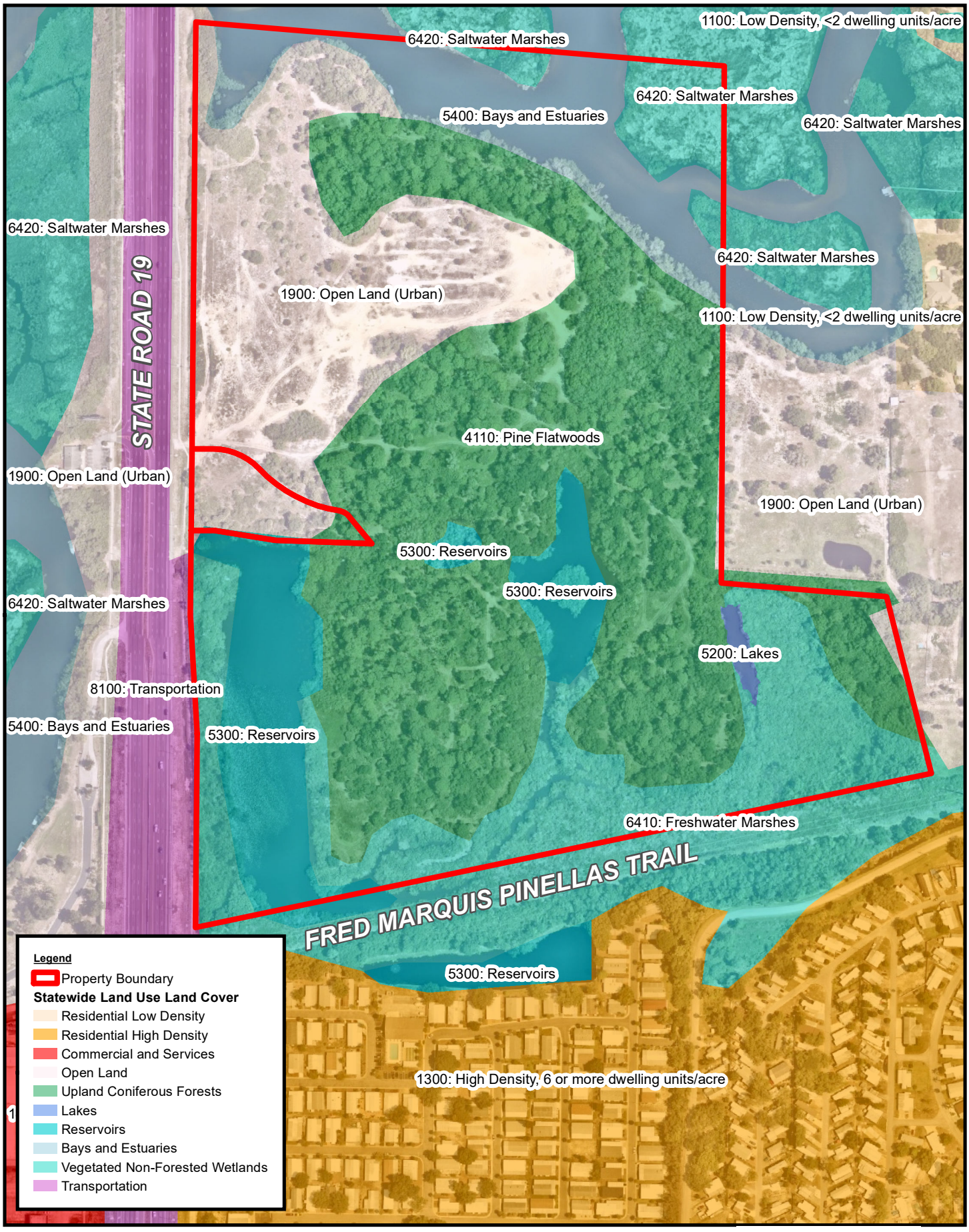
EX-3

EXHIBIT 4

FLUCFCS MAP



FLUCFCS Map

TARPON SPRINGS, FL

ANCLOTE HARBOR

June 2021

0 80 160 320 Feet

N

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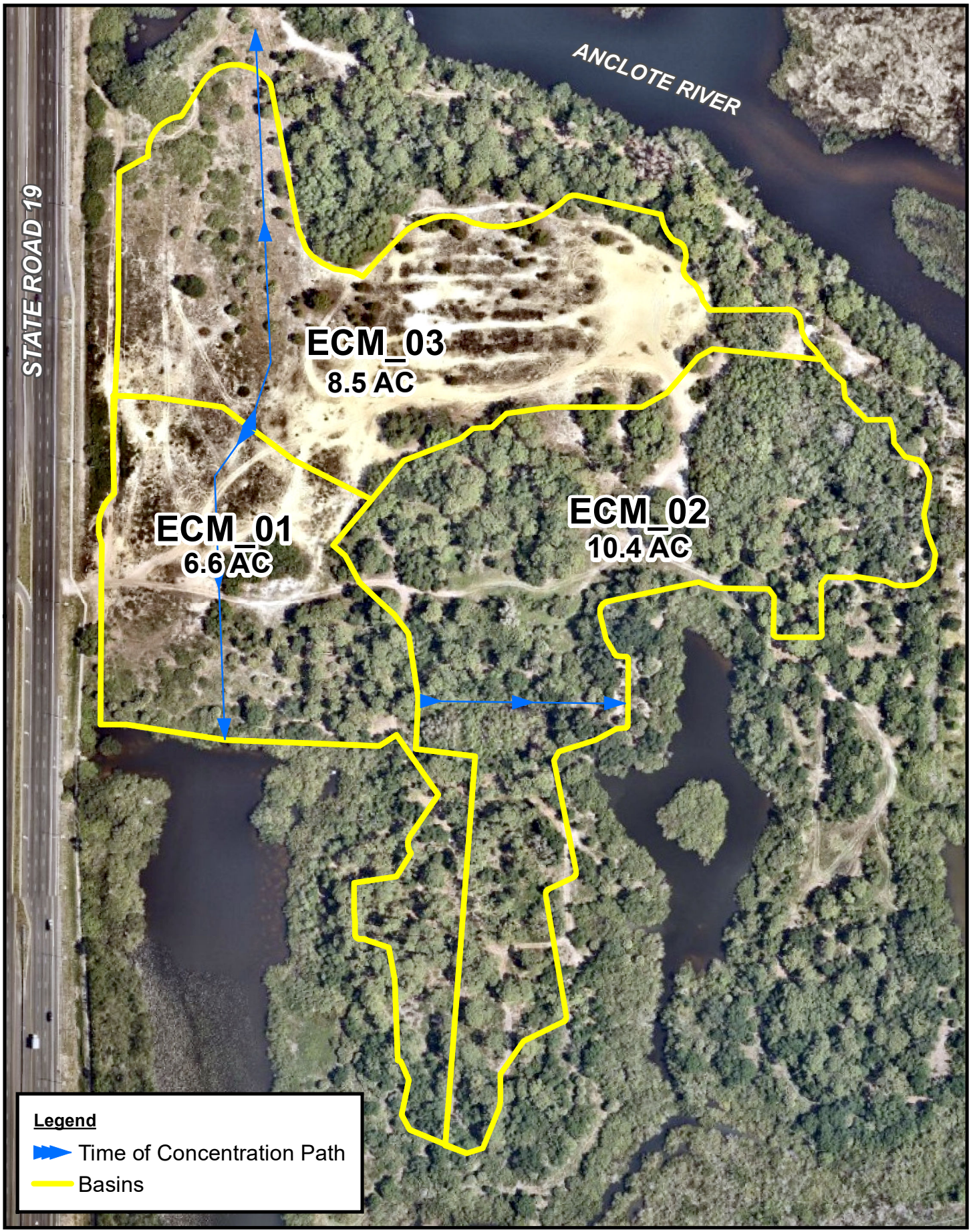
EX-4

EXHIBIT 5

EXISTING CONDITIONS EXHIBIT



Existing Conditions Map

TARPON SPRINGS, FL

ANCLOTE HARBOR

June 2021

0 50 100 200 Feet

N

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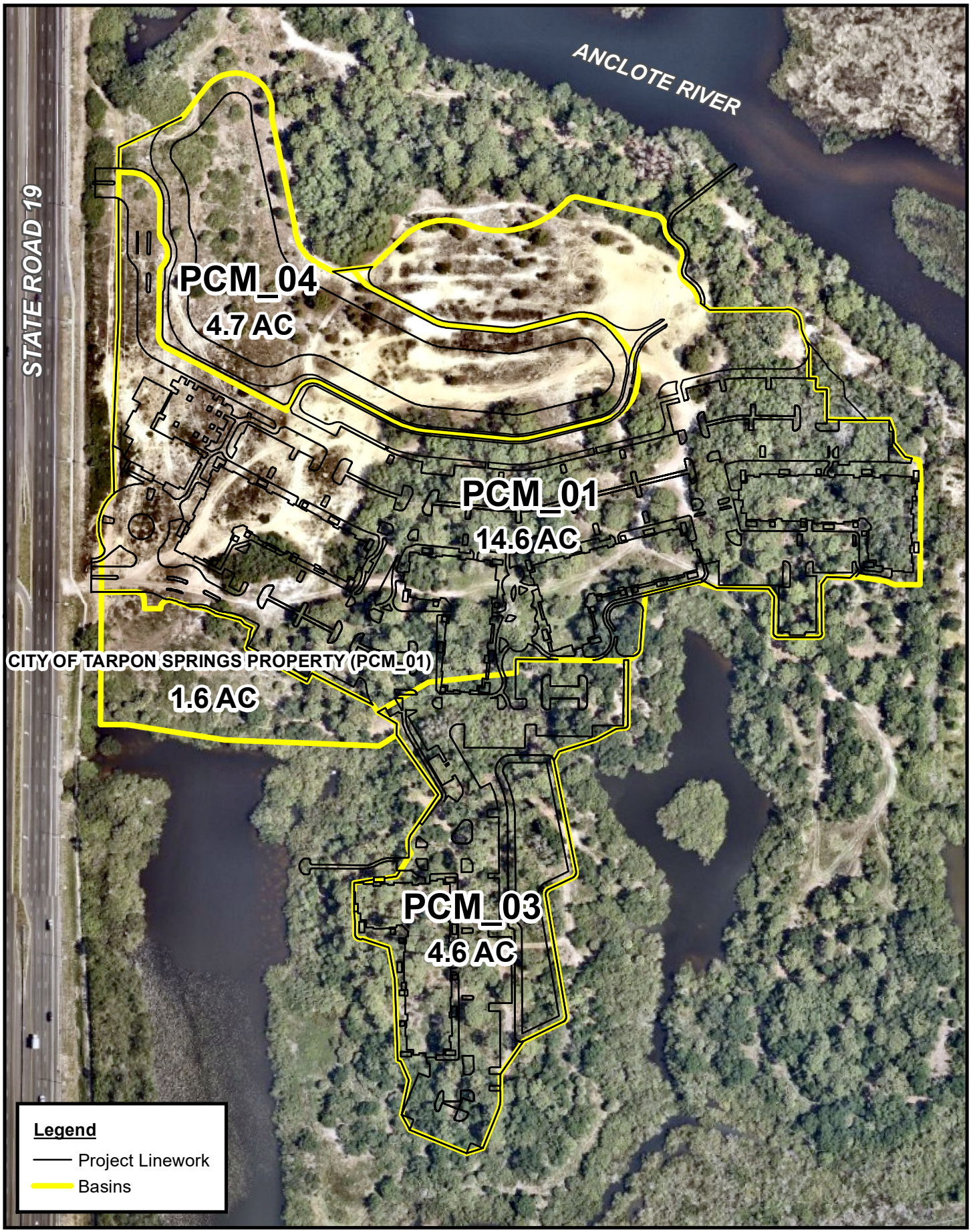
EX-5

EXHIBIT 6

PROPOSED CONDITIONS EXHIBIT



Proposed Conditions Map

TARPON SPRINGS, FL

ANCLOTE HARBOR

September 2021

City of Tarpon Springs

0 50 100 200 Feet

N

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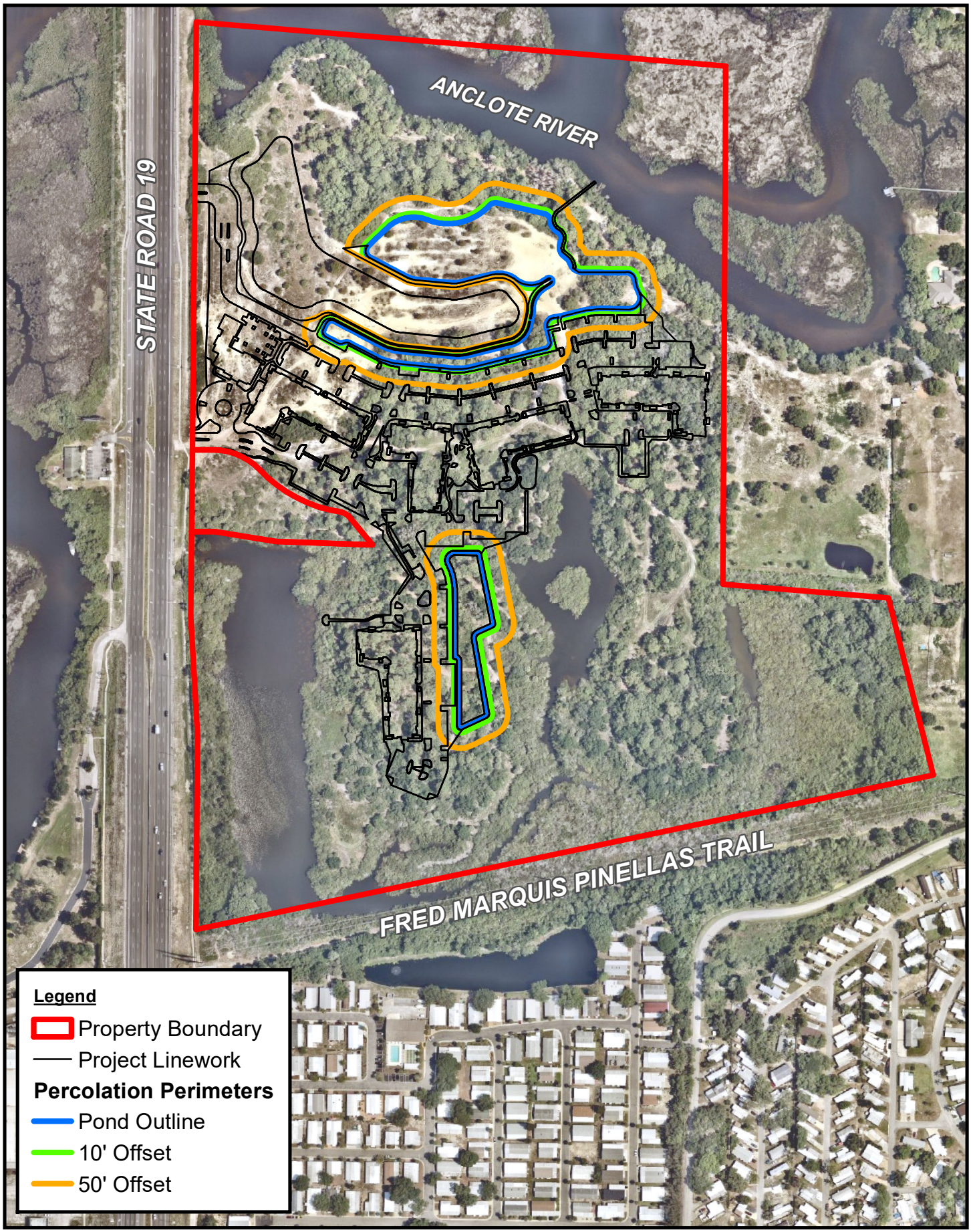
EX-6

EXHIBIT 7

PERCOLATION PERIMETERS EXHIBIT



Percolation Perimeters Map

ANCLOTE HARBOR

TARPON SPRINGS, FL

September 2021

City of Tarpon Springs

0 80 160 320 Feet

N

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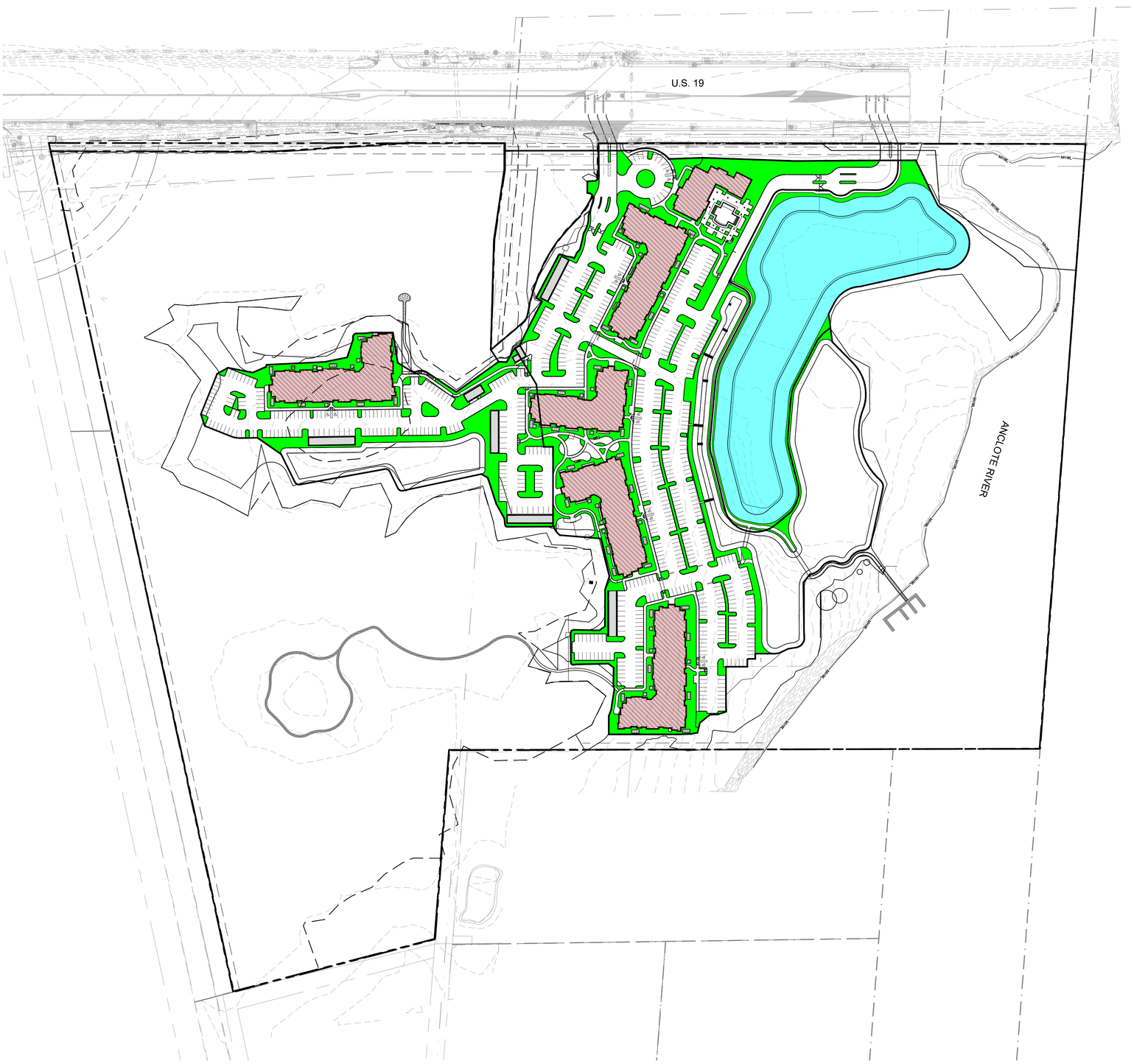
EX-7

EXHIBIT 8

IMPERVIOUS/PERVIOUS AREA EXHIBIT



LEGEND

- WET POND AREA (4.15 AC)
- IMPERVIOUS BUILDING AREA (3.90 AC)
- IMPERVIOUS AREA (13.69 AC)
- PERVIOUS AREA (4.69 AC)
- DRAINAGE BASIN LIMITS

GRAPHIC SCALE IN FEET
0 60 120 240

NORTH

EX-08

SHEET NUMBER

DATE 08/20/2021

PROJECT NO. 145062001

MORGAN
ANCLOTE HARBOR
TARPON SPRINGS FLORIDA

PROPOSED CONDITION
IMPERVIOUS AREA & BASIN MAP

EXHIBIT PURPOSES ONLY

Kimley»Horn
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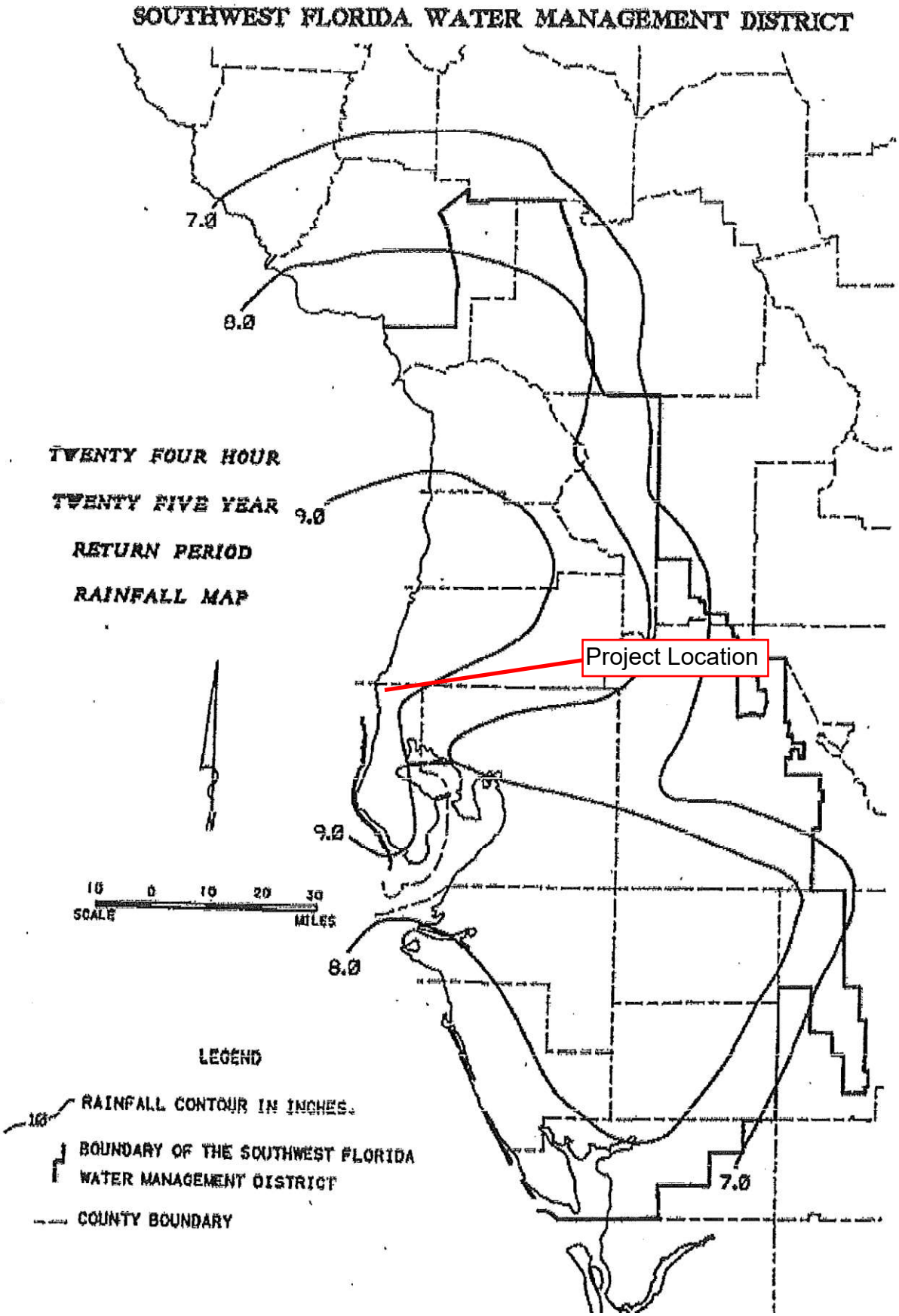
No.	REVISIONS	DATE	BY
1	FDP RESUBMITTAL	09/13/2021	BDM

APPENDIX A

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT RAINFALL MAP


SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
7.0
8.0
9.0
9.0
8.0
7.0
TWENTY FOUR HOUR
TWENTY FIVE YEAR
RETURN PERIOD
RAINFALL MAP
Project Location
10 0 10 20 30
SCALE MILES
LEGEND
10 RAINFALL CONTOUR IN INCHES.
BOUNDARY OF THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
COUNTY BOUNDARY

APPENDIX B

EXISTING CONDITIONS TIME OF CONCENTRATION CALCULATIONS

TIME OF CONCENTRATION
EXISTING CONDITIONS

	Total	Sheet Flow							Shallow Concentrated Flow						
Basin	**Tc** (min)	Manning, n (--)	2-Year 24-Hour Rain, P2 (in)	Flow Length, L (ft)	US Elevation (ft)	DS Elevation (ft)	Land Slope, s (--)	**Tt1** (min)	Paved or Unpvd.	Flow Length, L (ft)	US Elevation (ft)	DS Elevation (ft)	Water-course Slope, s (--)	Avg. Velocity, V (ft/s)	**Tt2** (min)
ECM_01	**58**	0.10	4.5	300	6.00	5.80	0.001	**56**	Unpaved	224	5.80	3.00	0.013	1.80	**2**
ECM_02	**74**	0.10	4.5	300	4.00	3.90	0.000	**74**	Unpaved	44	3.90	2.70	0.027	2.66	**0**
ECM_03	**47**	0.10	4.5	300	6.00	5.40	0.002	**36**	Unpaved	353	5.40	5.00	0.001	0.54	**11**

APPENDIX C

DRY RETENTION STORAGE CALCULATIONS

DRY RETENTION PONDS

Blue Numbers	= Input data
Red Numbers	= Answers

Treatment Volume

Basin Area= 25.48 ac

0.5" of treatment over entire basin area (On-Line Dry Retention)

Required Volume= 1.062 ac-ft
Required Elevation= 5.89

Provided Volume= 2.104 ac-ft
Provided Elevation= 6.24

0.00

Required Treatement Volume for Net Improvement
(See BMPTrains Report)

Required Volume= 2.041 ac-ft
Retention Depth= 1.40 in

Pond Volume

	Elev. (feet)	Pond 1 Surface Area (acres)	Incr. Volume (acre ft.)	Pond 3 Surface Area (acres)	Incr. Volume (acre ft.)	Total Pond Volume (acre ft.)	Total Pond Volume (cubic ft.)
T.O.B.=	8.00	2.830	1.379	0.811	0.393	7.906	344,365
	7.50	2.687	1.308	0.761	0.368	6.133	267,163
	7.00	2.545	1.237	0.712	0.344	4.457	194,151
	6.50	2.403	1.166	0.664	0.320	2.877	125,303
	6.00	2.261	1.095	0.616	0.296	1.391	60,593
B.O.P.=	5.50	2.120	0.000	0.568	0.000	0.000	0

APPENDIX D

WET DETENTION TREATMENT CALCULATIONS

Wet Detention Design Pool - Alternative 3 (Conservation Design)

Taken from SWFWMD Technical Procedure TP/SWP-022

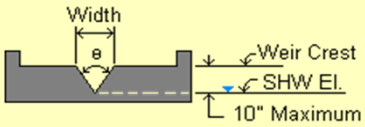
The project site acreage =	25.48	acres
The site coefficient of runoff (c) =	0.83	
The offsite acreage =	0.00	acres
The offsite coefficient of runoff (c) =	0.00	
Rainfall runoff depth (OFW ?) =	1.5	inches

The required minimum pond surface area at SHW =	2.14	acres or
	93,095	square feet
The design pool volume =	12.61	acre-feet or
	549,259	cubic feet
The required V-notch angle (θ) =	143	degrees
The maximum head =	0.50	feet or
	6.0	inches

Required littoral zone =	0.75	acres or
	32,583	square feet
SHW =	3.70	feet
Design weir crest =	4.20	feet
Required V-notch width =	2.98	feet

If the pond is larger than the minimum ==> acreage required, this will calculate the required V-notch dimensions.

SHW =	3.70	feet
pond surface area =	3.24	acres at SHW elevation
design weir crest =	4.03	feet
V-notch angle (θ) =	167	degrees
V-notch width =	5.57	feet
Minimum pond depth below SHW elevation less littoral zone =	4.46	feet



Convert a v-notch to a rectangular notch ►

1. Treatment Volume (Q)

a) For project site (Q_p)

Project acreage = 25.48 Acres

Q_p = 3.19 Ac.-Ft.

b) For offsite (Q_o)

Offsite acreage = 0.00 Acres

Coefficient of offsite runoff = 0.00

Q_o = 0.00 Ac.-Ft.

Therefore treatment volume Q = 3.19 Ac.-Ft.

2. Permanent wet pool volume (V_b)

a) based on 14 day residence volume (V_r)

Composite rational coefficient of runoff = 0.83

V_r = 6.28 Ac.-Ft.

b) A_s 0.667 inches of runoff (V_{min})

V_{min} = 1.42 Ac.-Ft.

V_b is the greater of a or b 9.42 Ac.-Ft.

Therefore the design pool volume = 12.61 Ac.-Ft.

3. Average minimum pond area (A_s)

c) For alternative 3, based on treatment volume below control elevation of a v-notch weir.

1) Based on 10" maximum head on the V notch

V_w = 1.06 Ac.-Ft.

A_s = 1.27 Acres

2) based on design pool volume (Q & V_b)

A_s = 2.14 Acres

Check Max head (H) = V_w/A_s 6.0 Inches = 0.50 Feet

The correct minimum pond surface area = 2.14 Acres

The V notch angle = 143.2 Degrees

V-notch to rectangular notch conversion

Blue Numbers	= Input data
Red Numbers	= Answers

There will be a range of widths that will work. The notch is sized to recover the volume between 24 and 30 hours and ignores the last 0.07' of water.

Weir crest elevation =	**4.02**	feet
Notch height =	**0.32**	feet
Required volume =	**46,246**	cubic feet
Pond area at SHW =	**3.24**	acre(s)
Rectangular notch width =	**2.50**	feet
Weir coefficient C =	**2.87**	

Width okay

POND STAGE/STORAGE

WET DETENTION POND

Treatment Volume based on Conservation Design Alternative 3		
Required Treatment Elevation Above SHWL =	4.03	ft
Provided V-Notch Weir Invert =	3.70	ft
Provided Treatment Elevation =	4.00	ft
Required Wet Pool Volume =	12.61	ac-ft
Provided Wet Pool Volume =	16.26	ac-ft

	Elevation (FT)	Feet	Area (SF)	Area (AC)	Avg. Area (SF)	Volume (CF)	Volume Sum (CF)	Volume Sum (Ac-Ft)
T.O.B.	8	4.3	179,587	4.123		88,648	689,394	15.83
					177,296			
	7.5	3.8	175,005	4.018		86,372	600,746	13.79
					172,744			
	7	3.3	170,482	3.914		514,374	514,374	11.81
					155,871			
SHWL	3.7	0	141,260	3.243		0	0	0.00
					140,392			
	3.5	0.2	139,524	3.203		28,078	28,078	0.64
					137,363			
	3	0.7	135,201	3.104		68,681	96,760	2.22
					133,053			
	2.5	1.2	130,904	3.005		66,526	163,286	3.75
					128,768			
	2	1.7	126,631	2.907		64,384	227,670	5.23
					124,508			
	1.5	2.2	122,384	2.810		62,254	289,923	6.66
					120,273			
	1	2.7	118,162	2.713		60,137	350,060	8.04
					116,063			
	0.5	3.2	113,964	2.616		58,032	408,091	9.37
					107,744			
BOTTOM	-1	4.7	101,523	2.331		161,615	569,707	13.08

APPENDIX E

ICPR RESULTS REPORT

Node Max Conditions [ECM]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
BNDRY RIVER	25YR - 24HR	0.79	0.79	0.0000	3.51	0.00	0
BNDRY WETLANDS	25YR - 24HR	0.79	0.79	0.0000	22.01	0.00	0

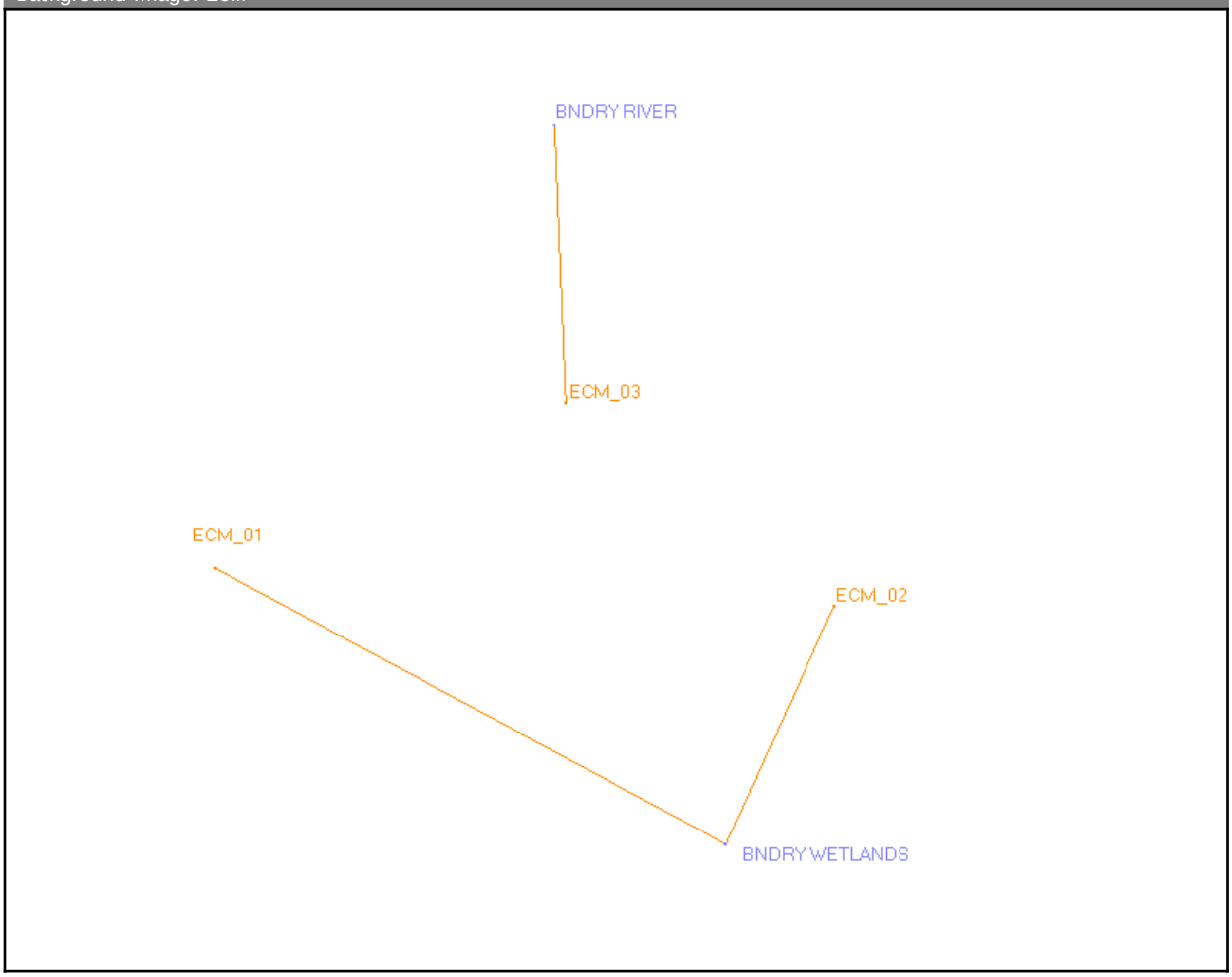
Node Max Conditions [PCM]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
BNDRY WETLANDS	25YR - 24HR	0.79	0.79	0.0000	14.95	0.00	0
DRY TREATMENT 1	25YR - 24HR	8.00	7.12	0.0010	88.97	61.20	116409
DRY TREATMENT 3	25YR - 24HR	8.00	7.48	0.0010	24.44	11.78	33139
WET POND	25YR - 24HR	8.00	5.94	0.0010	77.06	14.95	161267

APPENDIX F

ICPR INPUT REPORT

Background Image: ECM



Manual Basin: ECM_01

Scenario:	ECM
Node:	BNDRY WETLANDS
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	58.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	6.5517 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
5.1943	PERVIOUS	A/D			
1.3574	PERVIOUS	A			

Comment:

Manual Basin: ECM_02

Scenario: ECM
Node: BNDRY WETLANDS
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 74.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 10.4171 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
7.3236	PERVIOUS	A/D			
3.0935	PERVIOUS	A			

Comment:

Manual Basin: ECM_03

Scenario: ECM
Node: BNDRY RIVER
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 47.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 8.5144 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1817	PERVIOUS	A/D			
8.3327	PERVIOUS	A			

Comment:

Node: BNDRY RIVER

Scenario: ECM
Type: Time/Stage

Base Flow: 0.00 cfs
Initial Stage: 0.79 ft
Warning Stage: 0.79 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.79
0	0	0	100.0000	0.79

Comment: BOUNDARY CONDITION TAKEN FROM SWFWMD ANCLOTE WEST WATERSHED MODEL 100YR - 24HR MAX STAGE OF NODE NA00000.

Node: BNDRY WETLANDS

Scenario: ECM
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.79 ft
Warning Stage: 0.79 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.79
0	0	0	100.0000	0.79

Comment: BOUNDARY CONDITION TAKEN FROM SWFWMD ANCLOTE WEST WATERSHED MODEL 100YR - 24HR MAX STAGE OF NODE NA00000.

Simulation: 25YR - 24HR

Scenario: ECM
Run Date/Time: 6/14/2021 11:58:00 AM
Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	48.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CN
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: IMPERVIOUS
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic
Dflt Damping (2D): 0.0050 ft
Min Node Srf Area 100 ft2

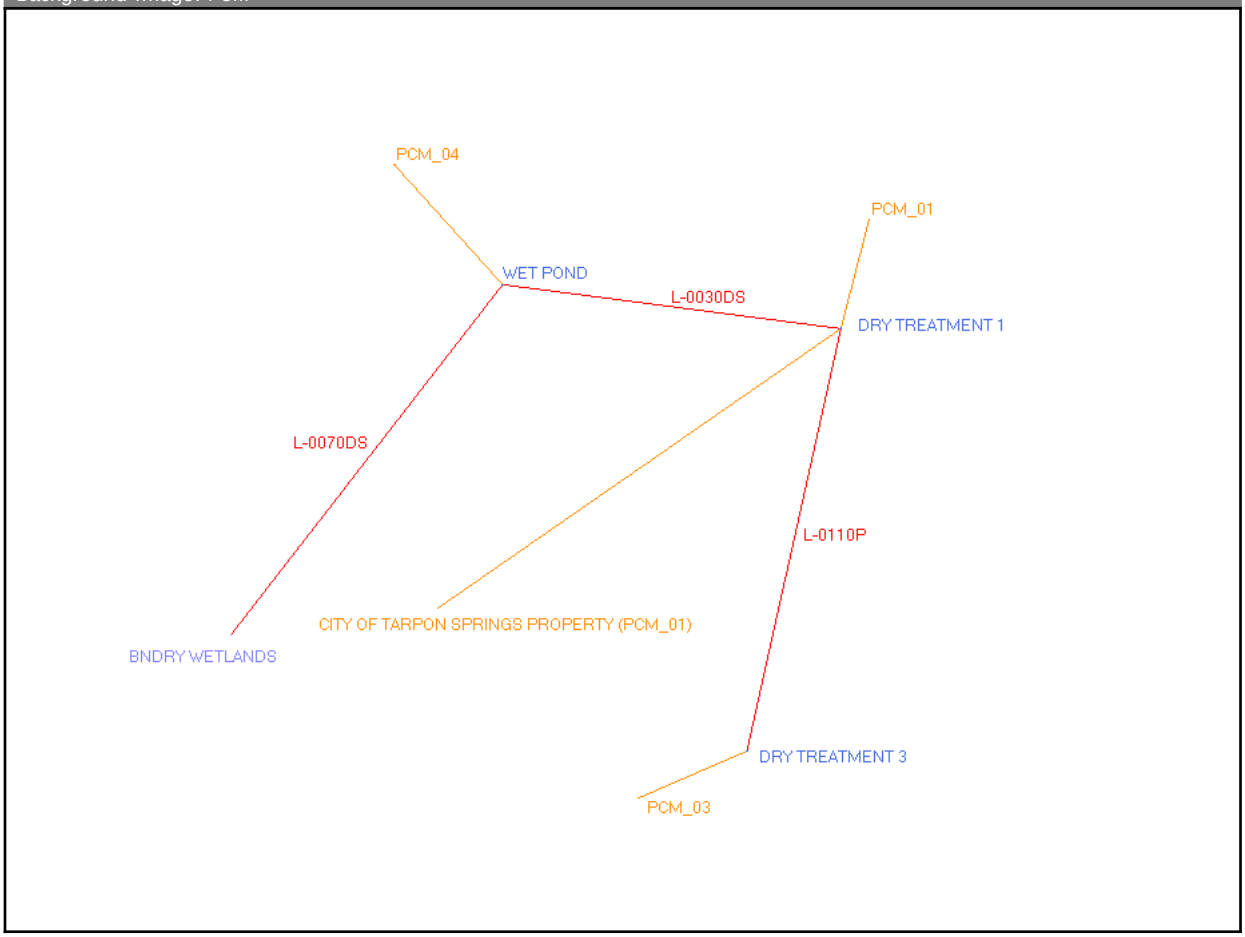
IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Opt: Global
OF Region Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 9.00 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area 100 ft2

(2D):
Energy Switch (2D): Energy

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

Comment:

Background Image: PCM



Manual Basin: CITY OF TARPON SPRINGS PROPERTY (PCM_01)

Scenario:	PCM
Node:	DRY TREATMENT 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256

Peaking Factor: 256.0
Area: 1.6000 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3200	LANDSCAPING	A/D			
1.2800	PAVEMENT	A/D			

Comment: CITY OF TARPON SPRINGS PROPERTY LAND USE ASSUMPTION: 80% ALLOWABLE IMPERVIOUS

Manual Basin: PCM_01

Scenario: PCM
Node: DRY TREATMENT 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 14.6989 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.5265	LANDSCAPING	A/D			
4.0172	PAVEMENT	A/D			
0.8807	BUILDING	A/D			
1.5141	LANDSCAPING	A			
2.6833	PAVEMENT	A			
1.1111	BUILDING	A			
0.2383	POND	A/D			
2.7276	POND	A			

Comment:

Manual Basin: PCM_03

Scenario: PCM
Node: DRY TREATMENT 3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 4.5676 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient	Reference ET

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.9907	LANDSCAPING	A/D			
2.1245	PAVEMENT	A/D			
0.5906	BUILDING	A/D			
0.8618	POND	A/D			

Comment:

Manual Basin: PCM_04

Scenario: PCM
Node: WET POND
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 4.6135 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0228	PAVEMENT	A/D			
0.0177	LANDSCAPING	A/D			
0.0989	POND	A/D			
0.1382	PAVEMENT	A			
0.3038	LANDSCAPING	A			
4.0322	POND	A			

Comment:

Node: BNDRY WETLANDS

Scenario: PCM
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.79 ft
Warning Stage: 0.79 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.79
0	0	0	100.0000	0.79

Comment: BOUNDARY CONDITION TAKEN FROM SWFWMD ANCLOTE WEST WATERSHED MODEL 100YR - 24HR MAX STAGE OF NODE NA00000.

Node: DRY TREATMENT 1

Scenario: PCM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.54 ft
Warning Stage: 8.00 ft

Stage [ft]	Area [ac]	Area [ft2]
5.50	2.1199	92343
8.00	2.9741	129553

Comment:

Node: DRY TREATMENT 3

Scenario: PCM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.54 ft
Warning Stage: 8.00 ft

Stage [ft]	Area [ac]	Area [ft2]
5.50	0.5684	24760
8.00	0.8112	35336

Comment:

Node: WET POND

Scenario: PCM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 3.70 ft
Warning Stage: 8.00 ft

Stage [ft]	Area [ac]	Area [ft2]
3.70	3.2430	141265
8.00	4.1230	179598

Comment: CWL: 3.7
TOB: 8

Drop Structure Link: L-0030DS

Scenario: PCM

Upstream Pipe
Invert: -0.50 ft

Downstream Pipe
Invert: -1.00 ft

From Node:	DRY TREATMENT 1	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	WET POND	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	2	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	69.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Horizontal	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	6.24 ft	Op Table:	
Control Elevation:	6.24 ft	Ref Node:	
Max Depth:	8.75 ft	Discharge Coefficients	
Max Width:	3.00 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Drop Structure Link: L-0070DS		Upstream Pipe		Downstream Pipe	
Scenario:	PCM	Invert:	2.50 ft	Invert:	2.50 ft
From Node:	WET POND	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	BNDRY WETLANDS	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	488.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft

Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component

Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	6.50 ft
Control Elevation:	6.50 ft
Max Depth:	3.08 ft
Max Width:	4.08 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	2
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Rectangular
Invert:	3.70 ft
Control Elevation:	3.70 ft
Max Depth:	0.32 ft
Max Width:	2.50 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment:

Weir Component

Weir:	3
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Rectangular
Invert:	4.02 ft
Control Elevation:	4.02 ft
Max Depth:	2.48 ft
Max Width:	4.08 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200

Fillet: 0.00 ft

Weir Table:
Orifice Default: 0.600
Orifice Table:

Weir Comment:

Drop Structure Comment:

Pipe Link: L-0110P		Upstream		Downstream	
Scenario:	PCM	Invert:	5.15 ft	Invert:	5.15 ft
From Node:	DRY TREATMENT 3	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	DRY TREATMENT 1	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	500.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Simulation: 25YR - 24HR

Scenario: PCM
Run Date/Time: 9/13/2021 6:13:31 PM
Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	48.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CN
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: IMPERVIOUS
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic
Dflt Damping (2D): 0.0050 ft
Min Node Srf Area (2D): 100 ft2
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Opt: Global
OF Region Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 9.00 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Curve Number: CN [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
BUILDING	A	98.0
BUILDING	A/D	98.0
BUILDING	B	98.0
BUILDING	WATER	98.0
LANDSCAPING	A	39.0
LANDSCAPING	A/D	80.0
LANDSCAPING	B	61.0
LANDSCAPING	WATER	100.0
PAVEMENT	A	98.0
PAVEMENT	A/D	98.0
PAVEMENT	B	98.0
PAVEMENT	WATER	98.0
PERVIOUS	A	39.0
PERVIOUS	A/D	80.0
PERVIOUS	B	61.0
PERVIOUS	WATER	100.0
POND	A	100.0
POND	A/D	100.0
POND	B	100.0
POND	WATER	100.0
SIDEWALK	A	98.0
SIDEWALK	A/D	98.0
SIDEWALK	B	98.0
SIDEWALK	PITS	98.0
SIDEWALK	WATER	98.0

Impervious: IMPERVIOUS [Set]

Land Cover Zone	% Impervious	% DCIA	% Direct	Ia Impervious [in]	Ia Pervious [in]
BUILDING	0.00	0.00	0.00	0.000	0.000
LANDSCAPING	0.00	0.00	0.00	0.000	0.000
PAVEMENT	0.00	0.00	0.00	0.000	0.000
PERVIOUS	0.00	0.00	0.00	0.000	0.000
POND	0.00	0.00	100.00	0.000	0.000
SIDEWALK	0.00	0.00	0.00	0.000	0.000

APPENDIX G

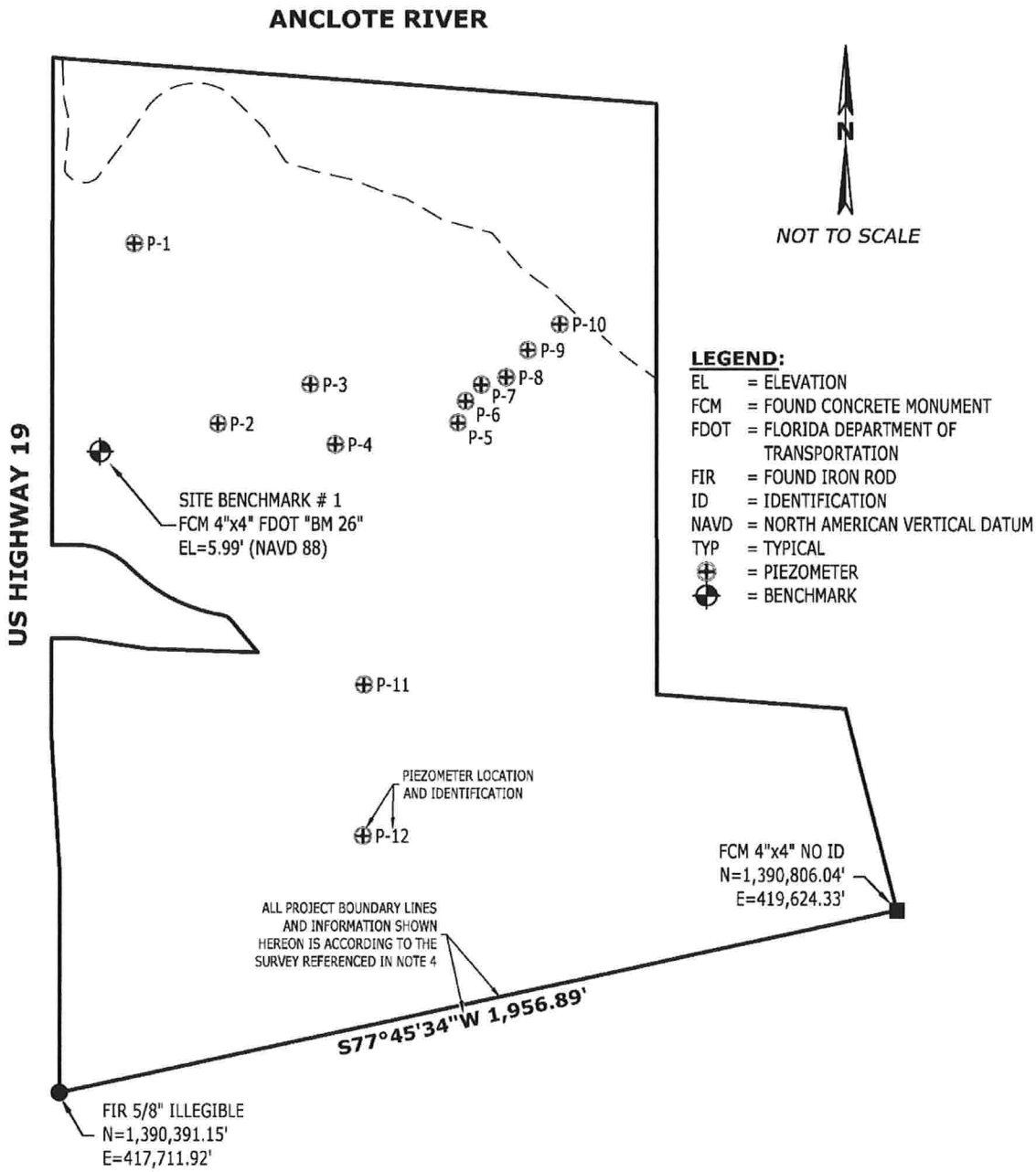
SOIL BORINGS TABLE

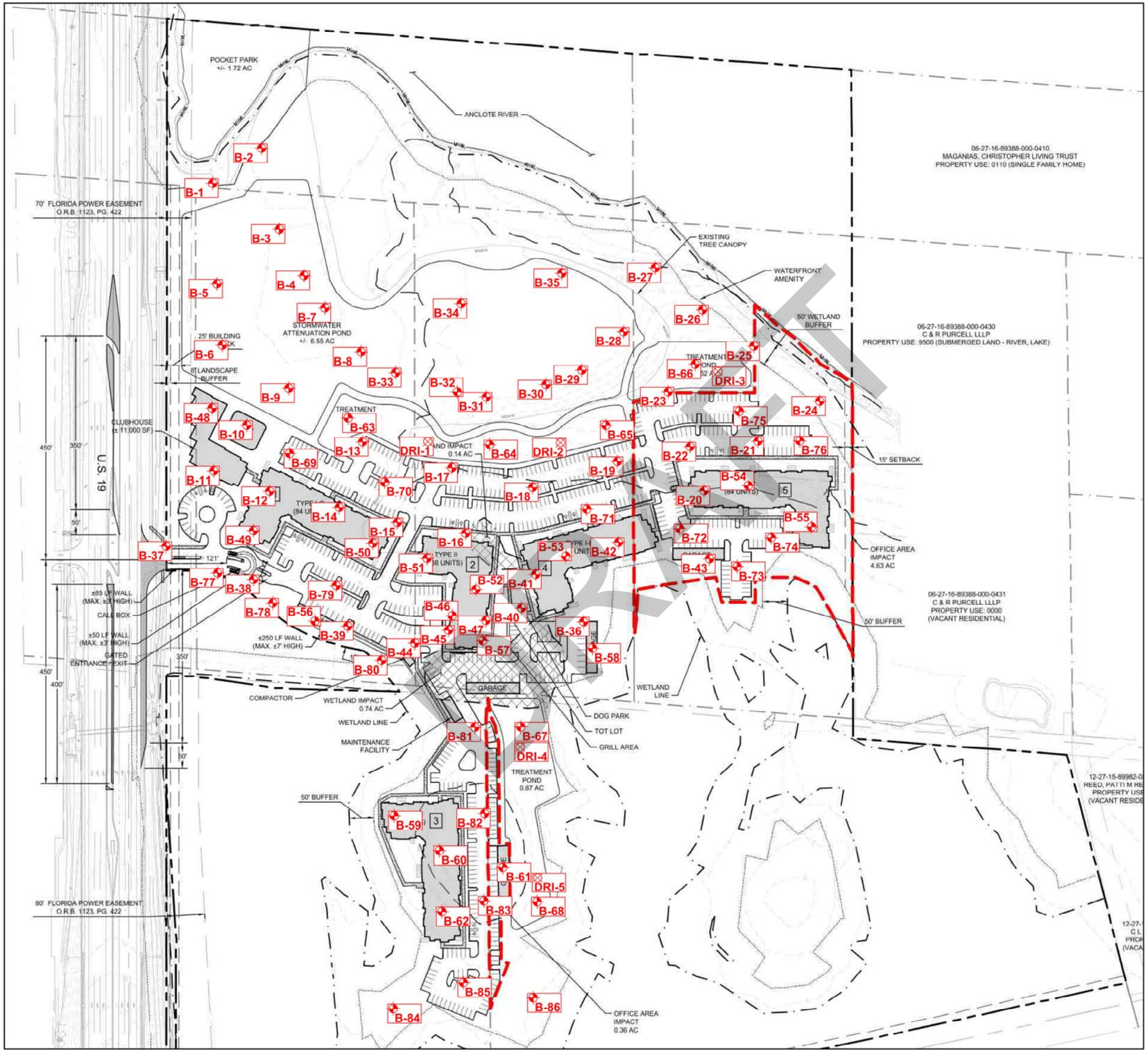
Soil Borings Table

BMP ID	Piezometer ID	Existing Ground Elevation (ft.)	Encountered Water Elevation (ft.)	Average Encountered Water Elevation (ft.)	Average Seasonal High Water Elevation (ft.)	Boring ID	Base of Aquifer Elevation (ft.)	Average Base of Aquifer Elevation (ft.)
WET POND	P-1	5.6	2.0	2.2	3.7	B-3	-11.4	-6.8
	P-3	9.3	1.2			B-8	-12.7	
DRY TREATMENT 1	P-2	5.0	1.3			B-63	-15.0	
	P-4	10.4	1.4			B-64	-9.6	
	P-5	14.9	1.8			B-65	-5.1	
DRY TREATMENT 2	P-7	20.4	2.8			B-23	-1.6	
	P-8	21.2	3.0			B-66	1.2	
	P-9	21.9	4.0			B-25	-0.1	
DRY TREATMENT 3	P-11	4.3	1.3	1.3	2.8	B-81	-7.7	-5.7
	P-12	8.4	1.2			B-83	-3.6	

*NOTE: Piezometer measurements from Universal Engineering Sciences Addendum Report dated May 14, 2021. Boring Information from Universal Engineering Sciences Geotechnical Report dated October 6, 2020.

MAP OF SURVEY:





LEGEND

APPROXIMATE LOCATION	
⊕	SPT BORING
⊕	DRI

N

UNIVERSAL
ENGINEERING SCIENCES
1743 INDEPENDENCE BLVD.
SARASOTA, FL.
941-358-7410

DRAWN FOR	MORGAN DEVELOPMENT
DRILLED BY	UES & R&M
DRAWN BY	R.L.D
DRAWING DATE	7/15/2019 8/26/2020
SCALE	NOT TO SCALE

PROJECT NO. 1185.2000136.0000
REPORT NO. G-MD-AHA-1

PROPOSED TARPON SPRINGS APARTMENT
US 19 AND ATLANTIC AVENUE
TARPON SPRINGS, FL

BORING LOCATION PLAN

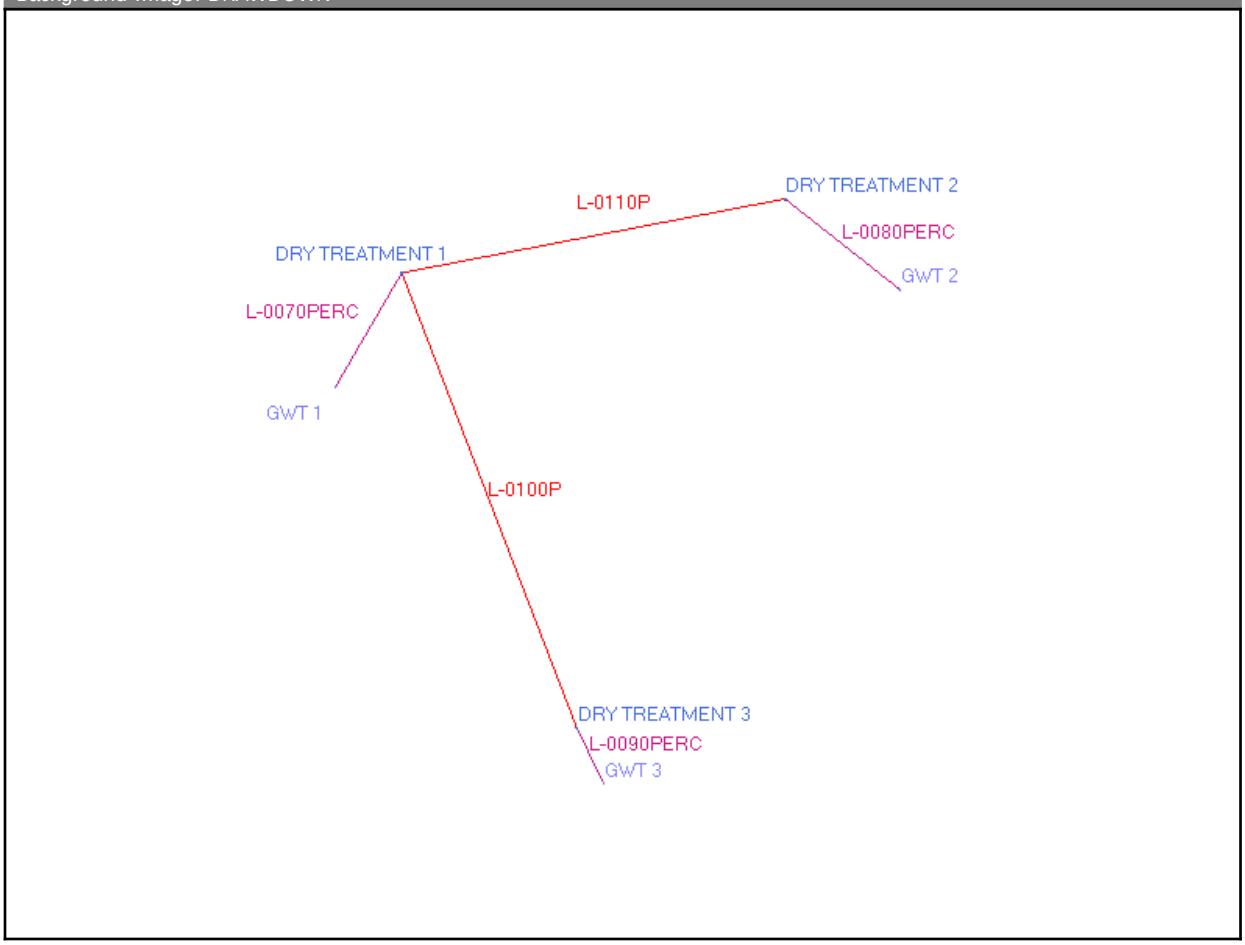
THIS MAP SHOWS APPROXIMATE LOCATION

A-2.0

APPENDIX H

DRAWDOWN CALCULATIONS

Background Image: DRAWDOWN



Node: DRY TREATMENT 1

Scenario: DRAWDOWN
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 6.24 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
5.50	2.1199	92343
8.00	2.9741	129553

Comment:

Node: DRY TREATMENT 3

Scenario: DRAWDOWN
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 6.24 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
5.50	0.5684	24760
8.00	0.8112	35336

Comment:

Node: GWT 1

Scenario: DRAWDOWN
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 3.70 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	3.70
0	0	0	100.0000	3.70

Comment: SHGW LEVEL TAKEN FROM UPDATED GEOTECH REPORT (1.5 FEET ABOVE ENCOUNTERED WATER LEVELS)

Node: GWT 3

Scenario: DRAWDOWN
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 3.70 ft
Warning Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	3.70
0	0	0	100.0000	3.70

Comment: SHGW LEVEL TAKEN FROM UPDATED GEOTECH REPORT (1.5 FEET ABOVE ENCOUNTERED WATER LEVELS)

Percolation Link: L-0080PERC			
Scenario:	DRAWDOWN	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	DRY TREATMENT 1		
To Node:	GWT 1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	3125.00 ft
Flow Direction:	Both	Perimeter 2:	3144.00 ft
Aquifer Base Elevation:	-6.80 ft	Perimeter 3:	3372.00 ft
Water Table Elevation:	3.70 ft	Distance P1 to P2:	10.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	40.00 ft
Horizontal Conductivity:	24.000 fpd	# of Cells P1 to P2:	2
Vertical Conductivity:	16.000 fpd	# of Cells P2 to P3:	4
Fillable Porosity:	0.200		
Layer Thickness:	0.00 ft		

Comment: SOIL DESIGN PARAMETERS TAKEN FROM ADDENDUM REPORT - GROUNDWATER MONITORING FROM UNIVERSAL ENGINEERING SCIENCES DATED MAY 14, 2021 AND GEOTECHNICAL REPORT FROM UNIVERSAL ENGINEERING SCIENCES DATED OCTOBER 6, 2020

Percolation Link: L-0090PERC			
Scenario:	DRAWDOWN	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	DRY TREATMENT 3		
To Node:	GWT 3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1090.00 ft
Flow Direction:	Both	Perimeter 2:	1153.00 ft
Aquifer Base Elevation:	-5.70 ft	Perimeter 3:	1397.00 ft
Water Table Elevation:	3.70 ft	Distance P1 to P2:	10.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	40.00 ft
Horizontal Conductivity:	16.000 fpd	# of Cells P1 to P2:	2
Vertical Conductivity:	10.500 fpd	# of Cells P2 to P3:	4
Fillable Porosity:	0.200		
Layer Thickness:	0.00 ft		

Comment: SOIL DESIGN PARAMETERS TAKEN FROM ADDENDUM REPORT - GROUNDWATER MONITORING FROM UNIVERSAL ENGINEERING SCIENCES DATED MAY 14, 2021 AND GEOTECHNICAL REPORT FROM UNIVERSAL ENGINEERING SCIENCES DATED OCTOBER 6, 2020

Pipe Link: L-0100P		Upstream		Downstream	
Scenario:	DRAWDOWN	Invert:	5.15 ft	Invert:	5.15 ft
From Node:	DRY TREATMENT 3	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	DRY TREATMENT 1	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	500.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			

Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Simulation: DRAWDOWNS

Scenario: DRAWDOWN
Run Date/Time: 9/13/2021 6:09:14 PM
Program Version: ICPR4 4.07.04

General

Run Mode: Normal

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

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Lookup Tables

Boundary Stage Set:

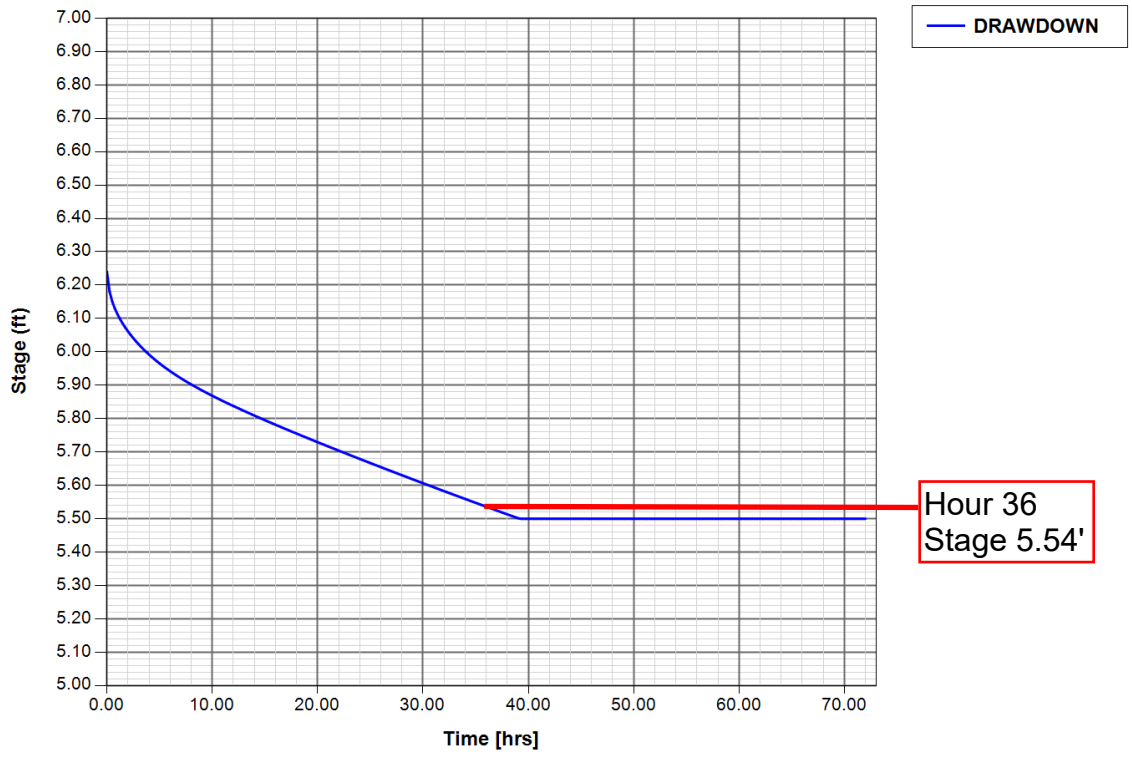
Reference ET Folder:		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	CN
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	PCM IMPERVIOUS
		Roughness Set:	
		Crop Coef Set:	
		Fillable Porosity Set:	
		Conductivity Set:	
		Leakage Set:	

Tolerances & Options

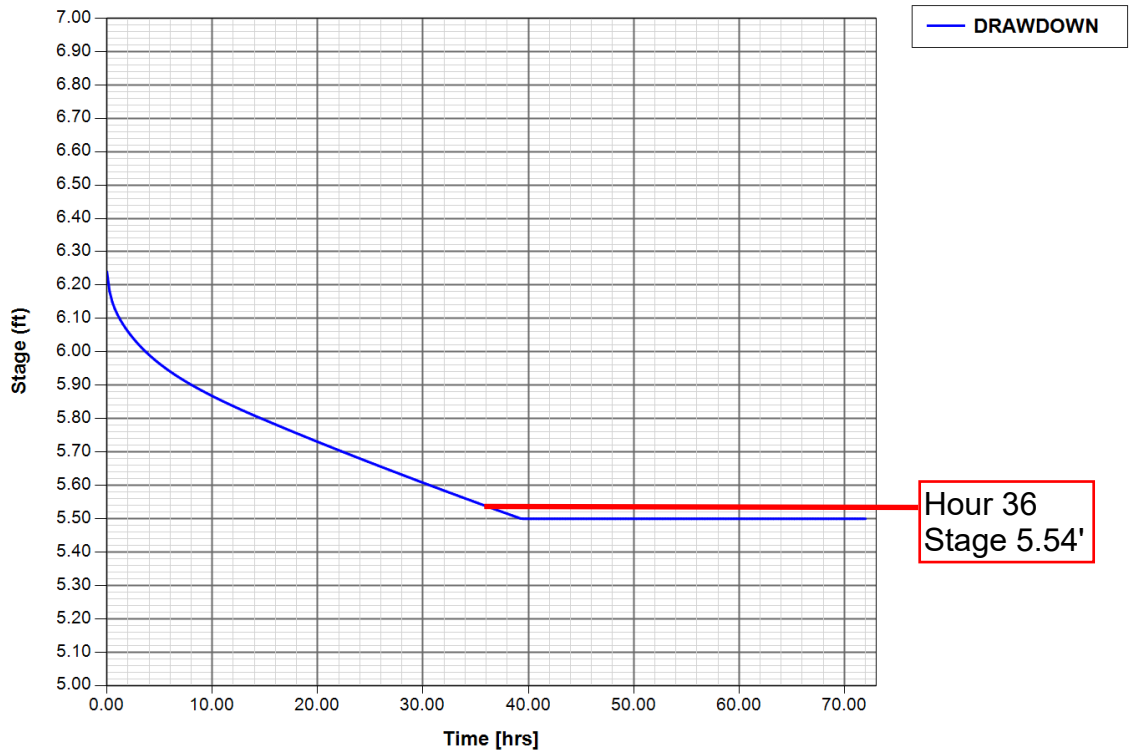
Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	No Rainfall
Max dZ:	1.0000 ft	OF Region Rain Opt:	No Rainfall
Link Optimizer Tol:	0.0001 ft		
Edge Length Option:	Automatic		
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	100 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Stage | Multi-Scenario [Node: DRY TREATMENT 1] Sim: DRAWDOWNS



Stage | Multi-Scenario [Node: DRY TREATMENT 3] Sim: DRAWDOWNS



APPENDIX I

BMPTRAINS REPORT – NET IMPROVEMENT

Complete Report (not including cost) Ver 4.3.1

Project: Anclote Harbor
Date: 9/13/2021 5:21:29 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Anclote Harbor
Rainfall Zone	Florida Zone 4
Annual Mean Rainfall	51.00

Pre-Condition Landuse Information

Landuse	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346
Area (acres)	25.48
Rational Coefficient (0-1)	0.07
Non DCIA Curve Number	70.00
DCIA Percent (0-100)	0.00
Nitrogen EMC (mg/l)	1.042
Phosphorus EMC (mg/l)	0.346
Runoff Volume (ac-ft/yr)	7.689
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	9.878
Phosphorus Loading (kg/yr)	3.280

Post-Condition Landuse Information

Landuse	Multi-Family: TN=2.320 TP=0.520
Area (acres)	25.48
Rational Coefficient (0-1)	0.48
Non DCIA Curve Number	72.00
DCIA Percent (0-100)	53.30
Wet Pond Area (ac)	7.96

Nitrogen EMC (mg/l)	2.320
Phosphorus EMC (mg/l)	0.520
Runoff Volume (ac-ft/yr)	35.489
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	101.518
Phosphorus Loading (kg/yr)	22.754

Catchment Number: 1 Name: Anclote Harbor

Project: Anclote Harbor
Date: 9/13/2021

Multiple BMP in Series Design Parameters

BMP in Series Number: 1
BMP Type: Retention

Retention Depth (in)	1.400
Retention Volume (ac-ft)	2.044

BMP in Series Number: 2
BMP Type: Wet Detention

Permanent Pool Volume (ac-ft)	13.080
Permanent Pool Volume (ac-ft) for 31 days residence	3.014
Annual Residence Time (days)	135
Littoral Zone Efficiency Credit	
Wetland Efficiency Credit	

BMP in Series Number: 3
BMP Type: None

BMP in Series Number: 4
BMP Type: None

Watershed Characteristics

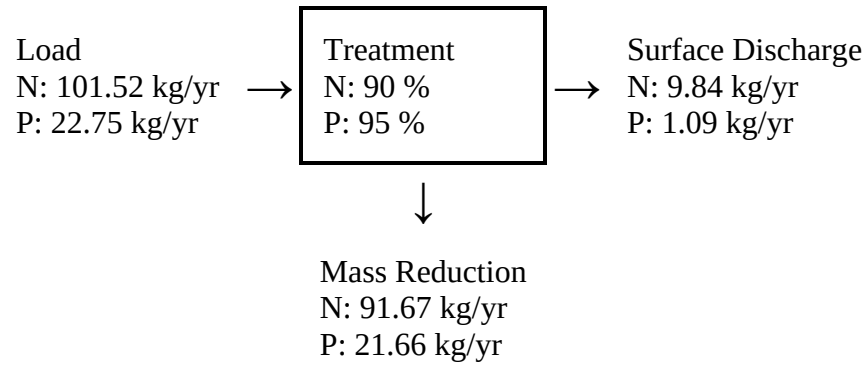
Catchment Area (acres)	25.48
Contributing Area (acres)	17.520
Non-DCIA Curve Number	72.00
DCIA Percent	53.30
Rainfall Zone	Florida Zone 4

Rainfall (in)	51.00

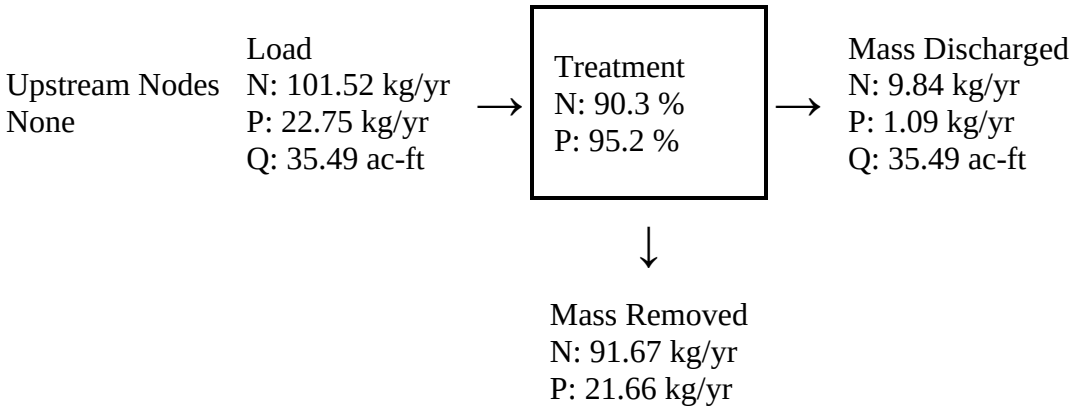
Surface Water Discharge

Required TN Treatment Efficiency (%)	90
Provided TN Treatment Efficiency (%)	90
Required TP Treatment Efficiency (%)	86
Provided TP Treatment Efficiency (%)	95

Load for Multiple BMP in Series



Load Diagram for Multiple BMP (As Used In Routing)



Summary Treatment Report Version: 4.3.1

Project: Anclote Harbor

Analysis Type: Net Improvement

Date:9/13/2021

BMP Types:

Catchment 1 - (Anclote Harbor) Multiple BMP Based on % removal values to the nearest percent

Routing Summary
Catchment 1 Routed to Outlet

Total nitrogen target removal met? **Yes**
Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	9.88 kg/yr	
Total N post load	101.52 kg/yr	
Target N load reduction	90 %	
Target N discharge load	9.88 kg/yr	
Percent N load reduction	90 %	
Provided N discharge load	9.84 kg/yr	21.71 lb/yr
Provided N load removed	91.67 kg/yr	202.14 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	3.28 kg/yr	
Total P post load	22.754 kg/yr	
Target P load reduction	86 %	
Target P discharge load	3.28 kg/yr	
Percent P load reduction	95 %	
Provided P discharge load	1.093 kg/yr	2.41 lb/yr
Provided P load removed	21.661 kg/yr	47.763 lb/yr

APPENDIX J

STORMWATER MANAGEMENT OPERATION AND MAINTENANCE

ANCLOTE HARBOR – TARPON SPRINGS, FLORIDA

STORMWATER MANAGEMENT SYSTEM
OPERATION AND MAINTENANCE PROGRAM

1.0 MAINTENANCE OF GRASSED AREAS

Once sodded and established, all grassed areas shall be mowed regularly and maintained free from bare earth conditions to prevent the potential for erosion. Grass clippings shall be collected and disposed of properly. Clippings shall not be disposed of in any created lakes or wetlands, swales, ditches or any other drainage facility.

2.0 MAINTENANCE OF PARKING FACILITIES

Regularly scheduled vacuum sweeping, or other appropriate methods, of all common streets, parking lots and paved areas within the development. All parcel and/or lot owners within the development shall undertake similar sweeping programs within their properties, if applicable.

3.0 MAINTENANCE OF WET DETENTION SYSTEM

3.1 REMOVAL OF AQUATIC WEEDS

Whenever practical, undesirable weeks and floating aquatics shall be removed manually from the lake areas. This will allow for the effective control of aquatic weed invasion and minimal disturbance to both planted and desirable naturally recruited species within required littoral zones.

3.2 CHEMICAL WEED CONTROL

Application of chemicals shall only be used as a last resort in controlling noxious and aquatic weeds. Any herbicides or pesticides shall be applied in accordance with the manufacturer's recommendations and as approved by a State licensed pest control advisor. Limited applications of weed control chemicals shall be performed in such a manner as to not adversely affect the desirable plant species within littoral zones.

3.3 ALGAE CONTROL

To minimize the potential for lake algae blooms, fertilization practices shall follow Florida Cooperative Extension Service recommendations

and be kept to the minimum necessary to maintain adequate plant growth and development.

Copper sulfate, commonly used to control algae, shall include chelating agents. Chelated copper sulfate results in lower copper residue, requires lower application concentrations, and furnishes longer periods of control than copper sulfate.

4.0 OPERATION INSPECTION SCHEDULE

Operation inspections by a qualified professional shall be conducted to assure that the surface water management system functions as designed. The frequency of these inspections shall be semi-annually for the first three years and annually thereafter. Spot inspections during rainstorm events may also be periodically warranted.

The following features of the surface water management system shall be inspected during each visitation:

4.1 DRY STORMWATER PONDS

Inspections of the stormwater detention pond will include a general review of the pond conditions with respect to slope stability, vegetative cover, and inlet structure efficiency. Bank slopes will be inspected for signs of erosion, settlement, and slope failure.

4.2 WET DETENTION SYSTEM

Lake inspections should include a general review of conditions with respect to algae and plant growth. Bank slopes should be inspected for signs of erosion, settlement, and slope failure. Where applicable, pond dikes and levees should be inspected for indications of settlement or breaks. Excess sediment deposits should be noted and all floating debris should be removed.

4.3 VEGETATION

The need for vegetation harvesting or spraying will be determined. Grassed areas such as swales and lake banks will also be inspected to determine the need for mowing, reseeding or fertilization.

4.4 INLET/ OUTFALL STRUCTURES

System structures will be inspected ensuring no obstructions to flow (i.e. debris) exist that would reduce the flow capacity of the system. The structural condition of inlets will also be inspected for evidence of pipe separation, settlement, or concrete deterioration.

4.5 CONVEYANCE SYSTEM

The conveyance system which includes storm sewer piping, inlets, and junction boxes will be inspected for structural and functional integrity. Evidence of seepage, restricted flow, or turbid discharges will be noted.

4.6 FILL AREAS

Areas which have been filled and stabilized adjacent to any portion of the surface water management system (including wetlands) will be inspected for evidence of settlement, erosion or slope failure.

APPENDIX K

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PRE-APP MEETING NOTES

THIS FORM IS INTENDED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING BY PROVIDING A PARTIAL "PROMPT LIST" OF DISCUSSION SUBJECTS. IT IS NOT A LIST OF REQUIREMENTS FOR SUBMITTAL BY THE APPLICANT.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
RESOURCE REGULATION DIVISION
PRE-APPLICATION MEETING NOTES

FILE NUMBER:

PA 406703

Date:	05/07/2019		
Time:	11:00		
Project Name:	Anclote Harbour		
District Engineer:	David Kramer		
District ES:	Al Gagne		
Attendees:	Luis Costa, Wally Brinkman		
County:	Pinellas	**Sec/Twp/Rge:**	06/27/16
Total Land Acreage:	75.0	**Project Acreage:**	40 acres

Prior On-Site/Off-Site Permit Activity:

- WALMART AT TARPON SPRINGS – 44027442.000-.003

Project Overview:

- Construction of a multi-family residential project on the east side of US19 on the south side of the Anclote River.

Environmental Discussion: (Wetlands On-Site, Wetlands on Adjacent Properties, Delineation, T&E species, Easements, Draw down Issues, Setbacks, Justification, Elimination/Reduction, Permanent/Temporary Impacts, Secondary and Cumulative Impacts, Mitigation Options, SHWL, Upland Habitats, Site Visit, etc.)

- Project may include wetland impacts. Site is located in the Upper Coastal Areas ERP Basin. Mitigation banks located within this basin may be used to offset wetland impacts, provided the bank has the appropriate type and number of credits available for purchase. Mitigation Banks that serve this area include Upper Coastal, Nature Coast, Old Florida, and Aripeka.
- Be advised, there is a known Bald Eagle nest on the property. Coordination with the Fish and Wildlife Service (FWS) will be required as part of the review of this application.
- Provide the limits of jurisdictional wetlands and surface waters. Roadside ditches or other water conveyances, including permitted and constructed water conveyance features, can be claimed as surface waters per Chapter 62-340 F.A.C. if they do not meet the definition of a swale as stated under Rule 403.803 (14) F.S
- Provide appropriate mitigation using UMAM for impacts, if applicable.
- If the wetland mitigation is appropriate and the applicant is proposing to utilize mitigation bank credit as wetland mitigation, the following applies: Provide letter or credit availability or, if applicable, a letter of reservation from the wetland mitigation bank. The wetland mitigation bank service area and current ledgers can be found out the following link: https://www.swfwmd.state.fl.us/business/epermitting/environmental-resource-permit, Go to "ERP Mitigation Bank Wetland Credit Ledgers"
- Demonstrate elimination and reduction of wetland impacts.
- Maintain minimum 15 foot, average 25 foot wetland conservation area setback or address secondary impacts.
- As of October 1, 2017, the District will no longer send a copy of an application that does not qualify for a State Programmatic General Permit (SPGP) to the U.S. Army Corps of Engineers. If a project does not qualify for a SPGP, you will need to apply separately to the Corps using the appropriate federal application form for activities under federal jurisdiction. Please see the Corps' Jacksonville District Regulatory Division Sourcebook for more information about federal permitting. Please call your local Corps office if you have questions about federal permitting. Link: http://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/

Site Information Discussion: (SHW Levels, Floodplain, Tailwater Conditions, Adjacent Off-Site Contributing Sources, Receiving Waterbody, etc.)

- ANCLOTE RIVER TIDAL Watershed - WBID 1440
- Wbid 1440 is identified as impaired for Nutrients (Total Nitrogen) – net improvement required http://fdep.maps.arcgis.com/home/webmap/viewer.html?webmap=1b4f1bf4c9c3481fb2864a415fbeca77
- Anclote is OFW
- Any wells on site should be identified and their future use/abandonment must be designated.

Water Quantity Discussions: (Basin Description, Storm Event, Pre/Post Volume, Pre/Post Discharge, etc.)

- Demonstrate that post development peak discharges from proposed project area will not cause an adverse impact for a 25-year, 24-hour storm event.
- Demonstrate that site will not impede the conveyance of contributing off-site flows.
- Demonstrate that the project will not increase flood stages up- or down-stream of the project area(s).
- Provide equivalent compensating storage for all 100-year, 24-hour riverine floodplain impacts if applicable. Providing cup-for-cup storage in dedicated areas of excavation is the preferred method of compensation. if no impacts to flood conveyance are proposed and storage impacts and compensation occur within the same basin. In this case, tabulations should be provided at 0.5-foot increments to demonstrate encroachment and compensation occur at the same levels. Otherwise, storage modeling will be required to demonstrate no increase in flood stages will occur on off-site properties, using the mean annual, 10-year, 25-year, and 100-year storm events for the pre- and post-development conditions.
- May reference the Anclote River WMP(s) for best available flood study data.
- Compensation for fill placed below the 100-year coastal flood surge elevation is not required.

Water Quality Discussions: (Type of Treatment, Technical Characteristics, Non-presumptive Alternatives, etc.)

- Provide water quality treatment for entire project area and all contributing off-site flows.
- In addition, since the project discharges to an impaired water body, must provide a net environmental improvement.
- Applicant must demonstrate a net improvement for the parameters of concern by performing a pre/post pollutant loading analysis based on existing land use and the proposed land use.
- Also, replace treatment function of existing ditches to be filled.
- Provide the greater of the net improvement volume and the OFW volume.

Sovereign Lands Discussion: (Determining Location, Correct Form of Authorization, Content of Application, Assessment of Fees, Coordination with FDEP)

- The project may be located within state owned sovereign submerged lands (SSSL). Be advised that a title determination will be required from FDEP to verify the presence and/or location of SSSL.
- If use of SSSL is proposed, authorization will be required. Refer to Chapter 18-21, F.A.C. and Chapter 18-20, F.A.C. for guidance on projects that impact SSSL and Aquatic Preserves.
- If any docking structures, or any other activities within the Anclote River, are proposed, a state lands authorization will be required. The site is located within the Pinellas County Aquatic Preserve. Therefore, the additional criteria in Chapter 18-20, F.A.C. will apply.

Operation and Maintenance/Legal Information: (Ownership or Perpetual Control, O&M Entity, O&M Instructions, Homeowner Association Documents, Coastal Zone requirements, etc.)

- The permit must be issued to entity that owns or controls the property.
- Provide evidence of ownership or control by deed, easement, contract for purchase, etc. Evidence of ownership or control must include a legal description. A Property Appraiser summary of the legal description is NOT acceptable.

Application Type and Fee Required:

- SWERP – Sections A, C, and E of the ERP Application - $2492.00
- If over 40 acres - $2798.00

Other: (Future Pre-Application Meetings, Fast Track, Submittal Date, Construction Start Date, Required District Permits – WUP, WOD, Well Construction, etc.)

- An application for an individual permit to construct or alter a dam, impoundment, reservoir, or appurtenant work, requires that a notice of receipt of the application must be published in a newspaper within the affected area. Provide documentation that such noticing has been accomplished. Note that the published notices of receipt for an ERP can be in accordance with the language provided in Rule 40D-1.603(10), F.A.C.

- Provide a copy of the legal description (of all applicable parcels within the project area) in one of the following forms:
  a. Deed with complete Legal Description attachment.
  b. Plat.
  c. Boundary survey of the property(ies) with a sketch.

- The plans and drainage report submitted electronically must include the appropriate information required under Rules 61G15-23.005 and 61G15-23.004 (Digital), F.A.C. The following text is required by the Florida Board of Professional Engineers (FBPE) to meet this requirement when a digitally created seal is not used and must appear where the signature would normally appear:

  ELECTRONIC (Manifest): *[NAME] State of Florida, Professional Engineer, License No. [NUMBER] This item has been electronically signed and sealed by [NAME] on the date indicated here using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies*

  DIGITAL: *[NAME] State of Florida, Professional Engineer, License No. [NUMBER]; This item has been digitally signed and sealed by [NAME] on the date indicated here using a Digital Signature; Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.*
- Provide soil erosion and sediment control measures for use during construction. Refer to ERP Applicant's Handbook Vol. 1 Part IV Erosion and Sediment Control.
- Demonstrate that excavation of any stormwater ponds does not breach an aquitard (see Subsection 2.1.1, A.H.V.II) such that it would allow for lesser quality water to pass, either way, between the two systems. In those geographical areas of the District where there is not an aquitard present, the depth of the pond(s) shall not be excavated to within two (2) feet of the underlying limestone which is part of a drinking water aquifer. [Refer to Subsection 5.4.1(b), A.H.V.II]

APPENDIX L

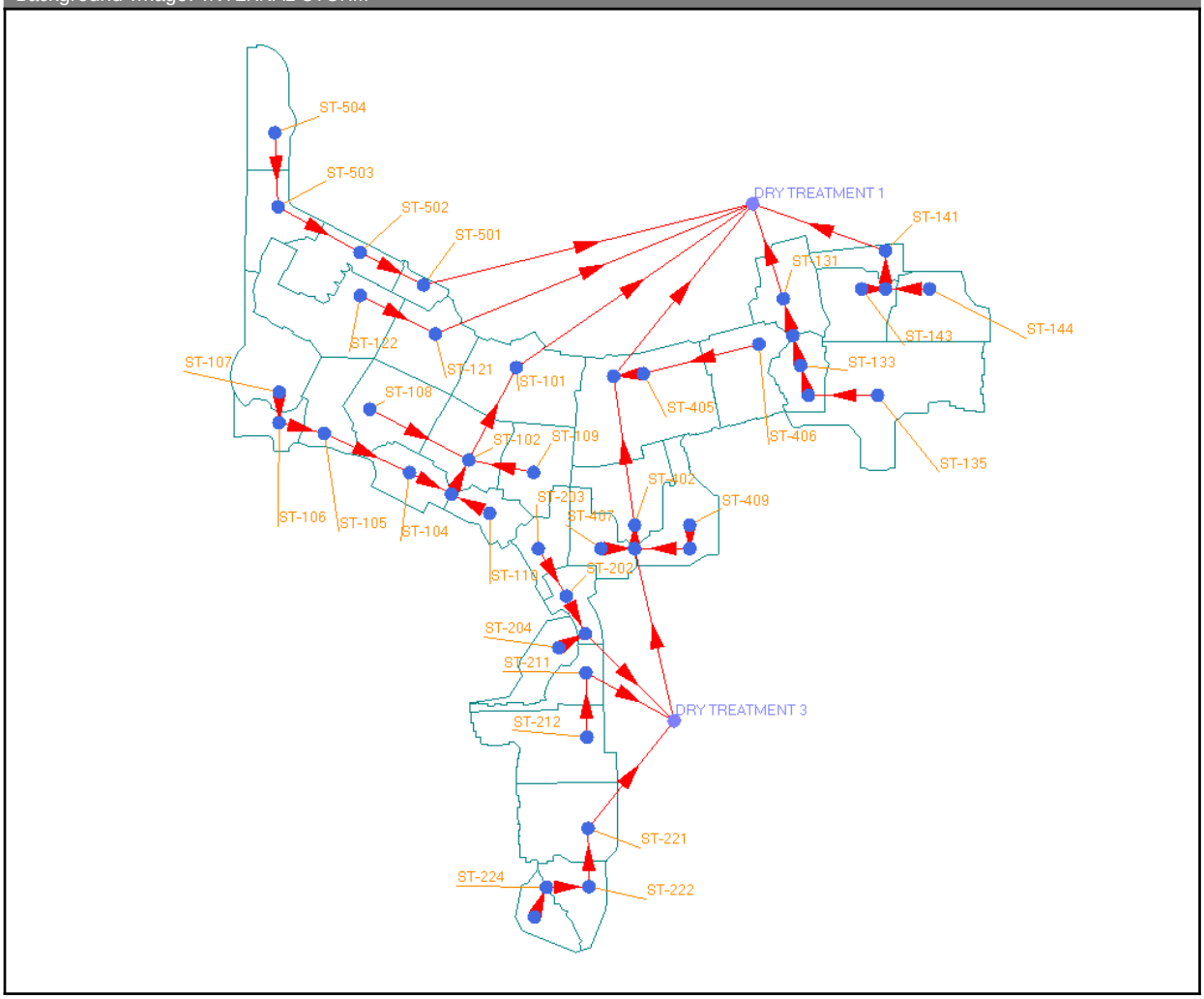
STORMTABS

INTERNAL STORM SEWER HGL

RESULTS ANALYSIS

Structure	Low EOP/ Rim El	25-year, 24 hour	
		HGL (ft)	Clearance (in)
ST-101 (STRM-145602001)	8.60	7.27	16
ST-102 (STRM-145602001)	8.60	8.00	7
ST-103 (STRM-145602001)	9.27	8.09	14
ST-104 (STRM-145602001)	8.60	8.17	5
ST-105 (STRM-145602001)	8.60	8.24	4
ST-106 (STRM-145602001)	8.60	8.31	3
ST-107 (STRM-145602001)	8.60	8.33	3
ST-108 (STRM-145602001)	8.60	8.10	6
ST-109 (STRM-145602001)	8.60	8.04	7
ST-110 (STRM-145602001)	8.60	8.10	6
ST-121 (STRM-145602001)	8.87	7.33	18
ST-122 (STRM-145602001)	8.89	7.46	17
ST-131 (STRM-145602001)	8.60	7.22	17
ST-132 (STRM-145602001)	9.21	7.50	21
ST-133 (STRM-145602001)	8.60	7.76	10
ST-134 (STRM-145602001)	9.19	7.93	15
ST-135 (STRM-145602001)	8.60	8.24	4
ST-141 (STRM-145602001)	8.60	7.18	17
ST-142 (STRM-145602001)	9.04	7.23	22
ST-143 (STRM-145602001)	8.60	7.25	16
ST-144 (STRM-145602001)	8.60	7.26	16
ST-201 (STRM-145602001)	9.37	7.49	23
ST-202 (STRM-145602001)	8.60	7.51	13
ST-203 (STRM-145602001)	8.60	7.52	13
ST-204 (STRM-145602001)	8.60	7.49	13
ST-211 (STRM-145602001)	8.60	7.51	13
ST-212 (STRM-145602001)	8.60	7.58	12
ST-221 (STRM-145602001)	8.60	7.56	12
ST-222 (STRM-145602001)	8.60	7.60	12
ST-223 (STRM-145602001)	9.35	7.60	21
ST-224 (STRM-145602001)	8.60	7.60	12
ST-401 (STRM-145602001)	8.99	7.28	21
ST-402 (STRM-145602001)	8.75	7.40	16
ST-403 (STRM-145602001)	9.98	7.43	31
ST-405 (STRM-145602001)	8.60	7.55	13
ST-406 (STRM-145602001)	8.60	7.67	11
ST-407 (STRM-145602001)	8.70	7.44	15
ST-408 (STRM-145602001)	9.01	7.45	19
ST-409 (STRM-145602001)	8.60	7.47	14
ST-501 (STRM-145602001)	8.60	7.17	17
ST-502 (STRM-145602001)	8.60	7.34	15
ST-503 (STRM-145602001)	8.60	7.44	14
ST-504 (STRM-145602001)	8.60	7.47	14

Background Image: INTERNAL STORM



Manual Basin: ST-101

Scenario:	INTERNAL STORM
Node:	ST-101 (STRM-145602001)
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	10.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	0.6365 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.4682	PAVEMENT	A/D			
0.1331	LANDSCAPING	A/D			
0.0352	BUILDING	A/D			

Comment:

Manual Basin: ST-102

Scenario: INTERNAL STORM
Node: ST-102 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.3964 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.2641	PAVEMENT	A/D			
0.0927	LANDSCAPING	A/D			
0.0396	BUILDING	A/D			

Comment:

Manual Basin: ST-104

Scenario: INTERNAL STORM
Node: ST-104 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2652 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0295	LANDSCAPING	A/D			
0.2357	PAVEMENT	A/D			

Comment:

Manual Basin: ST-105

Scenario: INTERNAL STORM
Node: ST-105 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.3225 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0517	LANDSCAPING	A/D			
0.1134	PAVEMENT	A/D			
0.0525	BUILDING	A/D			
0.0991	BUILDING	A			
0.0056	LANDSCAPING	A			
0.0003	PAVEMENT	A			

Comment:

Manual Basin: ST-106

Scenario: INTERNAL STORM
Node: ST-106 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.1839 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0590	LANDSCAPING	A/D			
0.1247	PAVEMENT	A/D			
0.0002	BUILDING	A/D			

Comment:

Manual Basin: ST-107

Scenario: INTERNAL STORM
Node: ST-107 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.4531 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0824	PAVEMENT	A/D			
0.0509	LANDSCAPING	A/D			
0.0001	BUILDING	A/D			
0.1349	LANDSCAPING	A			
0.1791	PAVEMENT	A			
0.0056	BUILDING	A			

Comment:

Manual Basin: ST-108

Scenario: INTERNAL STORM
Node: ST-108 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.4491 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.2498	PAVEMENT	A/D			
0.0607	LANDSCAPING	A/D			
0.1168	BUILDING	A/D			
0.0004	PAVEMENT	A			
0.0040	LANDSCAPING	A			
0.0175	BUILDING	A			

Comment:

Manual Basin: ST-109

Scenario: INTERNAL STORM
Node: ST-109 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number

Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.3745 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0909	LANDSCAPING	A/D			
0.2835	PAVEMENT	A/D			
0.0000	BUILDING	A/D			

Comment:

Manual Basin: ST-110

Scenario: INTERNAL STORM
Node: ST-110 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2128 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0248	LANDSCAPING	A/D			
0.1880	PAVEMENT	A/D			

Comment:

Manual Basin: ST-121

Scenario: INTERNAL STORM
Node: ST-121 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.4305 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0848	BUILDING	A/D			
0.0304	LANDSCAPING	A/D			
0.0924	PAVEMENT	A/D			
0.0374	BUILDING	A			
0.0459	LANDSCAPING	A			
0.1397	PAVEMENT	A			

Comment:

Manual Basin: ST-122

Scenario: INTERNAL STORM
Node: ST-122 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.6387 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3582	BUILDING	A			
0.1157	LANDSCAPING	A			
0.1648	PAVEMENT	A			

Comment:

Manual Basin: ST-131

Scenario: INTERNAL STORM
Node: ST-131 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.3861 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0694	LANDSCAPING	A			
0.0003	BUILDING	A			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3164	PAVEMENT	A			

Comment:

Manual Basin: ST-133

Scenario: INTERNAL STORM
Node: ST-133 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2516 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0157	LANDSCAPING	A/D			
0.0641	PAVEMENT	A/D			
0.0005	BUILDING	A/D			
0.1297	PAVEMENT	A			
0.0410	LANDSCAPING	A			
0.0006	BUILDING	A			

Comment:

Manual Basin: ST-135

Scenario: INTERNAL STORM
Node: ST-135 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.9891 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0475	LANDSCAPING	A/D			
0.3286	PAVEMENT	A/D			
0.0871	LANDSCAPING	A			
0.3832	BUILDING	A			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1427	PAVEMENT	A			

Comment:

Manual Basin: ST-141

Scenario: INTERNAL STORM
Node: ST-141 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.1593 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1449	PAVEMENT	A			
0.0144	LANDSCAPING	A			

Comment:

Manual Basin: ST-143

Scenario: INTERNAL STORM
Node: ST-143 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.3451 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0799	BUILDING	A			
0.0790	LANDSCAPING	A			
0.1862	PAVEMENT	A			

Comment:

Manual Basin: ST-144

Scenario: INTERNAL STORM
Node: ST-144 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.4301 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1285	BUILDING	A			
0.1754	PAVEMENT	A			
0.1263	LANDSCAPING	A			

Comment:

Manual Basin: ST-202

Scenario: INTERNAL STORM
Node: ST-202 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2084 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1358	PAVEMENT	A/D			
0.0726	LANDSCAPING	A/D			

Comment:

Manual Basin: ST-203

Scenario: INTERNAL STORM
Node: ST-203 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr

Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2473 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.2157	PAVEMENT	A/D			
0.0316	LANDSCAPING	A/D			

Comment:

Manual Basin: ST-204

Scenario: INTERNAL STORM
Node: ST-204 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2491 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0784	LANDSCAPING	A/D			
0.0005	BUILDING	A/D			
0.1702	PAVEMENT	A/D			

Comment:

Manual Basin: ST-211

Scenario: INTERNAL STORM
Node: ST-211 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2368 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0478	BUILDING	A/D			
0.0250	LANDSCAPING	A/D			
0.1640	PAVEMENT	A/D			

Comment:

Manual Basin: ST-212

Scenario: INTERNAL STORM
Node: ST-212 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.5936 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0490	LANDSCAPING	A/D			
0.3143	BUILDING	A/D			
0.2303	PAVEMENT	A/D			

Comment:

Manual Basin: ST-221

Scenario: INTERNAL STORM
Node: ST-221 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.5415 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0798	LANDSCAPING	A/D			
0.2260	BUILDING	A/D			
0.2357	PAVEMENT	A/D			

Comment:

Manual Basin: ST-222

Scenario: INTERNAL STORM
Node: ST-222 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2741 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0495	LANDSCAPING	A/D			
0.2231	PAVEMENT	A/D			
0.0014	BUILDING	A/D			

Comment:

Manual Basin: ST-224

Scenario: INTERNAL STORM
Node: ST-223 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.1970 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0321	LANDSCAPING	A/D			
0.1649	PAVEMENT	A/D			

Comment:

Manual Basin: ST-402

Scenario: INTERNAL STORM
Node: ST-402 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256

Peaking Factor: 256.0
Area: 0.4163 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.2243	PAVEMENT	A/D			
0.1247	LANDSCAPING	A/D			
0.0674	BUILDING	A/D			

Comment:

Manual Basin: ST-405

Scenario: INTERNAL STORM
Node: ST-405 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.9491 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.5349	PAVEMENT	A/D			
0.1791	LANDSCAPING	A/D			
0.2351	BUILDING	A/D			

Comment:

Manual Basin: ST-406

Scenario: INTERNAL STORM
Node: ST-406 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.4678 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1921	BUILDING	A/D			
0.0433	LANDSCAPING	A/D			
0.1091	PAVEMENT	A/D			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0155	LANDSCAPING	A			
0.1077	PAVEMENT	A			

Comment:

Manual Basin: ST-407

Scenario: INTERNAL STORM
Node: ST-407 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.2756 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0521	LANDSCAPING	A/D			
0.2235	PAVEMENT	A/D			

Comment:

Manual Basin: ST-409

Scenario: INTERNAL STORM
Node: ST-409 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.4231 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.2955	PAVEMENT	A/D			
0.0716	LANDSCAPING	A/D			
0.0561	BUILDING	A/D			

Comment:

Manual Basin: ST-501

Scenario: INTERNAL STORM
Node: ST-501 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.0980 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0425	LANDSCAPING	A			
0.0556	PAVEMENT	A			

Comment:

Manual Basin: ST-502

Scenario: INTERNAL STORM
Node: ST-502 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.3780 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3057	PAVEMENT	A			
0.0718	LANDSCAPING	A			
0.0005	BUILDING	A			

Comment:

Manual Basin: ST-503

Scenario: INTERNAL STORM
Node: ST-503 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr

Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.3186 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1973	LANDSCAPING	A			
0.0003	BUILDING	A			
0.1209	PAVEMENT	A			

Comment:

Manual Basin: ST-504

Scenario: INTERNAL STORM
Node: ST-504 (STRM-145602001)
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.3703 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0962	LANDSCAPING	A			
0.2741	PAVEMENT	A			

Comment:

Node: DRY TREATMENT 1

Scenario: INTERNAL STORM
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 5.54 ft
Warning Stage: 8.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	5.54
0	0	0	0.2511	5.54
0	0	0	0.5050	5.55
0	0	0	0.7527	5.55
0	0	0	1.0027	5.56
0	0	0	1.2527	5.56
0	0	0	1.5027	5.57

Year	Month	Day	Hour	Stage [ft]
0	0	0	1.7527	5.58
0	0	0	2.0027	5.59
0	0	0	2.2527	5.60
0	0	0	2.5027	5.62
0	0	0	2.7527	5.63
0	0	0	3.0027	5.64
0	0	0	3.2527	5.66
0	0	0	3.5027	5.67
0	0	0	3.7527	5.68
0	0	0	4.0027	5.70
0	0	0	4.2527	5.72
0	0	0	4.5027	5.73
0	0	0	4.7527	5.75
0	0	0	5.0027	5.77
0	0	0	5.2527	5.79
0	0	0	5.5027	5.81
0	0	0	5.7527	5.82
0	0	0	6.0027	5.84
0	0	0	6.2527	5.86
0	0	0	6.5027	5.89
0	0	0	6.7527	5.91
0	0	0	7.0027	5.93
0	0	0	7.2527	5.96
0	0	0	7.5027	5.98
0	0	0	7.7527	6.01
0	0	0	8.0027	6.03
0	0	0	8.2527	6.06
0	0	0	8.5019	6.09
0	0	0	8.7511	6.12
0	0	0	9.0001	6.16
0	0	0	9.2553	6.19
0	0	0	9.5015	6.23
0	0	0	9.7538	6.27
0	0	0	10.0050	6.31
0	0	0	10.2512	6.34
0	0	0	10.5042	6.37
0	0	0	10.7501	6.40
0	0	0	11.0000	6.43
0	0	0	11.2511	6.46
0	0	0	11.5024	6.50
0	0	0	11.7502	6.67
0	0	0	12.0003	6.98
0	0	0	12.2501	7.11
0	0	0	12.5007	7.07
0	0	0	12.7504	6.95
0	0	0	13.0006	6.83
0	0	0	13.2501	6.74
0	0	0	13.5011	6.68
0	0	0	13.7517	6.62

Year	Month	Day	Hour	Stage [ft]
0	0	0	14.0031	6.58
0	0	0	14.2511	6.54
0	0	0	14.5014	6.51
0	0	0	14.7529	6.49
0	0	0	15.0029	6.47
0	0	0	15.2562	6.46
0	0	0	15.5007	6.45
0	0	0	15.7551	6.44
0	0	0	16.0036	6.43
0	0	0	16.2510	6.42
0	0	0	16.5022	6.41
0	0	0	16.7509	6.40
0	0	0	17.0036	6.40
0	0	0	17.2513	6.39
0	0	0	17.5047	6.39
0	0	0	17.7503	6.39
0	0	0	18.0048	6.38
0	0	0	18.2517	6.38
0	0	0	18.5016	6.38
0	0	0	18.7539	6.37
0	0	0	19.0056	6.37
0	0	0	19.2541	6.37
0	0	0	19.5012	6.37
0	0	0	19.7550	6.36
0	0	0	20.0021	6.36
0	0	0	20.2524	6.36
0	0	0	20.5004	6.36
0	0	0	20.7504	6.35
0	0	0	21.0009	6.35
0	0	0	21.2514	6.35
0	0	0	21.5017	6.35
0	0	0	21.7515	6.35
0	0	0	22.0003	6.35
0	0	0	22.2560	6.35
0	0	0	22.5060	6.35
0	0	0	22.7560	6.34
0	0	0	23.0060	6.34
0	0	0	23.2560	6.34
0	0	0	23.5060	6.34
0	0	0	23.7560	6.34
0	0	0	24.0060	6.33
0	0	0	24.2560	6.33
0	0	0	24.5060	6.32
0	0	0	24.7560	6.31
0	0	0	25.0060	6.30
0	0	0	25.2560	6.29
0	0	0	25.5060	6.29
0	0	0	25.7560	6.28
0	0	0	26.0060	6.28

Year	Month	Day	Hour	Stage [ft]
0	0	0	26.2560	6.28
0	0	0	26.5060	6.27
0	0	0	26.7560	6.27
0	0	0	27.0060	6.27
0	0	0	27.2560	6.27
0	0	0	27.5060	6.26
0	0	0	27.7560	6.26
0	0	0	28.0060	6.26
0	0	0	28.2560	6.26
0	0	0	28.5060	6.26
0	0	0	28.7560	6.26
0	0	0	29.0060	6.26
0	0	0	29.2560	6.25
0	0	0	29.5060	6.25
0	0	0	29.7560	6.25
0	0	0	30.0060	6.25
0	0	0	30.2560	6.25
0	0	0	30.5060	6.25
0	0	0	30.7560	6.25
0	0	0	31.0060	6.25
0	0	0	31.2560	6.25
0	0	0	31.5060	6.25
0	0	0	31.7560	6.25
0	0	0	32.0060	6.25
0	0	0	32.2560	6.25
0	0	0	32.5060	6.25
0	0	0	32.7560	6.25
0	0	0	33.0060	6.25
0	0	0	33.2560	6.25
0	0	0	33.5060	6.25
0	0	0	33.7560	6.25
0	0	0	34.0060	6.25
0	0	0	34.2560	6.25
0	0	0	34.5060	6.25
0	0	0	34.7560	6.25
0	0	0	35.0060	6.25
0	0	0	35.2560	6.24
0	0	0	35.5060	6.24
0	0	0	35.7560	6.24
0	0	0	36.0060	6.24
0	0	0	36.2560	6.24
0	0	0	36.5060	6.24
0	0	0	36.7560	6.24
0	0	0	37.0060	6.24
0	0	0	37.2560	6.24
0	0	0	37.5060	6.24
0	0	0	37.7560	6.24
0	0	0	38.0060	6.24
0	0	0	38.2560	6.24

Year	Month	Day	Hour	Stage [ft]
0	0	0	38.5060	6.24
0	0	0	38.7560	6.24
0	0	0	39.0060	6.24
0	0	0	39.2560	6.24
0	0	0	39.5060	6.24
0	0	0	39.7560	6.24
0	0	0	40.0060	6.24
0	0	0	40.2560	6.24
0	0	0	40.5060	6.24
0	0	0	40.7560	6.24
0	0	0	41.0060	6.24
0	0	0	41.2560	6.24
0	0	0	41.5060	6.24
0	0	0	41.7560	6.24
0	0	0	42.0060	6.24
0	0	0	42.2560	6.24
0	0	0	42.5060	6.24
0	0	0	42.7560	6.24
0	0	0	43.0060	6.24
0	0	0	43.2560	6.24
0	0	0	43.5060	6.24
0	0	0	43.7560	6.24
0	0	0	44.0060	6.24
0	0	0	44.2560	6.24
0	0	0	44.5060	6.24
0	0	0	44.7560	6.24
0	0	0	45.0060	6.24
0	0	0	45.2560	6.24
0	0	0	45.5060	6.24
0	0	0	45.7560	6.24
0	0	0	46.0060	6.24
0	0	0	46.2560	6.24
0	0	0	46.5060	6.24
0	0	0	46.7560	6.24
0	0	0	47.0060	6.24
0	0	0	47.2560	6.24
0	0	0	47.5060	6.24
0	0	0	47.7560	6.24
0	0	0	48.0060	6.24

Comment:

Node: DRY TREATMENT 3

Scenario: INTERNAL STORM
Type: Time/Stage
Base Flow: 0.00 cfs

Initial Stage: 5.54 ft
Warning Stage: 8.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	5.54
0	0	0	0.2511	5.54
0	0	0	0.5050	5.55
0	0	0	0.7527	5.55
0	0	0	1.0027	5.56
0	0	0	1.2527	5.56
0	0	0	1.5027	5.57
0	0	0	1.7527	5.58
0	0	0	2.0027	5.59
0	0	0	2.2527	5.60
0	0	0	2.5027	5.62
0	0	0	2.7527	5.63
0	0	0	3.0027	5.64
0	0	0	3.2527	5.66
0	0	0	3.5027	5.67
0	0	0	3.7527	5.69
0	0	0	4.0027	5.70
0	0	0	4.2527	5.72
0	0	0	4.5027	5.73
0	0	0	4.7527	5.75
0	0	0	5.0027	5.77
0	0	0	5.2527	5.79
0	0	0	5.5027	5.81
0	0	0	5.7527	5.83
0	0	0	6.0027	5.84
0	0	0	6.2527	5.87
0	0	0	6.5027	5.89
0	0	0	6.7527	5.91
0	0	0	7.0027	5.93
0	0	0	7.2527	5.96
0	0	0	7.5027	5.98
0	0	0	7.7527	6.01
0	0	0	8.0027	6.03
0	0	0	8.2527	6.06
0	0	0	8.5019	6.09
0	0	0	8.7511	6.12
0	0	0	9.0001	6.16
0	0	0	9.2553	6.19
0	0	0	9.5015	6.23
0	0	0	9.7538	6.27
0	0	0	10.0050	6.31
0	0	0	10.2512	6.34
0	0	0	10.5042	6.38
0	0	0	10.7501	6.41
0	0	0	11.0000	6.44

Year	Month	Day	Hour	Stage [ft]
0	0	0	11.2511	6.47
0	0	0	11.5024	6.52
0	0	0	11.7502	6.73
0	0	0	12.0003	7.14
0	0	0	12.2501	7.43
0	0	0	12.5007	7.47
0	0	0	12.7504	7.34
0	0	0	13.0006	7.15
0	0	0	13.2501	6.97
0	0	0	13.5011	6.82
0	0	0	13.7517	6.71
0	0	0	14.0031	6.64
0	0	0	14.2511	6.59
0	0	0	14.5014	6.55
0	0	0	14.7529	6.52
0	0	0	15.0029	6.49
0	0	0	15.2562	6.47
0	0	0	15.5007	6.46
0	0	0	15.7551	6.45
0	0	0	16.0036	6.44
0	0	0	16.2510	6.43
0	0	0	16.5022	6.42
0	0	0	16.7509	6.41
0	0	0	17.0036	6.41
0	0	0	17.2513	6.40
0	0	0	17.5047	6.40
0	0	0	17.7503	6.39
0	0	0	18.0048	6.39
0	0	0	18.2517	6.38
0	0	0	18.5016	6.38
0	0	0	18.7539	6.38
0	0	0	19.0056	6.37
0	0	0	19.2541	6.37
0	0	0	19.5012	6.37
0	0	0	19.7550	6.37
0	0	0	20.0021	6.37
0	0	0	20.2524	6.36
0	0	0	20.5004	6.36
0	0	0	20.7504	6.36
0	0	0	21.0009	6.36
0	0	0	21.2514	6.35
0	0	0	21.5017	6.35
0	0	0	21.7515	6.35
0	0	0	22.0003	6.35
0	0	0	22.2560	6.35
0	0	0	22.5060	6.35
0	0	0	22.7560	6.35
0	0	0	23.0060	6.35
0	0	0	23.2560	6.34

Year	Month	Day	Hour	Stage [ft]
0	0	0	23.5060	6.34
0	0	0	23.7560	6.34
0	0	0	24.0060	6.34
0	0	0	24.2560	6.33
0	0	0	24.5060	6.32
0	0	0	24.7560	6.31
0	0	0	25.0060	6.30
0	0	0	25.2560	6.30
0	0	0	25.5060	6.29
0	0	0	25.7560	6.29
0	0	0	26.0060	6.28
0	0	0	26.2560	6.28
0	0	0	26.5060	6.27
0	0	0	26.7560	6.27
0	0	0	27.0060	6.27
0	0	0	27.2560	6.27
0	0	0	27.5060	6.26
0	0	0	27.7560	6.26
0	0	0	28.0060	6.26
0	0	0	28.2560	6.26
0	0	0	28.5060	6.26
0	0	0	28.7560	6.26
0	0	0	29.0060	6.26
0	0	0	29.2560	6.26
0	0	0	29.5060	6.25
0	0	0	29.7560	6.25
0	0	0	30.0060	6.25
0	0	0	30.2560	6.25
0	0	0	30.5060	6.25
0	0	0	30.7560	6.25
0	0	0	31.0060	6.25
0	0	0	31.2560	6.25
0	0	0	31.5060	6.25
0	0	0	31.7560	6.25
0	0	0	32.0060	6.25
0	0	0	32.2560	6.25
0	0	0	32.5060	6.25
0	0	0	32.7560	6.25
0	0	0	33.0060	6.25
0	0	0	33.2560	6.25
0	0	0	33.5060	6.25
0	0	0	33.7560	6.25
0	0	0	34.0060	6.25
0	0	0	34.2560	6.25
0	0	0	34.5060	6.25
0	0	0	34.7560	6.25
0	0	0	35.0060	6.25
0	0	0	35.2560	6.25
0	0	0	35.5060	6.25

Year	Month	Day	Hour	Stage [ft]
0	0	0	35.7560	6.25
0	0	0	36.0060	6.24
0	0	0	36.2560	6.24
0	0	0	36.5060	6.24
0	0	0	36.7560	6.24
0	0	0	37.0060	6.24
0	0	0	37.2560	6.24
0	0	0	37.5060	6.24
0	0	0	37.7560	6.24
0	0	0	38.0060	6.24
0	0	0	38.2560	6.24
0	0	0	38.5060	6.24
0	0	0	38.7560	6.24
0	0	0	39.0060	6.24
0	0	0	39.2560	6.24
0	0	0	39.5060	6.24
0	0	0	39.7560	6.24
0	0	0	40.0060	6.24
0	0	0	40.2560	6.24
0	0	0	40.5060	6.24
0	0	0	40.7560	6.24
0	0	0	41.0060	6.24
0	0	0	41.2560	6.24
0	0	0	41.5060	6.24
0	0	0	41.7560	6.24
0	0	0	42.0060	6.24
0	0	0	42.2560	6.24
0	0	0	42.5060	6.24
0	0	0	42.7560	6.24
0	0	0	43.0060	6.24
0	0	0	43.2560	6.24
0	0	0	43.5060	6.24
0	0	0	43.7560	6.24
0	0	0	44.0060	6.24
0	0	0	44.2560	6.24
0	0	0	44.5060	6.24
0	0	0	44.7560	6.24
0	0	0	45.0060	6.24
0	0	0	45.2560	6.24
0	0	0	45.5060	6.24
0	0	0	45.7560	6.24
0	0	0	46.0060	6.24
0	0	0	46.2560	6.24
0	0	0	46.5060	6.24
0	0	0	46.7560	6.24
0	0	0	47.0060	6.24
0	0	0	47.2560	6.24
0	0	0	47.5060	6.24
0	0	0	47.7560	6.24

Year	Month	Day	Hour	Stage [ft]
0	0	0	48.0060	6.24

Comment:

Node: ST-101 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-102 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-103 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 9.27 ft

Comment: Rim Elev: 9.27
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-104 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-105 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-106 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-107 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-108 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-109 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-110 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-121 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.70 ft
Warning Stage: 8.87 ft

Comment: Rim Elev: 8.87
Sump Elev: 0.70
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-122 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.89 ft

Comment: Rim Elev: 8.89
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-131 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-132 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 9.21 ft

Comment: Rim Elev: 9.21
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-133 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-134 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	9.19 ft

Comment: Rim Elev: 9.19
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-135 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-141 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-142 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 9.04 ft

Comment: Rim Elev: 9.04
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-143 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-144 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-201 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	9.37 ft

Comment: Rim Elev: 9.37
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-202 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-203 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-204 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-211 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-212 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-221 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 4.89 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 4.89
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-222 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-223 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	9.35 ft

Comment: Rim Elev: 9.35
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-224 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-401 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.99 ft

Comment: Rim Elev: 8.99
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-402 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.75 ft

Comment: Rim Elev: 8.75
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-403 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	9.98 ft

Comment: Rim Elev: 9.98
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-405 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-406 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-407 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.70 ft

Comment: Rim Elev: 8.70
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-408 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	9.01 ft

Comment: Rim Elev: 9.01
Sump Elev: 5.50
Desc: FDOT STORM MANHOLEPER FDOT STANDARD PLANS 425-001

Node: ST-409 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-501 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-502 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-503 (STRM-145602001)

Scenario: INTERNAL STORM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.50 ft
Warning Stage: 8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Node: ST-504 (STRM-145602001)

Scenario:	INTERNAL STORM
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	5.50 ft
Warning Stage:	8.60 ft

Comment: Rim Elev: 8.60
Sump Elev: 5.50
Desc: FDOT TYPE "F" DITCH BOTTOM INLETPER FDOT STANDARD PLANS 425-053

Pipe Link: 16 TO 15 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-131	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
To Node:	DRY TREATMENT 1	Max Depth:	1.58 ft	Max Depth:	1.58 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	124.55 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50	Top Clip			
Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000

Comment: Material: RCP

Pipe Link: 18 TO 17 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-132	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-131	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft

Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	67.00 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: 19 TO 18 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-133	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-132	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	54.21 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: 20 TO 19 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-134	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-133	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	54.21 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: 21 TO 20 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-135	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-134	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	121.73 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: 26 TO 27 (2) (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-143	Geometry: Circular		Geometry: Circular	
	(STRM-145602001)	Max Depth:	1.50 ft	Max Depth:	1.50 ft
To Node:	ST-142	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	42.02 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: 26 TO 27 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-144	Manning's N:	0.0130	Manning's N:	0.0130

	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-142	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	77.23 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: 29 TO 30 (1)		Upstream		Downstream	
(STRM-145602001)		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-406	Geometry: Circular		Geometry: Circular	
	(STRM-145602001)	Max Depth:	1.50 ft	Max Depth:	1.50 ft
To Node:	ST-405	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	209.51 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -29 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-201	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	DRY TREATMENT 3	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	55.63 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50	Top Clip			

Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000

Comment: Material: RCP

Pipe Link: PIPE -31 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-212	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-211	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	113.24 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -33 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-222	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-221	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	102.33 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -34 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-223	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-222	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	75.19 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: PIPE -35 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-224	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-223	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	56.23 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: PIPE -36 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-204	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-201	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	

Length:	52.59 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1		Top Clip		
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -38 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-202	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-201	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	73.61 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1		Top Clip		
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -39 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-203	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-202	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	97.06 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1		Top Clip		
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -40 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.15 ft	Invert:	5.15 ft
From Node:	DRY TREATMENT 3	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	ST-403	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
	(STRM-145602001)	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	74.00 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50	Top Clip			
Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000
Comment: Material: RCP					

Pipe Link: PIPE -41 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.15 ft	Invert:	5.15 ft
From Node:	ST-403	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
To Node:	ST-402	Max Depth:	2.00 ft	Max Depth:	2.00 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	41.25 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: PIPE -42 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.15 ft	Invert:	5.15 ft
From Node:	ST-402	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
To Node:	ST-401	Max Depth:	2.00 ft	Max Depth:	2.00 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	263.70 ft	Manning's N:	0.0000	Manning's N:	0.0000

FHWA Code:	1		Top Clip		
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: PIPE -43 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.15 ft	Invert:	5.15 ft
From Node:	ST-401	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
To Node:	DRY TREATMENT 1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	119.00 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50	Top Clip			
Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000
Comment: Material: RCP					

Pipe Link: PIPE -44 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-407	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-403	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	59.00 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: PIPE -45 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-409	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-408	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	41.25 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: PIPE -46 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.00 ft
From Node:	ST-408	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-403	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	96.71 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: PIPE -50 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-502	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-501	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	

Length:	125.25 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1		Top Clip		
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -51 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-501	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	DRY TREATMENT 1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Link Count:	1		Bottom Clip		
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	34.50 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50		Top Clip		
Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000

Comment: Material: RCP

Pipe Link: PIPE -52 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-504	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-503	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)		Bottom Clip		
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	130.32 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1		Top Clip		
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -53 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-503	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-502	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	164.92 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: PIPE -54 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-141	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	DRY TREATMENT 1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	63.00 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50	Top Clip			
Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000
Comment: Material: RCP					

Pipe Link: PIPE -55 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-142	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-141	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	67.00 ft	Manning's N:	0.0000	Manning's N:	0.0000

FHWA Code:	1		Top Clip		
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -56 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-405	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	ST-401	Max Depth:	1.50 ft	Max Depth:	1.50 ft
	(STRM-145602001)	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	52.37 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: PIPE -57 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	1.29 ft	Invert:	0.70 ft
From Node:	ST-121	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	DRY TREATMENT 1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	115.00 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50	Top Clip			
Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000

Comment: Material: RCP

Pipe Link: PIPE -58 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	4.89 ft	Invert:	1.29 ft
From Node:	ST-221	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	DRY TREATMENT 3	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	66.61 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50	Top Clip			
Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000
Comment: Material: RCP					

Pipe Link: PIPE -59 (STRM-145602001)		Upstream		Downstream	
Scenario:	INTERNAL STORM	Invert:	5.50 ft	Invert:	5.50 ft
From Node:	ST-211	Manning's N:	0.0130	Manning's N:	0.0130
	(STRM-145602001)	Geometry: Circular		Geometry: Circular	
To Node:	DRY TREATMENT 3	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Damping:	0.0000 ft	Op Table:		Op Table:	
Length:	57.00 ft	Ref Node:		Ref Node:	
FHWA Code:	1	Manning's N:	0.0000	Manning's N:	0.0000
Entr Loss Coef:	0.50	Top Clip			
Exit Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Loss Coef:	0.00	Op Table:		Op Table:	
Bend Location:	0.00 dec	Ref Node:		Ref Node:	
Energy Switch:	Energy	Manning's N:	0.0000	Manning's N:	0.0000
Comment: Material: RCP					

Pipe Link: ST-101 TO ST-100 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.15 ft	Invert:	5.15 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-101	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
	(STRM-145602001)	Max Depth:	2.00 ft	Max Depth:	2.00 ft
To Node:	DRY TREATMENT 1	Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	119.05 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			

Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: ST-102 TO ST-101 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-102	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
	(STRM-145602001)	Max Depth:	1.58 ft	Max Depth:	1.58 ft
To Node:	ST-101	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	182.48 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: ST-104 TO ST-103 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-103	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
	(STRM-145602001)	Max Depth:	1.58 ft	Max Depth:	1.58 ft
To Node:	ST-102	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	67.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: ST-105 TO ST-104 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-104	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
	(STRM-145602001)	Max Depth:	1.58 ft	Max Depth:	1.58 ft
To Node:	ST-103	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	82.87 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: ST-106 TO ST-105 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-105	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
	(STRM-145602001)	Max Depth:	1.58 ft	Max Depth:	1.58 ft
To Node:	ST-104	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	164.21 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				
Comment: Material: RCP					

Pipe Link: ST-107 TO ST-106 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-106	Geometry: Circular		Geometry: Circular	
	(STRM-145602001)	Max Depth:	1.50 ft	Max Depth:	1.50 ft
To Node:	ST-105	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft

Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	81.86 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: ST-108 TO ST-107 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-107	Geometry: Circular		Geometry: Circular	
	(STRM-145602001)	Max Depth:	1.50 ft	Max Depth:	1.50 ft
To Node:	ST-106	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	53.50 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: ST-110 TO ST-109 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-122	Geometry: Circular		Geometry: Circular	
	(STRM-145602001)	Max Depth:	1.50 ft	Max Depth:	1.50 ft
To Node:	ST-121	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	148.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	

Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: ST-111 TO ST-103 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-108	Geometry: Circular		Geometry: Circular	
	(STRM-145602001)	Max Depth:	1.50 ft	Max Depth:	1.50 ft
To Node:	ST-102	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	195.37 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: ST-112 TO ST-103 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-109	Geometry: Circular		Geometry: Circular	
	(STRM-145602001)	Max Depth:	1.50 ft	Max Depth:	1.50 ft
To Node:	ST-102	Bottom Clip			
	(STRM-145602001)	Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	115.84 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Pipe Link: ST-113 TO ST-104 (STRM-145602001)		Upstream		Downstream	
		Invert:	5.50 ft	Invert:	5.50 ft
Scenario:	INTERNAL STORM	Manning's N:	0.0130	Manning's N:	0.0130
From Node:	ST-110 (STRM-145602001)	Geometry: Circular		Geometry: Circular	
		Max Depth:	1.50 ft	Max Depth:	1.50 ft
To Node:	ST-103 (STRM-145602001)	Bottom Clip			
		Default:	0.00 ft	Default:	0.00 ft
Link Count:	1	Op Table:		Op Table:	
Flow Direction:	Both	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	75.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Comment: Material: RCP

Simulation: 25YR - 24HR

Scenario: INTERNAL STORM
Run Date/Time: 9/13/2021 6:36:05 PM
Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	48.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CN
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: IMPERVIOUS
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic
Dflt Damping (2D): 0.0050 ft
Min Node Srf Area (2D): 100 ft2
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Opt: Global
OF Region Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 9.00 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Curve Number: CN [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
BUILDING	A	98.0
BUILDING	A/D	98.0
BUILDING	B	98.0
BUILDING	WATER	98.0
LANDSCAPING	A	39.0
LANDSCAPING	A/D	80.0
LANDSCAPING	B	61.0
LANDSCAPING	WATER	100.0
PAVEMENT	A	98.0
PAVEMENT	A/D	98.0
PAVEMENT	B	98.0
PAVEMENT	WATER	98.0
PERVIOUS	A	39.0
PERVIOUS	A/D	80.0
PERVIOUS	B	61.0
PERVIOUS	WATER	100.0
POND	A	100.0
POND	A/D	100.0
POND	B	100.0
POND	WATER	100.0
SIDEWALK	A	98.0
SIDEWALK	A/D	98.0
SIDEWALK	B	98.0
SIDEWALK	PITS	98.0
SIDEWALK	WATER	98.0

Impervious: IMPERVIOUS [Set]

Land Cover Zone	% Impervious	% DCIA	% Direct	Ia Impervious [in]	Ia Pervious [in]
BUILDING	0.00	0.00	0.00	0.000	0.000
LANDSCAPING	0.00	0.00	0.00	0.000	0.000
PAVEMENT	0.00	0.00	0.00	0.000	0.000
PERVIOUS	0.00	0.00	0.00	0.000	0.000
POND	0.00	0.00	100.00	0.000	0.000
SIDEWALK	0.00	0.00	0.00	0.000	0.000

Node Max Conditions [INTERNAL STORM]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
DRY TREATMENT 1	25YR - 24HR	8.00	7.11	0.0004	49.42	16.15	0
DRY	25YR - 24HR	8.00	7.47	0.0004	14.60	8.42	0

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
TREATMENT 3							
ST-101 (STRM-14560 2001)	25YR - 24HR	8.60	7.27	-0.0004	16.08	16.07	596
ST-102 (STRM-14560 2001)	25YR - 24HR	8.60	8.00	0.0008	12.84	12.83	541
ST-103 (STRM-14560 2001)	25YR - 24HR	9.27	8.09	-0.0010	6.69	6.69	241
ST-104 (STRM-14560 2001)	25YR - 24HR	8.60	8.17	0.0009	5.61	5.60	305
ST-105 (STRM-14560 2001)	25YR - 24HR	8.60	8.24	-0.0009	4.26	4.24	264
ST-106 (STRM-14560 2001)	25YR - 24HR	8.60	8.31	-0.0010	2.65	2.64	102
ST-107 (STRM-14560 2001)	25YR - 24HR	8.60	8.33	-0.0010	1.78	1.73	100
ST-108 (STRM-14560 2001)	25YR - 24HR	8.60	8.10	0.0009	2.35	2.29	147
ST-109 (STRM-14560 2001)	25YR - 24HR	8.60	8.04	-0.0009	1.94	1.89	100
ST-110 (STRM-14560 2001)	25YR - 24HR	8.60	8.10	0.0010	1.12	1.09	100
ST-121 (STRM-14560 2001)	25YR - 24HR	8.87	7.33	0.0151	15.13	4.95	114
ST-122 (STRM-14560 2001)	25YR - 24HR	8.89	7.46	0.0009	2.91	2.89	111
ST-131 (STRM-14560 2001)	25YR - 24HR	8.60	7.22	0.0005	7.66	7.65	358
ST-132 (STRM-14560 2001)	25YR - 24HR	9.21	7.50	-0.0010	5.93	5.92	100
ST-133 (STRM-14560 2001)	25YR - 24HR	8.60	7.76	-0.0010	5.95	5.93	100

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
ST-134 (STRM-14560 2001)	25YR - 24HR	9.19	7.93	-0.0010	4.84	4.81	132
ST-135 (STRM-14560 2001)	25YR - 24HR	8.60	8.24	0.0010	4.88	4.84	100
ST-141 (STRM-14560 2001)	25YR - 24HR	8.60	7.18	0.0010	3.97	3.95	145
ST-142 (STRM-14560 2001)	25YR - 24HR	9.04	7.23	-0.0010	3.19	3.18	140
ST-143 (STRM-14560 2001)	25YR - 24HR	8.60	7.25	0.0010	1.50	1.48	100
ST-144 (STRM-14560 2001)	25YR - 24HR	8.60	7.26	-0.0008	1.74	1.72	100
ST-201 (STRM-14560 2001)	25YR - 24HR	9.37	7.49	-0.0010	3.54	3.51	178
ST-202 (STRM-14560 2001)	25YR - 24HR	8.60	7.51	-0.0010	2.33	2.30	128
ST-203 (STRM-14560 2001)	25YR - 24HR	8.60	7.52	-0.0009	1.30	1.27	100
ST-204 (STRM-14560 2001)	25YR - 24HR	8.60	7.49	0.0010	1.28	1.24	100
ST-211 (STRM-14560 2001)	25YR - 24HR	8.60	7.51	0.0010	4.37	4.34	170
ST-212 (STRM-14560 2001)	25YR - 24HR	8.60	7.58	0.0009	3.15	3.12	100
ST-221 (STRM-14560 2001)	25YR - 24HR	8.60	7.56	0.0015	5.20	5.17	100
ST-222 (STRM-14560 2001)	25YR - 24HR	8.60	7.60	-0.0010	2.39	2.36	133
ST-223 (STRM-14560 2001)	25YR - 24HR	9.35	7.60	0.0010	1.03	1.00	100
ST-224 (STRM-14560	25YR - 24HR	8.60	7.60	-0.0007	0.14	0.13	100

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
2001)							
ST-401 (STRM-14560 2001)	25YR - 24HR	8.99	7.28	0.0008	13.47	13.46	822
ST-402 (STRM-14560 2001)	25YR - 24HR	8.75	7.40	0.0010	9.92	9.85	476
ST-403 (STRM-14560 2001)	25YR - 24HR	9.98	7.43	0.0019	9.80	9.39	406
ST-405 (STRM-14560 2001)	25YR - 24HR	8.60	7.55	0.0009	7.34	7.31	196
ST-406 (STRM-14560 2001)	25YR - 24HR	8.60	7.67	0.0010	2.41	2.38	157
ST-407 (STRM-14560 2001)	25YR - 24HR	8.70	7.44	0.0010	1.44	1.48	100
ST-408 (STRM-14560 2001)	25YR - 24HR	9.01	7.45	0.0010	2.19	2.18	102
ST-409 (STRM-14560 2001)	25YR - 24HR	8.60	7.47	-0.0010	2.22	2.19	100
ST-501 (STRM-14560 2001)	25YR - 24HR	8.60	7.17	0.0010	4.33	4.32	146
ST-502 (STRM-14560 2001)	25YR - 24HR	8.60	7.34	0.0007	4.02	4.00	218
ST-503 (STRM-14560 2001)	25YR - 24HR	8.60	7.44	0.0007	2.34	2.32	221
ST-504 (STRM-14560 2001)	25YR - 24HR	8.60	7.47	0.0008	1.55	1.53	100

Link Min/Max Conditions [INTERNAL STORM]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
16 TO 15 (STRM-14560	25YR - 24HR	7.65	0.00	-0.17	2.41	2.45	2.43

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
2001)							
18 TO 17 (STRM-14560 2001)	25YR - 24HR	5.92	0.00	0.36	3.35	3.35	3.35
19 TO 18 (STRM-14560 2001)	25YR - 24HR	5.93	0.00	0.56	3.36	3.36	3.36
20 TO 19 (STRM-14560 2001)	25YR - 24HR	4.81	0.00	-0.58	2.72	2.72	2.72
21 TO 20 (STRM-14560 2001)	25YR - 24HR	4.84	0.00	0.37	2.74	2.74	2.74
26 TO 27 (2) (STRM-14560 2001)	25YR - 24HR	1.48	0.00	0.70	0.84	0.84	0.84
26 TO 27 (STRM-14560 2001)	25YR - 24HR	1.72	0.00	-0.54	0.97	0.97	0.97
29 TO 30 (1) (STRM-14560 2001)	25YR - 24HR	2.38	0.00	0.17	1.35	1.35	1.35
PIPE -29 (STRM-14560 2001)	25YR - 24HR	3.51	0.00	0.49	1.99	1.99	1.99
PIPE -31 (STRM-14560 2001)	25YR - 24HR	3.12	0.00	0.48	1.77	1.77	1.77
PIPE -33 (STRM-14560 2001)	25YR - 24HR	2.36	0.00	-0.45	1.34	1.34	1.34
PIPE -34 (STRM-14560 2001)	25YR - 24HR	0.97	0.00	0.57	0.55	0.55	0.55
PIPE -35 (STRM-14560 2001)	25YR - 24HR	0.13	-0.14	-0.13	-0.08	-0.08	-0.08
PIPE -36 (STRM-14560 2001)	25YR - 24HR	1.24	0.00	0.64	0.70	0.70	0.70
PIPE -38 (STRM-14560 2001)	25YR - 24HR	2.30	0.00	-0.63	1.30	1.30	1.30
PIPE -39 (STRM-14560 2001)	25YR - 24HR	1.27	0.00	-0.38	0.72	0.72	0.72
PIPE -40	25YR - 24HR	8.42	-1.78	2.28	1.66	1.66	1.66

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
(STRM-14560 2001)							
PIPE -41 (STRM-14560 2001)	25YR - 24HR	9.39	-0.41	2.48	1.86	1.86	1.86
PIPE -42 (STRM-14560 2001)	25YR - 24HR	9.85	-0.02	0.89	1.95	1.97	1.96
PIPE -43 (STRM-14560 2001)	25YR - 24HR	13.46	-0.51	-0.64	2.66	2.68	2.67
PIPE -44 (STRM-14560 2001)	25YR - 24HR	1.48	-0.05	0.72	0.84	0.84	0.84
PIPE -45 (STRM-14560 2001)	25YR - 24HR	2.19	-0.02	0.73	1.24	1.24	1.24
PIPE -46 (STRM-14560 2001)	25YR - 24HR	2.18	-0.06	0.56	1.23	1.23	1.23
PIPE -50 (STRM-14560 2001)	25YR - 24HR	4.00	0.00	0.27	2.26	2.26	2.26
PIPE -51 (STRM-14560 2001)	25YR - 24HR	4.32	0.00	0.39	2.44	2.44	2.44
PIPE -52 (STRM-14560 2001)	25YR - 24HR	1.53	0.00	0.30	0.86	0.86	0.86
PIPE -53 (STRM-14560 2001)	25YR - 24HR	2.32	0.00	-0.25	1.31	1.31	1.31
PIPE -54 (STRM-14560 2001)	25YR - 24HR	3.95	0.00	0.37	2.24	2.24	2.24
PIPE -55 (STRM-14560 2001)	25YR - 24HR	3.18	-0.01	0.52	1.80	1.80	1.80
PIPE -56 (STRM-14560 2001)	25YR - 24HR	7.31	0.00	-0.16	4.14	4.14	4.14
PIPE -57 (STRM-14560 2001)	25YR - 24HR	4.95	-15.13	-0.37	-8.56	-8.78	-8.67
PIPE -58 (STRM-14560 2001)	25YR - 24HR	5.17	-1.51	-0.48	2.93	-3.27	2.93

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
PIPE -59 (STRM-14560 2001)	25YR - 24HR	4.34	0.00	0.47	2.46	2.46	2.46
ST-101 TO ST-100 (STRM-14560 2001)	25YR - 24HR	16.07	-0.51	-0.15	3.18	3.27	3.23
ST-102 TO ST-101 (STRM-14560 2001)	25YR - 24HR	12.83	0.00	0.12	4.05	4.05	4.05
ST-104 TO ST-103 (STRM-14560 2001)	25YR - 24HR	6.69	-0.01	0.97	2.11	2.11	2.11
ST-105 TO ST-104 (STRM-14560 2001)	25YR - 24HR	5.60	0.00	1.12	1.77	1.77	1.77
ST-106 TO ST-105 (STRM-14560 2001)	25YR - 24HR	4.24	0.00	0.78	1.34	1.34	1.34
ST-107 TO ST-106 (STRM-14560 2001)	25YR - 24HR	2.64	0.00	0.49	1.49	1.49	1.49
ST-108 TO ST-107 (STRM-14560 2001)	25YR - 24HR	1.73	0.00	-0.66	0.98	0.98	0.98
ST-110 TO ST-109 (STRM-14560 2001)	25YR - 24HR	2.89	0.00	-0.33	1.63	1.63	1.63
ST-111 TO ST-103 (STRM-14560 2001)	25YR - 24HR	2.29	0.00	-0.19	1.30	1.30	1.30
ST-112 TO ST-103 (STRM-14560 2001)	25YR - 24HR	1.89	0.00	0.30	1.07	1.07	1.07
ST-113 TO ST-104 (STRM-14560 2001)	25YR - 24HR	1.09	0.00	0.55	0.62	0.62	0.62