POND SITING REPORT

Florida Department of Transportation

District One

State Road (SR) 70 Project Development and Environment (PD&E) Study

US 27 to County Road 29

Highlands County, Florida

Financial Management Number: 414506-4-52-01

ETDM Number: 3054

Date: November 2025

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

POND SITING REPORT

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FROM US 27 TO COUNTY ROAD 29

HIGHLANDS COUNTY, FLORIDA

Financial Management Number: 414506-4-52-01

ETDM Number: 3054

Prepared for:

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November 2025

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) proposes to improve a segment of State Road 70 (SR 70**)** in Highlands County, Florida. The project is also being referred to as SR 70 Segment 13. This report presents the Stormwater Management Facility (SMF) and Floodplain Compensation Site (FPC) alternatives evaluated to satisfy federal, state, and local stormwater management requirements.

The existing typical section consists of a two-lane, undivided roadway with 12-foot travel lanes and an outside shoulder width of 10 feet (4-foot paved). The proposed roadway typical section will widen SR 70 from two to four lanes throughout the study limits.

The SMF alternatives were developed to accommodate the proposed improvements while meeting the applicable stormwater treatment and attenuation criteria. The FPC have been developed to compensate the floodplain encroachments from the proposed roadway improvements. The vertical datum for this project is the North American Vertical Datum of 1988 (NAVD88). Elevations can be converted to the National Geodetic Vertical Datum of 1929 (NGVD29) by adding a conversion factor of 1.24 feet (NGVD29 = NAVD88 + 1.24').

This Pond Siting Report is being prepared in support of the SR 70 Project Development and Environment (PD&E) study being completed within the subject project limits under FPID# 414506-1-22-01. Please note, as this project is being completed as a PD&E and Design overlap project, it is incorporating Design-level data collection, and the project design prepared under FPID# 414506-3-32-01 (Jefferson Avenue to US 27). This Pond Siting Report is a preliminary tool used to identify and assess potential SMF and FPC sites using a comparative analysis of alternatives. The recommendations are based on preliminary data and engineering judgment, with pond sizing and drainage boundaries subject to refinement during final design.

The project is located entirely within the Harney Pond Canal watershed and is divided into three proposed roadway drainage basins. Under existing conditions, stormwater runoff sheet flows offsite and is conveyed through roadside ditches and cross drains to nearby receiving features, including wetlands. There are twelve existing ponds along the project due to the previous addition for the median passing lane project under ERP # 44027810.000 and the SR 70/US 70 intersection improvement project under ERP # 4325519.001. This project anticipates to impact nine of the existing ponds. Proposed drainage patterns aim to maintain the existing flow paths wherever feasible.

All drainage basins discharge to Harney Pond Canal (WBID: 3204), which is an impaired waterbody for nutrients and dissolved oxygen. This project does not discharge to any Outstanding Florida Waters (OFWs).

SMF and FPC design criteria for this project are based on FDOT's Drainage Manual and Southwest Florida Water Management District (SWFWMD) Environmental Resource Permit (ERP) Applicant's Handbook. Key design criteria include:

- SMFs must provide a minimum 80% reduction of average annual loading of both Total Nitrogen (TN) and Total Phosphorus (TP) for impaired waterbody.
- Encroachment to the 100-year floodplain requires equivalent compensating storage between the seasonal high water level and the 100-year floodplain elevation.

Each SMF alternative was evaluated considering impacts to cultural and environmental resources, potential hazardous material sites, right-of-way requirements, and stormwater performance metrics.

Each FPC alternative was evaluated for encroachment to the 100-year floodplain as defined by the Interconnected Channel and Pond Routing (ICPR) model. FPC sites were recommended according to several factors: cultural resources such as historic structures and archaeological features, environmental impacts including wetlands, upland habitat, and protected species, hazardous materials contamination, economic factors including estimated right-of-way acquisition and construction costs. Considered alternatives within this report include "cup for cup" compensation sites. However, upon the selection of the preferred FPC site, detailed modeling of the 100-year floodplain will be conducted to further reduce and refine the size of the preferred alternative.

Drainage maps and SMF and FPC alternatives are provided in the exhibits and tables that follow.

Table 1-1 Recommended SMF Alternatives

	Recommended SMFs		
	Basin 1301	**Basin 1302**	**Basin 1303**
Recommended SMF Alternative	**SMF 1301A**	**SMF 1302C**	**SMF 1303A**
Document Section No. for Basin Alternatives	**3.1**	**3.2**	**3.3**
POND DESCRIPTION	DRY	DRY	DRY
LOCATION (BEGIN STATION)	1304+64.39	1347+59.04	1413+65.36
LOCATION (END STATION)	1306+93.77	1351+79.67	1418+74.27
SIDE (LT, RT)	RT	RT	RT
SMF AREA (ACRES)	2.40	2.07	3.76
RIGHT-OF-WAY REQUIRED (ACRES)	3.32	3.9647	5.55
EASEMENT REQUIRED (ACRES)	0.00	0.00	0.00
EST. GROUND ELEVATION (FT) @ SMF SITE	119.80	115.00	44.40
PROPOSED LEOP WITHIN BASIN (FT)	122.43	113.20	47.70
EST. SHW ELEVATION (FT)	117.30	99.90	43.30
TREATMENT VOLUME REQUIRED (ACRE-FEET)	0.73	0.51	0.77
TREATMENT VOLUME PROVIDED (ACRE-FEET)	1.85	1.56	2.56
ATTENUATION VOLUME REQUIRED (ACRE-FEET)	3.04	8.12	4.29
ATTENUATION VOLUME PROVIDED (ACRE-FEET)	3.26	8.72	4.51
SOILS NAME	[45] PAOLA-BASINGER	[45] PAOLA-BASINGER	[13] FELDA FINE
HYDROLOGICAL SOIL GROUP	A	A	A/D
LAND USE	[1900] OPEN LAND [6410] FRESHWATER MARSHES	[2200] TREE CROPS	[2110] IMPROVED PASTURES
FLOODPLAIN IMPACTS (ACRE-FEET)	0.09	0.073	0.09
FLOODPLAIN COMPENSATION COST	$13,945	$0	$29,648
RECORDED HISTORICAL STRUCTURES/RESOURCES	LOW	LOW	LOW
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	MED	MED	LOW
PROTECTED, THREATENED, & ENDANGERED SPECIES	HIGH	HIGH	HIGH
SPECIES MITIGATION COST	$192,560	$142,800	$43,100
MAJOR UTILITIES PRESENT	FPL	FPL	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	Y	Y	Y
SECTION 4(F) PRESENT	N/A	N/A	N/A
SECTION 4(F) IMPACTED (Y/N)	N	N	N
CONSERVATION LANDS IMPACT AREA (ACRES)	N	N	N
CONSERVATION MITIGATION COST	$0.00	$0.00	$0.00
ESTIMATED WETLAND IMPACTS (ACRES)	0.05	0.00	0.00
WETLAND MITIGATION COST	$5,000	$0.00	$0.00
NUMBER OF PARCELS	1	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	P	P	P
ESTIMATED CONSTRUCTION COST	$721,917	$686,264	$893,685
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$375,000	$300,000	$255,000
TOTAL ESTIMATED COSTS	**$1,308,422**	**$1,129,064**	**$1,221,433**

Note:
The information presented in this table are subject to change until final Phase of the project.

Table 1-2 Recommended FPC Alternatives

Basin Condition: One FPC is required	**Floodplain 1301**	**Floodplain 1303**	**Floodplain 1306**	**Floodplain 1309**
	Alternative 1 FPC 1301A	Alternative 1 FPC 1303A	Alternative 1 FPC 1306A	Alternative 3 FPC 1309C
LOCATION (BEGIN STATION)	1302+20.75	1318+05.85	1332+39.73	1372+96.59
LOCATION (END STATION)	1306+95.53	1324+12.81	1335+00.96	1376+68.62
SIDE (LT, RT)	LT	RT	RT	LT
FPC AREA (ACRES)	3.24	1.59	0.33	0.42
EST. GROUND ELEVATION (FT) @ FPC SITE	119.71	117.7	113.8	85.7
EST. SHW ELEVATION (FT)	117.60	114.50	111.00	77.20
LAND USE	[2200] TREE CROPS	[2200] TREE CROPS	[2200] TREE CROPS	[1180] RURAL RESIDENTIAL
RECORDED HISTORICAL STRUCTURES/RESOURCES	Low	Low	Low	Low
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	Medium	Medium	Medium	Medium
PROTECTED, THREATENED, & ENDANGERED SPECIES	High	High	High	High
SPECIES MITIGATION COST	$114,406	$43,100	$25,840	$85,840
MAJOR UTILITIES PRESENT	FPL	FPL	FPL	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	N	N	N	N
SECTION 4(F) PRESENT	N/A	N/A	N/A	N/A
SECTION 4(F) IMPACTED (Y/N)	N	N	N	N
CONSERVATION LANDS IMPACT AREA (ACRES)	0.00	0.00	0.00	0.00
CONSERVATION MITIGATION COST	$0.00	$0.00	$0.00	$0.00
ESTIMATED WETLAND IMPACTS (ACRES)	1.05	0.08	0.16	0
WETLAND MITIGATION COST	$105,000	$8,000	$16,000	$0
NUMBER OF PARCELS	1	1	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	P	P	P	P
ESTIMATED CONSTRUCTION COST	$228,615	$142,258	$32,761	$67,565
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$325,000	$170,000	$130,000	$570,000
TOTAL ESTIMATED COSTS	**$773,021**	**$363,358**	**$204,601**	**$723,405**

Note:
The information presented in this table are subject to change until final Phase of the project.

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1 PROJECT OVERVIEW

1.1 Project Description

The Florida Department of Transportation (FDOT) proposes to improve a segment of State Road 70 (SR 70) from US 27 to County Road (CR 29) in Highlands County, Florida. The project is also being referred to as SR 70 Segment 13. The existing typical section consists of a two-lane, undivided roadway with 12-foot travel lanes and an outside shoulder width of 10 feet (4-foot paved). The proposed project will widen SR 70 from two to four lanes throughout the study limits.

The proposed typical section from Station 1271+50 to Station 1298+28 is a four-lane flush shoulder roadway with 12-foot travel lanes, 12-foot (5-foot paved) outside shoulders, 4-foot paved inside shoulders, type E median curbs, and outside roadside ditches. The proposed typical section from Station 1298+28 to Station 1414+00 is a four-lane flush shoulder roadway with 12-foot travel lanes, 12-foot (5-foot paved) outside shoulders, 8-foot (4-foot paved) inside shoulders, median ditch, and roadside ditches. A 10-foot shared use path is included on the southern side of the roadway.

1.2 Purpose

The purpose of this project is to improve operational conditions for emergency evacuations along the SR 70 corridor from US 27 to CR 29. This Pond Siting Report is being prepared in support of the SR 70 Project Development and Environment (PD&E) study being completed within the subject project limits under FPID# 414506-1-22-01. Please note, as this project is being completed as a PD&E and Design overlap project, it is incorporating Design-level data collection, and the project design prepared under FPID# 414506-3-32-01 (Jefferson Avenue to US 27). This report presents the Stormwater Management Facility (SMF) and Floodplain Compensation Site (FPC) alternatives evaluated to satisfy federal, state, and local stormwater management requirements.

2 PROJECT DESIGN INFORMATION

2.1 Data Sources

Correspondence, Meetings, and Field Reviews

- Southwest Florida Water Management District (SWFWMD) Pre-Application Meeting (May 2, 2024) – Appendix 2
- Drainage Kickoff Meeting (May 13, 2024) – Appendix 2
- Pond Siting Meeting (September 9, 2024) – Appendix 2
- Access Management Meeting (October 29, 2024) – Appendix 2
- Pond Siting Report (PSR) Checkpoint #1 Meeting (February 4, 2025) – Appendix 2
- PSR Checkpoint #2 Meeting (March 7, 2025) – Appendix 2
- PSR Checkpoint #3 Meeting (July 28, 2025) – Appendix 2

Technical Reference and Regulation Material

- FDOT Drainage Manual (January 2025)
- FDOT Drainage Design Guide (January 2024)
- SWFWMD Environmental Resource Permit (ERP) Applicant's Handbook Volume I (June 2024)
- SWFWMD ERP Applicant's Handbook Volume II (October 2025)

Aerial Photography, Maps, Plan, and Survey

- United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Highlands County Soil Survey (2024) – Appendix 5
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) – Community-Panel No.: 12055C0529C and 12055C0533C, effective November 18, 2015
- 2023 FDOT Aerial Photography
- National Wetlands Inventory (NWI) Wetlands Data
- Highlands County Property Line (GIS)
- LiDAR

Reports and Studies

- PSR SR 70 from CR 29 to Lonesome Island Road (FPID 414506-5) under development concurrently
- Drainage Design Report – SR 25 (US 27) at SR 70 Intersection Improvements (FPID 439827-1) (2019) by Dewberry Engineers Inc. – ERP Permit No. 25519.001 – Appendix 9
- SWFWMD RAI Response (FPID 194437-3-52-01) – ERP Permit No. 27810.000 – Appendix 9

2.2 Existing Drainage Patterns

An assessment of the existing conditions and drainage patterns was performed along the corridor. The assessment included a review of regional watershed studies, historical drainage maps, Florida Geographic Information Office (FGIO) Light Detection and Ranging (LiDAR) data, Highlands County contours,

FEMA FIRMs, existing SWFWMD permits, and USGS quadrangle maps. Field verification of topographic features and drainage outfalls was also conducted.

The project is located within the Harney Pond Canal watershed. For the purpose of analysis and reference, the project area has been divided into three drainage basins, which were delineated based on topography and field observations of drainage flow paths. Under existing conditions, stormwater runoff generally sheet flows offsite and is conveyed via cross drains and ditches to adjacent wetlands or depressional areas. There are nine existing ponds along the project due to the previous addition for the median passing lane project under ERP # 44027810.000 and the SR 70/US 70 intersection improvement project under ERP # 4325519.001. This project anticipates to impact nine of the existing ponds. Relevant excerpts from these ERPs can be found in Appendix 9.

All drainage basins within the project limits discharge to Harney Pond Canal (WBID: 3204), which is an impaired waterbody for nutrients and dissolved oxygen. This project does not discharge to an Outstanding Florida Water (OFW).

Table 2-1 Existing Pond Storage

Permit Begin STA	Permit End STA	CL SR 70 Begin STA	CL SR 70 End STA	Basin (Pre/Post)	Permit No.	Storage Name	Dry/Wet	Existing Treatment Vol. (Ac-Ft)	Existing Attenuation Vol. (Ac-Ft)
101+40	105+40	1267+95	1272+26	6-1/1301	25519.001	Swale NE	Dry	0.153	0.000
101+40	107+15	1267+76	1273+46	6-2/1301	25519.001	Swale SE	Dry		
147+00	148+00	1313+26	1314+24	6-3/1302	27810.000	Pond 12	Dry	0.009	0.046
151+00	151+50	1317+17	1318+05	7-9/1302	27810.000	Pond 21	Dry	0.016	0.100
158+00	168+60	1329+58	1334+93	7-9/1302	27810.000	Pond 31	Dry	0.030	0.184
169+30	175+50	1335+50	1336+77	7-3/1302	27810.000	Pond 32	Dry		
175+50	182+20	1344+69	1348+51	8-1/1302	27810.000	Pond 41	Dry	0.015	0.087
182+50	184+00	1348+74	1350+59	8-1/1302	27810.000	Pond 42	Dry		
184+40	186+20	1350+65	1352+13	8-1/1302	27810.000	Pond 43	Dry		

An aerial-based regional drainage map is included in Appendix 6. See Appendix 1 for a map of the WBID boundaries within the project limits.

2.3 Tailwater

The Harney Pond Canal (Canal C-41) outfalls into Lake Okeechobee approximately 18 miles southeast of the project area. The open basin in this project outfalls to the east into the north and south canals of the adjacent SR 70 Segment 14 which outfalls into the Harney Pond Canal. The pond siting reports for both projects are being performed concurrently. The boundary stages used in Segment 13 is based on the upstream biological indicators near CR 29, which are higher than the 100-year/72-hour peak stages in Segment 14. This provides a reasonable conservative assumption for the Hydrologic and Hydraulic (H&H) Modeling, which can be further refined at a later phase of the project.

Table 2-2 Tailwater Comparison

Node ID	Description	Adjacent Project (FPID 414506-5)		SR 70 Segment 13 (FPID 414506-4)
		Initial Stage (ft)	100-year/72-hour Peak Stage (ft)	Boundary Stage (ft)
N-0410	North Canal	39.62[(1)]	40.46	41.95[(3)]
N-0350C	South Canal	38.84[(2)]	40.81	43.00[(4)]

[(1)] Based on biological indicator SHW-14-1426

[(2)] Based on biological indicator SHW-14-1429

[(3)] Based on average of upstream biological indicators SHW-13-LS-A & SHW-14-1414-C

[(4)] Based on upstream biological indicator SHW-14-1414

2.4 Floodplain

Within Segment 13, SR 70 traverses a diversity of landforms. The Lake Wales Ridge is a geographical region with higher terrain on the western portion of the project near US 27. The Lake Wales Ridge is a wavy topographic landscape dispersed with small, isolated depressions. At the eastern edge of the ridge there is a sharp incline just west of L-7 Ranch Road that flattens out into the expansive Okeechobee Plains on the eastern portion of the project.

The applicable FEMA FIRMs (community-panel numbers 12055C0529C and 12055C0533C, effective November 18, 2015) show the 100-year flood hazard areas along the project corridor are designated as Zone A, which means that no base flood elevations have been determined. Refer to the FEMA FIRM in Appendix 1. When compared with the topography, the FEMA flood hazard areas do not include all the isolated depressions along the project corridor, and since no base flood elevations have been determined, an Interconnected Channel and Pond Routing (ICPR) model was created and used to determine the 100-year floodplain elevation for the project area.

2.5 Rules and Regulatory Agency Coordination

2.5.1 Permits

The project is located within the SWFWMD and South Florida Water Management District (SFWMD). An interagency agreement, executed March 24, 2018, delegated the permitting authority for the entire limits of the project to the SWFWMD. An ERP will be obtained from the SWFWMD. See the pre-application meeting minutes in Appendix 2.

2.5.2 Water Quality (Treatment)

Given the Location and Design Concept Approval (LDCA) is anticipated to be after June 28, 2026, the project will follow the BMP efficiency rate design and performance criteria listed in Section 8.3 AH Vol. 1. The stormwater treatment criteria within the Segment 13 project limits follow the SWFWMD requirements, which include:

1. A wet detention system shall provide treatment for one-half inch of runoff from the contributing

area in 24 hours.

2. The design overflow elevation in wet ponds shall not exceed 10 inches above the control elevation (orifice elevation or seasonal high water (SHW) level).

Within the project limits, only one impaired water body has been identified:

- Harney Pond Canal (WBID: 3204) – Impaired for nutrients.

All drainage basins within Segment 13 discharge into Harney Pond Canal. However, this project does not discharge to an OFW. Therefore, the SMF will provide a level of treatment sufficient to accomplish:

1. an 80 percent reduction of average annual loading of Total Phosphorus (TP) and Total Nitrogen (TN) from the proposed project; and
2. a reduction such that the post-development condition average annual loading of nutrients does not exceed the predevelopment condition nutrient loading.

2.5.3 Water Quantity (Attenuation)

For basins with a positive outfall, or open basins, SWFWMD will require the post-development peak discharge rate from the basin be less than or equal to the pre-development peak discharge rate for the 25-year/24-hour SWFWMD storm event.

For basins without a positive discharge, or closed basins, the project shall also retain the pre versus post runoff volume for the 100-year/24-hour SWFWMD storm event and the 100-year/240-hour FDOT storm event.

Rainfall depths for open basins were obtained from the rainfall maps provided in the SWFWMD Applicant's Handbook, while the rainfall depths for closed basins were obtained from NOAA Atlas 14 data in accordance with FDOT criteria.

2.5.4 Drainage Design Criteria

A summary of the drainage design criteria is included in Table 2-2.

Table 2-3 Summary of Drainage Design Criteria

Detention & Retention Ponds	Maintenance Berm	Horizontal Clearance	20 ft Minimum	DM Sect. 5.4.4.2
		Slope	1:8 or Flatter (For At Least 15 ft Adjacent to Pond)	
	Corners		30 ft Minimum Turning Radius (At Maintenance Berm's Inside Edge)	
	Freeboard	Offsite Ponds	1.0 ft Minimum	
		Linear Ditches	0.5 ft Minimum	
	Fencing		Side Slope ≥ 1:4	

Note:
DM denotes FDOT Drainage Manual (January 2025).
The information presented in this table are subject to change until final Phase of the project.

2.6 Geotechnical Information and Project Soil Conditions

2.6.1 Soil Characteristics

A review of the USDA NRCS Highlands County Soil Survey was conducted to assess the general soil characteristics within the project area. The survey provides hydrologic soil group (HSG) classifications, estimated seasonal high groundwater table (SHGWT) depths, and drainage characteristics that influence stormwater management facility (SMF) performance.

To validate the soil survey data, geotechnical borings were conducted by Tierra, Inc. at each proposed SMF location. These borings confirmed site-specific SHGWT elevations and provided additional insights into subsurface conditions. The geotechnical findings, along with the Highlands Soil Survey, are included in Appendix 5.

Table 2-3 summarizes the primary soil types, HSG classifications, and estimated SHGWT depths for each drainage basin.

Table 2-4 Project Soil Conditions

Basin	Map Unit	Soil Name	Hydrologic Soil Group	Estimated SHGWT Depth (ft)
1301	1	Paola Sand	A	>6.67
	9	Astatula Sand	A	>6.67
	45	Paola-Basinger Sand	A	>6.67
1302	45	Paola-Basinger Sand	A	>6.67
1303	8	Immokalee Sand	B/D	0.5 - 1.5
	13	Felda Fine Sand	A/D	>6.67
	20	Samsula Muck	A/D	0.0
	21	Hontoon Muck	A/D	0.0
	26	Tequesta Muck	A/D	0.0
	45	Paola-Basinger Sand	A	>6.67

Note:
The information presented in this table are subject to change until final Phase of the project.

2.6.2 Curve Numbers

Curve Numbers (CNs) were assigned based on land use conditions and HSG classifications from the USDA NRCS Highlands County Soil Survey. The values were taken from Table B-7 of the FDOT Drainage Design Guide and reflect existing and proposed conditions.

CN values were determined using NRCS land use classifications, with adjustments for soil type, impervious coverage, and anticipated moisture conditions. The final CN values applied in H&H modeling are summarized in Table 2-4.

Table 2-5 Curve Numbers Summary

Land Use Description	Hydrologic Soil Group			
	A	B	C	D
Pasture				
Poor Condition	68	79	86	89
Good Condition	39	61	74	80
Open Spaces				
Good Condition	68	79	86	89
Fair Condition	49	69	79	84
Poor Condition	39	61	74	80
Impervious	98			
Open Water	100			

Note:
The information presented in this table are subject to change until final Phase of the project.

2.6.3 Geotechnical Investigation

To support the stormwater management facility (SMF) and floodplain compensation (FPC) site selection process, Tierra, Inc. conducted geotechnical borings at each proposed SMF location. These investigations provided site-specific verification of SHGWT elevations, soil permeability, and subsurface conditions to confirm the feasibility of the proposed SMF alternatives.

The results were compared against the USDA NRCS Highlands County Soil Survey to identify any discrepancies and refine the pond siting process. The geotechnical findings also informed hydrologic and hydraulic modeling, ensuring compliance with FDOT and SWFWMD stormwater design criteria.

The preliminary geotechnical borings data, along with the Highlands County Soil Survey, is included in Appendix 5 for reference.

2.7 Base Clearance Water Elevation Consideration

Per FDOT requirements, a minimum three-foot clearance must be maintained between the Base Clearance Water Elevation (BCWE) and the roadway base course at the low edge of pavement (LEOP). In areas where linear ponds are implemented, the three-foot clearance is typically measured from the weir elevation of the linear ponds rather than from the SHGWT. Per FDOT Drainage Manual Section 5.4.1.5, a lower elevation may be used if (i) in-situ soils are classified as Hydrologic Soil Group A; (ii) geotechnical investigation reveals there is no confining layer to impede drawdown; and (iii) construction activities are limited within the treatment swale to avoid compaction and tracking of silt and muck.

The majority of the linear ponds identified in this PSR are located within in-situ soils with HSG A; however, some are located in HSG A/D. A design deviation request has been discussed with the District Drainage Engineer and will be further coordinated. Therefore, the cost estimate for the linear pond alternative does not include roadway profile adjustment.

2.8 Environmental Analysis

A multi-disciplined environmental analysis was performed for each pond alternative, including desktop cultural resources investigations, Level I contamination screenings, evaluation of potential impacts to threatened and endangered species, and estimates of potential wetland impacts. The results of the environmental analysis are both qualitative and quantitative. Qualitative ratings, such as high, medium, or low apply to cultural resources and contamination. Mitigation credit costs were applied to the estimated impacts to wetlands, and threatened and endangered species, and are included with the total cost for each alternative.

2.8.1 Historical and Archaeological Assessment

In general, the areas identified for the SR 70 roadway improvements and pond site alternatives are considered to have a low to medium risk of impact to archeological and historical resources. However, several alternatives have been noted to have a high potential due to proximity to previously documented archaeological sites. Evaluation of the project's potential involvement with archaeological and historical

resources is on-going and will be documented in the PD&E study's Cultural Resources Assessment Survey for Stormwater Ponds and Floodplain Compensation Facilities for agency consultation.

2.8.2 Hazardous Material Assessment

A desktop screening of the areas identified for the SR 70 roadway improvements and pond/floodplain site alternatives for potential sources of contamination and hazardous materials identified several potential sources that may require further Level II or Level III Screening. Identified potential sources with an elevated, medium risk are summarized in Table 2-5. Evaluation of the project's potential involvement with potential contamination is on-going and will be documented in the PD&E study's Contamination Screening Evaluation Report for Stormwater Ponds and Floodplain Compensation Facilities for District review.

Table 2-6 Medium Risk Contamination Summary

Source Description	
Railroad	Medium
Citrus groves	Medium
Storage tank unknowns and documented stained soil	Medium-High
Petroleum cleanup site	Medium-High

For sites determined to have a risk rating of "Medium" or "High," Level II field screening will be conducted if it is determined during the project's design that its construction activities could be within their vicinity. These sites have been determined to have potential contaminants, which may impact the project corridor. A soil and groundwater sampling plan will be developed for each site, if applicable. The sampling plan will provide sufficient detail as to the number of soil and groundwater samples to be obtained and the specific analytical test to be performed. A site location sketch for each facility showing all proposed boring locations and groundwater monitoring wells will be prepared. Level II sampling activities will be coordinated with the District Contamination Impact Coordinator (DCIC).

2.8.3 Wetland and Vegetative Cover

Wetland and other surface water boundaries were reviewed in both desktop and field evaluations in conformance with the federal and state criteria promulgated in the Corps of Engineers Wetlands Delineation Manual, the Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Atlantic and Gulf Coastal Plain Region: Version 2, the Florida Wetlands Delineation Manual, and Rule 62-340, F.A.C., Delineation of the Landward Extent of Wetlands and Surface Waters. Wetlands have been delineated adjacent to the proposed SR 70 roadway widening limits and additional areas where pond siting and floodplain compensation alternatives are anticipated. Consistent with 62.345 F.A.C., a Uniform Mitigation Assessment Methodology (UMAM) functional loss analysis was performed on representative wetland impact areas. The project's wetland impact analysis is on-going and will be documented in the

PD&E study's Natural Resources Evaluation report, as well as provided in support of the environmental resource permitting and future PD&E re-evaluation documentation as appropriate. Wetland impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and 22 United States Code (U.S.C.) § 1344.

For planning-level cost estimating, a wetland mitigation unit cost of $100,000 per acre was applied. This estimate is based on a standardized UMAM-based approach using publicly available wetland data and average market credit prices from mitigation banks across Florida. Using the National Wetlands Inventory (NWI), preliminary wetland impacts were estimated based on wetland type, connectivity, and aerial signature. These wetlands were assigned an average UMAM score of 0.5 (corresponding to a mid-range ecological value of 5 on a 1–10 scale). Discussions with wetland mitigation banks indicated a typical credit price of approximately $200,000 per UMAM credit. Applying a 0.5 UMAM score to this average price results in an estimated mitigation cost of $100,000 per wetland acre impacted. This preliminary cost assumption provides a reasonable planning-level estimate for use in comparing pond siting alternatives.

2.8.4 Habitat Assessment

Based on the information collected, field reviews, and species-specific surveys conducted for this project, a list of protected species with the potential to occur within the project study area was generated. This list includes a total of 72 federal or state protected species that have the potential for occurrence within the project study area. These protected species include 43 plants, one invertebrate, six reptiles, 17 birds, and five mammals. The project's involvement with listed/protected species and their habitats is on-going and will be documented in the PD&E study's Natural Resources Evaluation report for agency consultation, as well as provided in support of the environmental resource permitting and future PD&E re-evaluation documentation as appropriate. To the extent feasible, the FDOT will complete species-specific mitigation activities prior to the commencement of construction.

2.8.5 Wildlife Crossings

It is the intent for this corridor to provide opportunities for wildlife crossings. These passages will enhance wildlife connectivity that was severed by the construction of SR 70. Wildlife crossing siting opportunities were evaluated along the SR 70 corridor. Consideration of appropriate locations were analyzed through GIS data, which included current aerials, Florida Land Use, Cover and Forms Classification System (FLUCFCS), National Wetlands Inventory (NWI), US Fish and Wildlife Service (USFWS) and Florida Fish and Wildlife Conservation Commission (FWC) species data and coordination with District staff. These data sources were overlayed on current aerials and follow up field inspections were conducted to validate potential crossing locations identified during the desktop review. Undeveloped areas with natural systems on both sides of SR 70 such as wetlands and creek systems were considered an important factor in the analysis. While the western bridge crossing is intended to benefit large mammals (Florida panther and black bear), the other culvert crossings will provide an opportunity for the movement of amphibian, reptile, and small mammal species. Infrastructure improvements for environmental access and attractants

which may include raised ditch bottom inlets to serve as sky lights, so that the crossings are punctuated by natural light at several points and specialized grading and/or materials at the culvert ends to provide traversable pathways.

It is the design intent for the new wildlife crossings inverts to be set above estimated SHGWT to be generally dry and accessible during normal conditions. However, during large storm events, these pipes do convey flows between the adjacent areas north and south of SR 70 and this is reflected in the proposed conditions models. The wildlife crossings are co-located with onsite basin boundaries. Table 2-6 provides a summary of the proposed wildlife crossings.

Table 2-7 Wildlife Crossing Summary

No.	Station	Description	Length (ft)
1	1301+60	29”x45” ECP	208
2	1372+90	29”x45” ECP	194
3	1384+10	16'x7' CBC	215

3 ALTERNATIVE STORMWATER MANAGEMENT FACILITY (SMF) SITES

The project is located in the Harney Pond Canal watersheds in Highlands County, Florida. For the purpose of analysis and reference, the watersheds are divided into 3 existing drainage basins. There are twelve existing ponds along the project due to the previous addition for the median passing lane project under ERP # 44027810.000 and the SR 70/US 70 intersection improvement project under ERP # 4325519.001. This project anticipates to impact nine of the existing ponds. In the existing condition, stormwater runoff sheet flows offsite and is conveyed through existing cross drains to receiving wetlands and water bodies located adjacent to the project corridor. The proposed condition will maintain the existing drainage patterns and outfalls. For the purpose of analysis and reference, the project area is divided into 3 proposed roadway basins.

The following sections describe each basin with its SMF alternatives and a summary of the analysis. The existing and proposed drainage patterns for each basin are illustrated in the drainage maps included in this section and Appendix 6. The preliminary configuration and calculations for each SMF alternative are also included in Appendix 3.

The SMF alternatives were analyzed and evaluated for cultural resources such as historic structures and archaeological features; environmental impacts including wetlands, upland habitat, and protected, threatened, and endangered (T/E) species involvement; petroleum and hazardous materials contamination; economic factors including acquisition of right-of-way and special construction; and hydrologic and hydraulic characteristics. The supporting documentation for right-of-way acquisition cost estimate is included in Appendix 7. The preferred SMF sites will be reviewed in a title search for any easements. This review will continue during the design phase of the project.

Considered Alternatives

Offsite Ponds: A minimum of three offsite SMF alternatives were considered for each basin within the project area. These alternatives include both wet detention and dry retention facilities, depending on site conditions and regulatory requirements. Each alternative was evaluated based on treatment volume, constructability, environmental impacts, and overall cost.

Linear Ponds: Linear ponds were considered for some basins and are typically located within or immediately adjacent to the proposed right-of-way. These facilities are used primarily for water quality as a treatment train. The typical linear pond cross section is assumed to have a 1:6 front slope, 1:3 back slope, and a minimum 5-foot bottom width, with geometry adjusted as needed to match available ROW and longitudinal grade. The bottom of every linear pond was set at least 1’ above the SHGWT elevation.

3.1 Basin 1301

3.1.1 Pre-Development Analysis

Basin 1301 is a closed basin extending from Station 1266+52 to Station 1314+75 on the left and right sides of SR 70. Under existing conditions, stormwater runoff sheet flows off the roadway and adjacent lands and is conveyed by roadside ditches and swales before discharging to receiving wetlands and water bodies located adjacent to the project corridor. There are two linear treatment ponds (Swale NE and Swale SE) identified in ERP # 4325519.001. The predominant soil within the basin is Paola-Basinger Sand [45], classified as Hydrologic Soil Group A.

3.1.2 Post-Development Analysis

The proposed improvements include roadway widening SR 70 and the addition of a shared use path within Basin 1301, which may involve reconstruction or milling and resurfacing depending on the specific roadway segment. Stormwater runoff from the proposed roadway will be collected using a combination of roadside ditches and closed storm drain systems and conveyed to the proposed SMFs for treatment and attenuation. When determining the required treatment volume, the treatment volumes from the impacted ponds are included. The post-development design will maintain existing drainage flow directions. The control elevation for each proposed SMF was selected based on site-specific groundwater conditions and downstream tailwater constraints. For dry ponds, the site-specific SHGWT, as determined from nearby geotechnical borings, governs the proposed control elevation. For wet detention ponds, the control elevation is typically set at or above the SHGWT.

3.1.3 Alternative 1

SMF 1301A is a 2.40-acre dry retention pond located on the right side of the roadway from Station 1304+64 to Station 1306+94. Runoff will be conveyed to this SMF through roadside ditches and storm drain systems.

The estimated ground elevation at SMF 1301A is 119.8 feet, with a proposed LEOP of 122.4 feet and a SHGWT elevation of 117.3 feet. The previous presumptive treatment volume is 0.73 acre-feet, while 1.85 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 3.04 acre-feet, while 3.26 acre-feet is provided. Nutrient removal rates provided by SMF 1301A are 84% of Total Nitrogen (TN) and 84% of Total Phosphorus (TP).

The predominant soil at this location is Paola-Basinger Sand [45], which is classified as Hydrologic Soil Group A. The land use in the SMF footprint is [1900] Open Land and [6410] Freshwater Marshes. Recorded historical resources at this location are rated Low. The hazardous material risk rating is Medium. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $192,560. Estimated wetland impacts are 0.05 acre-feet, with a wetland mitigation cost of $5,000. No conservation land impacts are anticipated with this alternative.

There are no Section 4(f) areas located near the site. A Florida Power and Light (FPL) transmission line is present near the site, with potential impacts. One parcel is affected, requiring a partial take (P). Estimated floodplain impacts are 0.09 acres, with a floodplain compensation cost of $13,945. Total cost is estimated to be $1,308,422.

3.1.4 Alternative 2

SMF 1301B is a 2.91-acre dry retention pond located on the left side of the roadway from Station 1297+22 to Station 1302+03. Runoff will be conveyed to this SMF through roadside ditches and storm drain systems.

The estimated ground elevation at SMF 1301B is 119.5 feet, with a proposed LEOP of 122.4 feet and a SHGWT elevation of 117.9 feet. The previous presumptive treatment volume is 0.73 acre-feet, while 1.75 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 3.26 acre-feet, while 3.39 acre-feet is provided. Nutrient removal rates provided by SMF 1301B are 82% of Total Nitrogen (TN) and 82% of Total Phosphorus (TP).

The predominant soil at this location is Paola-Basinger Sand [45], which is classified as Hydrologic Soil Group A. The land use in the SMF footprint is [2200] Tree Crops. Recorded historical resources at this location are rated Low. The hazardous material risk rating is Medium. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $42,900. No wetland or conservation land impacts are anticipated with this alternative.

There are no Section 4(f) areas located near the site. A Florida Power and Light (FPL) transmission line is present near the site, with no potential impacts. One parcel is affected, requiring a partial take (P). Estimated floodplain impacts are 0.32 acres, with a floodplain compensation cost of $49,872. Total cost is estimated to be $1,420,946.

3.1.5 Alternative 3

SMF 1301C is a 2.91-acre dry retention pond located on the left side of the roadway from Station 1302+23 to Station 1306+52. Runoff will be conveyed to this SMF through roadside ditches and storm drain systems.

The estimated ground elevation at SMF 1301C is 121.0 feet, with a proposed LEOP of 122.4 feet and a SHGWT elevation of 117.7 feet. The previous presumptive treatment volume is 0.73 acre-feet, while 1.62 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 3.88 acre-feet, while 4.19 acre-feet is provided. Nutrient removal rates provided by SMF 1301C are 83% of Total Nitrogen (TN) and 83% of Total Phosphorus (TP).

The predominant soil at this location is Paola-Basinger Sand [45], which is classified as Hydrologic Soil Group A. The land use in the SMF footprint is [2200] Tree Crops. Recorded historical resources at this location are rated Low. The hazardous material risk rating is Medium. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $86,020. Estimated

wetland impacts are 0.96 acre-feet, with a wetland mitigation cost of $96,000. No conservation land impacts are anticipated with this alternative.

There are no Section 4(f) areas located near the site. A Florida Power and Light (FPL) transmission line is present near the site, with potential impacts. One parcel is affected, requiring a partial take (P). Estimated floodplain impacts are 0.89 acres, with a floodplain compensation cost of $140,447. Total cost is estimated to be $1,248,579.

Table 3-1 Basin 1301 SMF Alternatives

Basin Condition: One SMF is required	Roadway Basin 1301 SMF Alternatives		
	Alt. 1	Alt. 2	Alt. 3
	SMF 1301A	SMF 1301B	SMF 1301C
POND DESCRIPTION	DRY	DRY	DRY
LOCATION (BEGIN STATION)	1304+64.39	1297+22.74	1302+23.42
LOCATION (END STATION)	1306+93.77	1302+02.42	1306+51.96
SIDE (LT, RT)	RT	LT	LT
SMF AREA (ACRES)	2.40	2.91	2.91
RIGHT-OF-WAY REQUIRED (ACRES)	3.32	4.29	3.91
EASEMENT REQUIRED (ACRES)	0.00	0.00	0.00
EST. GROUND ELEVATION (FT) @ SMF SITE	119.80	119.50	121.00
PROPOSED LEOP WITHIN BASIN (FT)	122.43	122.43	122.43
EST. SHW ELEVATION (FT)	117.30	117.90	117.70
TREATMENT VOLUME REQUIRED (ACRE-FEET)	0.73	0.73	0.73
TREATMENT VOLUME PROVIDED (ACRE-FEET)	1.85	1.75	1.62
ATTENUATION VOLUME REQUIRED (ACRE-FEET)	3.04	3.26	3.88
ATTENUATION VOLUME PROVIDED (ACRE-FEET)	3.26	3.39	4.19
SOILS NAME	[45] PAOLA-BASINGER	[45] PAOLA-BASINGER	[45] PAOLA-BASINGER
HYDROLOGICAL SOIL GROUP	A	A	A
LAND USE	[1900] OPEN LAND [6410] FRESHWATER MARSHES	[2200] TREE CROPS	[2200] TREE CROPS
FLOODPLAIN IMPACTS (ACRE-FEET)	0.09	0.32	0.89
FLOODPLAIN COMPENSATION COST	$13,945	$49,872	$140,447
RECORDED HISTORICAL STRUCTURES/RESOURCES	LOW	LOW	LOW
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	MED	MED	MED
PROTECTED, THREATENED, & ENDANGERED SPECIES	HIGH	HIGH	HIGH
SPECIES MITIGATION COST	$192,560	$42,900	$86,020
MAJOR UTILITIES PRESENT	FPL	FPL	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	Y	N	Y
SECTION 4(F) PRESENT	N/A	N/A	N/A
SECTION 4(F) IMPACTED (Y/N)	N	N	N
CONSERVATION LANDS IMPACT AREA (ACRES)	N	N	N
CONSERVATION MITIGATION COST	$0.00	$0.00	$0.00
ESTIMATED WETLAND IMPACTS (ACRES)	0.05	0.00	0.96
WETLAND MITIGATION COST	$5,000	$0.00	$96,000
NUMBER OF PARCELS	1	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	P	P	P
ESTIMATED CONSTRUCTION COST	$721,917	$1,033,174	$651,112
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$375,000	$295,000	$275,000
TOTAL ESTIMATED COSTS	**$1,308,422**	**$1,420,946**	**$1,248,579**
RECOMMENDED SMF ALTERNATIVE	**SMF 1301A**		

Note:
The information presented in this table are subject to change until final Phase of the project.

3.1.6 Recommended SMF Site

SMF 1301A

PROS	CONS
1.Second least expensive alternative	1.Most amount of species impacts
2.Least amount of floodplain impacts	2.Potential utility impacts

SMF 1301B

PROS	CONS
1.No wetland impacts anticipated	1.Most expensive alternative
2.Least amount of species impacts	2.Most expensive construction cost

SMF 1301C

PROS	CONS
1.Least expensive alternative	1.Most amount of wetland impacts
2.Least expensive construction cost	2.Most amount of floodplain impacts
	3.Potential utility impacts

Recommendation

While SMF 1301C is the lowest-cost and most preferred SMF when evaluated independently, it is not feasible in combination with the most favorable FPC alternative, FPC 1301A. Given the importance of selecting a viable and cost-effective combination of SMF and FPC sites, all SMF and FPC pairings were evaluated. The pairing of SMF 1301A and FPC 1301A yields the lowest feasible total cost of $2,081,443 and is therefore the preferred combination for Roadway Basin 1301.

Supporting documentation, including the completed SMF comparison table and cost estimates, can be found in Appendix 7.

3.2 Basin 1302

3.2.1 Pre-Development Analysis

Basin 1302 is a closed basin extending from Station 1312+49 to Station 1354+84 along the left and right side of SR 70. Under existing conditions, stormwater runoff from the roadway sheet flows offsite into adjacent drainage features, including roadside ditches and natural depressional areas. There are ten linear ponds identified in ERP # 44027810.000. This project anticipates to impact seven of the existing ponds (Pond 12, Pond 21, Pond 31, Pond 32, Pond 41, Pond 42, and Pond 43) that held 3.47 acre-feet of

attenuation volume. The predominant soil type within the basin is Paola-Basinger Sand [45], classified as Hydrologic Soil Group A.

3.2.2 Post-Development Analysis

The proposed improvements include roadway widening SR 70 and the addition of a shared use path within Basin 1302, which may involve reconstruction or milling and resurfacing depending on the specific roadway segment. Stormwater runoff from the widened roadway will be collected using a combination of roadside ditches and closed storm drain systems and conveyed to the proposed SMF for treatment and attenuation. The attenuation volumes of existing linear ponds were considered when determining the attenuation requirements for the proposed pond. When determining the required treatment and attenuation volume, the volumes from the impacted ponds are included. The post-development design will maintain existing drainage flow directions.

3.2.3 Alternative 1

SMF 1302A is a 2.69-acre dry retention pond located on the left side of the roadway from Station 1337+76 to Station 1343+17. Runoff will be conveyed to this SMF through roadside ditches and storm drain systems.

The estimated ground elevation at SMF 1302A is 110.0 feet, with a proposed LEOP of 113.2 feet and a SHGWT elevation of 102.1 feet. The previous presumptive treatment volume is 0.51 acre-feet, while 1.45 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 9.48 acre-feet, while 9.56 acre-feet is provided. Nutrient removal rates provided by SMF 1302A are 83% of Total Nitrogen (TN) and 83% of Total Phosphorus (TP).

The predominant soil at this location is Paola-Basinger Sand [45], which is classified as Hydrologic Soil Group A. The land use in the SMF footprint is [1100] Residential Low Density and [6410] Freshwater Marshes. Recorded historical resources at this location are rated Low. The hazardous material risk rating is Low. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $310,780. Estimated wetland impacts are 0.31 acre-feet, with a wetland mitigation cost of $31,000. No conservation land impacts are anticipated with this alternative.

There are no Section 4(f) areas located near the site. A Florida Power and Light (FPL) transmission line is present near the site, with no potential impacts. Five parcels are affected, requiring a whole take (WT) of each. Estimated floodplain impacts are 1.94 acres, with no floodplain compensation cost. Total cost is estimated to be $1,996,724.

3.2.4 Alternative 2

SMF 1302B is a 1.70-acre dry retention pond located on the left side of the roadway from Station 1350+54 to Station 1354+43. Runoff will be conveyed to this SMF through roadside ditches and storm drain systems.

The estimated ground elevation at SMF 1302B is 108.0 feet, with a proposed LEOP of 113.2 feet and a SHGWT elevation of 93.6 feet. The previous presumptive treatment volume is 0.51 acre-feet, while 1.38 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 8.84 acre-feet, while 9.37 acre-feet is provided. Nutrient removal rates provided by SMF 1302B are 82% of Total Nitrogen (TN) and 82% of Total Phosphorus (TP).

The predominant soil at this location is Paola-Basinger Sand [45], which is classified as Hydrologic Soil Group A. The land use in the SMF footprint is [1100] Residential Low Density. Recorded historical resources at this location are rated Low. The hazardous material risk rating is Low. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $174,000. No wetland or conservation land impacts are anticipated with this alternative.

There are no Section 4(f) areas located near the site. A Florida Power and Light (FPL) transmission line is present near the site, with potential impacts. Five parcels are affected, requiring a whole take (WT) of each. Estimated floodplain impacts are 1.51 acres, with no floodplain compensation cost. Total cost is estimated to be $1,727,229.

3.2.5 Alternative 3

SMF 1302C is a 2.07-acre dry retention pond located on the right side of the roadway from Station 1347+59 to Station 1351+80. Runoff will be conveyed to this SMF through roadside ditches and storm drain systems.

The estimated ground elevation at SMF 1302C is 115.0 feet, with a proposed LEOP of 113.2 feet and a SHGWT elevation of 99.9 feet. The previous presumptive treatment volume is 0.51 acre-feet, while 1.56 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 8.12 acre-feet, while 8.72 acre-feet is provided. Nutrient removal rates provided by SMF 1302C are 85% of Total Nitrogen (TN) and 85% of Total Phosphorus (TP).

The predominant soil at this location is Paola-Basinger Sand [45], which is classified as Hydrologic Soil Group A. The land use in the SMF footprint is [2200] Tree Crops. Recorded historical resources at this location are rated Low. The hazardous material risk rating is Medium. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $142,800. No wetland or conservation land impacts are anticipated with this alternative.

There are no Section 4(f) areas located near the site. A Florida Power and Light (FPL) transmission line is present near the site, with potential impacts. One parcel is affected, requiring a partial take (P) of each. Estimated floodplain impacts are 0.07 acres, with no floodplain compensation cost. Total cost is estimated to be $1,129,064.

Table 3-2 Basin 1302 SMF Alternatives

Basin Condition: One SMF is required	Roadway Basin 1302 SMF Alternatives		
	Alt. 1	Alt. 2	Alt. 3
	SMF 1302A	SMF 1302B	SMF 1302C
POND DESCRIPTION	DRY	DRY	DRY
LOCATION (BEGIN STATION)	1337+75.73	1350+54.79	1347+59.04
LOCATION (END STATION)	1343+16.44	1354+42.99	1351+79.67
SIDE (LT, RT)	LT	LT	RT
SMF AREA (ACRES)	2.69	1.70	2.07
RIGHT-OF-WAY REQUIRED (ACRES)	3.79	2.63	3.96
EASEMENT REQUIRED (ACRES)	0.00	0.00	0.00
EST. GROUND ELEVATION (FT) @ SMF SITE	110.00	108.00	115.00
PROPOSED LEOP WITHIN BASIN (FT)	113.20	113.20	113.20
EST. SHW ELEVATION (FT)	102.10	93.60	99.90
TREATMENT VOLUME REQUIRED (ACRE-FEET)	0.51	0.51	0.51
TREATMENT VOLUME PROVIDED (ACRE-FEET)	1.45	1.38	1.56
ATTENUATION VOLUME REQUIRED (ACRE-FEET)	9.48	8.84	8.12
ATTENUATION VOLUME PROVIDED (ACRE-FEET)	9.56	9.37	8.72
SOILS NAME	[45] PAOLA-BASINGER	[45] PAOLA-BASINGER	[45] PAOLA-BASINGER
HYDROLOGICAL SOIL GROUP	A	A	A
LAND USE	[1100] RESIDENTIAL LOW DENSITY [6410] FRESHWATER MARSHES	[1100] RESIDENTIAL LOW DENSITY	[2200] TREE CROPS
FLOODPLAIN IMPACTS (ACRE-FEET)	1.94	1.51	0.07
FLOODPLAIN COMPENSATION COST	$0.00	$0.00	$0.00
RECORDED HISTORICAL STRUCTURES/RESOURCES	LOW	LOW	LOW
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	LOW	LOW	MED
PROTECTED, THREATENED, & ENDANGERED SPECIES	HIGH	HIGH	HIGH
SPECIES MITIGATION COST	$310,780	$174,000	$142,800
MAJOR UTILITIES PRESENT	FPL	FPL	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	N	Y	Y
SECTION 4(F) PRESENT	N/A	N/A	N/A
SECTION 4(F) IMPACTED (Y/N)	N	N	N
CONSERVATION LANDS IMPACT AREA (ACRES)	N	N	N
CONSERVATION MITIGATION COST	$0.00	$0.00	$0.00
ESTIMATED WETLAND IMPACTS (ACRES)	0.31	0.00	0.00
WETLAND MITIGATION COST	$31,000	$0.00	$0.00
NUMBER OF PARCELS	5	5	1
PARTIAL (P) OR WHOLE TAKE (WT)	WT	WT	P
ESTIMATED CONSTRUCTION COST	$1,134,944	$1,093,229	$686,264
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$520,000	$460,000	$300,000
TOTAL ESTIMATED COSTS	**$1,996,724**	**$1,727,229**	**$1,129,064**
RECOMMENDED SMF ALTERNATIVE	**SMF 1302C**		

Note:
The information presented in this table are subject to change until final Phase of the project.

3.2.6 Recommended SMF Site

SMF 1302A

PROS

1. Low hazardous material risk rating

CONS

1. Most expensive alternative
2. Most amount of species impacts
3. Most amount of wetland impacts
4. Most amount of floodplain impacts

SMF 1302B

PROS

1. Second least expensive alternative
2. Low hazardous material risk rating

CONS

1. Second most floodplain impacts
2. Second most expensive ROW cost

SMF 1302C

PROS

1. Least expensive alternative
2. Least amount of species impacts
3. Least amount of floodplain impacts
4. Requires only partial take of one parcel.

CONS

1. Medium hazardous material risk rating
2. Requires only partial take of one parcel

Recommendation

Based on an evaluation of total cost, right-of-way cost, floodplain impacts, hazardous material risk rating, and species mitigation cost, SMF 1302C is the preferred alternative for Roadway Basin 1302.

Supporting documentation, including the completed SMF comparison table and cost estimates, can be found in Appendix 7.

3.3 Basin 1303

3.3.1 Pre-Development Analysis

Basin 1303 is an open basin that extends from Station 1357+06 to Station 1428+72 along the left and right sides of SR 70, that ultimately outfalls to Harney Pond Canal. Under existing conditions, stormwater runoff from the roadway sheet flows offsite into adjacent roadside ditches. The predominant soils within this basin include Felda Fine Sand [13] and Tequesta Muck [26], classified as Hydrologic Soil Group A/D.

3.3.2 Post-Development Analysis

Proposed improvements to SR 70 within Basin 1303 include roadway widening and the addition of a shared use path. Runoff from the widened roadway will be collected through roadside ditches and storm drain systems and conveyed to the proposed SMF for treatment and attenuation. The proposed design will maintain the existing general drainage flow direction and discharge locations.

3.3.3 Alternative 1

SMF 1303A is a 3.76-acre dry retention pond located on the right side of the roadway from Station 1413+65 to Station 1418+75. Runoff will be conveyed to this SMF through a combination of roadside ditches and closed storm drain systems and will discharge to the canal north of SMF 1303A.

The estimated ground elevation at SMF 1303A is 44.4 feet, with a proposed LEOP of 47.7 feet and a SHGWT elevation of 43.3 feet. The previous presumptive treatment volume is 0.77 acre-feet, while 2.56 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 4.29 acre-feet, while 4.51 acre-feet is provided. Nutrient removal rates provided by SMF 1303A are 84% of Total Nitrogen (TN) and 84% of Total Phosphorus (TP).

The predominant soil at this location is Felda Fine Sand [13], which is classified as Hydrologic Soil Group A/D. The land use in the SMF footprint is [2110] Improved Pastures. Recorded historical resources at this location are rated Low. The hazardous material risk rating is Low. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $43,100. No wetland or conservation land impacts are anticipated with this alternative.

There are no Section 4(f) areas located near the site. A Florida Power and Light (FPL) transmission line is present near the site, with potential impacts One parcel is affected, requiring a partial take (P). Estimated floodplain impacts are 0.08 acres, with a floodplain compensation cost of $11,605. Total cost is estimated to be $1,203,390.

3.3.4 Alternative 2

SMF 1303B is a 2.71-acre dry retention pond located on the left side of the roadway from Station 1414+08 to Station 1419+45. Runoff will be conveyed to this SMF through roadside ditches and storm drain systems and will discharge to the canal south of this SMF.

The estimated ground elevation at SMF 1303B is 43.0 feet, with a proposed LEOP of 47.7 feet and a SHGWT elevation of 41.8 feet The previous presumptive treatment volume is 0.77 acre-feet, while 2.10 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 4.86 acre-feet, while 5.32 acre-feet is provided. Nutrient removal rates provided by SMF 1303B are 89% of Total Nitrogen (TN) and 89% of Total Phosphorus (TP).

The predominant soil at this location is Felda Fine Sand [13], which is classified as Hydrologic Soil Group A/D. The land use in the SMF footprint is [2110] Improved Pastures. Recorded historical resources at this location are rated Low. The hazardous material risk rating is Low. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $47,300. Estimated wetland

impacts are 2.06 acre-feet, with a wetland mitigation cost of $63,721. No conservation land impacts are anticipated with this alternative.

There are no Section 4(f) areas located near the site. A Florida Power and Light (FPL) transmission line is present near the site, with potential impacts One parcel is affected, requiring a partial take (P). Estimated floodplain impacts are 2.18 acres, with a floodplain compensation cost of $79,258. Total cost is estimated to be $1,560,834.

3.3.5 Alternative 3

Alternative 3 includes SMF 1303C, SMF 1303D, and SMF 1303E. SMF 1303D and SMF 1303E are linear ponds located within the proposed right-of-way, which collect and convey runoff to a downstream dry retention pond. The area of SMF 1303D is 0.67 acres located on the left side of the roadway from Station 1378+00 to Station 1381+50. The area of SMF 1303E is 0.97 acres located on the left side of the roadway from Station 1400+00 to Station 1411+10. SMF 1303C is a 5.05-acre wet detention pond located on the right side of the roadway from Station 1405+17 to Station 1412+18. No easements are required. Runoff from the proposed roadway will be conveyed to these SMFs through roadside ditches and storm drain systems and will discharge to the canal east of SMF 1303C.

The estimated ground elevation at SMF 1303C is 44.4 feet, proposed LEOP is 47.7 feet, and SHGWT elevation is 43.8 feet. The previous presumptive treatment volume is 0.77 acre-feet, while 4.59 acre-feet is provided to meet the minimum required nutrient removal rates. The required attenuation volume is 7.31 acre-feet, while 8.05 acre-feet is provided. SMF 1303C provides 1.95 acre-ft of treatment volume and 7.36 acre-ft of attenuation volume. SMF 1303D provides 1.28 acre-ft of treatment volume. SMF 1303E provides 0.77 acre-ft of treatment volume. To accommodate for hydraulic head, additional volume beyond the required attenuation volume is provided above the linear treatment cells. Nutrient removal rates provided by SMF 1303C, SMF 1303D, and SMF 1303E are 83% of Total Nitrogen (TN) and 94% of Total Phosphorus (TP).

Soils include Felda Fine Sand [13], Tequesta Muck [26], and Paola-Basinger Sand [45]. The area is part of Hydrologic Soil Group A and A/D. Land use is [2210] Citrus Groves.

Recorded historical resources at this location are rated Low. The hazardous material risk rating is Medium. This site has a High potential to impact protected, threatened, or endangered species, with a species mitigation cost of $55,700. No wetland or conservation land impacts are anticipated with this alternative.

For Alternative 3, SMF 1303D and SMF 1303E, all proposed linear ponds are located entirely within the proposed roadway right-of-way. As such, species mitigation, conservation mitigation, and wetland mitigation costs do not contribute to the total cost of the alternative, as these impacts are considered consistent throughout the proposed right-of-way of Basin 1303.

Florida Power and Light (FPL) transmission lines are located near the site, with potential impacts. Floodplain impacts and compensation costs are 2.35 acre-feet and $109,491, respectively. One parcel is impacted, requiring a partial take (P). Total cost is estimated to be $1,739,327.

Table 3-3 Basin 1303 SMF Alternatives

Basin Condition: One SMF is required	Roadway Basin 1303 SMF Alternatives				
	Alt. 1	Alt. 2	Alt. 3		
	SMF 1303A	SMF 1303B	SMF 1303C	SMF 1303D	SMF 1303E
POND DESCRIPTION	DRY	DRY	WET	LINEAR	LINEAR
LOCATION (BEGIN STATION)	1413+65.36	1414+08.35	1405+17.16	1378+00.00	1400+00.00
LOCATION (END STATION)	1418+74.27	1419+44.05	1412+17.32	1381+50.00	1411+10.00
SIDE (LT, RT)	RT	LT	RT	LT	LT
SMF AREA (ACRES)	3.76	2.71	5.05	0.67	0.97
RIGHT-OF-WAY REQUIRED (ACRES)	5.55	5.74	9.45	0.00	0.00
EASEMENT REQUIRED (ACRES)	0.00	0.00	0.00	0.00	0.00
EST. GROUND ELEVATION (FT) @ SMF SITE	44.40	43.00	44.40	VARIES	VARIES
PROPOSED LEOP WITHIN BASIN (FT)	47.70	47.70	47.70	47.70	47.70
EST. SHW ELEVATION (FT)	43.30	41.80	43.80	VARIES	44.17
TREATMENT VOLUME REQUIRED (ACRE-FEET)	0.77	0.77	1.54		
TREATMENT VOLUME PROVIDED (ACRE-FEET)	2.56	2.10	6.30		
ATTENUATION VOLUME REQUIRED (ACRE-FEET)	4.29	4.86	7.27		
ATTENUATION VOLUME PROVIDED (ACRE-FEET)	4.51	5.32	7.37		
SOILS NAME	[13] FELDA FINE	[13] FELDA FINE	[13] FELDA FINE [26] TEQUESTA	[45] PAOLA-BASINGER	[26] TEQUESTA
HYDROLOGICAL SOIL GROUP	A/D	A/D	A/D	A	A/D
LAND USE	[2110] IMPROVED PASTURES	[2110] IMPROVED PASTURES	[2210] CITRUS GROVES	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
FLOODPLAIN IMPACTS (ACRE-FEET)	0.08	2.06	2.35	0	0
FLOODPLAIN COMPENSATION COST	$11,605	$63,721	$109,491	$0	$0
RECORDED HISTORICAL STRUCTURES/RESOURCES	LOW	LOW	LOW	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	LOW	LOW	MED	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
PROTECTED, THREATENED, & ENDANGERED SPECIES	HIGH	HIGH	HIGH	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
SPECIES MITIGATION COST	$43,100	$47,300	$55,700	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
MAJOR UTILITIES PRESENT	FPL	FPL	N/A	FPL	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	Y	Y	N	Y	Y
SECTION 4(F) PRESENT	N/A	N/A	N/A	N/A	N/A
SECTION 4(F) IMPACTED (Y/N)	N	N	N	N	N
CONSERVATION LANDS IMPACT AREA (ACRES)	N	N	N	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
CONSERVATION MITIGATION COST	$0.00	$0.00	$0.00	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
ESTIMATED WETLAND IMPACTS (ACRES)	0.00	0.39	0.00	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
WETLAND MITIGATION COST	$0.00	$39,000.00	$0.00	N/A PROP. RDWY R/W	N/A PROP. RDWY R/W
NUMBER OF PARCELS	1	1	1	0	0
PARTIAL (P) OR WHOLE TAKE (WT)	P	P	P	N/A	N/A
ESTIMATED CONSTRUCTION COST	$893,685	$1,100,813	$1,179,136		
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$255,000	$310,000	$395,000	$0.00	$0.00
TOTAL ESTIMATED COSTS	**$1,203,390**	**$1,560,834**	**$1,739,327**		
RECOMMENDED SMF ALTERNATIVE	**SMF 1303A**				

Note:
The information presented in this table are subject to change until final Phase of the project.

3.3.6 Recommended SMF Site

SMF 1303A and SMF 1303D

PROS

1. Least expensive alternative
2. Least amount of floodplain impacts
3. No wetland impacts anticipated

CONS

1. High species impact ranking

SMF 1303B

PROS

1. Second least expensive alternative

CONS

1. Most amount of wetland impacts
2. High species impact ranking

SMF 1303C and SMF 1303D

PROS

1. No wetland impacts anticipated

CONS

1. Most expensive alternative
2. Most amount of floodplain impacts
3. Medium hazardous material risk rating

Recommendation

Based on an evaluation of total cost, right-of-way cost, wetland impacts, species mitigation cost, and floodplain compensation cost. SMF 1303A is the preferred alternative for Roadway Basin 1303.

Supporting documentation, including the completed SMF comparison table and cost estimates, can be found in Appendix 7.

4 ALTERNATIVE FLOODPLAIN COMPENSATION (FPC) SITES

The 100-year floodplain elevations and areas were determined by the ICPR model. There are 51 sub-basins in the ICPR model, and the proposed roadway improvements will impact the 100-year floodplain within seven of the 51 sub-basins.

Floodplain mitigation alternatives included in this report include an analysis based on the "cup for cup" compensation methodology.

Considered Alternatives

"Cup for Cup" Approach: Floodplain encroachment volumes from the proposed roadway section were estimated between the SHGWT elevation and 100-year floodplain elevation for each sub-basin. Encroachment volumes were based on the topographical survey taken within the right-of-way. Impacts to a group of sub-basins which were hydraulically connected were compensated for within a single FPC alternative. This limited the required amount of FPC sites and allowed for the combination of those sites where impacts were minor. Up to two alternative FPC sites were evaluated and were sized based on the estimated SHGWT elevations from geotechnical borings and surveyed biological indicators (stain lines).

Modeling: Runoff volume from the impacted areas will be redirected away from the floodplains to the stormwater management facilities. This will result in a reduction of the floodplain impact caused by the roadway fill. Therefore, modeling will be utilized to demonstrate no impacts or reduced impacts are associated with the proposed roadway improvements. Updates to the ICPR model will be performed in the permitting phase to refine, reduce, or eliminate FPC sites. A preliminary comparison of the redirected runoff volume and the encroachment volume has been performed, see Appendix 4.

Table 4-1 Floodplain Impact Summary

Floodplain Name	ICPR Sub-basin Name	Floodplain Location (CL Construction)		100-year Floodplain Elevation (ft, NAVD)	Impact Volume (ac-ft)	Preferred Floodplain Compensation Site
		From Station	To Station			
1301	106	1298+20	1313+14	119.19	4.02	FPC 1301A
	107	1297+05	1314+70	118.65	0.43	
1303	109	1318+00	1325+30	115.99	1.98	FPC 1303A
	108	1314+70	1320+15	115.99	0.18	
1306	109A	1324+11	1335+00	114.06	0.27	FPC 1306A
	109B	1325+30	1335+00	112.86	0.18	
1309	119	1370+39	1377+14	80.00	1.08	FPC 1309C

4.1 FPC 1301

Floodplain 1301 includes ICPR model sub-basins 106 and 107. The roadway corridor will encroach upon the 100-year floodplain within these sub-basins and impact 4.48 acre-feet of floodplain. Additionally, the floodplain encroachment volumes by the proposed offsite SMF 1301 alternatives A, B, and C, is 0.10 acre-feet, 0.32 acre-feet, and 0.89 acre-feet, respectively. Refer to the floodplain calculations in Appendix 4 and the floodplain map in Appendix 6.

4.1.1 Alternative 1

FPC 1301A is an offsite floodplain compensation site located in tree crops northeast of the SR 70 and Ekhoff Lane intersection near the western end of Flagler Street. The site is directly adjacent to the SR 70 right-of-way.

The site-specific data provided by Tierra, Inc. estimates the SHGWT to be at elevation 117.6 feet. The site provides 4.89 acre-feet of floodplain compensation. See Table 4-2 for a summary of the FPC site information. The FPC site can also compensate for the floodplain impacts caused by either SMF 1301A or SMF1302B. SMF 1302C would be located on the same site as FPC 1301A, therefore, if SMF 1302C is selected as the preferred pond site then FPC 1301A is no longer an option.

4.1.2 Alternative 2

FPC 1301B is an offsite floodplain compensation site located in open lands south of the SR 70 and Ekhoff Lane intersection near a freshwater marsh. The site is directly adjacent to the SR 70 right-of-way.

The site-specific data provided by Tierra, Inc. estimates the SHGWT to be at elevation 117.2 feet. The site provides 5.62 acre-feet of floodplain compensation. See Table 4-2 for a summary of the FPC site information. The FPC site can also compensate for the floodplain impacts caused by either SMF 1301B or SMF1302C. SMF 1302A would be located on the same site as FPC 1301B, therefore, if SMF 1302A is selected as the preferred pond site then FPC 1301B is no longer an option.

Table 4-2 FPC 1301 Alternatives

Basin Condition: One FPC is required	**Floodplain 1301** Alternative 1 FPC 1301A	**Floodplain 1301** Alternative 2 FPC 1301B
LOCATION (BEGIN STATION)	1302+20.75	1296+33.47
LOCATION (END STATION)	1306+95.53	1301+95.18
SIDE (LT, RT)	LT	RT
FPC AREA (ACRES)	3.24	4.62
EST. GROUND ELEVATION (FT) @ FPC SITE	119.71	119.81
EST. SHW ELEVATION (FT)	117.60	117.20
LAND USE	[2200] TREE CROPS	[1900] OPEN LAND
RECORDED HISTORICAL STRUCTURES/RESOURCES	Low	Low
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	Medium	Low
PROTECTED, THREATENED, & ENDANGERED SPECIES	High	High
SPECIES MITIGATION COST	$114,406	$167,280
MAJOR UTILITIES PRESENT	FPL	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	N	N
SECTION 4(F) PRESENT	N/A	N/A
SECTION 4(F) IMPACTED (Y/N)	N	N
CONSERVATION LANDS IMPACT AREA (ACRES)	0.00	0.00
CONSERVATION MITIGATION COST	$0.00	$0.00
ESTIMATED WETLAND IMPACTS (ACRES)	1.05	1.12
WETLAND MITIGATION COST	$105,000	$112,000
NUMBER OF PARCELS	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	P	P
ESTIMATED CONSTRUCTION COST	$228,616	$376,609
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$325,000	$275,000
TOTAL ESTIMATED COSTS	**$773,022**	**$930,889**
Recommended FPC Alternative	**FPC 1301A**	

4.1.3 Recommended FPC Site

FPC 1301A

PROS

1. Lower T/E species impacts
2. Lower wetland or conservation impacts
3. Lower construction cost

CONS

1. Medium risk for hazardous material
2. Higher right-of-way cost

FPC 1301B

PROS	CONS
1. Low risk for hazardous material	1. Higher T/E species impacts
2. Lower right-of-way cost	2. Higher wetland or conservation impacts
	3. Higher construction cost

Based on an evaluation of right-of-way impacts, construction cost, wetland impacts, conservation land impacts, species mitigation, and FPC area, FPC 1301A is the preferred alternative.

This alternative was selected due to the lowest wetland and conservation impact, the lowest construction cost, and the lowest species mitigation cost. The cost estimates can be found above and in Appendix 7.

4.2 FPC 1303

Floodplain 1303 includes ICPR model sub-basins 108 and 109. The roadway corridor will encroach upon the 100-year floodplain within these sub-basins and impact 2.12 acre-feet of floodplain. Refer to the floodplain calculations in Appendix 4 and the floodplain map in Appendix 6.

4.2.1 Alternative 1

FPC 1303A is an offsite floodplain compensation site located in tree crops south of the SR 70 and Broward Avenue intersection near a freshwater marsh. The site is directly adjacent to the SR 70 right-of-way. FPC 1303A was the only alternative evaluated given the impact is primarily located south of SR 70 surrounding the impacted depression.

The site-specific data provided by Tierra, Inc. estimates the SHGWT to be at elevation 114.5 feet. The site provides 2.32 acre-feet of floodplain compensation. See Table 4-3 for a summary of the FPC site information.

Table 4-3 FPC 1303 Alternatives

Basin Condition: One FPC is required	**Floodplain 1303**
	Alternative 1 FPC 1303A
LOCATION (BEGIN STATION)	1318+05.85
LOCATION (END STATION)	1324+12.81
SIDE (LT, RT)	RT
FPC AREA (ACRES)	1.65
EST. GROUND ELEVATION (FT) @ FPC SITE	117.7
EST. SHW ELEVATION (FT)	114.50
LAND USE	[2200] TREE CROPS
RECORDED HISTORICAL STRUCTURES/RESOURCES	Low
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	Medium
PROTECTED, THREATENED, & ENDANGERED SPECIES	High
SPECIES MITIGATION COST	$43,100
MAJOR UTILITIES PRESENT	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	N
SECTION 4(F) PRESENT	N/A
SECTION 4(F) IMPACTED (Y/N)	N
CONSERVATION LANDS IMPACT AREA (ACRES)	0.00
CONSERVATION MITIGATION COST	$0.00
ESTIMATED WETLAND IMPACTS (ACRES)	0.08
WETLAND MITIGATION COST	$8,000
NUMBER OF PARCELS	1
PARTIAL (P) OR WHOLE TAKE (WT)	P
ESTIMATED CONSTRUCTION COST	$173,860
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$170,000
TOTAL ESTIMATED COSTS	$394,960
Recommended FPC Alternative	**FPC 1303A**

4.2.2 Recommended FPC Site

FPC 1303A

PROS

1. Partial take of one parcel

CONS

1. Wetland or conservation impacts
2. High impact on T/E species
3. Medium risk for hazardous material
4. Medium archaeological potential

FPC 1303A was the only alternative evaluated and, therefore, is the preferred alternative. The cost estimates can be found above and in Appendix 7.

4.3 FPC 1306

Floodplain 1306 includes ICPR model sub-basins 109A and 109B. The roadway corridor will encroach upon the 100-year floodplain within these sub-basins and impact 0.45 acre-feet of floodplain. Refer to the floodplain calculations in Appendix 4 and the floodplain map in Appendix 6.

4.3.1 Alternative 1

FPC 1306A is an offsite floodplain compensation site located in tree crops south of the SR 70 and Highlands Boulevard intersection near a freshwater marsh. The site is directly adjacent to the SR 70 right-of-way. FPC 1306A was the only alternative evaluated given the impact is primarily located south of SR 70 surrounding the impacted depression.

The site-specific data provided by Tierra, Inc. estimates the SHGWT to be at elevation 108.5 feet. The site provides 0.76 acre-feet of floodplain compensation. See Table 4-4 for a summary of the FPC site information.

Table 4-4 FPC 1306 Alternatives

Basin Condition: One FPC is required	**Floodplain 1306**
	Alternative 1 FPC 1306A
LOCATION (BEGIN STATION)	1332+39.73
LOCATION (END STATION)	1335+00.96
SIDE (LT, RT)	RT
FPC AREA (ACRES)	0.33
EST. GROUND ELEVATION (FT) @ FPC SITE	113.8
EST. SHW ELEVATION (FT)	111.00
LAND USE	[2200] TREE CROPS
RECORDED HISTORICAL STRUCTURES/RESOURCES	Low
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	Medium
PROTECTED, THREATENED, & ENDANGERED SPECIES	High
SPECIES MITIGATION COST	$25,840
MAJOR UTILITIES PRESENT	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	N
SECTION 4(F) PRESENT	N/A
SECTION 4(F) IMPACTED (Y/N)	N
CONSERVATION LANDS IMPACT AREA (ACRES)	0.00
CONSERVATION MITIGATION COST	$0.00
ESTIMATED WETLAND IMPACTS (ACRES)	0.16
WETLAND MITIGATION COST	$16,000
NUMBER OF PARCELS	1
PARTIAL (P) OR WHOLE TAKE (WT)	P
ESTIMATED CONSTRUCTION COST	$32,762
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$130,000
TOTAL ESTIMATED COSTS	$204,602
Recommended FPC Alternative	**FPC 1306A**

4.3.2 Recommended FPC Site

FPC 1306A

PROS	CONS
1.Low archaeological potential	1.Medium risk for hazardous material
	2.High impact to T/E species
	3.Wetland impacts

FPC 1306A was the only alternative evaluated and therefore is the preferred alternative. The cost estimates can be found above and in Appendix 7.

4.4 FPC 1309

Floodplain 1309 includes ICPR model sub-basin 119. The roadway corridor will encroach upon the 100-year floodplain within the sub-basin and impact 1.08 acre-feet of floodplain. Refer to the floodplain calculations in Appendix 4 and the floodplain map in Appendix 6.

4.4.1 Alternative 1

FPC 1309A is an offsite floodplain compensation site located in a rural residential lot southeast of the SR 70 and Bear Road intersection. The FPC is setback approximately 300 feet from the SR 70 right-of-way and a drainage access easement will be required for this site. Additionally, a piped connection from the FPC site to Floodplain 1309 will be required along the easement. The surrounding landscape has varying topographic relief with karst like features and rolling hills. Earthwork would entail excavating through the hillside to the specified elevations and would require a larger overall construction footprint to tie back to the existing grade.

The site-specific data provided by Tierra, Inc. did not encounter ground water down to elevation 85.7 feet. Therefore, the average of two borings taken near SR 70 were used to estimate the SHGWT at elevation 77.2 feet. The site provides 1.21 acre-feet of floodplain compensation. See Table 4-5 for a summary of the FPC site information.

4.4.2 Alternative 2

Alternative 2 is an offsite swale located along the edge of citrus groves southeast of the SR 70 and Bear Road intersection. The swale will intercept 1.27 acres of pervious area contributing to Floodplain 1309 and reroute the runoff to SMF 1309. A pipe under the shared-use path will be required to connect the downstream end of the swale to the roadside ditch. Since this is not a cup-for-cup analysis, further analysis or modeling will be required to confirm feasibility during the design phase. Additionally, a retaining wall will be required to the east of the shared use path on the back side to reduce impacts to Floodplain 1309. See Appendix 4 for a preliminary comparison of the redirected runoff volume and the encroachment volume, and Table 4-5 for a summary of the site information.

4.4.3 Alternative 3

FPC 1309C is an offsite floodplain compensation site located in a rural residential lot southeast of the SR 70 and Bear Road intersection. Additionally, the proposed FPC 1309C area is located within a parcel that currently contains a residential property. Implementation of the FPC design will require the relocation or removal of this house to accommodate the proposed earthworks. A review of the topographic survey indicates that the site exhibits varying ground elevations across the parcel. This variation in levels will be an important consideration during detailed design to ensure that flood storage volumes are accurately balanced and that the proposed works integrate smoothly with existing ground levels. There is no designated FEMA shape within this parcel.

The site-specific data provided by Tierra, Inc. did not encounter ground water down to an elevation of 85.7 feet. Therefore, the average of two borings taken near SR 70 were used to estimate the SHGWT at an elevation of 77.2 feet. The site provides 1.14 acre-feet of floodplain compensation. See Table 4-5 for a summary of the FPC site information.

Table 4-5 FPC 1309 Alternatives

Basin Condition: One FPC is required	**Floodplain 1309** Alternative 1 FPC 1309A	**Floodplain 1309** Alternative 2[(1)] FPC 1309B	**Floodplain 1309** Alternative 3 FPC 1309C
LOCATION (BEGIN STATION)	1372+92.34	1370+39.50	1372+96.59
LOCATION (END STATION)	1377+93.83	1372+96.59	1376+68.62
SIDE (LT, RT)	RT	RT	LT
FPC AREA (ACRES)	0.52	0.16	0.42
EST. GROUND ELEVATION (FT) @ FPC SITE	86.0	105.0	85.7
EST. SHW ELEVATION (FT)[(2)]	77.20	77.20	77.20
LAND USE	[1180] RURAL RESIDENTIAL	[2210] CITRUS GROVES	[1180] RURAL RESIDENTIAL
RECORDED HISTORICAL STRUCTURES/RESOURCES	Low	Low	Low
HAZARDOUS MATERIAL LEVEL I EVAL. (RISK RATING)	Low	Medium	Medium
PROTECTED, THREATENED, & ENDANGERED SPECIES	High	High	High
SPECIES MITIGATION COST	$346,860	$134,240	$85,840
MAJOR UTILITIES PRESENT	FPL	FPL	FPL
POTENTIAL MAJOR UTILITIES IMPACTED (Y/N)	N	N	N
SECTION 4(F) PRESENT	N/A	N/A	N/A
SECTION 4(F) IMPACTED (Y/N)	N	N	N
CONSERVATION LANDS IMPACT AREA (ACRES)	0.00	0.00	0.00
CONSERVATION MITIGATION COST	$0.00	$0.00	$0.00
ESTIMATED WETLAND IMPACTS (ACRES)	0	0	0
WETLAND MITIGATION COST	$0	$0	$0
NUMBER OF PARCELS	1	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	P	P	P
ESTIMATED CONSTRUCTION COST	$253,845	$660,492	$67,565
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$235,000	$165,000	$570,000
TOTAL ESTIMATED COSTS	$835,705	$959,732	$723,405
Recommended FPC Alternative	**FPC 1309C**		

[(1)] Alternative B is a swale to bypass contributing offsite area from Floodplain 1309 to SMF 1309 and is not a "cup for cup" FPC.

[(2)] Based on average of borings (SH13-430R & SH13-435R) near roadway. Site specific borings encountered no ground water.

4.4.4 Recommended FPC Site

FPC 1309A

PROS	CONS
1.Traditional “cup-for-cup” approach	1.Higher construction cost than FPC 1309C
2.Low risk for hazardous material	2.Highest impacts on T/E species

Floodplain 1309 Alternative 2 (Swale)

PROS	CONS
1.Lowest right-of-way cost	1.Require a retaining wall
	2.Highest construction cost
	3.Medium risk for hazardous material

FPC 1309C

1.Lowest construction cost	1.Medium risk for hazardous material
2.Lowest impacts on T/E species	2.Highest ROW cost

Based on an evaluation of right-of-way impacts, construction cost, wetland impacts, conservation land impacts, and species mitigation, Alternative 3 FPC 1309C is the preferred alternative.

This alternative was selected due to the lowest construction cost, the lowest mitigation cost, and the lowest species mitigation cost. The cost estimates can be found above and in Appendix 7.

APPENDIX 1

FIGURES



Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
(M.P. 14.490-17.245)
Highlands County, Florida
FPID: 414506-4-52-01

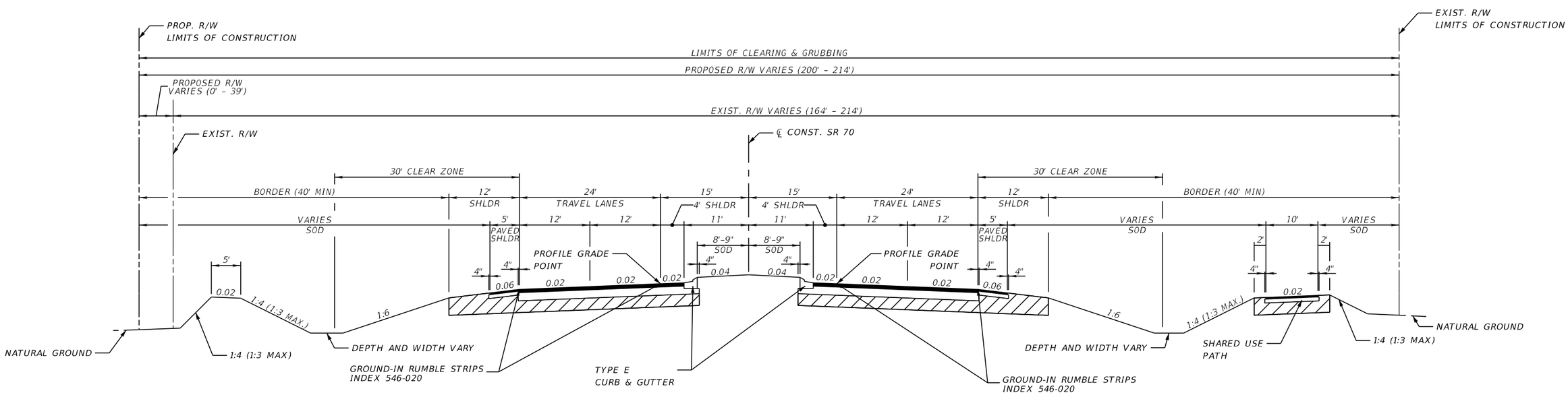
Legend

Project Limit

0 1,000 2,000 US Feet

Figure 1

Project Location Map



TYPICAL SECTION NO. 1

SR 70

℄ CONST. SR 70

STA. 1271+50.32 TO STA. 1298+27.57

TRAVEL LANES, TURN LANES, & INSIDE PAVED SHOULDERS (3-FT BASE CLEARANCE)

OPTIONAL BASE GROUP 9
TYPE SP (TRAFFIC E) (PG 76-22) (3.50")
FC-5 (PG 76-22) (0.75")

TRAVEL LANES, TURN LANES, & INSIDE PAVED SHOULDERS (2-FT BASE CLEARANCE)

OPTIONAL BASE GROUP 12
TYPE SP (TRAFFIC E) (PG 76-22) (3.50")
FC-5 (PG 76-22) (0.75")

SHARED USE PATH

OPTIONAL BASE GROUP 1
TYPE SP (TRAFFIC B) (1.50")

OUTSIDE PAVED SHOULDERS (3-FT BASE CLEARANCE)

OPTIONAL BASE GROUP 2
TYPE SP (TRAFFIC E) (PG 76-22) (1.50")
FC-5 (PG 76-22) (0.75")

OUTSIDE PAVED SHOULDERS (2-FT BASE CLEARANCE)

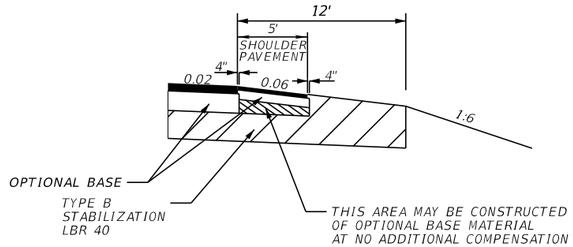
OPTIONAL BASE GROUP 4
TYPE SP (TRAFFIC E) (PG 76-22) (1.50")
FC-5 (PG 76-22) (0.75")

SIDE STREET TURNOUTS

OPTIONAL BASE GROUP 3
TYPE SP (TRAFFIC B) (1.50")

U-TURN BULB OUT CONSTRUCTION

OPTIONAL BASE GROUP 9
TYPE SP (TRAFFIC E) (PG 76-22) (3.50")



SHOULDER PAVEMENT DETAIL

TRAFFIC DATA

CURRENT YEAR	= 2022	AADT = 5600
ESTIMATED OPENING YEAR	= 2030	AADT = 7400
ESTIMATED DESIGN YEAR	= 2050	AADT = 12500

K = 9.5% D = 59.9% T = 32.0%
DESIGN HOUR T = 16.0%
DESIGN SPEED = 55 MPH
POSTED SPEED = 55 MPH
TARGET SPEED = 55 MPH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BRETT M. HENSLEY, P.E.
P.E. LICENSE NUMBER 94514
HNTB CORPORATION
4651 SALISBURY ROAD
SUITE 320
JACKSONVILLE, FL 32256

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

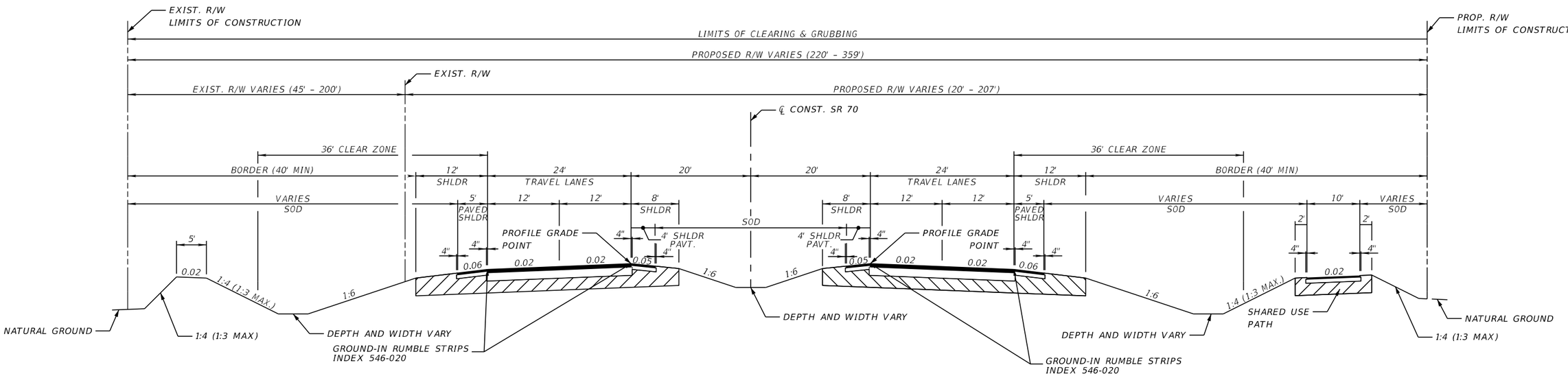
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

TYPICAL SECTION

SHEET NO.

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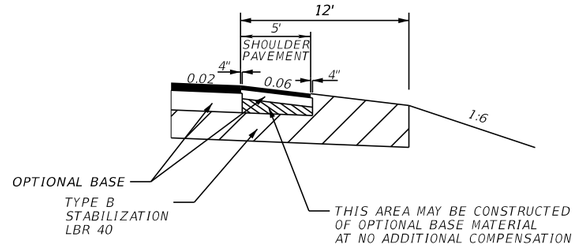
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TYPICAL SECTION NO. 2

SR 70

℄ CONST. SR 70
STA. 1298+27.57 TO STA. 1303+63.00
STA. 1371+50.00 TO STA. 1391+47.98



SHOULDER PAVEMENT DETAIL

TRAFFIC DATA

CURRENT YEAR	= 2022	AADT = 5600
ESTIMATED OPENING YEAR	= 2030	AADT = 7600
ESTIMATED DESIGN YEAR	= 2050	AADT = 12500

K = 9.5% D = 59.9% T = 32.0%
DESIGN HOUR T = 16.0%
DESIGN SPEED = 65 MPH
POSTED SPEED = 65 MPH
TARGET SPEED = 65 MPH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BRETT M. HENSLEY, P.E.
P.E. LICENSE NUMBER 94514
HNTB CORPORATION
4651 SALISBURY ROAD
SUITE 320
JACKSONVILLE, FL 32256

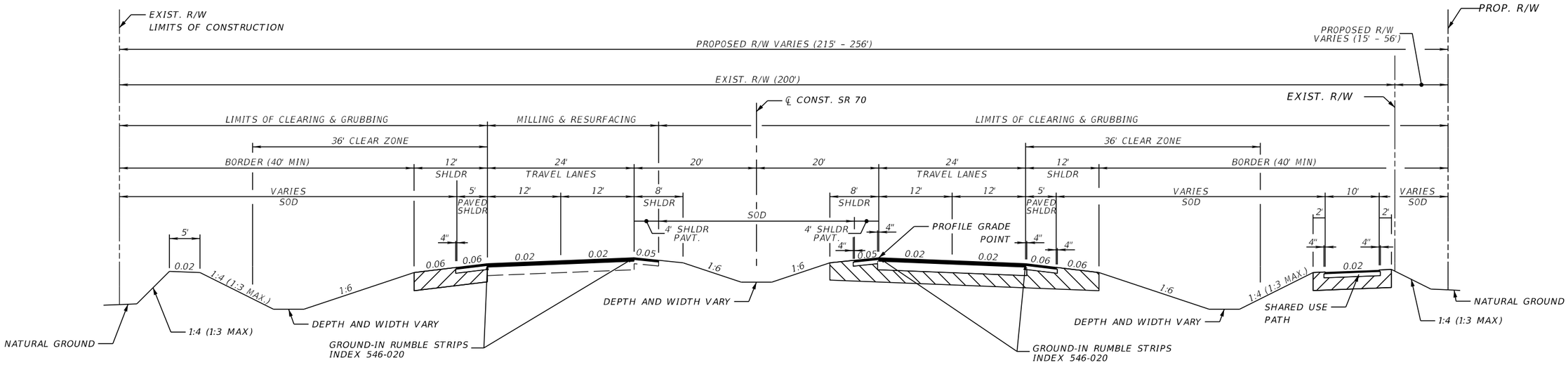
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

TYPICAL SECTION

SHEET NO.

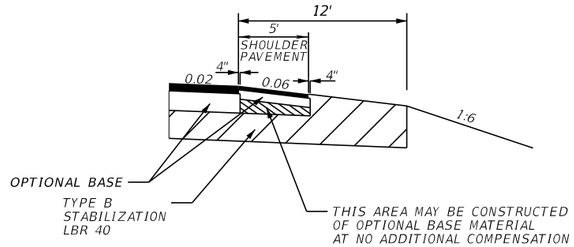
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RUL 61G15-23.004, F.A.C.



TYPICAL SECTION NO. 3

SR 70

℄ CONST. SR 70
STA. 1303+63.00 TO STA. 1371+50.00



SHOULDER PAVEMENT DETAIL

TRAVEL LANE MILLING & RESURFACING

MILL FOR DEPTH (3.75")
TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

PAVED SHOULDER MILLING & RESURFACING

MILL FOR DEPTH (3.75")
TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

NOTE: SEE TYPICAL SECTION DETAIL SHEET (4 – 6) FOR CROSS SLOPE CORRECTION DETAILS.

TRAFFIC DATA

CURRENT YEAR	= 2022	AADT = 5600
ESTIMATED OPENING YEAR	= 2030	AADT = 7600
ESTIMATED DESIGN YEAR	= 2050	AADT = 12500

K = 9.5% D = 59.9% T = 32.0%
DESIGN HOUR T = 16.0%
DESIGN SPEED = 65 MPH
POSTED SPEED = 65 MPH
TARGET SPEED = 65 MPH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BRETT M. HENSLEY, P.E.
P.E. LICENSE NUMBER 94514
HNTB CORPORATION
4651 SALISBURY ROAD
SUITE 320
JACKSONVILLE, FL 32256

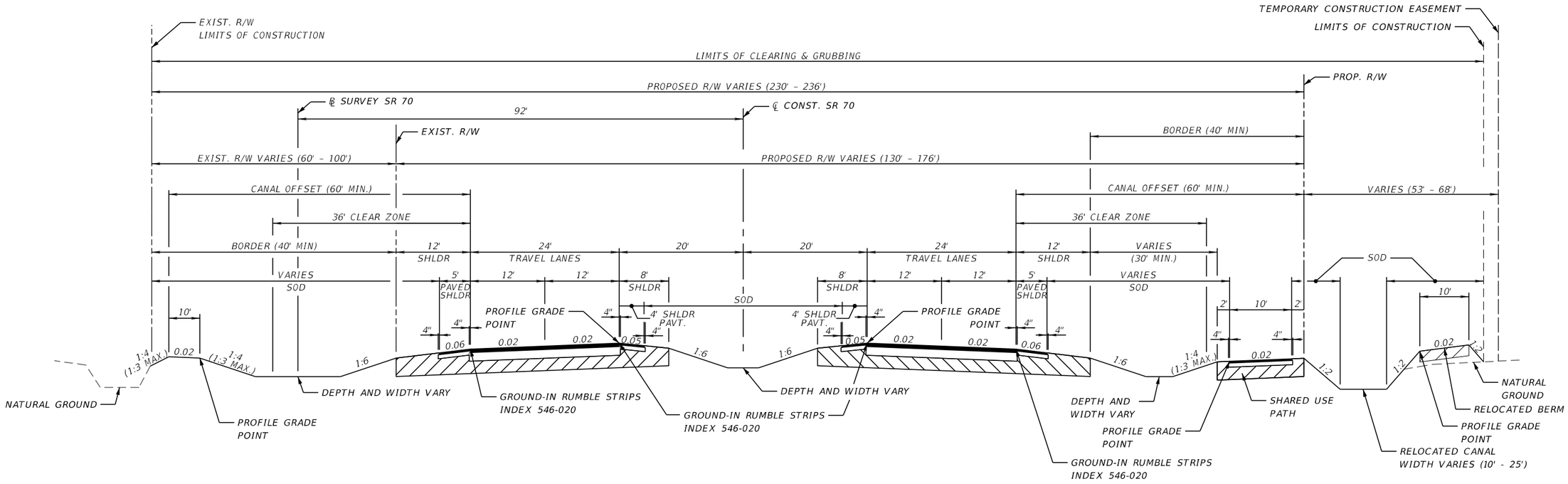
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

TYPICAL SECTION

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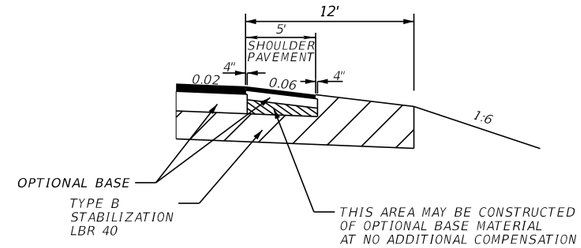
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TYPICAL SECTION NO. 4

SR 70

℄ CONST. SR 70
STA. 1391+47.98 TO STA. 1414+00.00



SHOULDER PAVEMENT DETAIL

TRAFFIC DATA

CURRENT YEAR	= 2022	AADT = 5600
ESTIMATED OPENING YEAR	= 2030	AADT = 7600
ESTIMATED DESIGN YEAR	= 2050	AADT = 12500

K = 9.5% D = 59.9% T = 32.0%
DESIGN HOUR T = 16.0%
DESIGN SPEED = 65 MPH
POSTED SPEED = 65 MPH
TARGET SPEED = 65 MPH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BRETT M. HENSLEY, P.E.
P.E. LICENSE NUMBER 94514
HNTB CORPORATION
4651 SALISBURY ROAD
SUITE 320
JACKSONVILLE, FL 32256

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

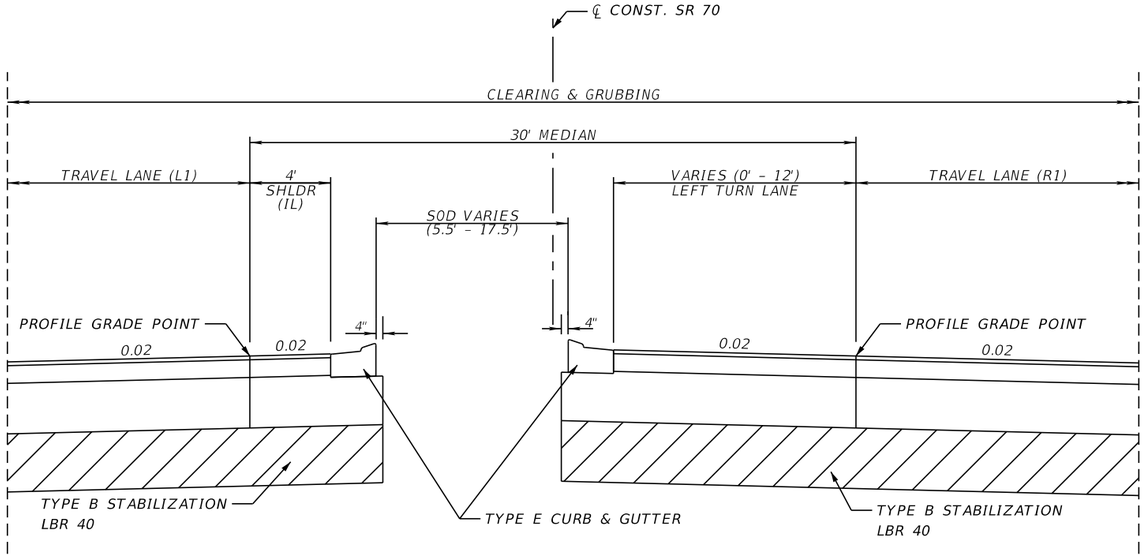
TYPICAL SECTION

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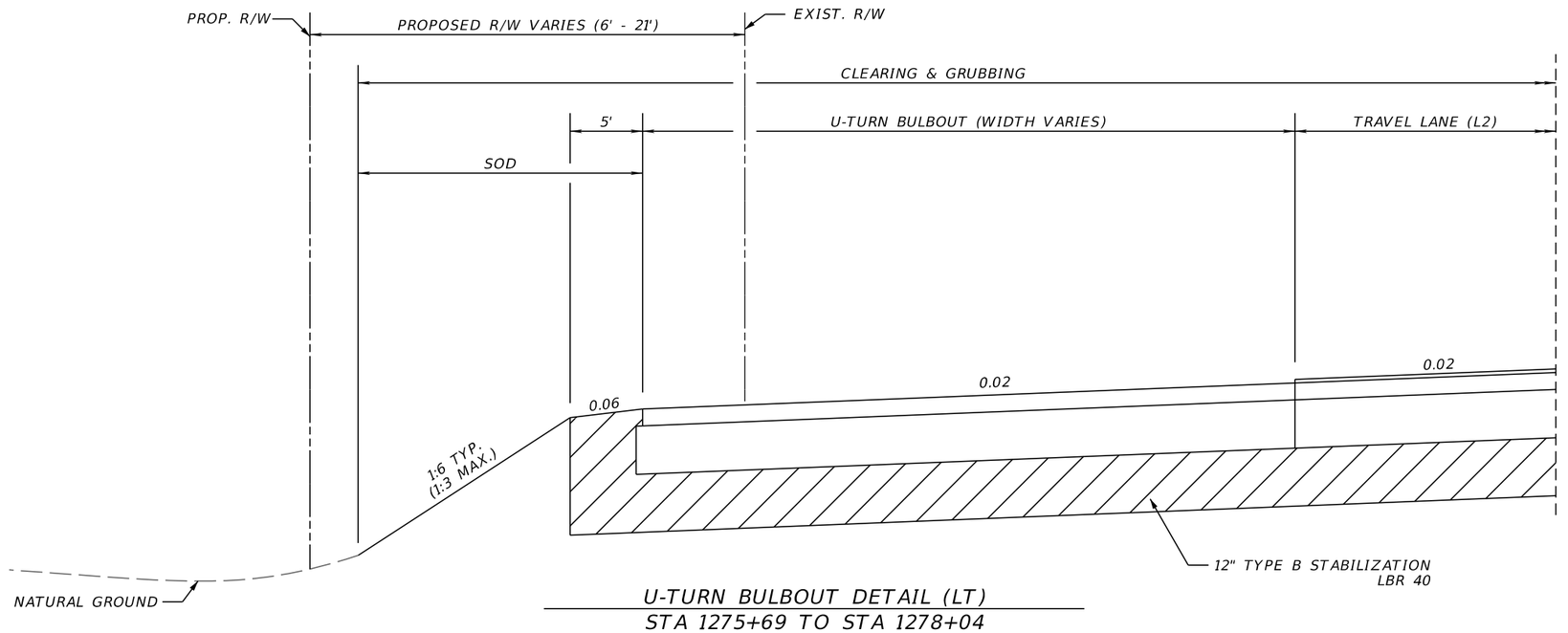
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NOTE: MIRROR DETAIL FOR WB LEFT TURN LANES.



LEFT TURN LANE DETAIL

STA 1271+50 TO STA 1277+01
STA 1281+83 TO STA 1285+04
STA 1288+93 TO STA 1292+90
STA 1294+36 TO STA 1297+79



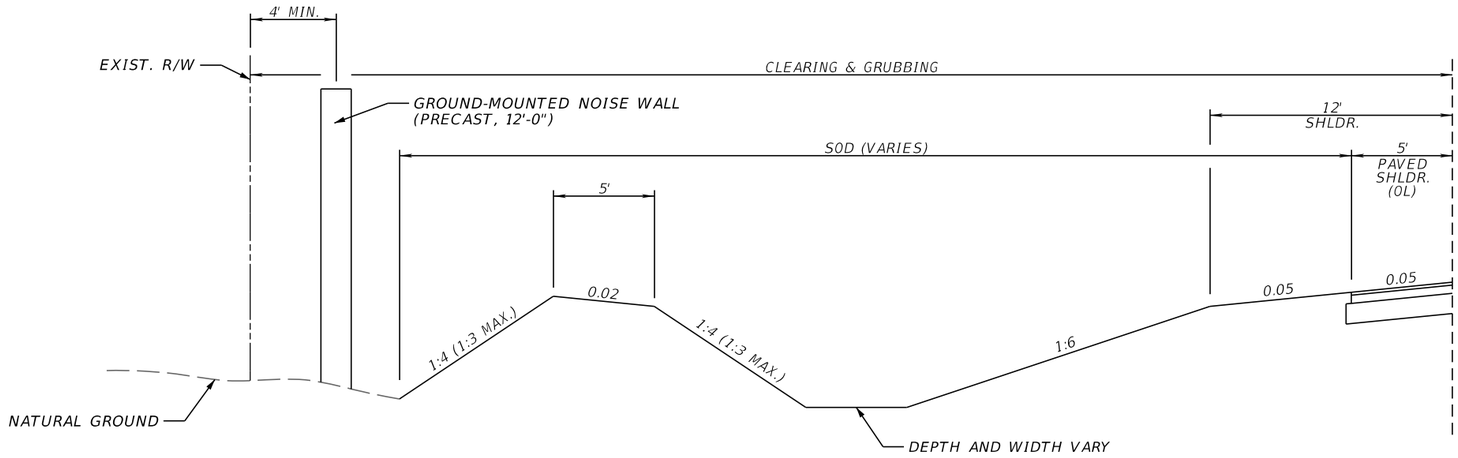
U-TURN BULBOUT DETAIL (LT)

STA 1275+69 TO STA 1278+04

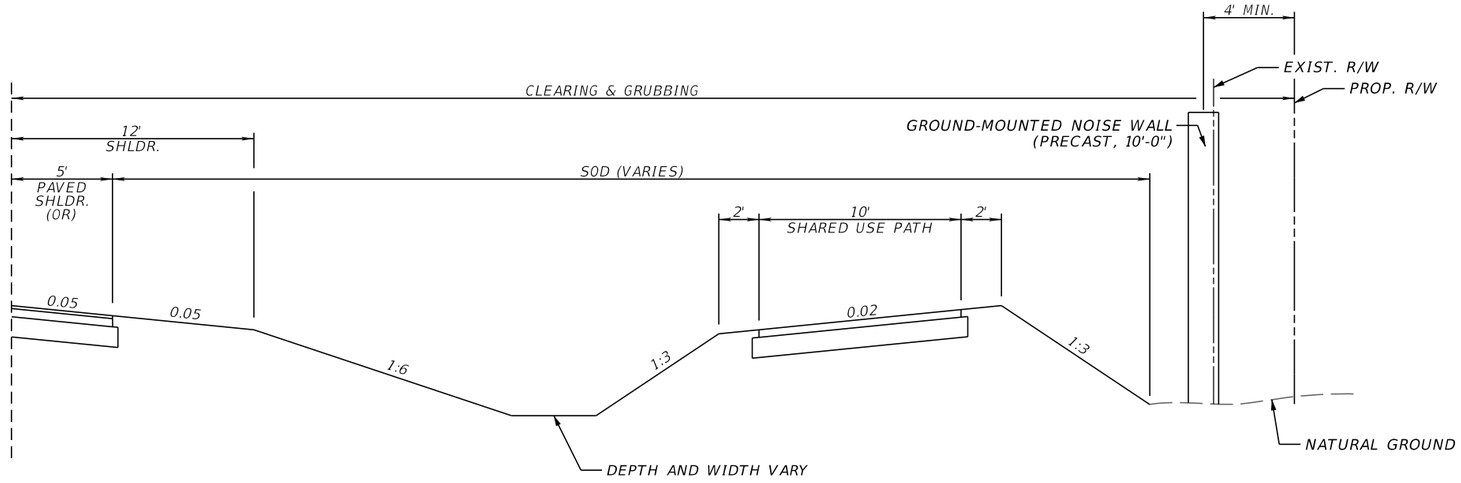
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DATE	DESCRIPTION	DATE	DESCRIPTION	BRETT M. HENSLEY, P.E. P.E. LICENSE NUMBER 94514 HNTB CORPORATION 4651 SALISBURY ROAD SUITE 320 JACKSONVILLE, FL 32256	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					70	HIGHLANDS	414506-4-52-01		

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NOISE WALL DETAIL (LT)
STA 1289+20 TO STA 1293+00



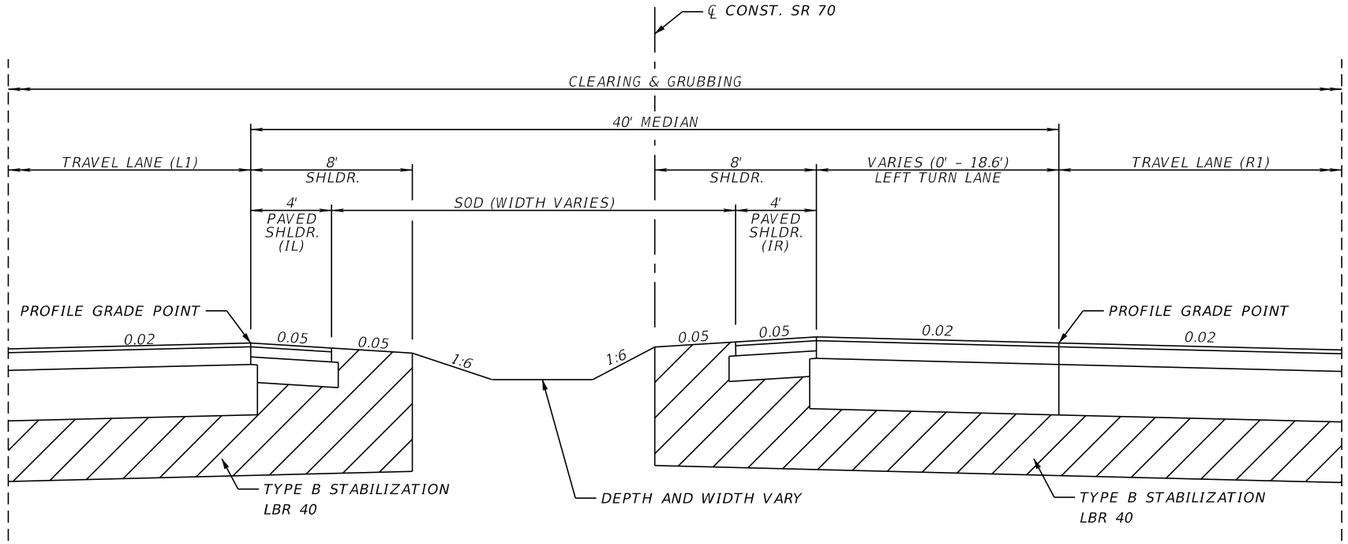
NOISE WALL DETAIL (RT)
STA 1282+55 TO STA 1293+23

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL SECTION DETAIL (2)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	BRETT M. HENSLEY, P.E. P.E. LICENSE NUMBER 94514 HNTB CORPORATION 4651 SALISBURY ROAD SUITE 320 JACKSONVILLE, FL 32256	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					70	HIGHLANDS	414506-4-52-01		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RUL 61G15-23.004, F.A.C.

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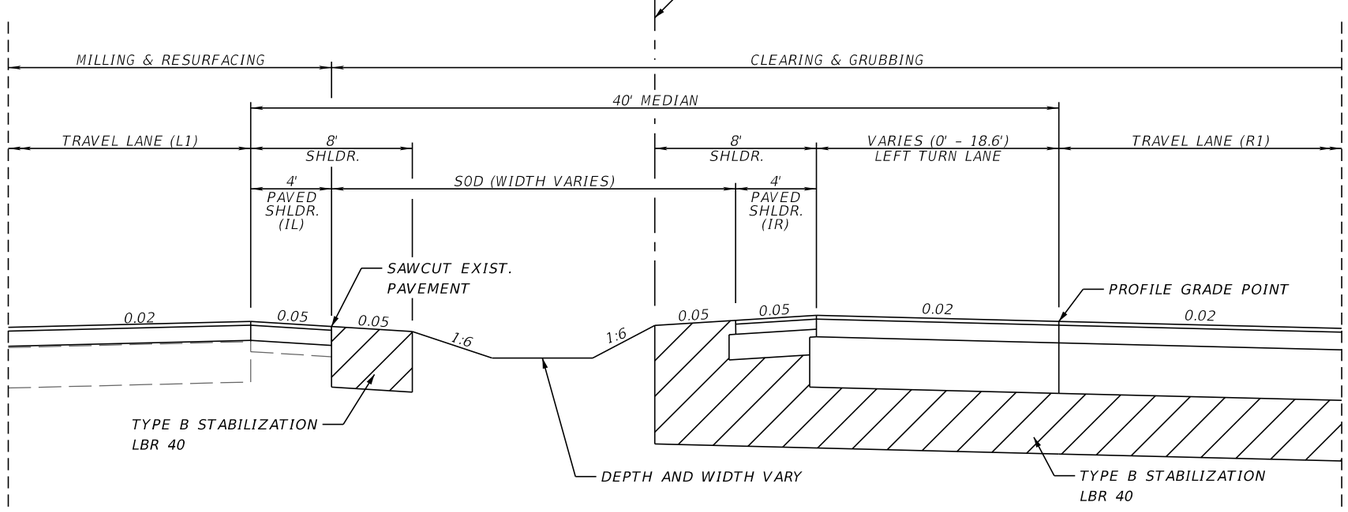
NOTE: MIRROR DETAIL FOR WB LEFT TURN LANES.



LEFT TURN LANE DETAIL

STA 1302+20 TO STA 1303+63
STA 1386+65 TO STA 1391+40
STA 1394+31 TO STA 1398+78

NOTE: SEE ROADWAY PLANS FOR EXACT LIMITS OF SAWCUT AND MILLING.



LEFT TURN LANE DETAIL

STA 1303+63 TO STA 1306+21
STA 1315+01 TO STA 1319+32
STA 1327+72 TO STA 1332+53
STA 1341+28 TO STA 1346+01
STA 1361+24 TO STA 1365+97

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL SECTION DETAIL (3)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	BRETT M. HENSLEY, P.E. P.E. LICENSE NUMBER 94514 HNTB CORPORATION 4651 SALISBURY ROAD SUITE 320 JACKSONVILLE, FL 32256	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					70	HIGHLANDS	414506-4-52-01		

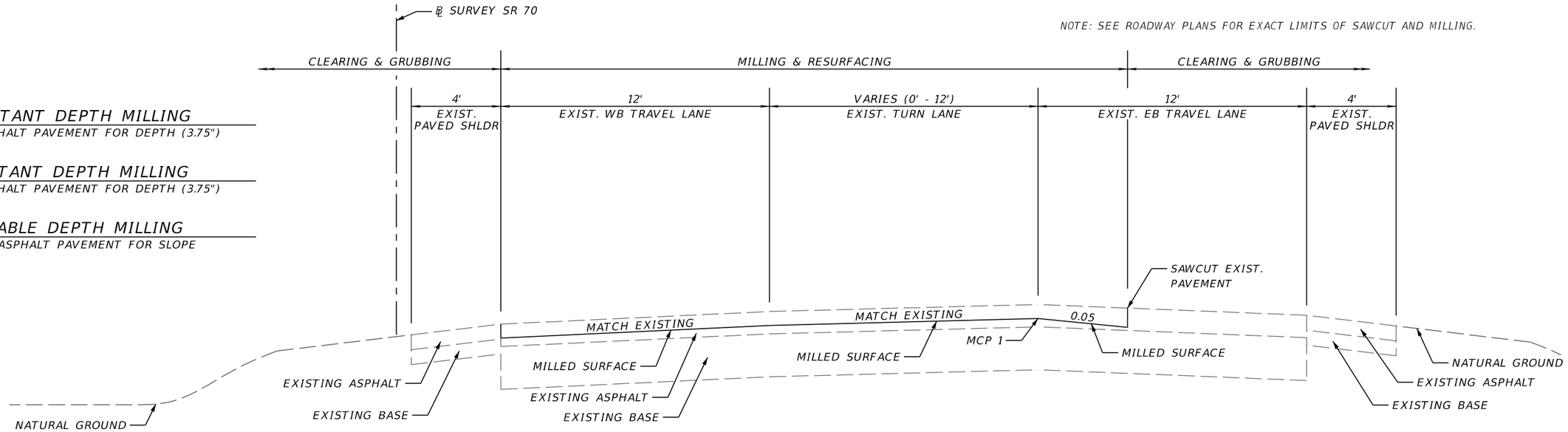
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RUL 61G15-23.004, F.A.C.

NOTE: SEE ROADWAY PLANS FOR EXACT LIMITS OF SAWCUT AND MILLING.

L2 CONSTANT DEPTH MILLING
MILL EXIST. ASPHALT PAVEMENT FOR DEPTH (3.75")

L1 CONSTANT DEPTH MILLING
MILL EXIST. ASPHALT PAVEMENT FOR DEPTH (3.75")

IL VARIABLE DEPTH MILLING
MILL EXIST. ASPHALT PAVEMENT FOR SLOPE



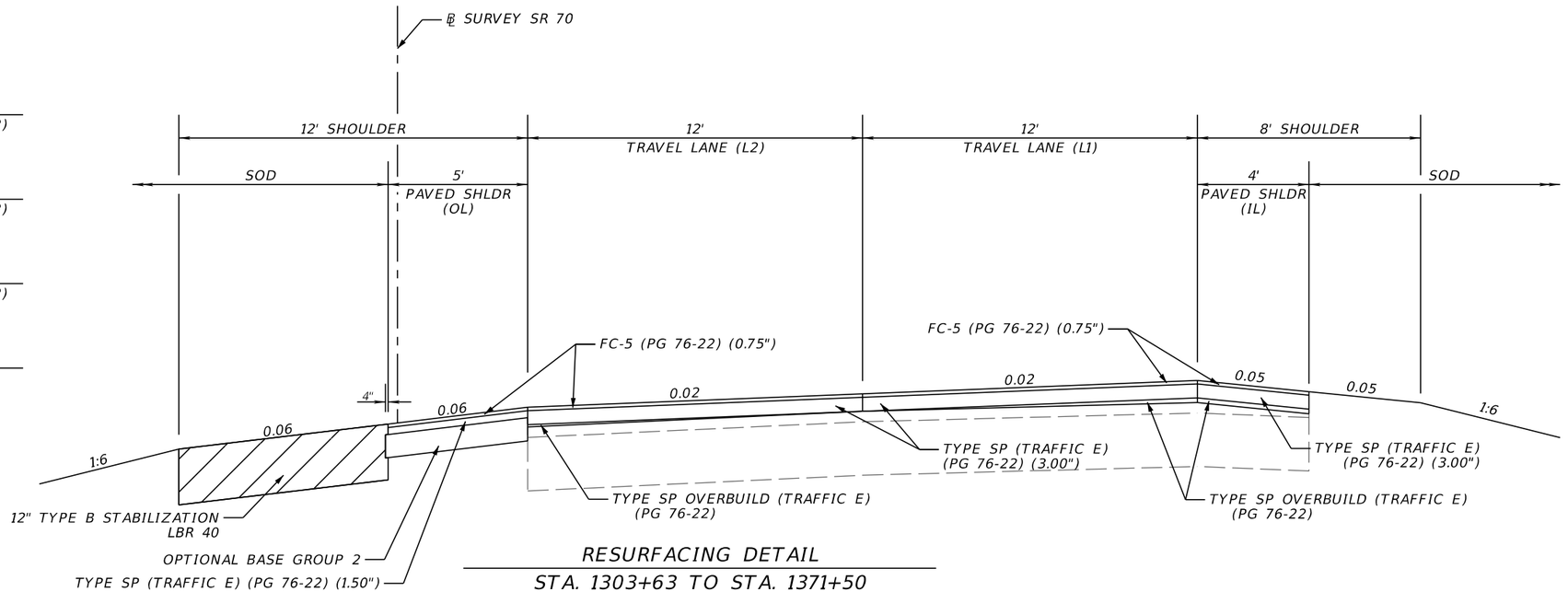
MILLING DETAIL
STA. 1303+63 TO STA. 1371+50

IL RESURFACING
TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

L2 RESURFACING
TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

L1 RESURFACING
TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

OL RECONSTRUCTION
OPTIONAL BASE GROUP 2
TYPE SP (TRAFFIC E) (PG 76-22) (1.50")
FC-5 (PG 76-22) (0.75")



RESURFACING DETAIL
STA. 1303+63 TO STA. 1371+50

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL SECTION DETAIL (4)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	BRETT M. HENSLEY, P.E. P.E. LICENSE NUMBER 94514 HNTB CORPORATION 4651 SALISBURY ROAD SUITE 320 JACKSONVILLE, FL 32256	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					70	HIGHLANDS	414506-4-52-01		

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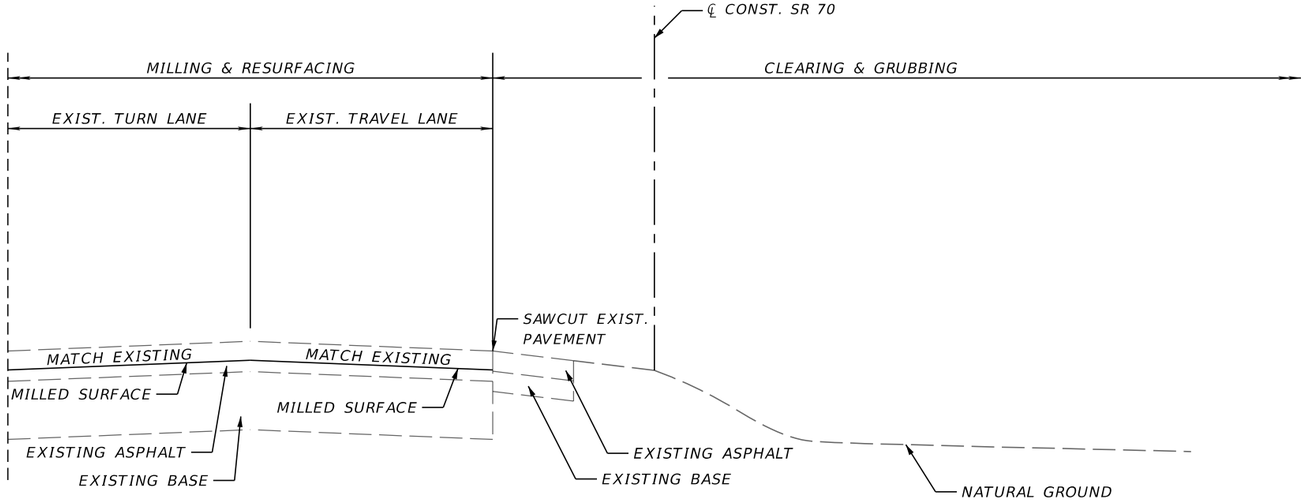
NOTE: SEE ROADWAY PLANS FOR EXACT LIMITS OF SAWCUT AND MILLING.

EXIST. TURN LANE CONSTANT DEPTH MILLING

MILL EXIST. ASPHALT PAVEMENT FOR DEPTH (3.75")

EXIST. TRAVEL LANE CONSTANT DEPTH MILLING

MILL EXIST. ASPHALT PAVEMENT FOR DEPTH (3.75")



MILLING DETAIL (LEFT TURN LANE)

STA. 1321+13 TO STA. 1325+20

L1 RESURFACING

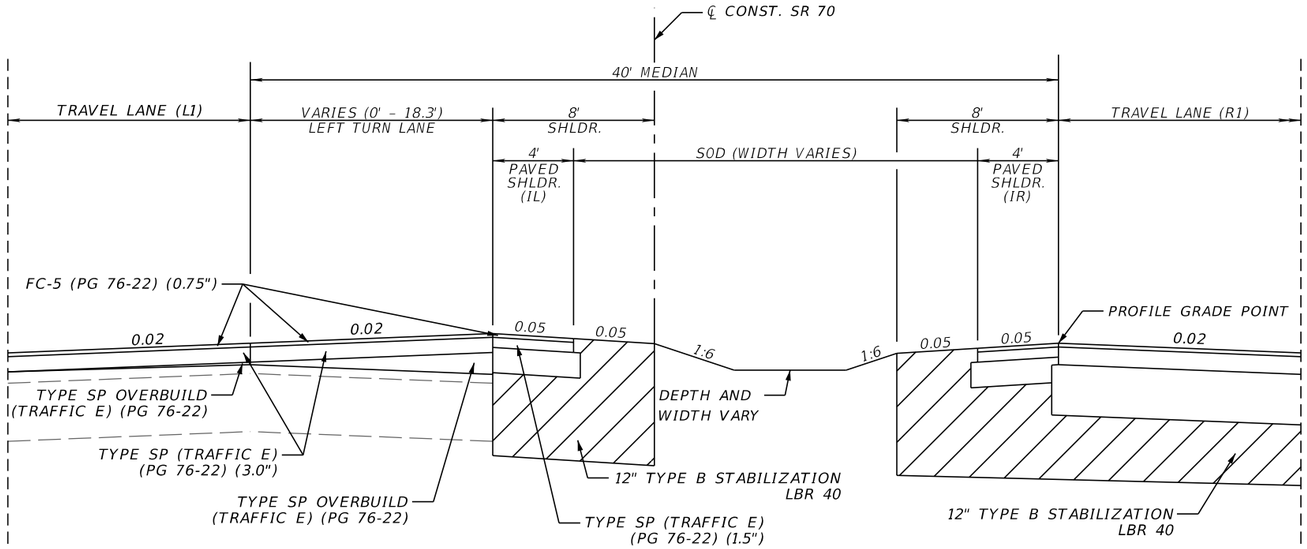
TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

LEFT TURN LANE RESURFACING

TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

OL CONSTRUCTION

OPTIONAL BASE GROUP 2
TYPE SP (TRAFFIC E) (PG 76-22) (1.50")
FC-5 (PG 76-22) (0.75")



RESURFACING DETAIL (LEFT TURN LANE)

STA. 1321+13 TO STA. 1325+20

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BRETT M. HENSLEY, P.E.
P.E. LICENSE NUMBER 94514
HNTB CORPORATION
4651 SALISBURY ROAD
SUITE 320
JACKSONVILLE, FL 32256

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

TYPICAL SECTION DETAIL (5)

SHEET NO.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RUL 61G15-23.004, F.A.C.

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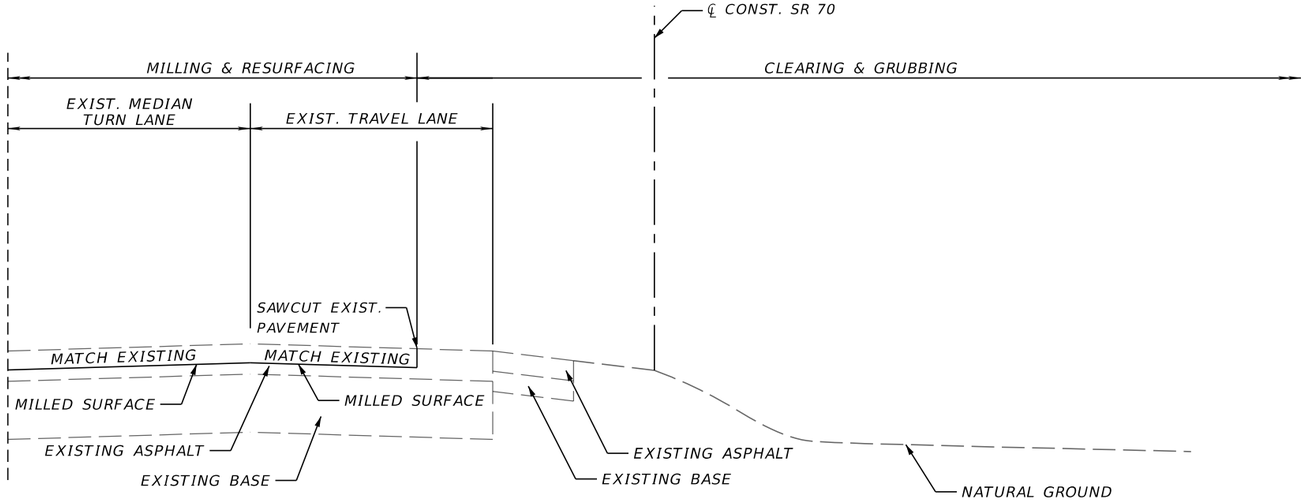
NOTE: SEE ROADWAY PLANS FOR EXACT LIMITS OF SAWCUT AND MILLING.

EXIST. TURN LANE CONSTANT DEPTH MILLING

MILL EXIST. ASPHALT PAVEMENT FOR DEPTH (3.75")

EXIST. TRAVEL LANE CONSTANT DEPTH MILLING

MILL EXIST. ASPHALT PAVEMENT FOR DEPTH (3.75")



MILLING DETAIL (LEFT TURN LANE)
STA 1347+17 TO STA 1351+64

L1 RESURFACING

TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

LEFT TURN LANE RESURFACING

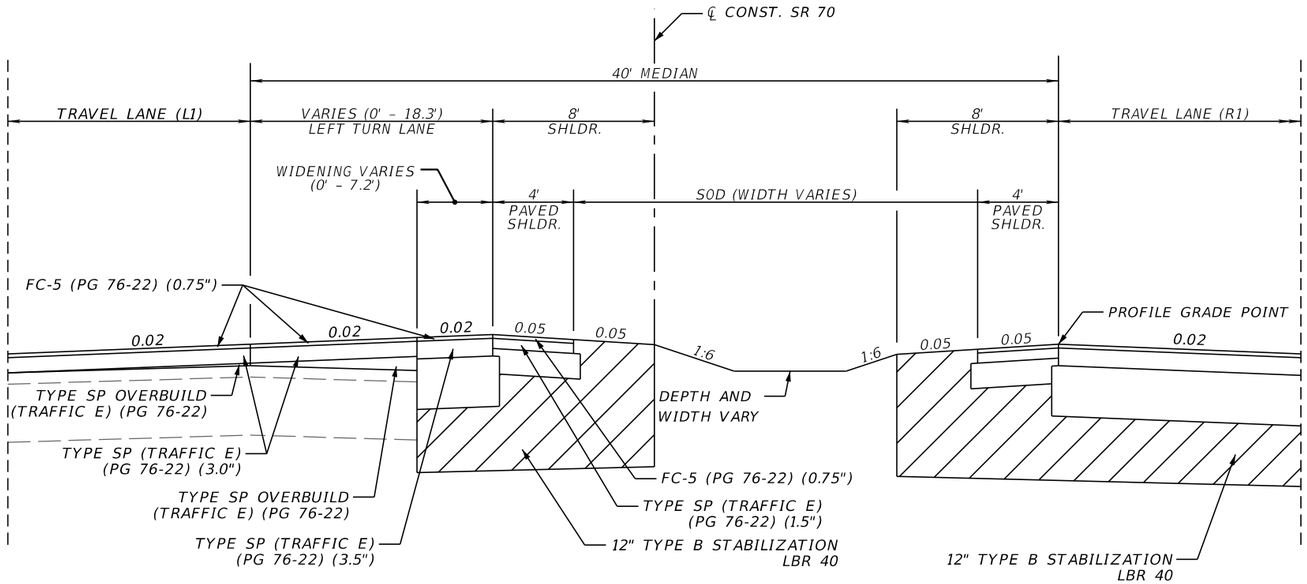
TYPE SP OVERBUILD (TRAFFIC E) (PG 76-22)
TYPE SP (TRAFFIC E) (PG 76-22) (3.00")
FC-5 (PG 76-22) (0.75")

LEFT TURN LANE WIDENING

OPTIONAL BASE GROUP 9
TYPE SP (TRAFFIC E) (PG 76-22) (3.50")
FC-5 (PG 76-22) (0.75")

OL CONSTRUCTION

OPTIONAL BASE GROUP 2
TYPE SP (TRAFFIC E) (PG 76-22) (1.50")
FC-5 (PG 76-22) (0.75")



RESURFACING DETAIL (LEFT TURN LANE)
STA 1347+17 TO STA 1351+64

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BRETT M. HENSLEY, P.E.
P.E. LICENSE NUMBER 94514
HNTB CORPORATION
4651 SALISBURY ROAD
SUITE 320
JACKSONVILLE, FL 32256

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

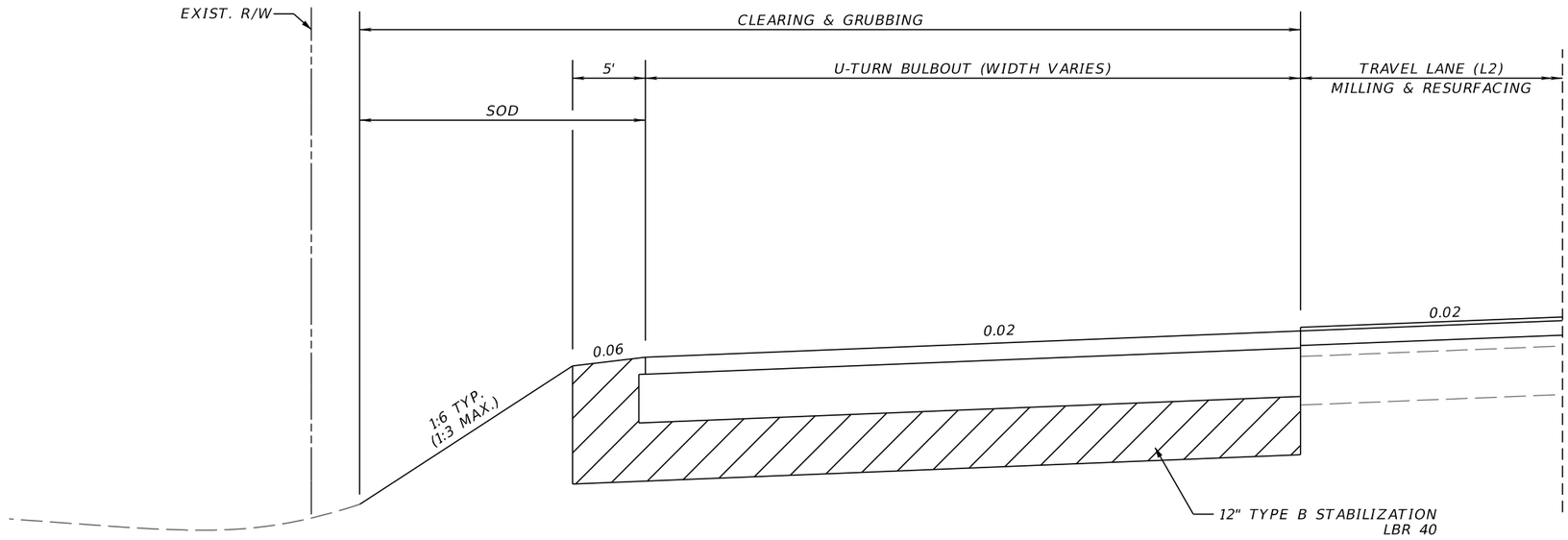
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

TYPICAL SECTION DETAIL (6)

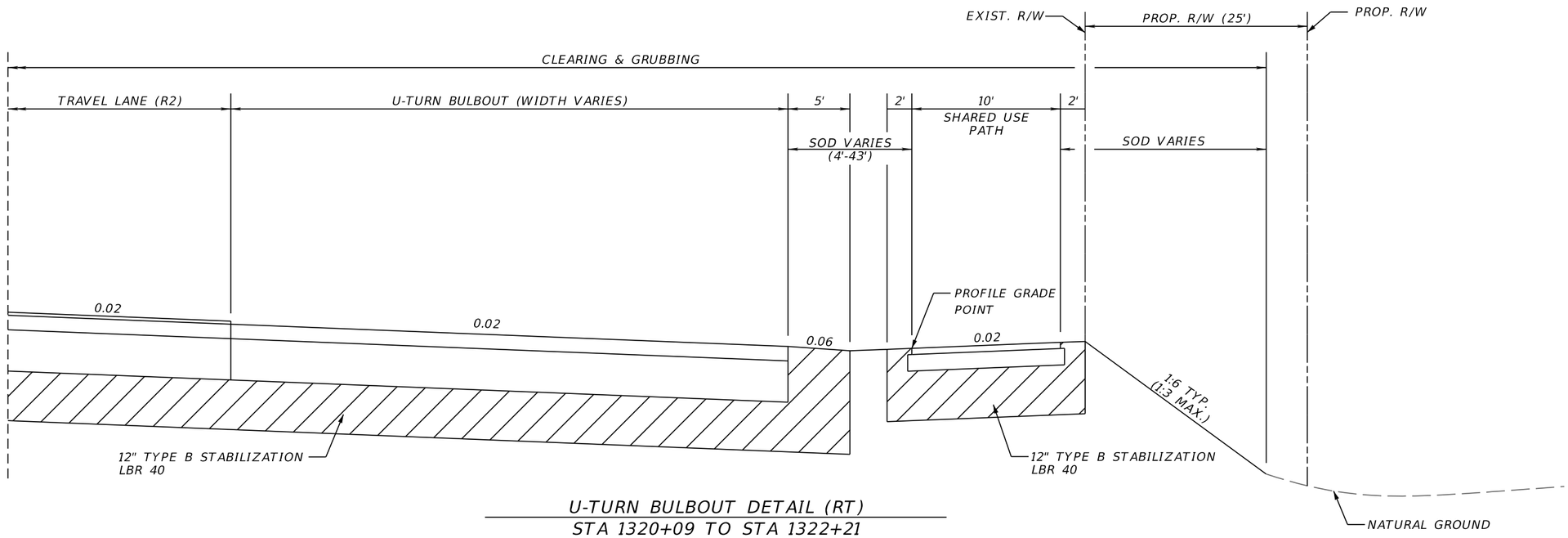
SHEET NO.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RUL 61G15-23.004, F.A.C.

c:\caddlib\pw\bhensley\sediv\d0241360\TYPSRD02.dgn : TYP DETAIL 6 [SHEET]
aserrano 2/7/2025 4:21:41 PM



U-TURN BULBOUT DETAIL (LT)
STA 1305+19 TO STA 1307+30

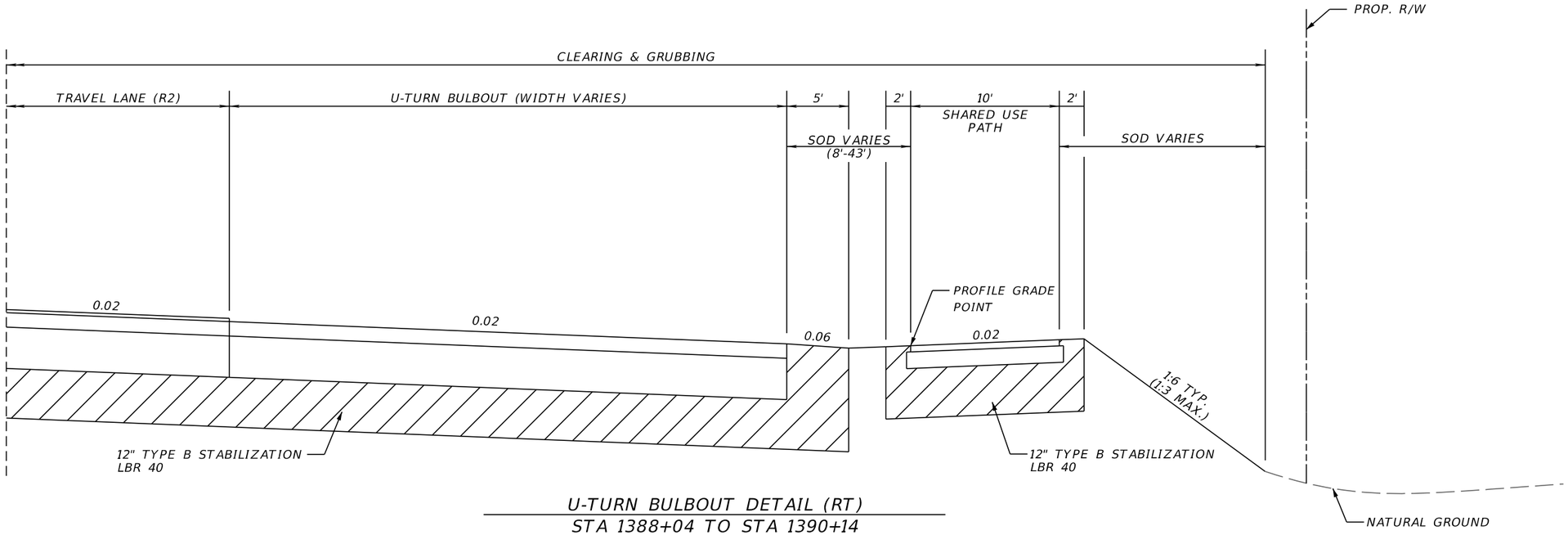


U-TURN BULBOUT DETAIL (RT)
STA 1320+09 TO STA 1322+21

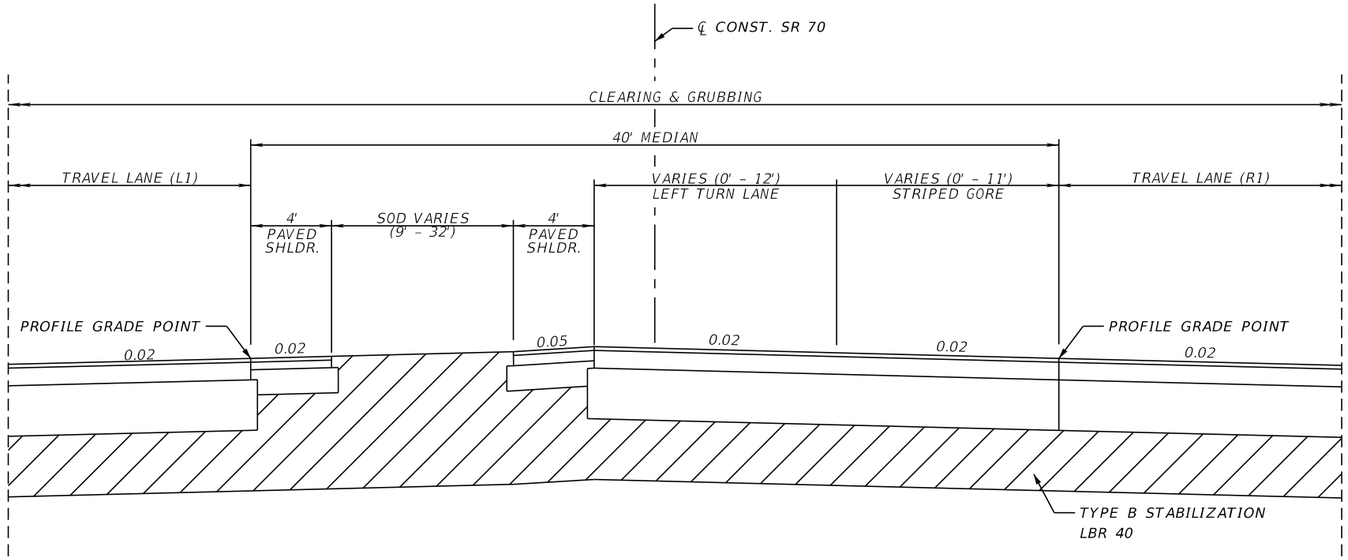
REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL SECTION DETAIL (7)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	BRETT M. HENSLEY, P.E. P.E. LICENSE NUMBER 94514 HNTB CORPORATION 4651 SALISBURY ROAD SUITE 320 JACKSONVILLE, FL 32256	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					70	HIGHLANDS	414506-4-52-01		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RUL 61G15-23.004, F.A.C.

c:\caddlib\pw\bhensley\sediv\d0241360\TYPSRD02.dgn : TYP DETAIL 2 [SHEET]
aserrano 2/7/2025 4:21:41 PM



U-TURN BULBOUT DETAIL (RT)
STA 1388+04 TO STA 1390+14

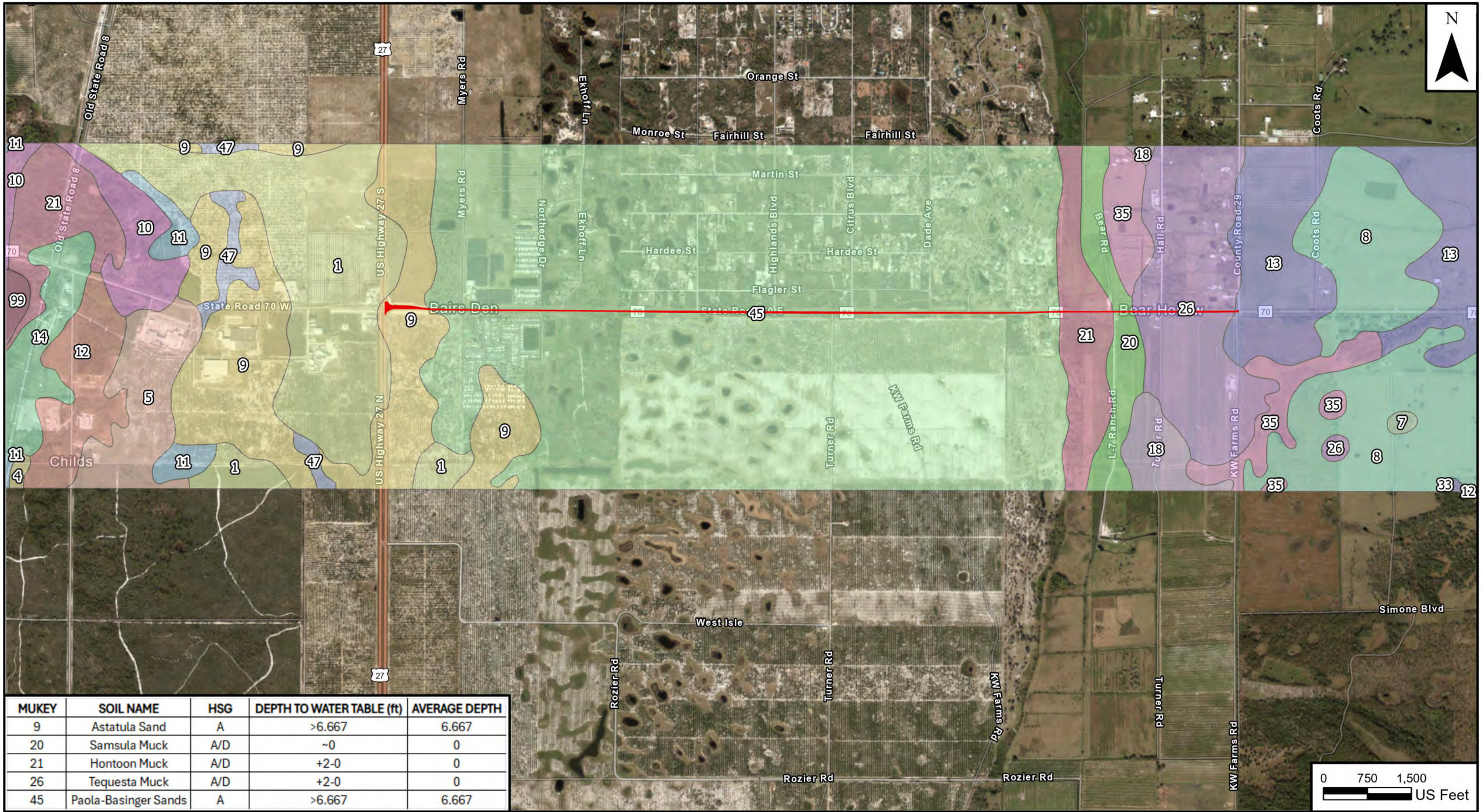


LEFT TURN LANE DETAIL (RT)
STA 1407+15 TO STA 1411+62

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL SECTION DETAIL (8)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	BRETT M. HENSLEY, P.E. P.E. LICENSE NUMBER 94514 HNTB CORPORATION 4651 SALISBURY ROAD SUITE 320 JACKSONVILLE, FL 32256	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					70	HIGHLANDS	414506-4-52-01		

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RUL 61G15-23.004, F.A.C.

c:\caddlib\pw\bhensley\sediv\d0241360\TYPSRD02.dgn : TYP DETAIL 8 [SHEET]
aserrano 2/7/2025 4:21:42 PM



MUKEY	SOIL NAME	HSG	DEPTH TO WATER TABLE (ft)	AVERAGE DEPTH
9	Astatula Sand	A	>6.667	6.667
20	Samsula Muck	A/D	~0	0
21	Hontoon Muck	A/D	+2-0	0
26	Tequesta Muck	A/D	+2-0	0
45	Paola-Basinger Sands	A	>6.667	6.667

Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
(M.P. 14.490-17.245)
Highlands County, Florida
FPID: 414506-4-52-01

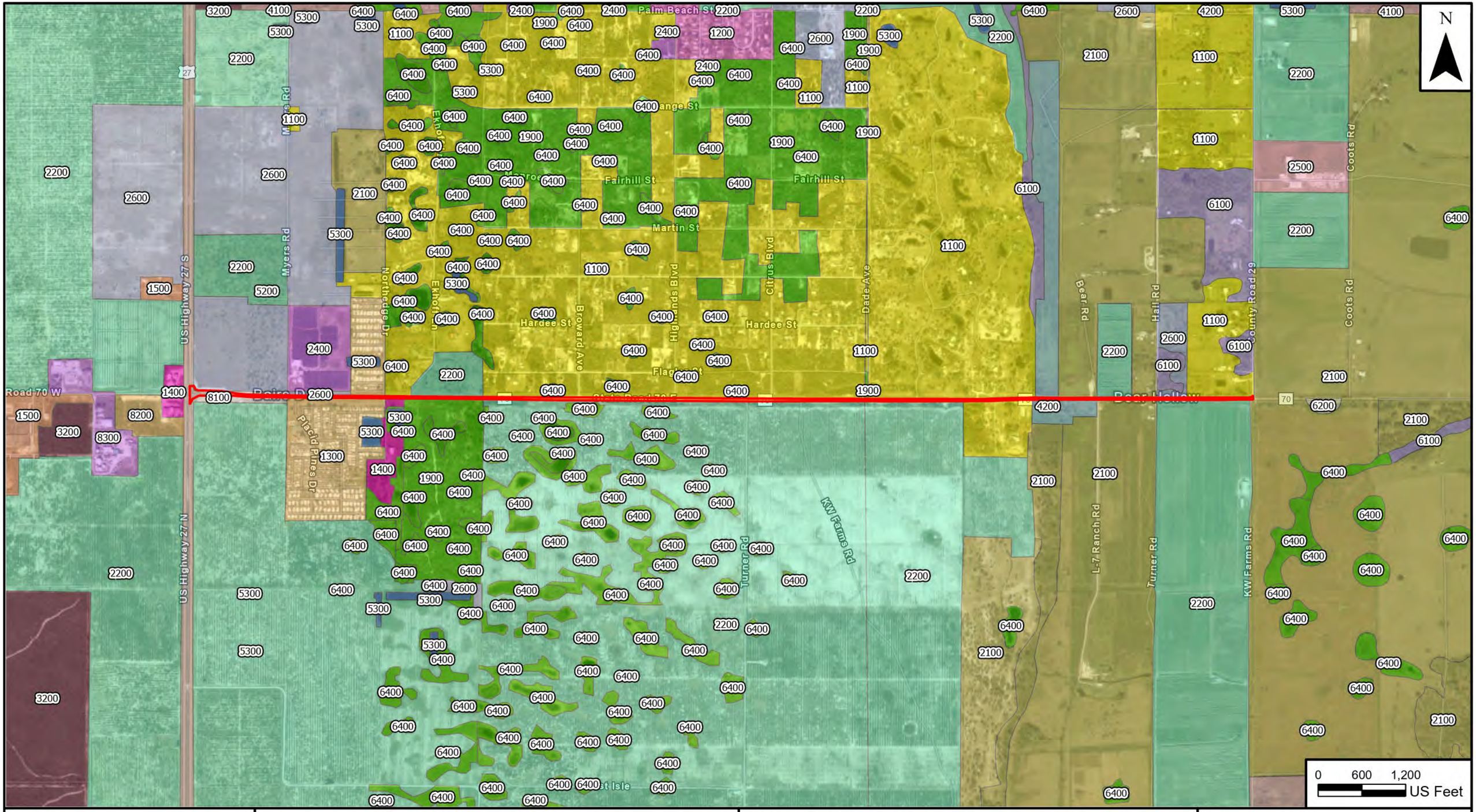
Legend

Project Limit
- Project Limit

Soil MUKEY & HSG
- 1,A
- 10,A/D
- 11,A
- 12,A/D
- 13,A/D
- 14,A
- 18,C/D
- 2,A
- 20,A/D
- 21,A/D
- 24,C/D
- 25,C/D
- 26,A/D
- 28,A
- 33,A/D
- 35,A/D
- 38,A/D
- 4,A
- 45,A
- 47,A
- 5,A
- 6,A
- 7,A/D
- 8,B/D
- 9,A
- 99,WATER

Figure 3

Soils Map



Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
(M.P. 14.490-17.245)
Highlands County, Florida
FPID: 414506-4-52-01

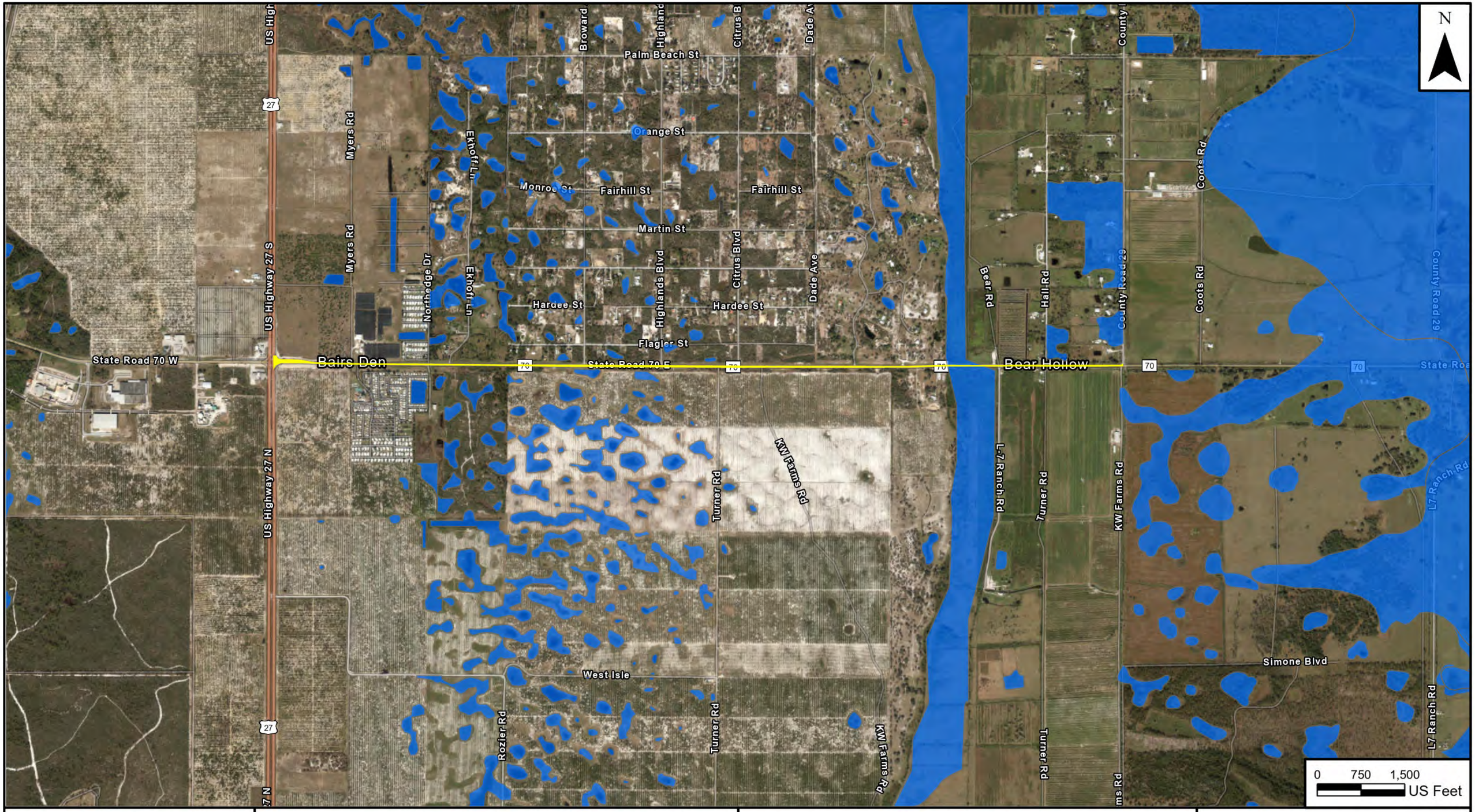
Legend

Project Limit
- Project Limit

Land Use
- 1100,Residential Low Density
- 1200,Residential Medium Density
- 1300,Residential High Density
- 1400,Commercial and Services
- 1500,Industrial
- 1900,Open Land
- 2100,Cropland and Pastureland
- 2200,Tree Crops
- 2400,Nurseries and Vineyards
- 2500,Specialty Farms
- 2600,Other Open Lands <Rural>
- 3200,Shrub and Brushland
- 4100,Upland Coniferous Forests
- 4200,Upland Hardwood Forests
- 4400,Tree Plantations
- 5200,Lakes
- 5300,Reservoirs
- 6100,Wetland Hardwood Forests
- 6200,Wetland Coniferous Forests
- 6300,Wetland Forested Mixed
- 6400,Vegetated Non-Forested Wetlands
- 8100,Transportation
- 8200,Communications
- 8300,Utilities

Figure 4

Existing Land Use Map



Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
(M.P. 14.490-17.245)
Highlands County, Florida
FPID: 414506-4-52-01

Legend

Project Limit

Project Limit

FEMA Flood Map

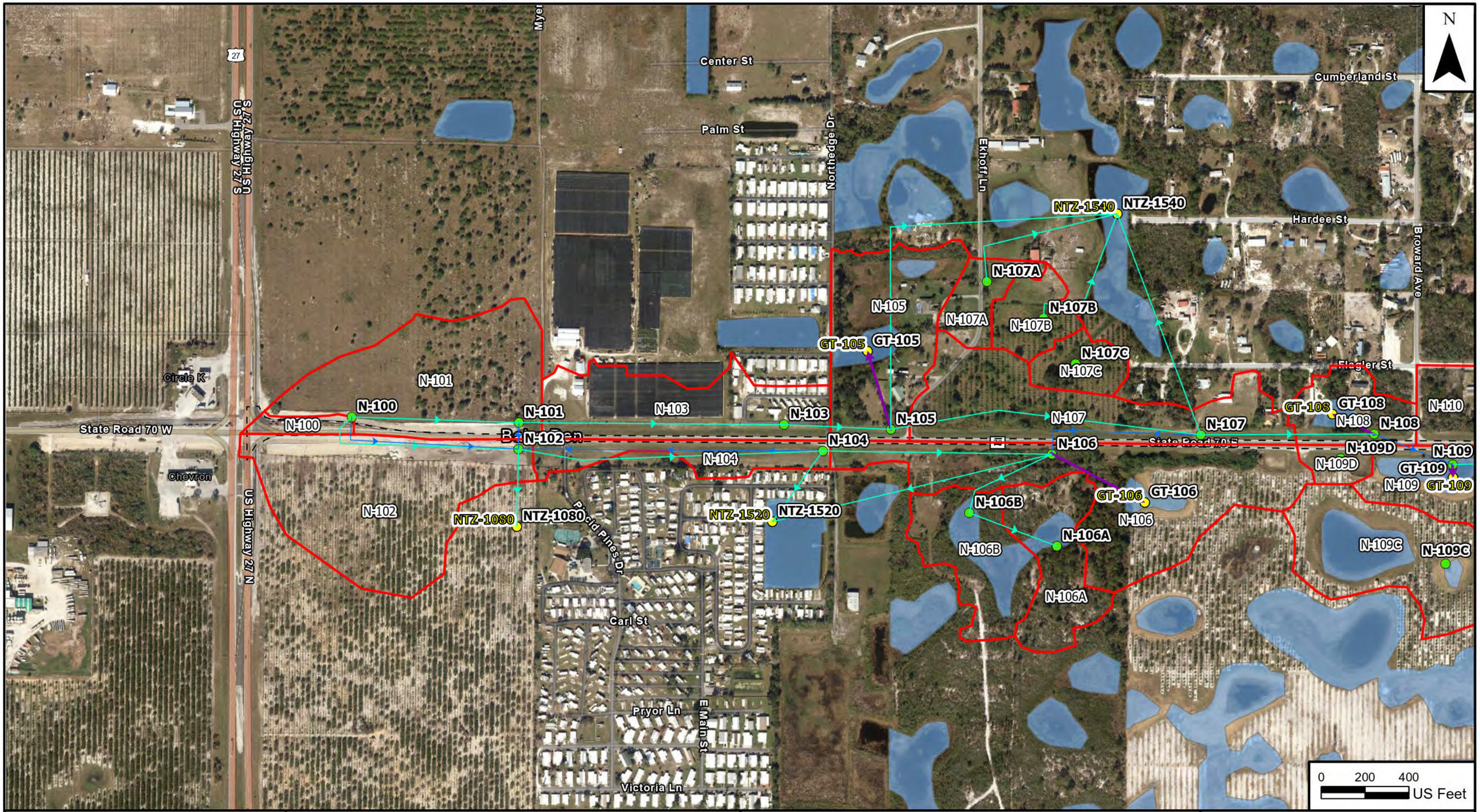
Flood Zones

A

AE

Figure 5

FEMA Firm Map
Panels 12055C0529C, 12055C0533C,
(Effective 11-18-15)



Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
(M.P. 14.490-17.245)
Highlands County, Florida
FPID: 414506-4-52-01

Legend

HYDRO-STRUCTURES
STRUCTURE TYPES
- Pipe
- Weir
- Percolation

ICPR NODES
NODE TYPES
- Stage/Area
- Time/Stage

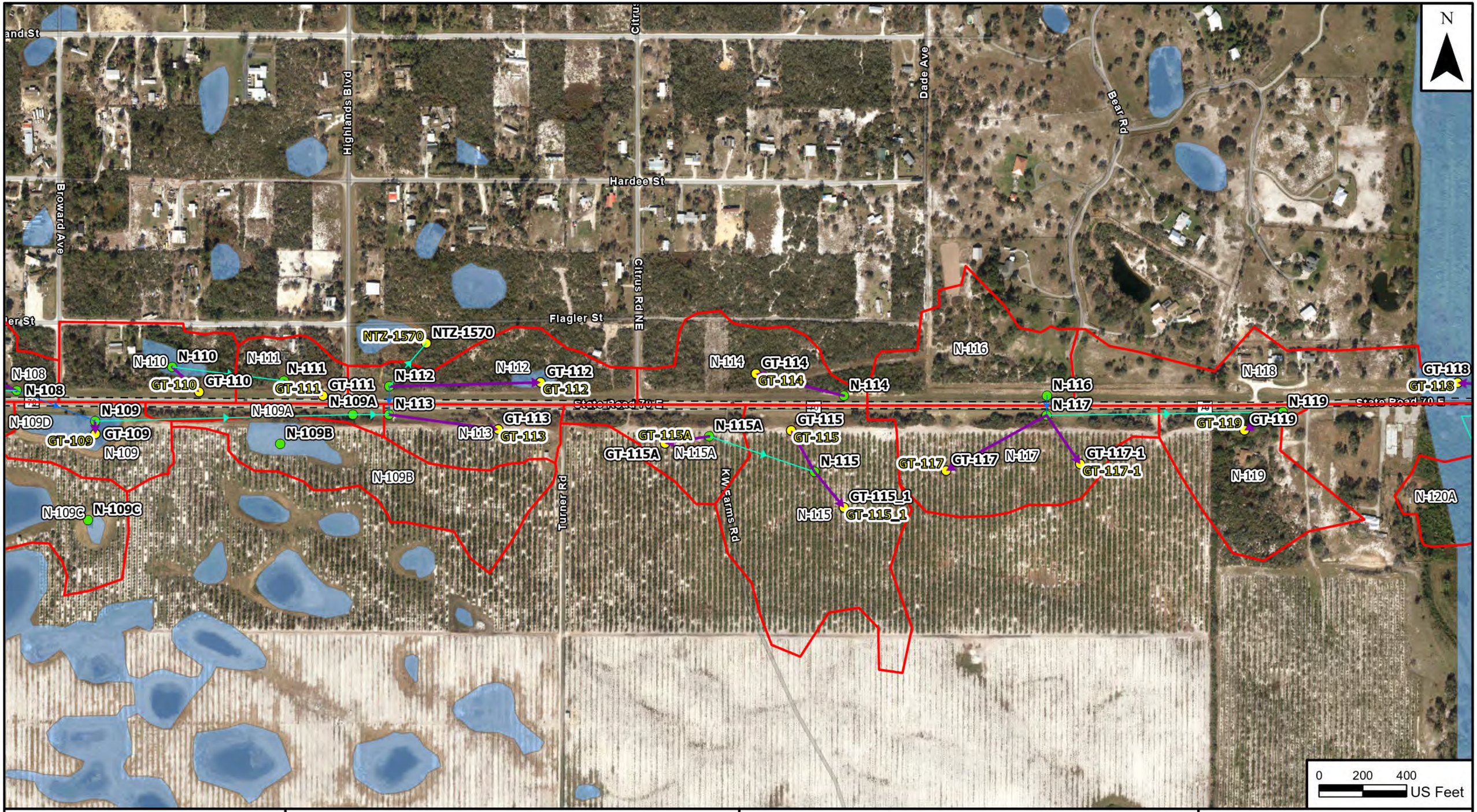
ICPR BASINS
- ICPR BASINS

Project Limit
- Project Limit

FEMA
Flood Zones
- A
- AE

Figure 6

ICPR Model Segment 13



Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
(M.P. 14.490-17.245)
Highlands County, Florida
FPID: 414506-4-52-01

Legend

HYDRO-STRUCTURES
STRUCTURE TYPES
- Pipe
- Weir
- Percolation

ICPR NODES
NODE TYPES
- Stage/Area
- Time/Stage

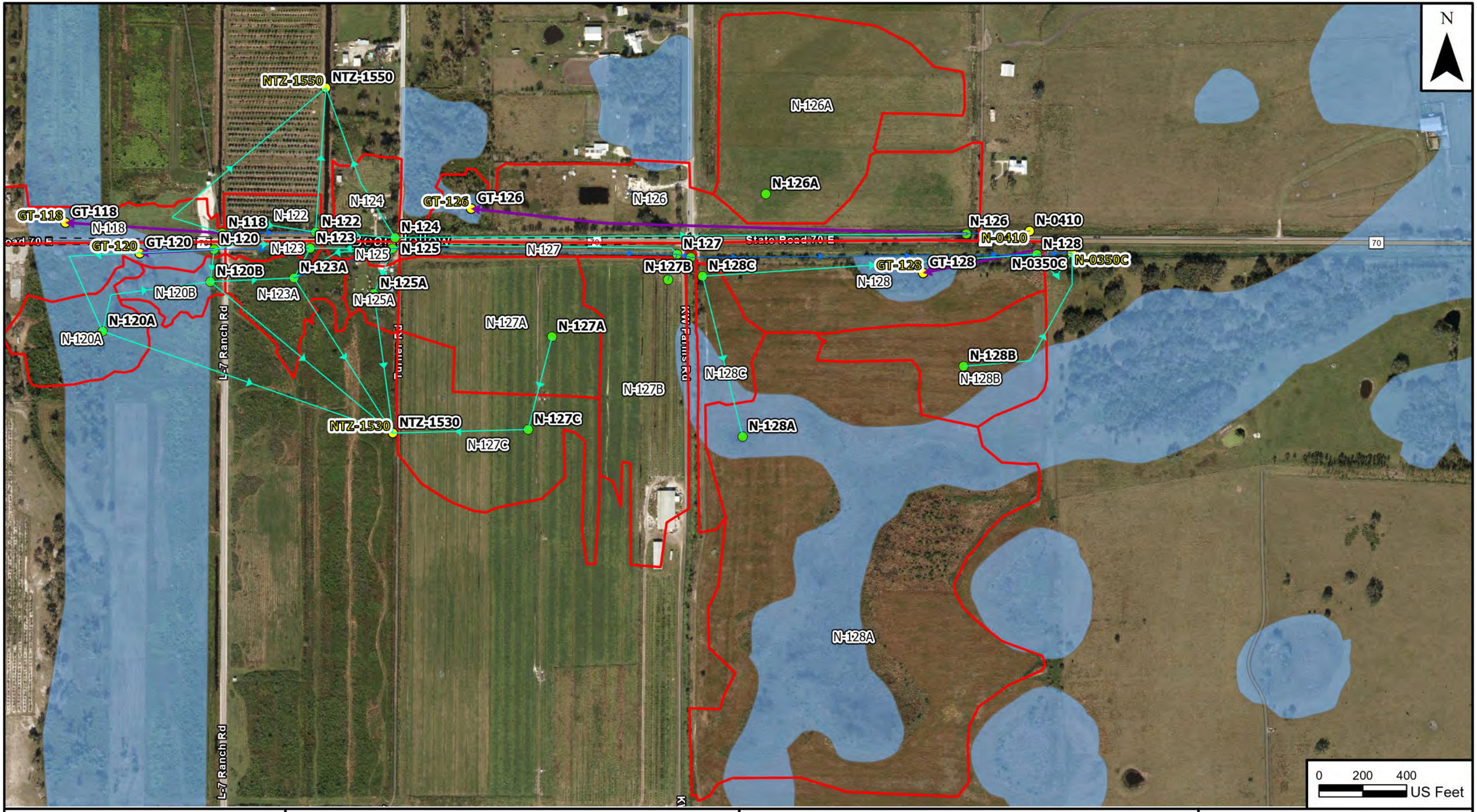
ICPR BASINS
- ICPR BASINS

Project Limit
- Project Limit

FEMA
Flood Zones
- A
- AE

Figure 6

ICPR Model Segment 13



Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
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FPID: 414506-4-52-01

Legend

HYDRO-STRUCTURES
STRUCTURE TYPES
- Pipe
- Weir
- Percolation

ICPR NODES
NODE TYPES
- Stage/Area
- Time/Stage

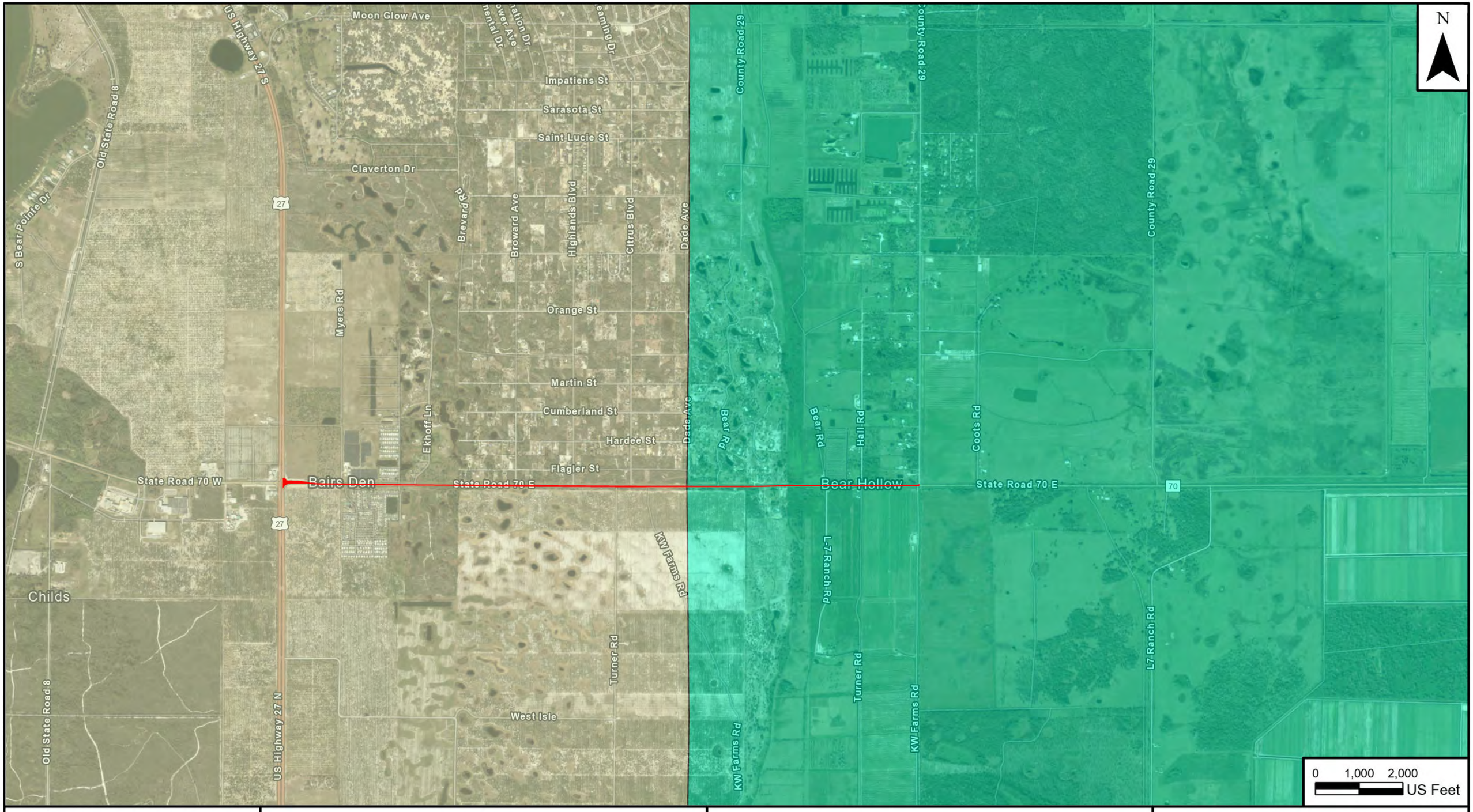
ICPR BASINS
- ICPR BASINS

Project Limit
- Project Limit

FEMA
Flood Zones
- A
- AE

Figure 6

ICPR Model Segment 13



Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
(M.P. 14.490-17.245)
Highlands County, Florida
FPID: 414506-4-52-01

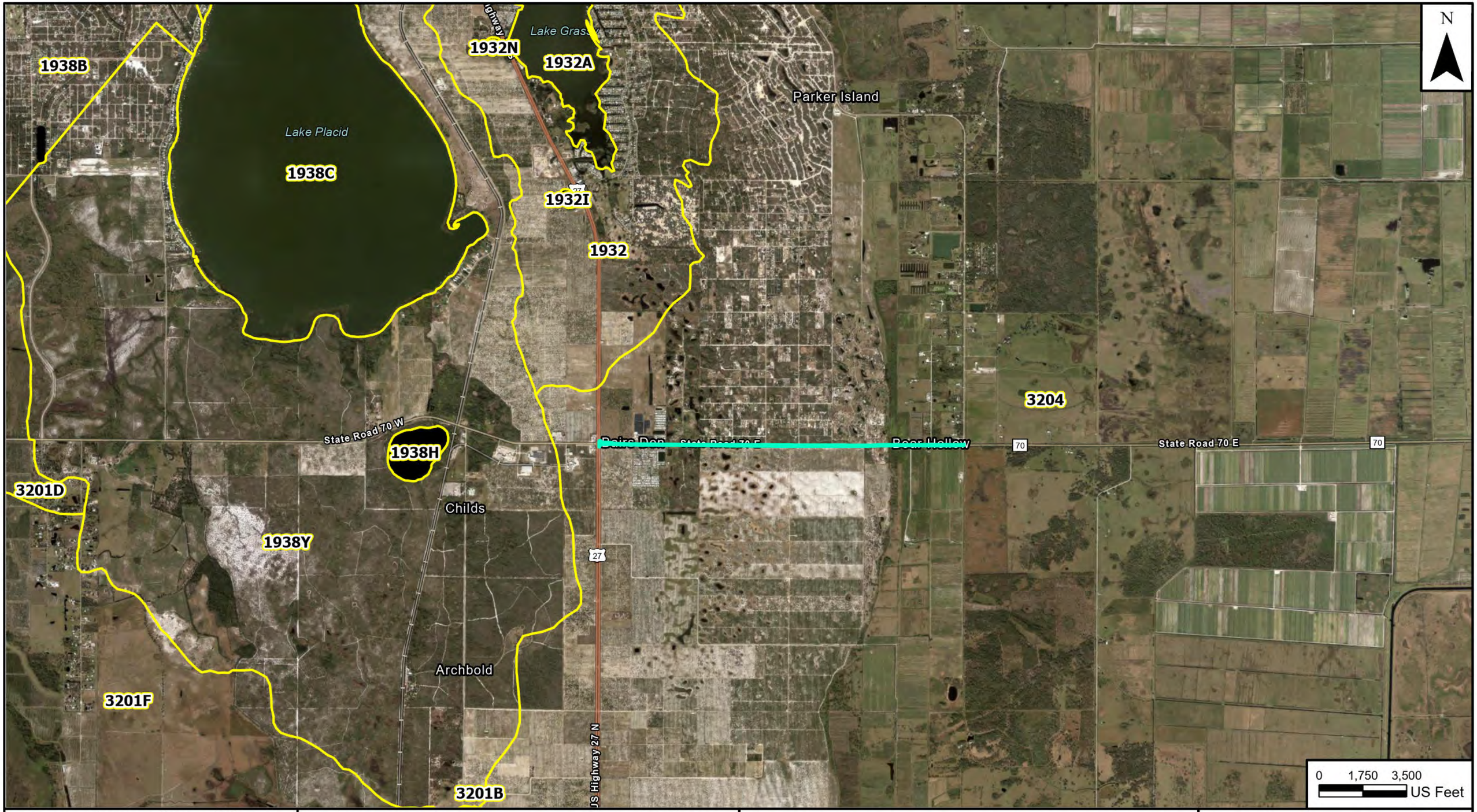
Legend

WMD
- SFWMD
- SWFWMD

Project Limit
- Project Limit

Figure 7

Water Management District
Location Map



Prepared For : D1

FDOT

Pond Siting Report

S.R. 70 from US 27 to County Road 29
(M.P. 14.490-17.245)
Highlands County, Florida
FPID: 414506-4-52-01

Legend

Project Limit
Project Limit

WBIDs
WBIDs

Figure 8

WBID/Watershed Map

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	02/01/2023	04/17/2023	14.194	14.794	08/14/2024	8/20/24(CONST.)
BY	FTE	FTE				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02		SR 70	HIGHLANDS	01	09060000	3 OF 7

13.0 14.0 15.0

13.000 OUTSIDE CITY & URBAN
"|"=SR-70
"|"SR 70

13.390 627642-Y 13.381

13.400 OLD SR 8

13.471 OLD SR 8 13.468

DISTRIBUTION BLVD 13.894

Begin Project
MP 14.490

14.490 US 27

14.490 SR 25/

14.750 MYERS RD

14.760 SUNSHINE RV RESORT

N EDGE ST 14.988

ASSOCIATED STATION EXCEPTION
SEE ROADWAY ID: 09400000
MP 11.119 TO MP 11.179

ROADWAY FEATURES

LANE WIDTHS ARE AVERAGED

13.000 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

13.409 66.0' - 24.0'
2 - 12.0' RDWY
12.0 PVD MED
2 - 5.0' PVD SHLD1
12.0' LWN SHLD2 - LT
8.0' LWN SHLD2 - RT

13.626 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

13.781 66.0' - 24.0'
2 - 12.0' RDWY
13.0 PVD MED
2 - 4.0' PVD SHLD1
9.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT

13.894 69.0' - 26.0'
2 - 13.0' RDWY
11.0 PVD MED
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

14.041 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

14.194 57.0' - 24.0'
2 - 12.0' RDWY
4.0' PVD SHLD1 - LT
5.0' PVD SHLD1 - RT
2 - 12.0' LWN SHLD2

14.269 88.0' - 24.0'
2 - 12.0' RDWY
30.0 PVD MED
2 - 5.0' PVD SHLD1
2 - 12.0' LWN SHLD2

14.387 105.0' - 24.0'
2 - 12.0' RDWY
31.0 CB&VEG MED
4.0' PVD INSHLD1 - LT
2.0' C&G INSHLD1 - RT
2.0' C&G INSHLD2 - LT
20.0' WARN SHLD1 - LT
6.0' PVD SHLD1 - RT
2 - 12.0' LWN SHLD2

14.490 107.0' - 13.0'L+12.0'R
1 - 13.0'L + 1 - 12.0'R RDWY
30.0 CB&VEG MED
2.0' C&G INSHLD1 - LT
4.0' PVD INSHLD1 - RT
2.0' C&G INSHLD2 - RT
8.0' PVD SHLD1 - LT
20.0' WARN SHLD1 - RT
2 - 12.0' LWN SHLD2

14.587 88.0' - 24.0'
2 - 12.0' RDWY
29.0 PVD MED
6.0' PVD SHLD1 - LT
5.0' PVD SHLD1 - RT
2 - 12.0' LWN SHLD2

14.734 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

ROADWAY COMPOSITION

13.000 28/FC-2
13.409 28/FC-2 / 28/FC-2
13.626 28/FC-2
13.781 28/FC-2 / 28/FC-2
14.041 28/FC-2
14.269 28/FC-2 / 28/FC-2
14.387 28/FC-2 / 08/FC-2
14.461 08/FC-2
14.520 08/FC-2 / 28/FC-2
14.587 28/FC-2 / 28/FC-2
14.734 28/FC-2

HORIZONTAL ALIGNMENT

PC=13.036
PI=13.141
PT=13.239
Δ=37°28'30.00"
D=3°30'00 00
CURVE DATA NOT FIELD VERIFIED
B=S72°15'15"E

Δ=17°47'30.00"
D=3°00'00 00
PC=13.720
PI=13.827
PT=13.882
B=N89°57'15"E

PC=14.563
PI=14.565
PT=14.587
Δ=2°18'30.00"
D=1°00'00 00

Δ=2°18'30.00"
D=1°00'00 00
PC=14.827
PI=14.649
PT=14.671
B=N89°57'15"E

STRUCTURE DESCRIPTION

13.192 1 - 7'X 5'X 72' CBC

13.538 2 - 36" X 75' CC

14.366 1 - 18" X 34' CC

14.586 1 - 15" X 40' CC

DISTRICT USE

SIS 13.000 CORRIDOR

FUN CLASS 13.000 RURAL PRIN ART OTHER

15.0 16.0 17.0

15.000 OUTSIDE CITY & URBAN
"|"=SR-70
"|"SR 70

EKHOFF LN 15.067

BROWARD AVE 15.505

HIGHLANDS BLVD 15.755

16.006 CITRUS BLVD

BEAR RD 16.374

TURNER RD 16.842

HALL RD 16.994

ROADWAY FEATURES

LANE WIDTHS ARE AVERAGED

15.000 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

15.254 60.0' - 24.0'
2 - 12.0' RDWY
12.0 PVD MED
2 - 4.0' PVD SHLD1
12.0' LWN SHLD2 - LT
4.0' LWN SHLD2 - RT

15.553 62.0' - 24.0'
2 - 12.0' RDWY
12.0 PVD MED
2 - 4.0' PVD SHLD1
12.0' LWN SHLD2 - LT
6.0' LWN SHLD2 - RT

16.097 48.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
12.0' LWN SHLD2 - LT
4.0' LWN SHLD2 - RT

16.164 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

16.237 48.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
12.0' LWN SHLD2 - LT
4.0' LWN SHLD2 - RT

16.395 56.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
2 - 12.0' LWN SHLD2

16.472 48.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
12.0' LWN SHLD2 - LT
4.0' LWN SHLD2 - RT

16.553 52.0' - 24.0'
2 - 12.0' RDWY
2 - 4.0' PVD SHLD1
12.0' LWN SHLD2 - LT
8.0' LWN SHLD2 - RT

16.842 46.0' - 22.0'
2 - 11.0' RDWY
2 - 4.0' PVD SHLD1
4.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT

16.994 38.0' - 22.0'
2 - 11.0' RDWY
2 - 4.0' PVD SHLD1
2 - 4.0' LWN SHLD2

ROADWAY COMPOSITION

15.000 28/FC-2
15.254 28/FC-2 / 28/FC-2
16.097 28/FC-2

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED
Δ=0°05'30.00"
PI=15.238
B=N89°51'45"E

Δ=0°23'00.00"
PI=16.238

Δ=2°18'30.00"
D=1°00'00 00
PC=16.516
PI=16.538
PT=16.560

PC=16.601
PI=16.623
PT=16.645
Δ=2°18'30.00"
D=1°00'00 00

Δ=1°00'00.00"
PI=16.984

STRUCTURE DESCRIPTION

15.176 1 - 30" X 88' CC

15.456 1 - 24" X 82' CC

15.778 1 - 24" X 72' CC

16.347 1 - 24" X 88' CC

DISTRICT USE

SIS 15.000 CORRIDOR

FUN CLASS 15.000 RURAL PRIN ART OTHER

Version: 1.4.2.27 04/17/2023

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	02/01/2023	04/17/2023				
BY	FTE	FTE				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO.
02		SR 70	HIGHLANDS	01	09060000	4 OF 7

17.0 | 18.0 | 19.0 | 20.0

ROADWAY FEATURES

17.000 OUTSIDE CITY & URBAN
"|"=SR-70
"|"SR 70

29
CR 29
17.245

End Project
MP 17.245

LONESOME ISLAND RD
19.791

LANE WIDTHS ARE AVERAGED

17.000 38.0' - 22.0'
2 - 11.0' RDWY
2 - 4.0' PVD SHLD1
2 - 4.0' LWN SHLD2

18.207 38.0' - 22.0'
2 - 11.0' RDWY
2 - 4.0' WARN SHLD1
2 - 4.0' LWN SHLD2

ROADWAY COMPOSITION

17.000 28/FC-2

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

PI=17.543
Δ=2°00'00.00"
B=S88°00'00"E

PI=18.203
Δ=3°00'00.00"
B=N89°00'00"E

PI=18.688
Δ=3°00'00.00"
B=S88°00'00"E

PI=19.080
Δ=2°00'00.00"

PI=19.483
Δ=2°00'00.00"
B=N88°00'00"E

STRUCTURE DESCRIPTION

17.900
1 - 36" X 42" CMP

19.251
1 - 120" X 60" CMP

DISTRICT USE

SIS

17.000 CORRIDOR

FUN CLASS

17.000 RURAL PRIN ART OTHER

20.0 | 21.0 | 22.0 | 23.0

ROADWAY FEATURES

20.000 OUTSIDE CITY & URBAN
"|"=SR-70
"|"SR 70

DENCO RD
20.288

21.038
SOUTHWIND RD

MARCIA GROVE RD
21.269

CANAL

HARNEY POND

LANE WIDTHS ARE AVERAGED

20.000 38.0' - 22.0'
2 - 11.0' RDWY
2 - 4.0' WARN SHLD1
2 - 4.0' LWN SHLD2

21.269 46.0' - 22.0'
2 - 11.0' RDWY
2 - 4.0' WARN SHLD1
4.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT

21.534 46.0' - 22.0'
2 - 11.0' RDWY
2 - 4.0' PVD SHLD1
4.0' LWN SHLD2 - LT
12.0' LWN SHLD2 - RT

21.742 38.0' - 22.0'
2 - 11.0' RDWY
2 - 4.0' PVD SHLD1
2 - 4.0' LWN SHLD2

22.254 48.0' - 22.0'
2 - 11.0' RDWY
2 - 8.0' WARN SHLD1
2 - 5.0' LWN SHLD2

22.409 35.0' - 20.0'
2 - 10.0' RDWY
2 - 4.0' WARN SHLD1
3.0' LWN SHLD2 - LT
4.0' LWN SHLD2 - RT

ROADWAY COMPOSITION

20.000 28/FC-2

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED
PI=20.015
Δ=2°00'00.00"
B=N90°00'00"E

STRUCTURE DESCRIPTION

21.017
2 - 120" X 60" CMP

22.320 #0920 22.343
121.4'
BR

22.645
1 - 88" X 60" CMP

DISTRICT USE

SIS

20.000 CORRIDOR

FUN CLASS

20.000 RURAL PRIN ART OTHER

Version: 1.4.2.27 04/17/2023

APPENDIX 2

CORRESPONDENCE

Purpose of Meeting:
SR 70 Segments 12-13 – Jefferson Avenue to CR 29 (414506-3 & 414506-4)
Highlands County
SWFWMD Pre-Application Meeting

Date of Meeting
May 2, 2024, 2:00pm – 4:00pm

Location:
Microsoft Teams

Attendees:

- FDOT – Brent Setchell, Melody Joyner, Nicole Monies (Melanie Calvo, Atkins for OEM)
- SWFWMD – Al Gagne, Chris Kuzlo
- PGA – Joe Lauk
- HNTB – Matt Dockins, Hong (Sam) Chiu, Gordon Mullen, James Fine, John Burton, John Fowler, Bill Jones

Attachment: See presentation slides attached.

Agenda & Notes

1. Introductions
2. Overview
    a. Strategic Corridors – State Road (SR) 70
        i. Segments 12 and 13 (FPIDs 414506-3 and 414506-4)
        ii. Matt introduced the FDOT's Strategic Corridors program along SR 70 and the purpose and need for the proposed network improvements. Then specific discussion was provided relative to Segments 12 (from Jefferson Avenue east to US 27) and 13 (from US 27 east to County Road 29).
        iii. Sam introduced the three proposed roadway typical sections along the corridor.
3. SWFWMD/SFWMD Interagency Agreement
    a. The project limits crossing the SWFWMD/SFWMD boundaries in two locations, one west of US 27 and one east of US 27.
    b. The Interagency Agreement executed March 24, 2018 delegated the permitting authority for the entire limits of this project to the SWFWMD.
4. Stormwater Management
    a. Water Quality
        i. Sam referenced the prior December 2014 pre-application meeting and provided additional discussion for how the proposed improvements will address the nutrient impaired water bodies by demonstrating net improvement and meet SWFWMD's 150% of presumptive treatment volume for direct discharge to the Placid Lakes Outstanding Florida Water (OFW).
        ii. The Project Development and Environment (PD&E) study is expected to be complete approximately Summer of 2025 and therefore, should fall under the current stormwater rules.
    b. Water Quantity
        i. Sam provided additional discussion that the proposed improvements will address both peak discharge rates (in open basins) and discharge volumes (in closed basins).
    c. Floodplains

i. Part of the project is located within the Lake Placid watershed model. The project will use this watershed model as the best available information. Further evaluation may be necessary to model initial stages and the project specific seasonal high water.
ii. In the area without the watershed model, the Federal Emergency Management Agency (FEMA) map will be reviewed in conjunction with other data sources. The FDOT/Consultant will determine the appropriate 100-Year Base Flood Elevations and compensate for any impacts. Cup-for-cup compensation is the anticipated approach for those areas.

d. SWFWMD did not object to the proposed design criteria and approach discussed.

5. Utility and Environmental Considerations
   a. Utilities
      i. The project is sandwiched between a Florida Power & Light (FP&L) transmission line to the north and Florida Gas Transmission (FGT) pipeline to the south. Both are immediately adjacent to the SR 70 right-of-way and are costly to impact/relocate.
      ii. FP&L is currently in the process of relocating further to the north and enhancing their facilities.
      iii. FDOT is continuing coordination with both entities.
   b. Conservation Lands
      i. Much of the western project portion within Segment 12 is bounded by the Lake Wales Ridge Wildlife and Environmental Area (LWRWEA) and Archbold Biological Station.
      ii. The roadway improvements are evaluating widening to the north, which would impact the LWRWEA. FDOT is coordinating further with the Florida Fish and Wildlife Conservation Commission, Florida Department of Environmental Protection, and applicable state land agencies.
   c. Protected Species
      i. Numerous federal and state listed/protected species are or may be present in the project vicinity. Field surveys are on-going.
      ii. Brent discussed the location/siting rationale for the three proposed wildlife crossings.
      iii. Brent suggested that potential additional land acquisition(s) may be needed specifically for listed/protection species mitigation.
   d. Wetlands
      i. Based on preliminary impact analysis, approximately 18.5 acres of direct and secondary wetland impacts at approximately 8.8 UMAM functional loss units are anticipated for Segment 12.
      ii. Approximately 12.3 acres of direct and secondary wetland impacts at approximately 5.4 UMAM functional loss units are anticipated for Segment 13.
      iii. These impacts have not been field-reviewed with SWFMWD or US Army Corps of Engineers staff and are subject to change.
      iv. Mitigation options are limited within the three watershed basins. Only state credits are available within the Kissimmee Ridge (SWFWMD) and South Kissimmee (SFWMD) basins. State credits are not currently available within the Fisheating Creek basin. SWFWMD will accept state mitigation bank credits.
      v. No federal 404 credits are available in any of the three basins. FDOT expects that the existing banks will not be able to obtain federal credits by the time Segments 12 and 13 may need them prior to construction.
   e. Impacts & Mitigation Approaches
      i. Due to the location and environmentally sensitive nature of the project limits, FDOT is evaluating a variety of potential options.
         1. On-site mitigation is not initially desirable for FDOT, and there are limited options for this within the SR 70 corridor.

2. FDOT is considering a partnering option with a third-party company (i.e., permittee-responsible offsite mitigation within the same basin. This may require 2 separate permits (one for the proposed improvements and one for the mitigation) and could potentially be linked as permit conditions. FDOT would be a co-permittee and have an MOU with a third-party contractor with specific conditions directed to the third-party contractor, who would be responsible for the construction, perpetual operations and maintenance of the mitigation site. FDOT would not want to do annual payments but would prefer to do a lump-sum payment for the third-party to put in escrow.
    a. SWFWMD has recently received direction from FDEP. SWFWMD views this as being comparable to developer permits with excess functional gain in which they modify the excess functional gain permit for each phase of development. FDEP doesn't like this approach. Going forward, off-site mitigation permits will need to specifically identify to which project(s) the excess functional gain applies (i.e., like a bank ledger). SWFWMD has no issues with FDOT doing offsite mitigation, but they urged cautioned for who will be the permittee.
3. Brent discussed a potential option which could include land acquisition, livestock removal and potentially hydrologic improvements to be completed on large portion of acreage adjacent to the Platt Branch Wildlife and Environmental Area (FDOT's Platt Branch species mitigation bank) and US 27. FDOT could acquire the existing gap between both areas, remove cattle to gain functional lift to local wetlands and water quality, and add a second wildlife crossing at US 27. FDOT understands that sufficient functional lift may exist due to the large amount of acreage involved. The mitigation for several segments of the SR 70 could likely be tied to this mitigation site.
    a. SWFWMD noted that this site would be within the Fisheating Creek watershed (within the SFWMD's boundaries). SWFWMD would allow this, but the FDOT would have to address the functional loss within the impacted Kissimmee Ridge basin, and potential cumulative impacts. SWFWMD may require a 1:1 (acreage) mitigation within the same basin (while other functional gain could occur out of basin). SWFWMD stated that FDOT may need to propose multiple different strategies to avoid cumulative impacts.
    b. SWFWMD asked whether FDOT has had to address the USACE proximity (multiplication) factor for mitigation based on distance from the impacted hydrologic use code (HUC) basin (multiplier based on the # of basins away from subject basin). Brent indicated that District One's prior experience with this didn't work out, but not due to the proximity factor tool.
4. Brent discussed potential Cracker Hammock and Skipper Ranch mitigation options, also occurring within the Fisheating Creek basin. FDOT's Intent for these improvements is to connect conservation lands from SR 70 up to Highlands Hammock State Park. SWFWMD indicated that they generally don't like Conservation Easements as a mitigative measure but will consider them for parcels that are "large enough" and provide a significant ecological lift (benefit). SWFWMD also noted these were out of the basin with the impacts and cumulative impacts would need to be addressed.

6. Schedule

a. The permitting application submittal schedule is preliminarily anticipated for Fall 2025. The permitting aspects and schedule discussed are subject to change.
b. Sam mentioned that this project is anticipated to be let as Design/Build, so the plans may be more consistent with a concept plans, in lieu of the traditional FDOT Phase II plans.

Purpose of Meeting:
SR 70 Segments 9-10 – SR 31 to DeSoto/Highlands County Line (451690-1 & 451942-1)
SR 70 Segments 12-13 – Jefferson Avenue to CR 29 (414506-3 & 414506-4)
Drainage Kickoff Meeting

Date of Meeting
May 13, 2024, 1:00pm

Location:
Microsoft Teams

Attendees:

- FDOT – Brent Setchell, Ryan Molloy
- FDOT GEC (PGA) – Joe Lauk
- HNTB – Ed Ponce, John Burton, John Fowler, Matt Dockins, Sam Chiu

Attachment: See presentation slides attached.

Agenda & Notes

1. Introductions
2. Overview
    a. Strategic Corridors – State Road (SR) 70
        i. Segments 9 and 10 (FPIDs 451690-1 and 451942-1)
            1. It is a concurrent PD&E and Concept Design
        ii. Segments 12 and 13 (FPIDs 414506-3 and 414506-4)
            1. It has a previous standalone PD&E and the current phase is Concept Design.
3. Roadway Typical Sections
    a. Segments 9 and 10
        i. Existing
            1. Two lane undivided roadway
            2. From Turkey Hammock to 1-mile west of County Line has passing lane added under FPID 420983-1
            3. There are existing path and access road on the north side that may need to be restored
                a. Joe clarified that it would be great to re-established, but not a must condition
        ii. Proposed
            1. Four lane divided roadway
            2. Two roadway alternatives being evaluated
    b. Segments 12 and 13
        i. Existing
            1. Two lane undivided roadway
        ii. Proposed
            1. PD&E divided the project into three typical sections due to the varying existing and proposed right-of-way
            2. Concept Design is refining the roadway typical sections
4. Conservation Lands
    a. Segments 9 and 10 – None directly adjacent to the project
    b. Segments 12 and 13 – Western portion within Segment 12 is bounded by the Lake Wales Ridge Wildlife and Environmental Area (LWRWEA) and Archbold Biological Station.

5. Water Management District Boundaries
    a. Segments 9 and 10 – Fully contained in Southwest Florida Water Management District (SWFWMD).
    b. Segments 12 and 13 – Mostly in SWFWMD, but the eastern end is within South Florida Water Management District (SFWMD). The Interagency Agreement executed March 24, 2018 delegated the permitting authority for the entire limits of this project to the SWFWMD.
6. Existing Permitted Ponds
    a. Segments 9 and 10
        i. About 1.2-mile of existing linear ponds were added on both sides of SR 70 for the widening under FPID 193896-1.
        ii. About 5.6-mile of existing linear ponds and 0.4-mile of existing linear floodplain compensation sites (FPCs) were added on the north side of SR 70 for the passing lane under FPID 420983-1.
    b. Segments 12 and 13
        i. Four existing linear ponds were added on the south side of SR 70 for the Georgia Pacifica Access Road project.
        ii. Four linear ponds have been added at the SR 25/SR 70 Intersection for the intersection improvement under FPID 439827-1.
            1. Brent clarified that the project is nearly completed.
        iii. Ten existing linear ponds were added on both sides of SR 70 for the intersection/turn lane improvements under FPID 194437-3.
7. Base Clearance
    a. The base clearance water elevations for both projects are ongoing; however, the preliminary results show generally high ground water table.
        i. Brent noted that there are no known issues or overtopping with the exception of the RV Parking east of US 27. HNTB will request more information on this flooding.
    b. The intent is to follow the guidance outlined in Drainage Manual 5.4.1.1.
        i. Brent concurred.
8. Stormwater Management
    a. Segments 9 and 10
        i. The intent is to evaluate both linear ponds and offsite ponds.
        ii. Sam noted that the use of linear ponds will need to evaluate in conjunction with the roadway as it has cost implication to roadway profile and roadway right-of-way.
    b. Segments 12 and 13
        i. PD&E identified 1 alternative per basins. However, PD&E did not have survey, geotechnical data, and roadway profile.
        ii. The Concept Design will perform the design level Pond Siting Analysis.
    c. Water Quality
        i. The proposed improvements will address the nutrient impaired water bodies by demonstrating net improvement and meet SWFWMD's 150% of presumptive treatment volume for direct discharge to the Placid Lakes Outstanding Florida Water (OFW).
        ii. The Project Development and Environment (PD&E) study is expected to be complete approximately Summer of 2025 and therefore, should fall under the current stormwater rules.
        iii. In the area that the existing ponds are being impacted, it will need to provide treatment to the new impervious plus offsetting the existing treatment volume.
            1. Brent concurred.

d. Water Quantity
    i. In open basins, the proposed improvements will need to demonstrate the post development peak discharge rate does not exceed the pre development using SWFWMD's 25-year 24-hour storm event.
    ii. In closed basins, the proposed improvements will need to demonstrate the post development discharge volume does not exceed the pre development using FDOT's 100-year 240-hour storm event.
e. Floodplains
    i. Part of the project is located within the Lake Placid watershed model. The project will use this watershed model as the best available information. Further evaluation may be necessary to model initial stages and the project specific seasonal high water.
    ii. In the area without the watershed model, the Federal Emergency Management Agency (FEMA) map will be utilized as the best available information. Cup-for-cup compensation is the anticipated approach for those areas.
        1. In the area with historic basin storage, but not mapped as 100-year floodplain, the project will also need to demonstrate compensation or no adverse impacts.

Florida Department of Transportation

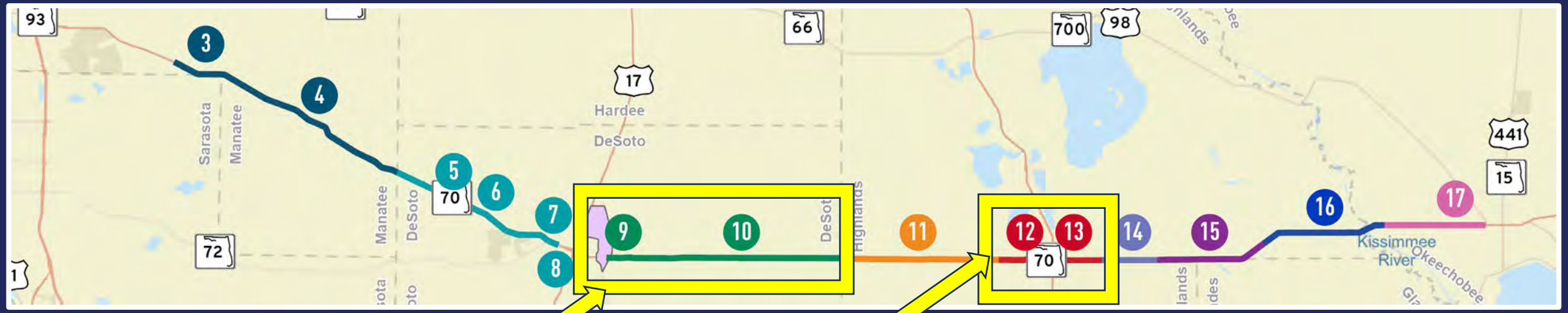


STRATEGIC CORRIDORS – Segment 9-10 & 12-13

FPIDs 451690-1, 451942-1, 414506-3 & 414506-4

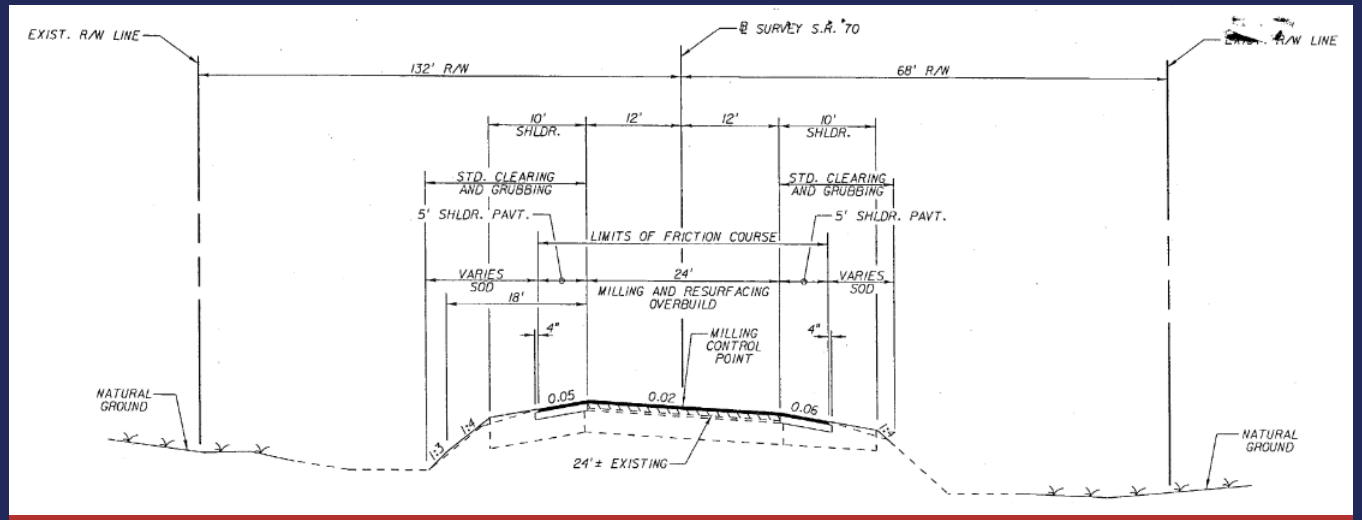
Drainage Kickoff Meeting
May 13, 2024

SR 70 Implementation Overview

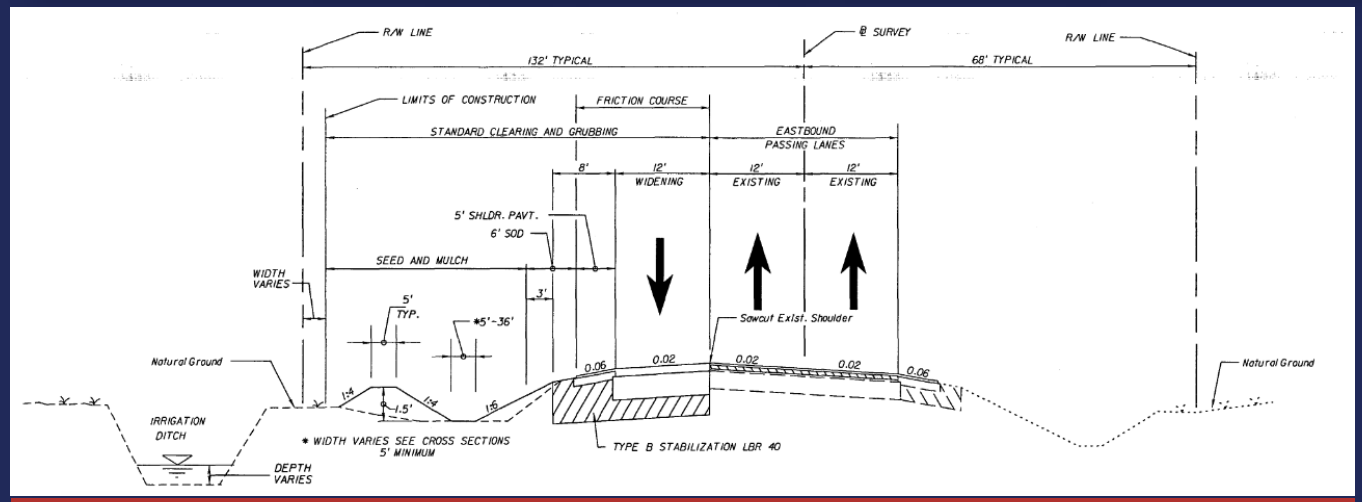


Segment 3-4	Segment 5-8	Segment 9-10	Segment 11	Segment 12-13	Segment 14	Segment 15	Segment 16	Segment 17
FPID Pending	FPID Pending	451690-1 451942-1	451649-1	414506-3 414506-4	414506-5	449851-1	450334-1	445254-1
Waterbury Rd. to Manatee Co. Line	Manatee/DeSoto Co. Line to Peace River	West of SR 31 to DeSoto/Highlands Co. Line	DeSoto/Highlands Co. Line to Jefferson Ave.	Jefferson Ave. to CR 29	CR 29 to Lonesome Island Rd.	Lonesome Island Rd. to CR 721	CR 721 to 128th Ave.	128th Ave. to US 98
Manatee Co.	DeSoto Co.	DeSoto Co.	Highlands Co.	Highlands Co.	Highlands Co.	Highlands Co.	Highlands Co.	Highlands/ Okeechobee Co.
17 Miles	12.5 Miles	16.6 Miles	10.2 Miles	7.0 Miles	4.4 Miles	7.6 Miles	8.6 Miles	7 Miles
HNTB	Kimley Horn	HNTB	Lochner	RK&K HNTB	KCA HNTB	Consor (American)	Scalar	TBD

Segment 9-10 Roadway Typical Sections

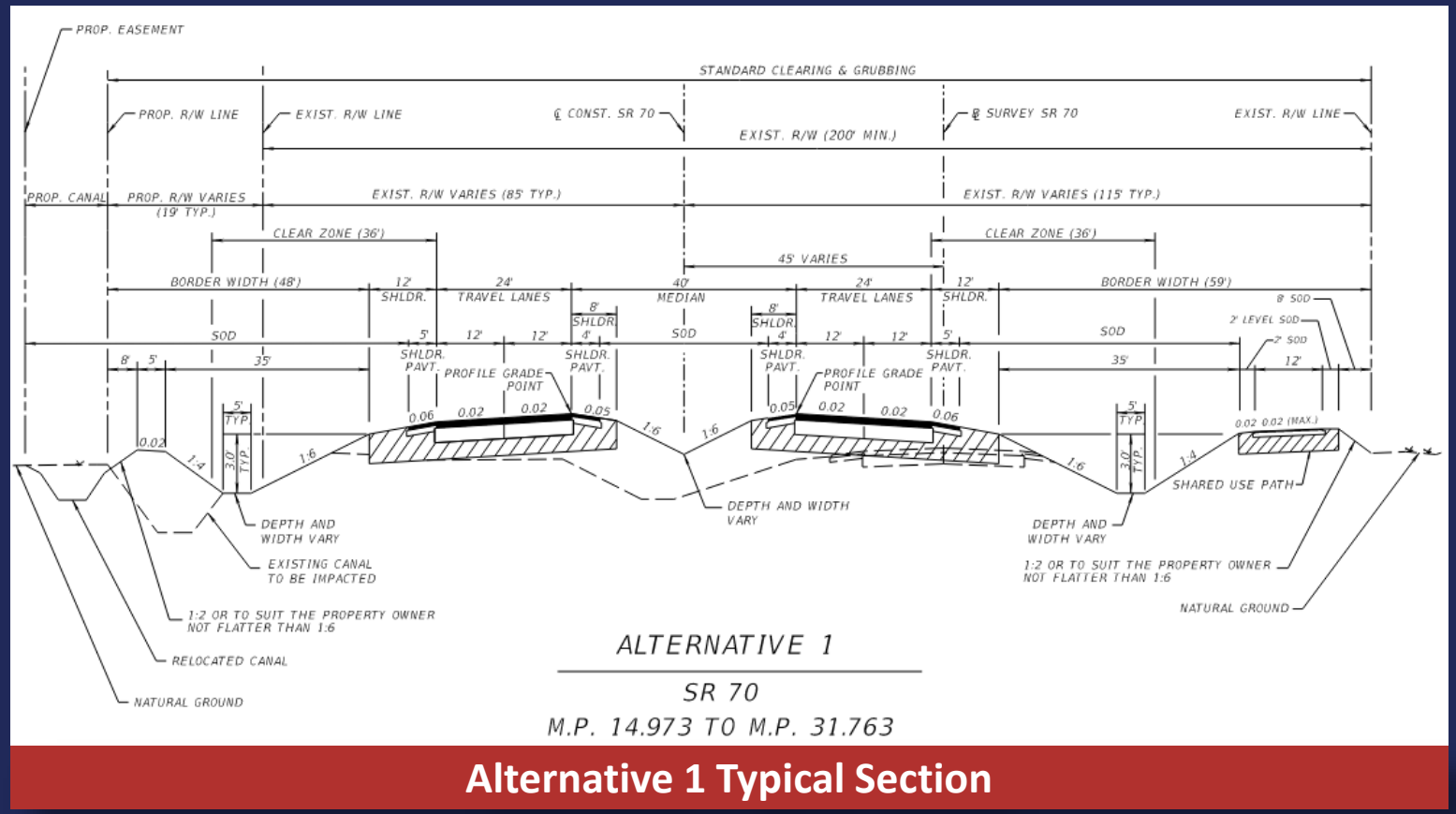


Existing Typical Section (FPID 193848-2)



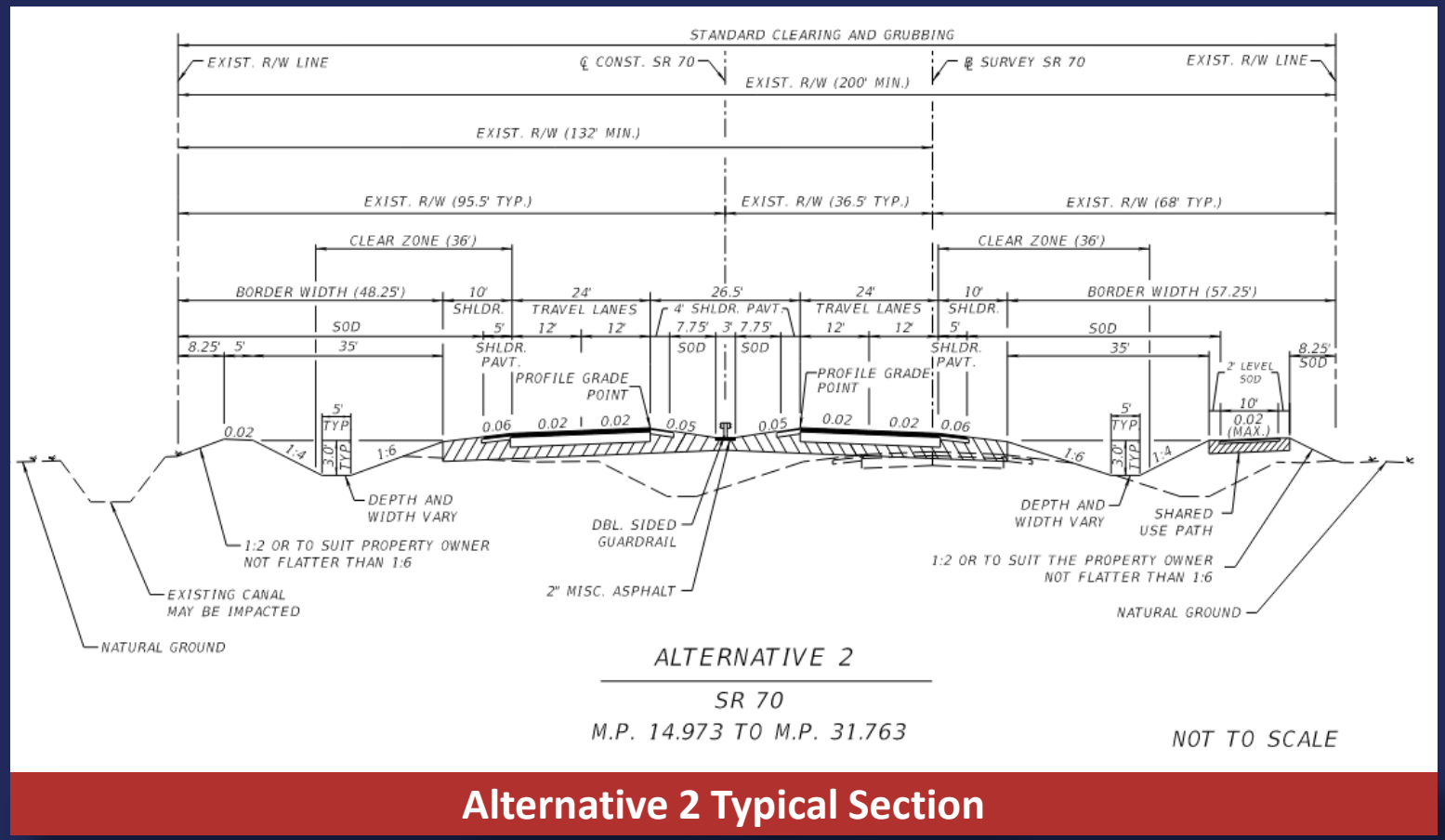
Existing Typical Section (FPID 420983-1)

Segment 9-10 Roadway Typical Sections



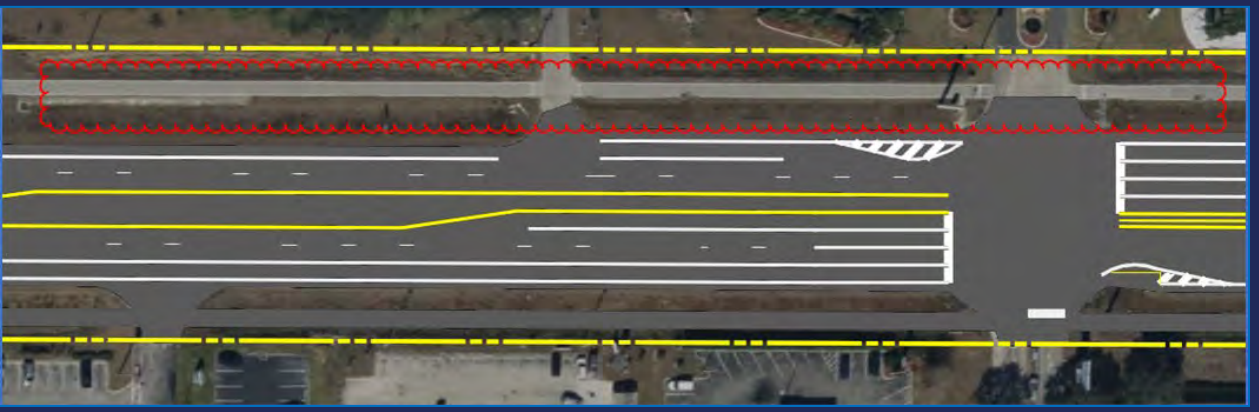
Alternative 1 Typical Section

Segment 9-10 Roadway Typical Sections



Alternative 2 Typical Section

Segment 9-10 Roadway Typical Sections





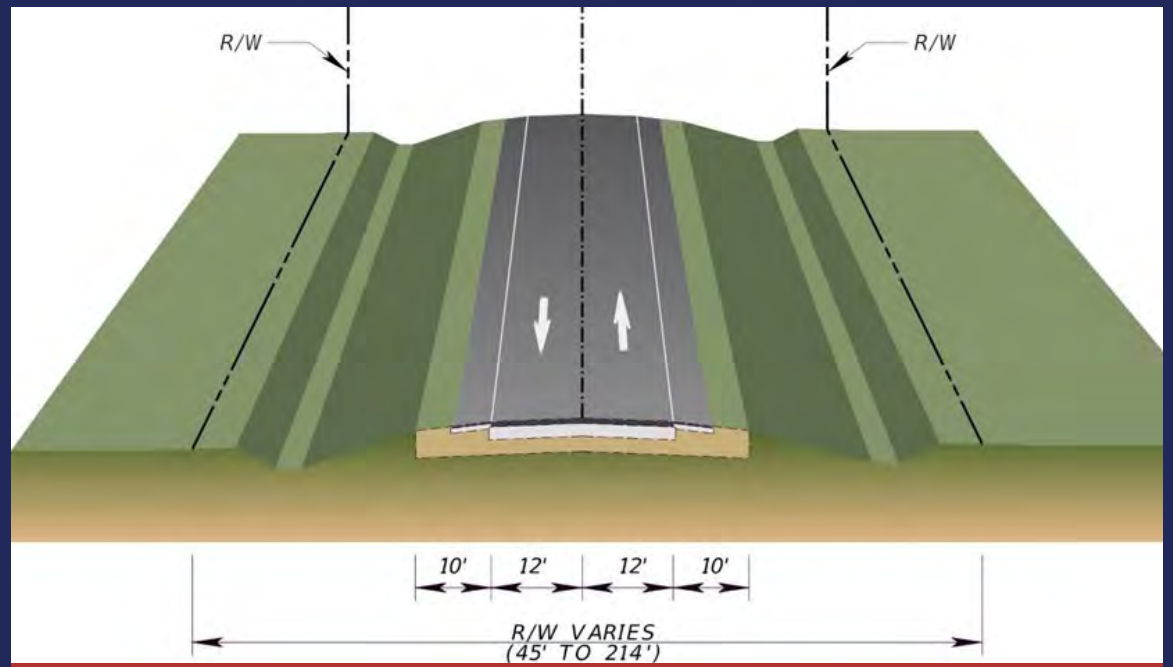


Existing Path



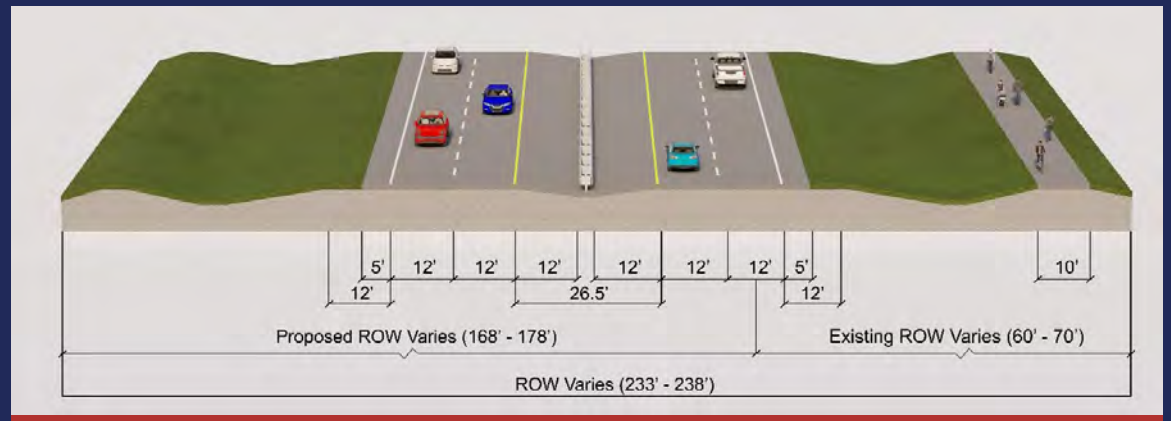
Existing Access Road

Segment 12-13 Roadway Typical Sections

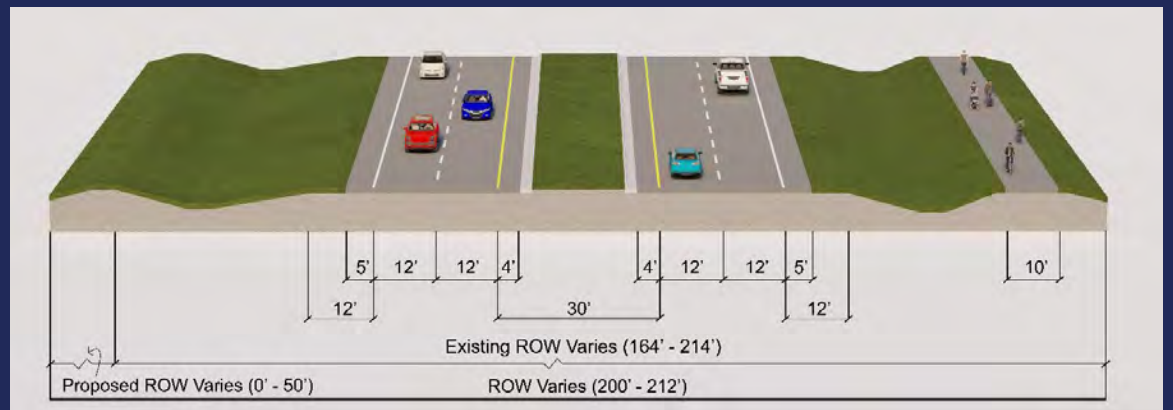


Existing Typical Section

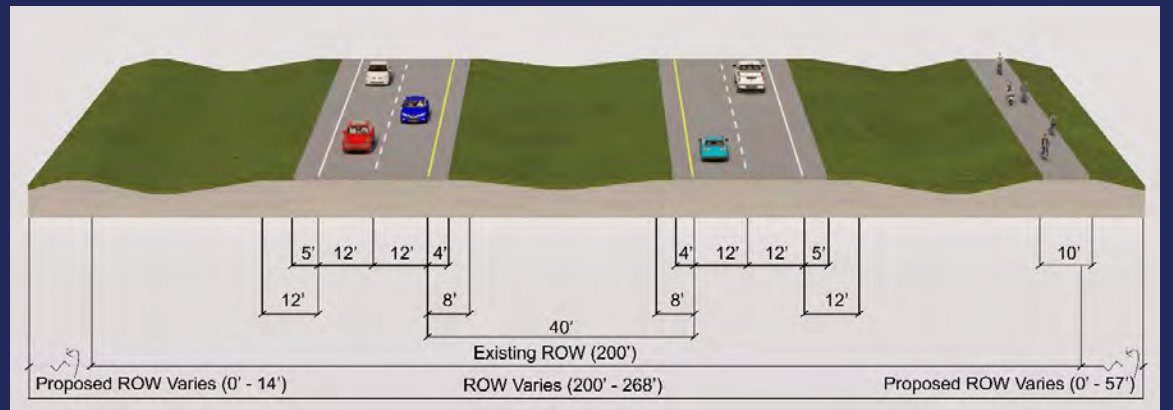
Segment 12-13 Roadway Typical Sections



PD&E Segment A Typical Section

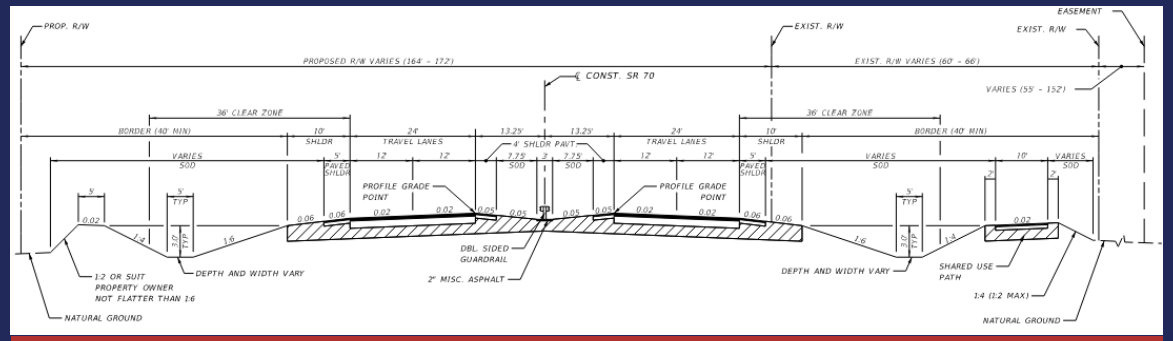


PD&E Segment B Typical Section

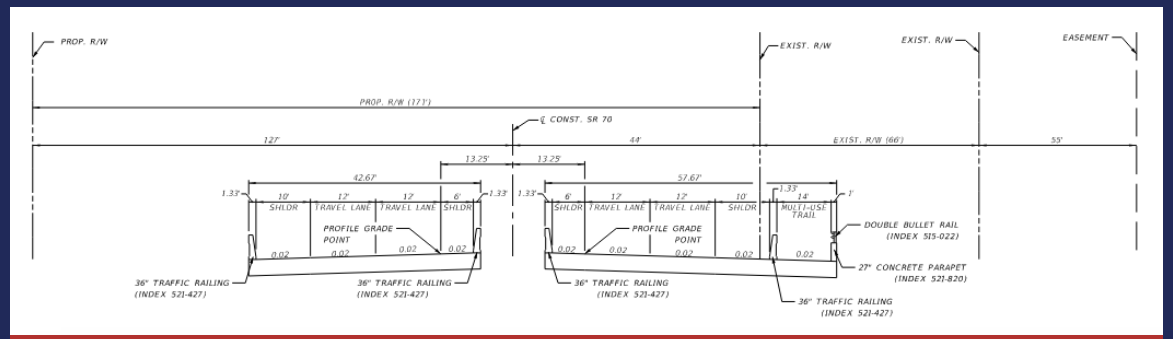


PD&E Segment C Typical Section

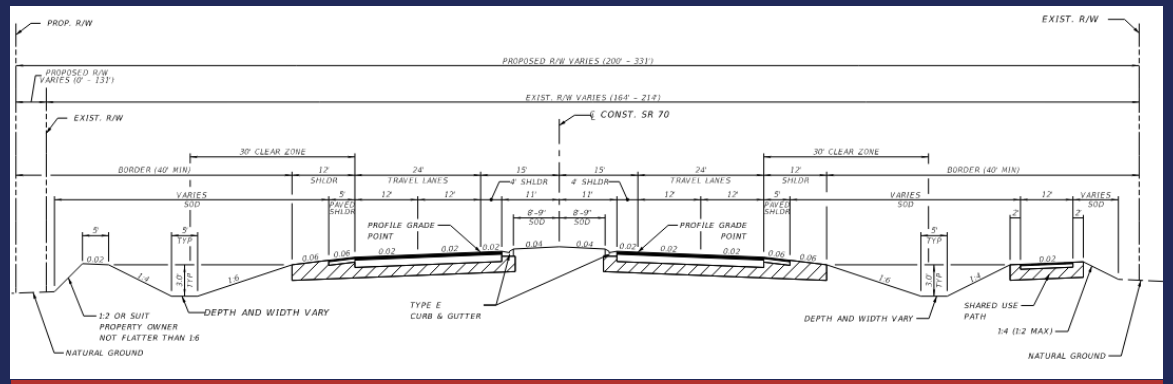
Segment 12-13 Roadway Typical Sections



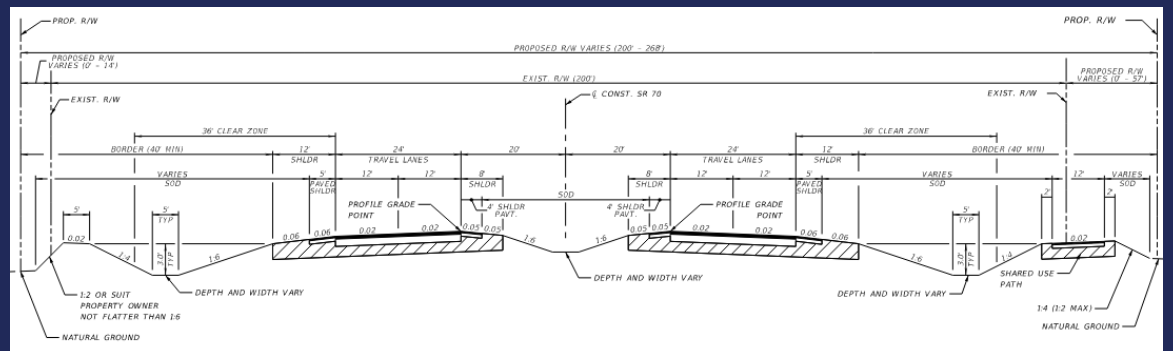
Typical Section #1



Typical Section #2



Typical Section #3

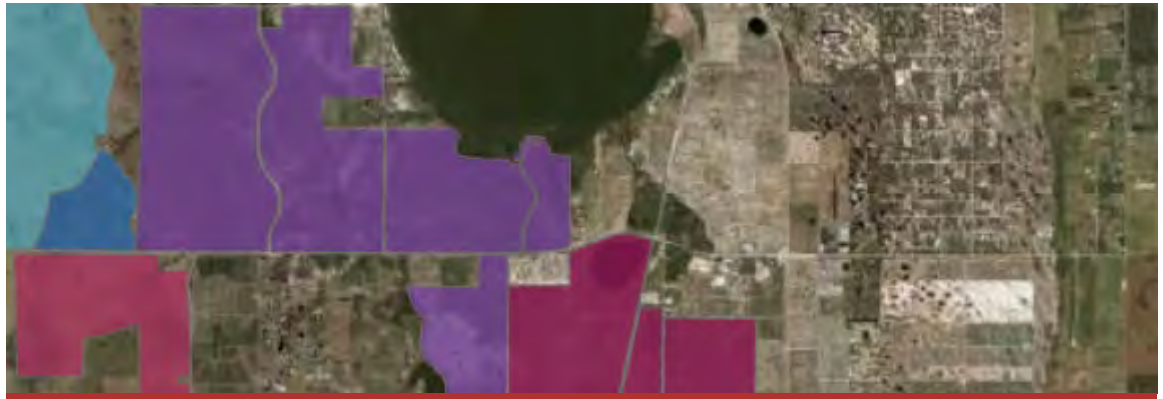


Typical Section #4

Conservation Lands

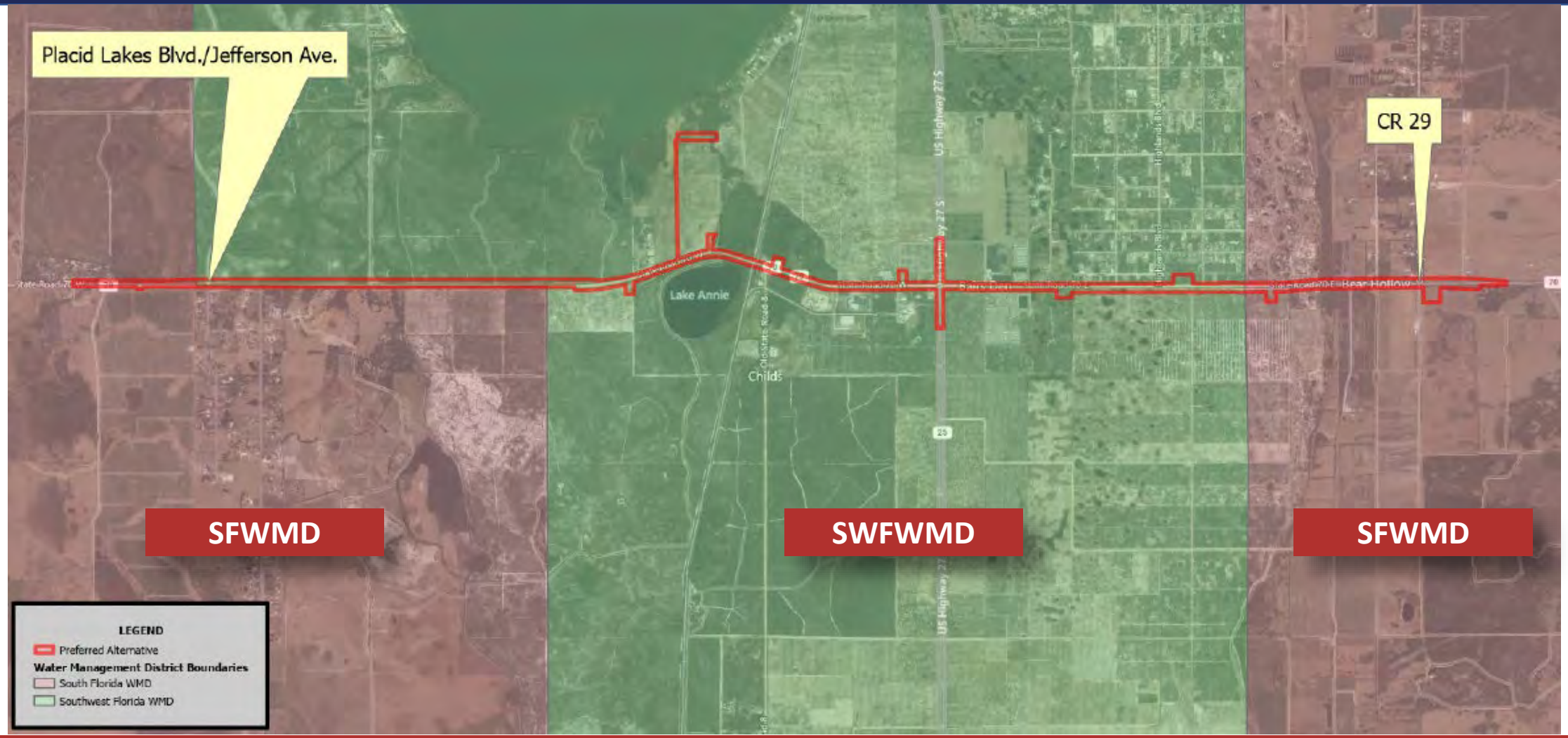


Segment 9-10



Segment 12-13

Segment 12-13 WMD Boundaries



Segment 12-13 Interagency Agreement

INTERAGENCY AGREEMENT BETWEEN
THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
AND THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT
FOR THE DESIGNATION OF REGULATORY RESPONSIBILITY FOR AN
ENVIRONMENTAL RESOURCE PERMIT FOR THE
SR 70 PROJECT IN HIGHLANDS COUNTY

THIS INTERAGENCY AGREEMENT (Agreement) is made and entered into by and between the SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) and the SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD).

WITNESSETH:

WHEREAS, The Florida Department of Transportation (FDOT) is seeking an environmental resource permit for construction of road improvements and associated stormwater facilities along an approximately 7-mile portion of SR 70, from east of Jefferson Avenue to CR 29, in Highlands County, Florida. (SR 70 Project); and

WHEREAS, the beginning of the SR 70 Project falls under the jurisdiction of SFWMD, and then the project continues along the geographical boundary between SFWMD and SWFWMD until it again falls under SWFWMD's jurisdiction, and then ends in SFWMD's jurisdiction. See project map attached as "Exhibit A."

WHEREAS, the geographic area of the SR 70 Project includes portions of Highlands County that are located within the jurisdictional boundaries of SWFWMD and SFWMD; and

WHEREAS, Subsection 373.046(6), Fla. Stat., authorizes a water management district to designate, via an interagency agreement, regulatory responsibility to another water management district when the geographic area of a project or local government crosses water management district boundaries; and

WHEREAS, the designation of the SWFWMD as the water management district with Part IV, Chapter 373, Fla. Stat., regulatory responsibility for the SR 70 Project would allow for more efficient processing of permit applications under that part; and

WHEREAS, the SWFWMD and the SFWMD desire to designate the SWFWMD as the water management district with Part IV, Chapter 373, Fla. Stat., regulatory responsibility for the SR 70 Project, pursuant to Part IV, Chapter 373, Fla. Stat.;

NOW THEREFORE, the SWFWMD and the SFWMD, under the authority of Subsection 373.046(6), Fla. Stat., hereby agree as follows:

1. The SFWMD hereby designates to SWFWMD all regulatory responsibilities under Part IV of Chapter 373, Fla. Stat., for those activities associated with the SR 70 Project that lie within the jurisdictional boundaries of SFWMD. Such regulatory responsibilities shall include receiving, processing, and taking final agency action on all environmental resource permit applications, or modifications thereof, and taking any compliance and enforcement action with regard to such permit.

2. This Agreement will commence upon execution by all parties and will remain in effect until either party terminates such agreement for its convenience upon ninety (90) days written notice to the other party.

IN WITNESS WHEREOF, each party, or its lawful representative, has executed this Agreement on the date set forth next to their signature below.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

By: _____
Randall S. Maggard, Chair

Attest: _____
Bryan K. Beswick, Secretary
Ed Armstrong, Treasurer

Date: March 27, 2018

(Seal)

Legal Form Approved:

Jodi A. Thompson
Staff Attorney

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

By: _____
Jill S. Creech, P.E.
Director, Regulation Division

Attest: _____
District Clerk/Secretary

Date: 03/16/18, 2018

(Seal)

Legal Form Approved:

Jennifer D. Brown
Senior Attorney

Segment 9-10 Existing Linear Ponds & FPCs

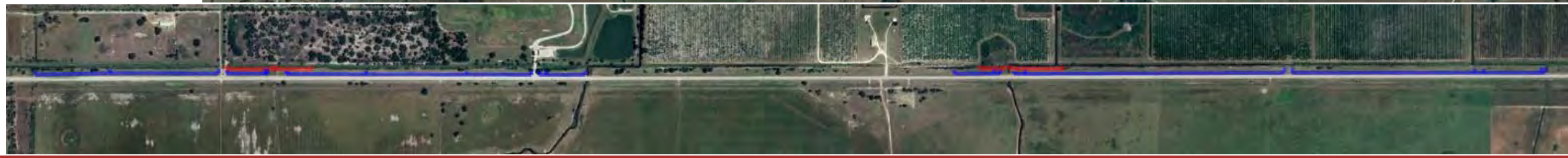
- ✓ FPID 193896-1
  - ✓ SR 70 Widening (Turner Ave to SR 31)
  - ✓ 1.2-mile of existing linear ponds (both sides)



Segment 9-10 Existing Linear Ponds & FPCs

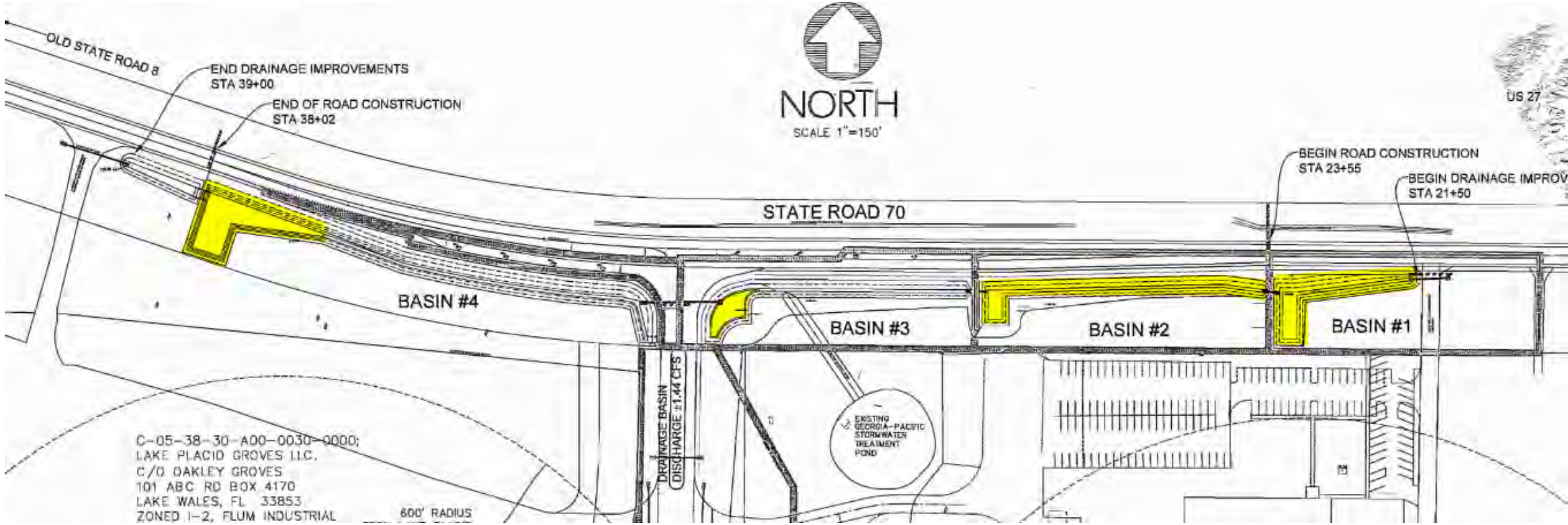
- ✓ FPID 420983-1
  - ✓ SR 70 Passing Lanes (Turkey Hammock Rd to 1-mile west of County Line)
  - ✓ 5.6-mile of existing linear ponds (north side)
  - ✓ 0.4-mile of existing linear FPCs (north side)





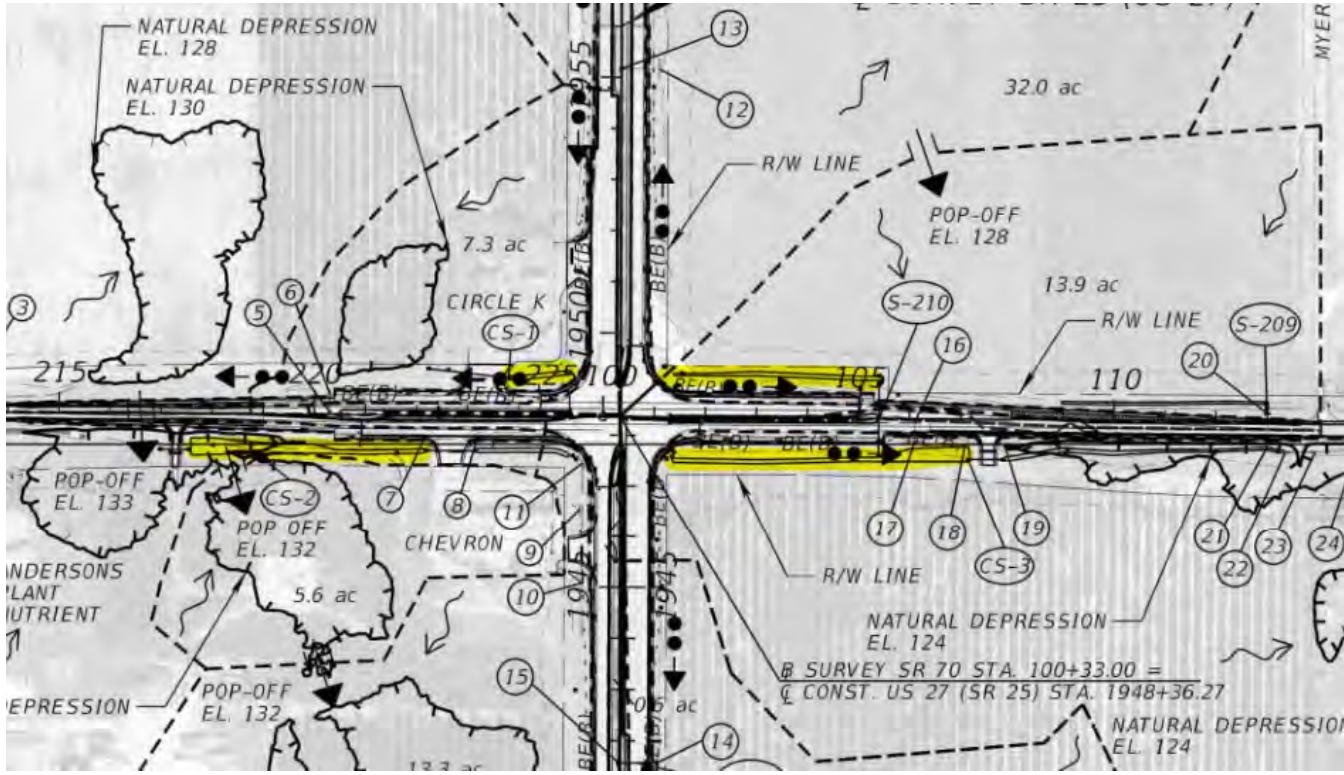
Segment 12-13 Existing Linear Ponds

- ✓ Georgia Pacific Access Rd
  - ✓ Four existing linear ponds (south side)



Segment 12-13 Existing Linear Ponds

- ✓ FPID 439827-1
  - ✓ SR 25/SR 70 Intersection Improvement
  - ✓ Four existing linear ponds (both sides)
  - ✓ Under construction



Segment 12-13 Existing Linear Ponds

- ✓ FPID 194437-3
  - ✓ Intersection/Turn Lane Improvement
  - ✓ Ten existing linear ponds (both sides)



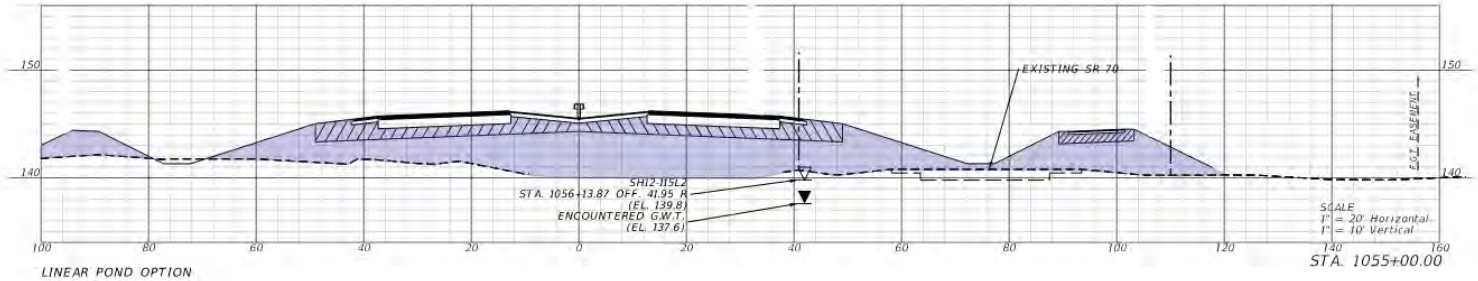
Base Clearance

- ✓ 3’ Base Clearance
- ✓ Weir Elevation for Linear Ponds
  - ✓ Drainage Manual 5.4.1.1
- ✓ Geotech Estimated SHGWT
  - ✓ Generally high
  - ✓ Segments 9-10
    - ✓ Under Review
  - ✓ Segments 12-13
    - ✓ 15%: 0’-1’ existing base clearance
    - ✓ 20%: 1’-2’ existing base clearance
    - ✓ 15%: 2’-3’ existing base clearance
    - ✓ 50%: >3’ existing base clearance
    - ✓ Pending additional verification

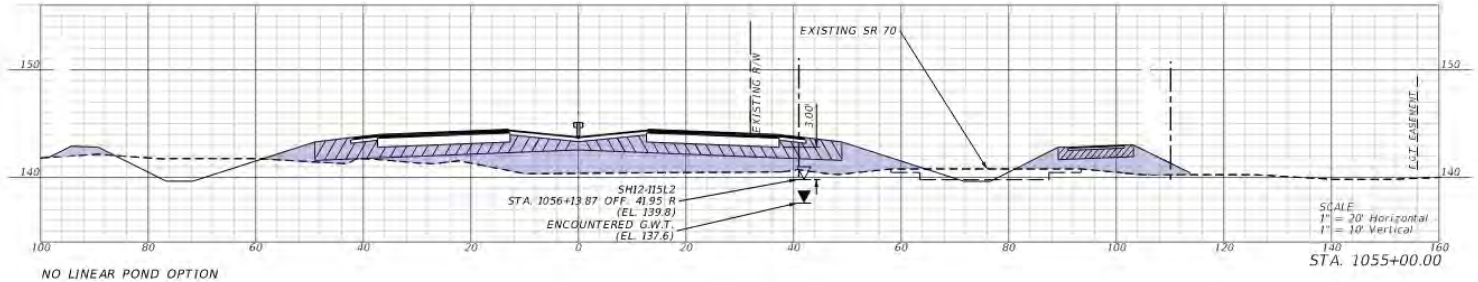
Base clearance is the distance between the bottom of the roadway base and the top of the base clearance water elevation (BCWE). The BCWE is considered the long-term standing water which could negatively affect the structural integrity of the roadway base. Allowable base clearances are based on the roadway's classification and are provided in **FDM 210.10.3**.

The BCWE for roadside treatment swales should be set at the weir elevation. A lower elevation may be used if all of the following apply:

- In-situ soils are classified as Hydrologic Soil Group A,
- Geotechnical investigation reveals there is no confining layer to impede drawdown, and
- Construction activities are limited within the treatment swale to avoid compaction and tracking of silt and muck.



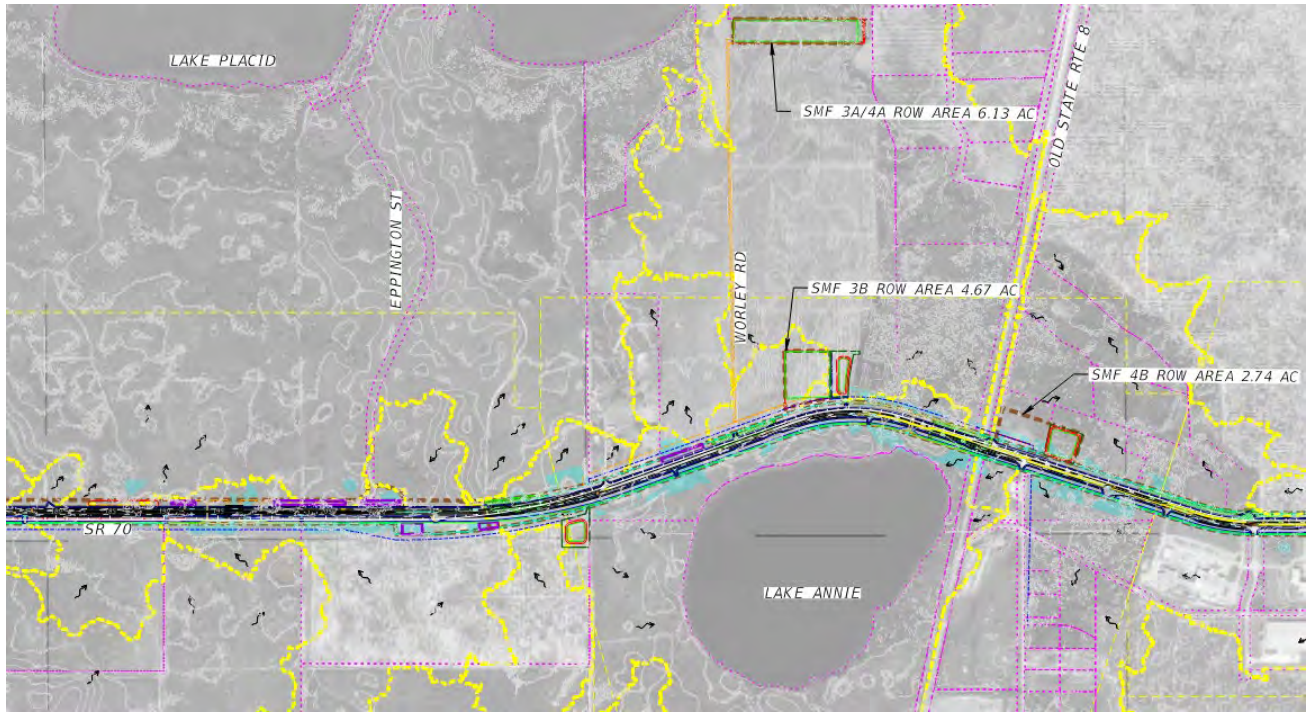
LINEAR POND OPTION



NO LINEAR POND OPTION

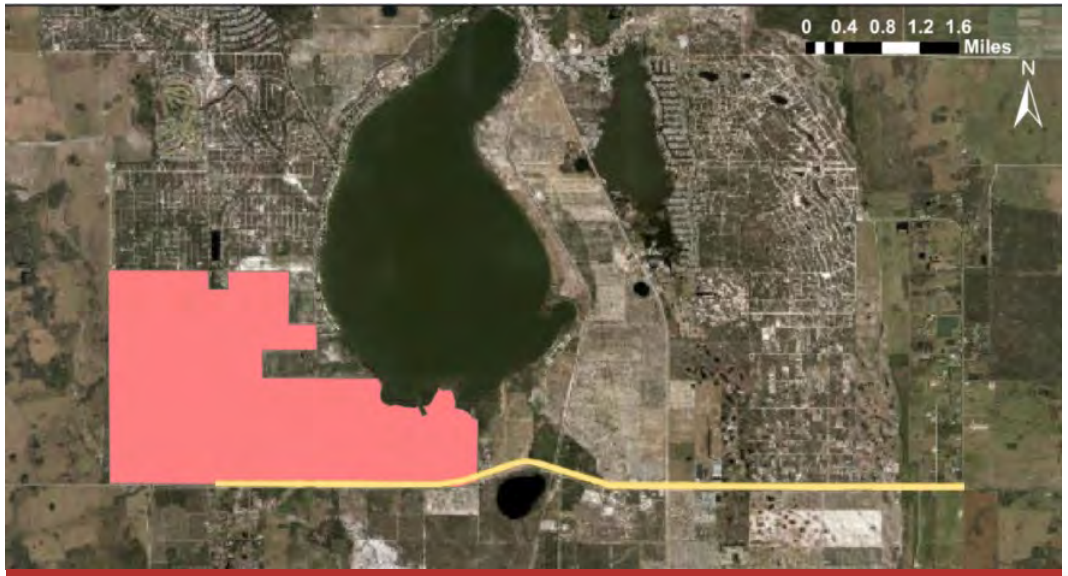
Pond Siting & Stormwater Management

- ✓ Segments 9-10
  - ✓ Linear Ponds
  - ✓ Offsite Ponds
- ✓ Segments 12-13
  - ✓ PD&E identified 1 alternative per basins
    - ✓ PD&E did not have survey and geotech
    - ✓ PD&E did not have a roadway profile
  - ✓ Utility Easements – FP&L & FGT
  - ✓ Linear Ponds in Conservation Land
  - ✓ Offsite Ponds
  - ✓ Combine Basins?



Pond Siting & Stormwater Management

- ✓ Segment 12-13
  - ✓ PD&E Pre-Application Meeting
    - ✓ December 2014 (PA 401780)
  - ✓ Concept Design Pre-Application Meeting
    - ✓ April 2024
- ✓ Water Quality
  - ✓ For Nutrient Impaired WBIDs → Net Improvement
  - ✓ For Basins Directly Discharge to OFW → 150% of Presumptive Treatment Volume
  - ✓ Equivalent New DCIA
  - ✓ Compensatory Treatment
  - ✓ Current Stormwater Rules



Placid Lakes OFW

Pond Siting & Stormwater Management

- ✓ Water Quantity (SWFWMD)
  - ✓ Open Basin →
    25-year 24-hour Pre vs. Post
    Peak Discharge Rate
  - ✓ Closed Basin →
    100-year 240-hour Pre vs. Post
    Discharge Volume



FEMA



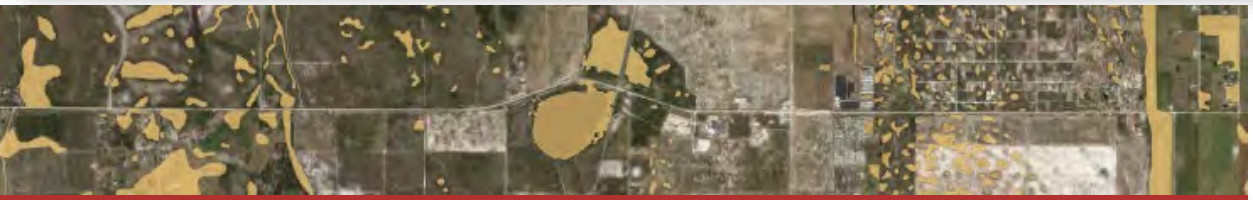
Lake Placid Watershed Model

Pond Siting & Stormwater Management

- ✓ Floodplains
  - ✓ Lake Placid Watershed Model
  - ✓ SHGWT vs. Initial Stage



Segment 9-10 FEMA



Segment 12-13 FEMA



Lake Placid Watershed Model

Questions?

HNTB Corporation
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MEETING MINUTES

Project Name
SR 70 Segments 9-10, 12-14

Date of Meeting
September 9, 2024

FPID(s)
451690-1, 451942-1, 414506-3, 414506-4, 414506-5

Location
D1 HQ, Microsoft Teams

Purpose of Meeting
Drainage Pond Siting Schedule

Time
2:00 PM – 3:00 PM

Attendees:

- **FDOT – Joe Lauk (PGA), Brent Setchell, Melody Joyner, Melissa Slater**
- **HNTB – Bill Jones, Ed Ponce, John Burton, Sam Chiu, Angela Shepard, Matt Dockins, Gordon Mullen, Dave Crombie**

Agenda & Notes

1. Introductions & Agenda
    - Pond siting is critical path for both PD&E and design. Regular check-ins will help expedite schedule and make sure we are on the right track.
    - Meeting purpose to review project schedules and identify decision points for pond siting activities.

2. Segment 9-10, 12-14 schedules:
    - Discussed draft schedule of activities for concurrent PD&E and design related to pond siting.
    - During the meeting, comments and revisions made to the draft schedule included the following:
        - Pond Siting Alternatives Analysis will include preliminary environmental desktop analysis.
        - Brent suggested having a check-in meeting to confirm alternates before starting the field work (exploratory Geotech and Environmental). This will be accomplished in Checkpoint Meeting #1
        - Brent suggested an additional check in meeting prior to submission of the Draft PSR (Meeting #2). This meeting will discuss estimated costs & impacts and identify preliminary recommendations to incorporate in the Draft PSR.
        - Full field investigation (Geotech and Topo Survey) may begin after Draft PSR.
        - Meeting #3 will be scheduled prior to Final PSR submittal to confirm final recommendations.
        - After confirmation of final pond site recommendations, preliminary right of way process activities, including title searches and mapping up to 60%, may begin. For purposes of the pond siting schedule, right of way activities will be reflected in two lines for preliminary and final effort (appraisals, etc).

- Bill displayed a graphic illustrating the Segment 14 LDCA will be achieved by December 2024 and noted that this allows for ROW acquisition and permitting package submittals in advance of the other segments.
- Bill noted some funding for right of way and/or mitigation will be available in FY 2026.
- An additional schedule line will show the anticipated Segment 14 re-evaluation timeline. Anticipated 6-month timeline should be complete by August 2025, prior to 60% plans and SFWMD permit application.
- Dates related to DB procurement are subject to change.

3. Pond siting methodology, approach, preliminary alternate sites discussion.
    - Segment 14
        - Angela reviewed the current PD&E alternates and recommendations, three alternative stormwater management facility types for 3 basins (offsite wet detention, linear ponds, regional pond), and 2 FPC sites with 2 alternates identified for each site.
            - FPC 2A (PD&E recommended) is now a planned FPL Solar Farm site. Unless it is anticipated this is still a viable site, an additional alternate site will be needed to replace FPC 2A.
            - FPC 1A (PD&E recommended) may impact adjacent wetlands with modeled SHWT. Recommendation may change to FPC 1B or third alternate (TBD).
            - Preliminary cost differences estimated for the LRE memo comparing alternative stormwater management facility types will be expanded and incorporated in the PSR.
        - Angela identified next steps for updating the ICPR floodplain model with design-level information as it becomes available. Brent had no comments on the overall approach.
            - Brent agreed that initial stage shouldn't be at canal bottom. FP model updates will incorporate the recent canal SHW/NWL determinations.
            - Angela noted upcoming Draft BHR will be based on the current PD&E FP model and will be refined in the Final BHR when FP model updates for roadway design geometry and topo survey are incorporated. Joe and Brent have concerns about the BHR rework if survey data is not available. John noted available LiDAR has been reasonably accurate compared to survey to-date. Joe inquired if the BDR/BHR is on the critical path. Angela noted the BDR/BHR schedule is aligned with the current design schedule.
            - The current FP model reflects permitted (future) conditions for some offsite wetland restoration project sites. Updates needed to replace FP model input with existing conditions data.
                - In order to update the FP model with the best available (permit) data, Angela requested approval to contact offsite property owners for ICPR data not available from SFWMD or KCA. Brent had no concern with contact.
            - Anticipated that upcoming ICPR model updates may result in increases in FP impacts and corresponding FPC site sizes.
                - If viable sites are not available, will revisit other opportunities with less favorable schedule impacts.
    - Segment 13
        - PD&E provided one alternative per basin. Updates will include 3 per basin.
        - HNTB to request flooding complaints for the RV site

- Brent alerted the team about the isolated depressions, which may have clay/organic materials to cause the impoundment. Brent also noted the odd topography in proximity to seepage slope.
- Will need model to estimate floodplain elevations in depressions.

- Segment 12
  - PD&E provided one alternative per basin. Updates will include 3 per basin. Basins 1 and 2 include linear pond options as suggested in the PD&E. Basins 3 and 4 have a regional alternative.
  - Initial stages in the watershed model will be updated to reflect recent SHWT determination. Updates may result in increases in FP impacts and corresponding FPC site sizes.
  - Discussion about the roadway realignment shift north due to FP&L.
  - Brent asked if the EB roadway is re-using the existing. HNTB indicated that is for Segment 9-10.
- Segments 9-10
  - Existing FGT and FP&L easements
  - HNTB indicated that there are owners that has multiple large parcels. Will look for opportunities to minimize impacts to owner or combine basins.
  - Basin delineation and CN calculations underway.
  - No previous sites identified. Three alternatives per basin will be provided, including linear ponds as an option. The current roadway design fit inside the existing roadway R/W. Any differences in project costs due to linear ponds will be accounted for in the PSR.
  - FPC sites will be identified offsite.
  - Potential pond sites may not be directly adjacent to roadway due to FPL and FGT easements.
  - Survey anticipated in early December. LiDAR will be used in the meantime.

4. Additional general discussion for PSR methodology:
   - Brent's preference is to locate pond sites close to R/W
   - When sizing pond, use 1.0 to 1.5 ft of treatment depth. Include consideration for impacts to roadway profile and cost benefit of expanding pond footprint.
   - If a shallow treatment depth is used (such as 0.5 ft), this will need justification if that is due to roadway profile. Should include a comparison of the larger pond vs. roadway cost (raising roadway profile that affect roadway R/W and roadway embankment)
   - Alternative cost estimates should include all costs associated with ponds, such as outfall and easements, and other differential costs (higher roadway profiles or additional corridor right of way).
     - Include consideration for pipes will connect to ponds. Potential example of combining basins that requires a deeper pipe to traverse cross drain locations.

5. Action items:
   - Update pond siting project schedules, see attached.
   - Schedule check in meetings.



Strategic Corridors – District One

Meeting Sign In Sheet

Name	Office/Firm	Phone	Email
ED PONCE	HNTB	863-604.1034	eponce@hntb.com
Gordon Muller	HNTB	863-804-3087	gsmuller@hntb.com
John Burton	HNTB	727-642-1966	jburton@hntb.com
Angela Shepard	HNTB	904-676-7188	ashepard@hntb.com
SAM CHIU	HNTB	813-407-7719	HTCHIU@HNTB.COM
DAVE CROMBIE	HNTB	850-264.7754	dcrombie@hntb.com
Matt Dockry	HNTB	617-488-8433	MDockry@HNTB.com
JOSEPH LAUK	PCA / PROTEGE	863 6c40516	Joe.Lauk@dot.state.fl.us
Melody Joyner	FDOT	863-800-6247	melody.joyner
Melissa Slater	FDOT	863-221-8847	melissa.slater@dot.state.fl.us

Project Schedules & *Pond Siting Activities*	**9 & 10**	**12**	**13**	**14**
Preliminary WMD Coordination/Pre-App Meeting	-	Apr 2024	Apr 2024	May 2024
Typical Section	Jul 2024	Aug 2024	May 2024	Jul 2024
15% L&G	Oct 2024	Nov 2024	Sep 2024	Aug 2024
30% Plans	Jan 2025	Feb 2025	Dec 2024	Nov 2024
Pond Siting Alternatives Analysis *- Evaluate alternate drainage schemes* *- Estimate right of way required for each alternate* *- Begin environmental desktop clearances*	Sep 2024-Jan 2025	Nov 2024-Mar 2025	Sep-Dec 2024	Aug-Dec 2024
Checkpoint Meeting 1: Pond Siting Alternatives Analysis w/ Multi-functional Team: *Coordinate ROW, parcels, alternate viability, property owner contact, access conveyance requirements, aesthetic, social, cultural, and environmental impacts of each alternate*. *Confirm sites for preliminary & environmental field work*	Jan 2025	Mar 2025	Jan 2025	Dec 2024
Estimate costs and assess impacts: complete desktop clearances, field work: species survey, PSR Geotech, CRAS, Contamination, & Environmental for all alternatives.	Jan-Apr 2025	Jan-Apr 2025	Jan-Apr 2025	Dec 2024-Apr 2025
Checkpoint Meeting 2: *Discuss estimated costs & impacts and identify preliminary recommendations*	Mar 2025	Apr 2025	Mar 2025	Feb 2025
Draft PSR	Jan-Mar 2025	Mar-Apr 2025	Jan-Mar 2025	Dec 2024-Feb 2025
Complete remaining field investigation (Geotech and Topo Survey) for recommended pond sites	Apr-Jul 2025	May-Aug 2025	Apr-Jul 2025	Mar-Jun 2025
Checkpoint Meeting 3: *Confirm final recommendations.*	May 2025	Jul 2025	May 2025	May 2025
Final PSR	May 2025	Jul 2025	May 2025	May 2025
Begin preliminary pond Right of Way Process: (title searches, mapping up to 60%)	May 2025	Jul 2025	May 2025	May 2025
Public Hearing	Jun 2025	Oct 2025	Oct 2025	Sep 2023
LDCA	Oct 2025	Mar 2026	Mar 2026	Dec 2024 - Jan 2025
Re-evaluation (Segment 14 only)	-	-	-	Feb-Aug 2025
After LDCA, begin ROW process (appraisals) as environmental certifications and mapping complete	Oct 2025	Mar 2026	Mar 2026	Aug 2025
60% Plans	Sep 2025	Oct 2025	Oct 2025	Aug 2025
Permit Application *after LDCA*	Oct 2025 (SWFWMD)	Mar 2026 (SWFWMD)		Aug 2025 (SFWMD)
Final DB Plans	Oct 2025	Mar 2026	Mar 2026	Nov 2025
Potential DB Ad	Oct 2025	Mar 2026	Mar 2026	Mar 2026
Potential RFQ	Oct 2025	May 2026	May 2026	May 2026
Potential Award	Dec 2025	Nov 2026	Nov 2026	Nov 2026

HNTB Corporation
The HNTB Companies
Engineers Architects Planners

Project Name
SR 70 from Jefferson Ave to Lonesome Island

Date of Meeting
10/29/2024

HNTB Project #
75614-DS-010

Location
Teams

Purpose of Meeting
Segment 12-14 Access Management

Time
9:00 am

Participants
Walter Breuggeman, FDOT
Vivianne Pena, FDOT
Matt Dockins, HNTB
Gordon Mullen, HNTB
John Burton, HNTB
John Fowler, HNTB
Ed Ponce, HNTB
Brett Hensley, HNTB

MEETING NOTES

- PD&E Concepts – Access Overview
  - Segments 12/13
    - Access Class 03
    - Directionals only
    - Signalized median u-turn at US 27
    - Some bulb-outs for truck u-turns
  - Segment 14
    - Access Class 03
    - Mix of directional and full openings
    - Already had public hearing
- Proposed Design Modifications
  - Areas of paved shoulder widening to accommodate Passenger Vehicle u-turns
    - Walter wants to accommodate a larger crew-cab type pickup truck with extended bed at all u-turn locations
    - **Action: HNTB to run AutoTurn to verify that a larger pickup can make the u-turn movement**
  - Walter would like to look at the concept further and provide feedback
  - Remove opening at Sta. 1100+00
  - Remove opening at Sta. 1198+00
  - Can't easily build new loons
  - Maybe accommodate large trucks 1x per mile
  - SR 82 Lesson Learned: Sight line issue from lack of offset left turns

    - Need for offset left turns depends on future traffic volumes
- Walter doesn't like combining a loon with a side street if the side street is expected to have any significant volume
- Realign Old SR 8
    - Significant truck movements observed
    - Realign northern leg
    - Create 4-leg signalized intersection
    - Requires additional R/W
    - Impacts FGT transmission line
    - Need a signal warrant to construct a signal
        - Action: HNTB to perform a signal warrant analysis
    - Need ICE analysis
        - Would a roundabout work?
        - Can still construct a roundabout without a warrant
    - May want to do a cost analysis of Old SR 8 realignment
- Several modifications between RR tracks and US 27
- FP&L looking at expansion with driveway near SE corner of Glades Electric substation
    - Any new driveway would need to be east of the orange grove
- Median u-turn (MUT) at US 27 is preferred option
    - Walter will verify the ICE analysis was completed
- Unsignalized Green T at CR 29
    - Need ICE analysis
- Reach out to Susan Joel before starting ICE analysis
    - Susan.Joel@dot.state.fl.us

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MEETING MINUTES

Project Name
SR 70 Segments 12-14

Date of Meeting
February 4, 2025

FPID(s)
414506-3, 414506-4, 414506-5

Location
D1 HQ, Microsoft Teams

Purpose of Meeting
Analysis with Multi-Functional Team: Coordination of ROW, Parcels, Alternate Viability, Property Owner Contact, Access Conveyance Requirements, and Assessment of Aesthetic, Social, Cultural, and Environmental Impacts of Each Alternate. Confirm Sites for Preliminary & Environmental Field Work. Drainage Pond Siting & Exploratory Borings Sign-Off

Time
1:00 PM – 2:00 PM

Attendees:

- **FDOT – Brent Setchell, Eric Collier, Joe Lauk (PGA), Ryan Molloy, Brooke Feagle (AtkinsRéalis), Kathryn Cothern**
- **HNTB – Angela Shepard, Braeden Johnson, Ed Ponce, John Burton, John Fowler, John Fowler, Matt Dockins, Nic Leon, Sam Chiu**

Agenda & Notes

1. Introductions & Agenda

- The primary focus of this meeting was to review pond siting progress and obtain concurrence for exploratory borings and environmental surveys to further evaluate site alternatives.

2. Segment 14

- LDCA is anticipated 04/2025 and re-evaluation is scheduled to be completed 12/2025.
- The Stormwater Management Facility (SMF) alternatives for the three drainage basins (three cross drains) are generally consistent with the 2023 PD&E. The updated evaluation and recommendations will incorporate most recent data collection, estimated impacts, and estimated construction costs.
    - Stormwater Management Alternative 1 (Linear Ponds)
        - Positioned within the 60-ft minimum horizontal offset, between travel lanes and adjacent canal hazards, along both sides of SR 70. The linear ponds extend throughout entire Segment 14 limits.
        - Due to profile gradient and driveway locations, multiple cells are anticipated for each of the three basins.
        - Basin 1: 16 cells
        - Basin 2: 22 cells
        - Basin 3: 13 cells
    - Stormwater Management Alternative 2 (Offsite Wet Detention Ponds)
        - Ponds are positioned adjacent to, and outfall into the agricultural canals along SR 70. Easements are required for access and conveyance from roadway into ponds, which will cross beneath the bottom of canal (canal depths vary, approximately 5-feet from

bottom to top of bank), and pond outfalls back to the canals. The corresponding maximum pond depths to accommodate deeper conveyance pipes are not expected exceed 12-feet below the normal water level.

- Potential constructability/dewatering concerns were discussed for pipes crossing beneath the canals. However, for ponds located south of SR 70, the anticipated construction phasing would allow installation of pipes prior to the relocation of the south canal.

- Basin 1: No change to the location of SMF 1 site. Some adjustment to pond size to provide entirety of required attenuation volume versus partial storage within roadway corridor.
- Basin 2: The 2023 PD&E located SMF 2 on the north side of SR 70. This location is the basis of the roadway design shown in the 30% concept plans. However, recent data collection and re-evaluation favors a SMF 2 relocation to the south side of SR 70. Improvements discussed include constructability of conveyance beneath the canal and a lower ESHWT (tailwater) between the north and south canals. The design team estimates a potential roadway profile reduction of approx. 1.5-feet if the pond is repositioned to the south.
    - Remove SMF 2 (north) and replace with SMF 2 (south) for further evaluation.
- Basin 3: No change to the location of SMF 3 site. Some adjustment to pond size to provide entirety of required attenuation volume versus partial storage within roadway corridor and pond repositioned south of the relocated canal.

o <u>Stormwater Management Alternative 3 (Regional Pond)</u>

- No change to site location. Alternative to include both a land use swap for water quality and wet detention for water quantity.
- Right of way, access easements, and conveyance easements will require further evaluation to verify need, appropriate designation, and avoidance of severing remnant parcel usage and access.
- Potential utility involvement with FGT

o <u>Floodplain Compensation (FPC) Areas</u>

- Zone A Floodplains present in majority/middle of Segment 14 limits. Modeling is the approach to define required compensation. Updates to 2023 PD&E model are in progress to incorporate latest and best available design information and confirm compensation needs. 2023 PD&E estimated 48.5 ac-ft will be required.
- Compensating storage is generally unavailable in the middle portion of the project due to high groundwater tables but is available along each side of Zone A limits, on the west (FPC 1's) and east (FPC 2's).
- Alternate Sites discussed:
    - FPC 1A – same location as PD&E. Remove from further evaluation due to unavailability of compensation storage (ESHWT 41.6 to 42.9 above 100-year stage 39.3) and proximity to adjacent wetland.
    - FPC 1B - same location as PD&E. Site elevations vary from 34 to 40. ESHWT at upper elevations are above 100-year stage 34.7. Some floodplain storage capacity (2 ac-ft) still available without dewatering.
    - FPC 1C – new site, 1 parcel; group of smaller sites with limited footprint to avoid impacting private infrastructure. Approximately 7.7 ac-ft compensation volume available with current footprint. Potential for expansion if needed.

- FPC 1D – new site, 2 parcels; group of smaller sites with limited footprint to avoid impacting private infrastructure. Approximately 22 ac-ft compensation volume available. Potential for expansion if needed.
- FPC 2A – same location as PD&E. Remove from further evaluation due to planned FPL solar farm and unavailability of compensation storage (ESHWT 32.5 to 34.5 above 100-year stage 31.3).
- FPC 2B – relocate north to frontage portion of same parcel due to unavailability of compensation storage at previous location. Existing ground and approx. 1.5 depth to water table at frontage location has 29+ ac-ft of compensation storage available below the 100-year stage. Potential for expansion if needed.
- FPC 2C – (was not presented during the meeting) but was added for further evaluation as a location with viable storage availability.
- FPC 2D – new site; located between conservation lands on the north side of SR 70. Approx. 0.5-ft depth to apparent water table, controlled by discharge pump. If basis of storage capacity is nearest canal ESHWT, then site is not viable. Otherwise, with a 0.5-ft depth this site could provide 28 ac-ft of storage on a 59-ac site. Remove site from further evaluation due to unavailability of storage.

- FPC siting next steps:
  - a. Complete ICPR model updates to confirm required storage volumes necessary to avoid increasing watershed 100-year stages. Compare required storage volumes to available storage capacity at alternate sites and combine sites as necessary to group into three independent alternatives.
  - b. If a minimum of three viable alternatives are not available, the PSR will include supporting justification and clarification why remaining parcels have been removed from consideration.
  - c. If total available storage is insufficient, incorporate WRE future improvements in model and quantify the storage benefit during the 100-year event as a potential supplement to available FPC sites.
- FDOT Drainage concurred request to proceed with exploratory borings and environmental surveys on remaining alternative FPC sites with available storage including: FPC 1B, FPC 1C, FPC 2B (relocated), FPC 1D, and FPC 2C (new).

3. Segment 13

- LDCA has been shifted to beyond 06/28/2026. The pond siting is using the new water quality criteria.
- Stormwater Management
  - Basin 1303
    - An open basin within an impaired WBID.
    - Alternative 1 consists of SMF 1303A (wet pond) at SE corner of SR 70 and CR 29, and SMF 1303D (dry linear pond). SMF 1303D is added to upstream of the seepage slope to meet the new water quality criteria.
      - FDOT Drainage indicated that the latest guidance from CO is to use the ditch front slope and ditch block as a mean of nutrient removal to help meet new water quality criteria. Adding pond would not be the first solution.
      - HNTB added that SMF 1303D is located within the existing roadway right-of-way.
    - Alternative 2 consists of SMF 1303B (dry pond) at the NE corner of SR 70 and CR 29.
    - Alternative 3 consists of SMF 1303C (dry pond) at the SW corner of SR 70 and CR 29.

        - All three alternatives are located at the east end of the basin due to topography.
    - Basin 1302
        - A closed basin within an impaired WBID.
        - Alternative 1 consists of SMF 1302A (dry pond) between Highlands Blvd and Citrus Blvd. This alternative is located at the main depression.
        - Alternative 2 consists of SMF 1302B (dry pond) east of Citrus Blvd. This alternative is located at the secondary depression.
        - Alternative 3 consists of SMF 1302C (dry pond) at the SE corner of SR 70 and Turner Rd. This alternative is placed partially outside the closed basin.
    - Basin 1301
        - A closed basin within an impaired WBID.
        - Alternative 1 consists of SMF 1301A (dry pond) south of SR 70 and west of Brevard Ave.
        - Alternative 2 consists of SMF 1301B (dry pond) at the NE corner of SR 70 and Ekhoff Ln.
        - Alternative 3 consists of SMF 1301C (dry pond) at the NW corner of SR 70 and Brevard Ave.
        - All three alternatives are located near the cross drain, which is the at the bottom of the basin.
        - FDOT Drainage inquired where does the cross drain and channel drain to. HNTB clarified that it drains to the closed basin to the northeast.
- <u>Floodplain Compensation Areas</u>
    - Floodplain Impact Area (FIA) 1309
        - A depression is located south of SR 70 and 800-feet east of Bear Rd. This depression receives both onsite and offsite contributing areas in conjunction with the depression located behind a private single-family home.
        - Alternative 1 consists of FPC 1309A, which is located upstream of the depression at a higher elevation. This alternative intends to provide the required storage before the runoff contribute to the reduced depression.
        - Alternative 2 was discussed regarding placing a FPC west of the private property; however, this would result in surrounding the private single-family home with depressional storage on the west and south sides and the proposed roadway to the north side. Additional discussion with roadway and right-of-way to determine if this property requires to be whole-take given the roadway tie-down slope is adjacent to the private single-family home.
    - FIA 1308
        - Five isolated depressions are located on both sides of SR 70 from east of Citrus Blvd to east of Bear Rd. These depressions receive both onsite and offsite contributing areas.
        - An FPC was identified south of SR 70 at Bear Rd in the previous PD&E, which the floodplain elevations were determined using the NRCS equations.
        - A localized ICPR model with percolation links was created with this project to simulate the 100-year flood stage, which determined the impacts being minimal.
        - HNTB suggested obtaining geotechnical data to validate the perc link data. If confirmed, no FPC will be proposed. FDOT Drainage concurred with the approach.
    - FIA 1307
        - An isolated depression located north of SR 70 from Highlands Blvd to Citrus Blvd. The encroachment is due to the proposed SMF, which is sized to include the loss of existing storage.

- FIA 1306
  - An isolated depression is located at the southwest corner of SR 70 and Highlands Blvd.
  - Alternative 1 consists of FPC 1306A, which is located immediately east of the floodplain.
  - Given the location of the isolated depression, the compensation needs to occur within parcel C03383001000A00000 due to the hydraulics connectivity. No other alternatives have been identified. FDOT Drainage concurred with the approach.
- FIA 1305
  - Two isolated depressions located north of SR 70 from Broward Ave to Citrus Blvd. The encroachment is minor and demonstrate by comparing the loss of existing storage and the reduction in contributing area in these depressions.
- FIA 1303
  - An isolated depression is located at the south of SR 70 at Broward Ave.
  - Alternative 1 consists of FPC 1303A, which is located immediately south of the floodplain.
  - Given the location of the isolated depression, the compensation needs to occur within parcel C03383001000A00000 due to the hydraulics connectivity. No other alternatives have been identified. FDOT Drainage concurred with the approach.
- FIA 1301
  - A low area is located at the cross drain between Ekhoff Ln and Brevard Ave.
  - This area is not mapped as a floodplain in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM).
  - A localized ICPR model with percolation links was created with this project to simulate the 100-year flood stage, which determined there are impacts to the loss of storage.
  - Alternative 1 consists of FPC 1301A, which is located north of the cross drain. This alternative will only be compatible with SMF 1301A as it is partially overlapped with SMF 1301B and SMF 1301C.
  - Alternative 2 consists of FPC 1301B, which is located southwest of the cross drain.

4. Segment 12

- LDCA has been shifted to beyond 06/28/2026. The pond siting is using the new water quality criteria.
- Stormwater Management
  - Basin 1204
    - A closed basin within an impaired WBID.
    - Alternative 1 consists of SMF 1204A (dry pond) north of SR 70 and 1,000-feet west of US 27.
    - Alternative 2 consists of SMF 1204B (dry pond) at NW corner of SR 70 and US 27.
    - Alternative 3 consists of SMF 1204C (dry pond) west of US 27 and 650-feet south of SR 70.
      - FDOT Drainage inquired about the conveyance from SR 70 to the pond. FDOT Drainage asked if there are existing conveyance is in place or if modifications are required.
      - HNTB indicated there is existing roadside ditch; however, closed storm drain system may be needed under the ditch such that only SR 70 runoff being contributed to the pond.
    - All three alternatives are located at the east end of the basin due to topography.

        - FDOT Drainage inquired about the outfall locations of the alternatives. HNTB indicated that these closed basin ponds should be discharging to the nearest isolated depression, but will verify after the meeting.
    - Basin 1203
        - An open basin within an impaired WBID.
        - Alternative 1 consists of SMF 1203A (dry pond) and SMF 1203D (dry pond), which both are located north of SR 70 and east of the rail track. SMF 1203D is the remanent space due to the proposed Old SR 8 realignment.
        - Alternative 2 consists of SMF 1203B (dry pond) and SMF 1203D (dry pond). SMF 1203B is located north of SR 70 and 1,150-feet east of the rail track.
        - Alternative 3 consists of SMF 1203C (dry pond) and SMF 1203D (dry pond). SMF 1203C is located south of SR 70 and 600-feet east of the rail track.
    - Basin 1202
        - An open basin within an impaired WBID.
        - Alternative 1 consists of SMF 1202A (dry pond) north of SR 70 and 1,450-feet west of rail track.
        - Alternative 2 consists of SMF 1202B (dry pond) 3,700-feet north of SR 70 near Lake Placid. This was the regional alternative in the previous PD&E. This alternative requires a lengthy storm drain conveyance along Worley Rd.
        - Alternative 3 consists of SMF 1202C (dry pond) at NW corner of SR 70 and Worley Rd.
        - All three alternatives have likely involvement with FGT.
        - FDOT Drainage inquired if SMF 1202A is located inside a FWC interested parcel. HNTB indicated that this is not one of the FWC interested parcels, but will verify after the meeting.
- <u>Floodplain Compensation Areas</u>
    - The FEMA FIRMs within Segment 12 are dated November 2015.
    - The initial PD&E Study used the Lake Placid Watershed model (2014) as the best available information, which is depicting more floodplains than the FEMA FIRMs.
    - FIA 1214
        - Floodplains are located along both sides of SR 70 from the rail track to east of Distribution Blvd.
        - Alternative 1 consists of three FPC sites (FPC 1214A, FPC 1214C, and FPC 1214D) due to the shallow groundwater table.
            - FPC 1214A is located in parcel C1837300100AA00000 on the north side of SR 70 and will require an easement.
            - FPC 1214C is located in parcel C053830A0000300000 on the south side of SR 70 and will require an easement in parcel C323730A0000100000.
            - FPC 1214D is located in parcel C1837300100AA00000 and C323730A0000700000 on the north side of SR 70.
        - Alternative 2 consists of three FPC sites (FPC 1214B, FPC 1214C, and FPC 1214D) due to the shallow groundwater table.
            - FPC 1214B is located in parcel C323730A0000600000 on the north side of SR 70.
            - FPC 1214C and FP1214D are the same as Alternative 1.
        - FDOT Drainage is concerned with the size of the compensation area relative to the impact area.

- After inquiring about modeling scope, FDOT Drainage suggested proceeding as a worst-case scenario and allowing Design-Build (D/B) to perform additional ICPR modeling.
- FDOT PM emphasized the needs for right-of-way acquisition.
- FDOT Drainage suggested investigating other solution, such as upsizing pipes across Old SR 8 and R/R to lower the stages in FIA 1214.
- FDOT Drainage acknowledged that modeling will likely be needed for the permit application with SWFWMD.
- HNTB will investigate further.

- FIA 1213
  - Floodplains are located along both sides of SR 70 from 1,600-feet west of the rail track to the rail track.
  - Alternative 1 consists of FPC 1213A, which is located immediately next to SMF 1202A.
  - Alternative 2 consists of FPC 1213B, which is located north of Lake Annie in parcel C18373001013730000.
- FIA 1211
  - Floodplains are located along both sides of SR 70 from west of Nursey Ln to east of Worley Rd. Some of the impacts are located within the Archbold parcel.
  - FPC cannot be placed inside the Archbold property due to the conservation area.
  - Alternative 1 consists of FPC 1211A, which is located in the parcel (C063830A0000100000) immediately west of the Archbold property.
  - Alternative 2 consists of FPC 1213B, which is located north of SR 70 in parcel C313730A0000120000. The FPC will be bermed up and connect to the floodplain on the south side via a culvert.

5. Items not discussed

- Due to the time constraints, these topics were not fully discussed and tabled to the next checkpoint meeting:
  - Segment 12
    - Stormwater Management
      - Basin 1201
    - Floodplain Compensation Areas
      - FIA 1201
      - FIA 1203
      - FIA 1205
      - FIA 1206
      - FIA 1208
  - Segment 13
    - Seepage slope floodplain

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MEETING MINUTES

Project Name
SR 70 Segments 12-14

Date of Meeting
March 7, 2025

FPID(s)
414506-3, 414506-4, 414506-5

Location
D1 HQ, Microsoft Teams

Purpose of Meeting
Coordination of ROW, Parcels, Alternate Viability, Access Conveyance Requirements, and Assessment of Aesthetic, Social, Cultural, and Environmental Impacts of Each Alternate. Discuss preliminary impacts, costs and recommended alternatives.

Time
9:30 AM – 11:00 AM

Attendees:

- **FDOT – Brent Setchell, Joe Lauk (PGA), Ryan Molloy**
- **HNTB – Angela Shepard, Braeden Johnson, Ed Ponce, John Burton, John Fowler, Matt Dockins, Nic Leon, Sam Chiu**

Agenda & Notes

1. Introductions & Agenda

- The primary focus of this meeting was to review pond siting progress (especially for the alternatives that were not covered in the previous meeting), estimated impacts and costs. Some preliminary recommended alternatives were discussed and alternative approaches, such as acquisition of flood rights were identified for several floodplain compensation areas.

2. Segment 14

- LDCA is anticipated 04/2025 and re-evaluation is scheduled to be completed 12/2025.
- The Stormwater Management Facility (SMF) alternatives for the three drainage basins (three cross drains) are generally consistent with the 2023 PD&E. The updated evaluation and recommendations will incorporate most recent data collection, estimated impacts, and estimated construction costs.
    - Stormwater Management Alternative 1 (Linear Ponds)
        - Positioned within the 60-ft minimum horizontal offset, between travel lanes and adjacent canal hazards, along both sides of SR 70. The linear ponds extend throughout entire Segment 14 limits.
        - Due to profile gradient and driveway locations, multiple cells are anticipated for each of the three basins.
        - Basin 1: 16 cells
        - Basin 2: 30 cells
        - Basin 3: 19 cells

- Stormwater Management Alternative 2 (Offsite Wet Detention Ponds) (Preliminary Recommended Alternative)
  - Ponds are positioned adjacent to, and outfall into the agricultural canals along SR 70. Easements are required for access and conveyance from roadway into ponds, which will cross beneath the bottom of canal and pond outfalls back to the canals.
- Stormwater Management Alternative 3 (Regional Pond)
  - Alternative to be relocated and redefined from a facility where project runoff is collected and conveyed into, to a facility that diverts a portion of the existing north-south canal that is connected to the C-41. The objective of the redefined alternative is to meet water quantity and water quality requirements through increased detention of the canal (at Node N-0630). The land use swap for water quality may still be required.
    - Potential utility involvement with FGT
- C-41 Control Structure for both SMF and FPC:
  - The evaluation of a new alternative was requested to consider meeting the project's water quantity, water quality, and floodplain compensation needs (through reduction of peak tailwater stages) by the creation of a new control structure within the C-41 canal, owned and maintained by SFWMD, just north of the SR 70 bridge. This alternative would need to be validated that it does not introduce any adverse upstream impacts. It was noted some of the adjacent properties are conservation land with planned wetland restoration activities that may tolerate an increase in tailwater.
- Floodplain Compensation (FPC):
  - Zone A Floodplains present in majority/middle of Segment 14 limits. Modeling is the approach to define required compensation. Updates to 2023 PD&E model have confirmed that identified FPC sites (total 109 ac-ft) are not able to alleviate stage increases within the watershed caused by the estimated 128 ac-ft storage loss due to the proposed roadway.
  - Canal relocation, existing and future ownership is also a factor.
  - A recommended alternative is not yet determined, but the FPC Alternatives were redefined in this meeting to the following:
    - 1. FPC siting approach that combines all sites identified into a single alternative, with aim to avoid any stage increases within the watershed. In this alternative, the relocated canal would be restored to existing conditions.
    - 2. Flood rights acquisition approach that provides no proposed storage in addition to the SMF sites. The relocated canal would be restored to existing conditions, and the locations where resulting 100-year stages now encroach where previously did not would be mapped and sent to FDOT ROW for estimated flood rights cost.
    - 3. Flood rights acquisition approach that relocates the south canal to more stable and maintainable front and back slopes (1:3) and a wider channel bottom to reduce stage increases. Locations where resulting 100-year stages now encroach were previously did not would be mapped and sent to FDOT ROW for estimate flood rights cost. This alternative would include additional ROW and maintenance costs for FDOT ownership of the relocated south canal.

3. Segment 13

- All the site-specific preliminary geotechnical data was received recently.
- Some SHGWT comes back higher, and those alternatives are undergoing modification.

4. Segment 12

- Due to the time constraints in the previous meeting, some basins and floodplain impact areas (FIAs) were not discussed.
- LDCA has been shifted to beyond 06/28/2026. The pond siting is using the new water quality criteria.
- Stormwater Management
    - Basin 1201
        - An open basin within an impaired WBID and is contributing to the Placid Lakes Highlands OFW.
        - This basin is located directly adjacent to the conservation area.
        - Alternative 1 consists of SMF 1201A and SMF 1201D.
            - SMF 1201A is an offsite pond located south of SR 70 in parcel C013829A0000500000, immediately west of the FWC parcel. This SMF is a wet pond based on the preliminary geotechnical data.
            - In order to meet the 95% nutrient removal criteria, onsite linear ponds are needed for pre-treatment as SMF 1201D.
            - FDOT Drainage noted that a potential closed storm drain may be needed to cross the wildlife crossing bridge.
        - Alternative 2 consists of SMF 1201B and SMF 1201E.
            - SMF 1201B is an offsite pond located south of SR 70 in parcel C063830A0000100000, immediately east of the FWC parcel. This SMF is a wet pond based on the preliminary geotechnical data.
            - In order to meet the 95% nutrient removal criteria, onsite linear ponds are needed for pre-treatment as SMF 1201E.
            - FDOT Drainage noted that a potential closed storm drain may be needed to cross the wildlife crossing bridge.
        - Alternative 3 consists of SMF 1201C.
            - SMF 1201C includes onsite linear ponds within the proposed roadway ROW.
            - SMF 1201C more cells than SMF 1201D and SMF 1201E, but is taking advantage of the wide roadway ditches due to FPL.
            - FDOT Drainage noted that this option is favorable (pending cost estimate) due the adjacent conservation areas.
        - Linear ponds and base clearance water elevation (BCWE)
            - FDOT Drainage Manual requires the BCWE be set at the weir when there are linear ponds. Lower elevation may be used at special cases.
            - Currently, the roadway profile is based on geotechnical data, biological indicator, and stain lines. The potential linear pond weirs have not been accounted.
            - HNTB inquired if FDOT will allow the use of the SHGWT to set the BCWE in the area with linear ponds (especially in the area with non HSG Type A soils). If it is not permitted, the cost of additional roadway embankment and mainline ROW would be needed to accommodate the linear ponds.
            - FDOT Drainage will need an email on this potential criteria deviation.

- Basin 1202
  - An open basin within an impaired WBID.
  - The site-specific preliminary geotechnical data shows a lower SHGWT than original estimate. SMF sizes reduction may be possible.
  - Alternative 1 consists of SMF 1202A (dry pond) north of SR 70 and 1,450-feet west of rail track.
  - Alternative 2 consists of SMF 1202B (dry pond) 3,700-feet north of SR 70 near Lake Placid. This was the regional alternative in the previous PD&E. This alternative requires a lengthy storm drain conveyance along Worley Rd.
  - Alternative 3 consists of SMF 1202C (dry pond) at NW corner of SR 70 and Worley Rd.
  - FDOT Drainage noted that all three ponds are located in the same parcel (C18373001015000000).
    - HNTB noted that the constraints of the conservation area to the west and wetland to the east.
  - As a follow-up to the previous meeting, HNTB confirmed that this is not one of the FWC interested parcels.
- Basin 1203
  - An open basin within an impaired WBID.
  - The site-specific preliminary geotechnical data shows a higher SHGWT than original estimate.
  - Alternative 1 consists of SMF 1203A (wet pond) and SMF 1203D (wet pond), which both are located north of SR 70 and east of the rail track. SMF 1203D is the remanent space due to the proposed Old SR 8 realignment.
    - In order to meet the 95% nutrient removal criteria, onsite linear ponds are needed for pre-treatment as SMF 1203E.
  - Alternative 2 consists of SMF 1203B (wet pond) and SMF 1203D (wet pond). SMF 1203B is located north of SR 70 and 1,150-feet east of the rail track.
    - In order to meet the 95% nutrient removal criteria, onsite linear ponds are needed for pre-treatment as SMF 1203E.
  - Alternative 3 consists of SMF 1203C (wet pond) and SMF 1203D (wet pond). SMF 1203C is located south of SR 70 and 600-feet east of the rail track.
    - In order to meet the 95% nutrient removal criteria, onsite linear ponds are needed for pre-treatment as SMF 1203E.
  - FDOT Drainage inquired about the outfall locations. HNTB clarified the linear ponds would discharge into the offsite ponds, which then discharge northwestern direction.
- Basin 1204
  - A closed basin within an impaired WBID.
  - The alternatives were modified to avoid the downstream depression.
  - Alternative 1 consists of SMF 1204A (dry pond) north of SR 70 and 1,000-feet west of US 27. The site-specific preliminary geotechnical data shows a percolation rate.
  - Alternative 2 consists of SMF 1204B (dry pond) at NW corner of SR 70 and US 27.
    - FDOT Drainage inquired how the roadway runoff will reach this pond.
    - HNTB clarified that it will likely be conveyed with a closed storm drain systema long US 27.
  - Alternative 3 consists of SMF 1204C (dry pond) west of US 27 and 650-feet south of SR 70. The preliminary assessment has encroachment into the depression. A standalone FPC could be added next to the SMF.

- Floodplain Compensation Areas
  - Floodplain Impact Area (FIA) 1201
    - Floodplain is located along the north side of SR 70 from east of Placid Lakes Blvd to west of Park Land Dr.
    - This FIA is located directly within the conservation area.
    - Alternative 1 consists of FPC 1201A at the southeast corner of SR 70 and Placid Lakes Blvd. The FPC will be bermed up and connect to the floodplain on the north side via a culvert.
    - Alternative 2 consists of obtaining flood right within the conservation area. Additional modeling would likely be necessary for this alternative.
      - FDOT Drainage concurred to explore this further. FDOT Drainage will coordinate with FDOT OEM.
  - FIA 1203
    - Floodplains are located along both side of SR 70 from east of Placid Lakes Blvd to 1,440-feet west of Placid View Dr.
    - The northern FIA is located directly within the conservation area.
    - The 100-year peak stage in the southern floodplain is nearly 2-feet higher than the northern floodplain.
    - Alternative 1 consists of FPC 1203A for the southern impacts, and floodplain modeling for the northern impacts.
      - FPC 1203A is located along the southern edge of parcel C023829A0000200000.
    - Alternative 2 consists of FPC 1203B for the southern impacts, and floodplain modeling for the northern impacts.
      - FPC 1203B is located along the private access road within parcel C023829A0000200000.
    - FDOT Drainage and HNTB discussed Alternative 3 on improving the culverts under SR 70 to lower the southern floodplain to offset the encroachment, and obtaining flood right within the conservation area.
      - FDOT Drainage concurred to explore this further. FDOT Drainage will coordinate with FDOT OEM.
  - FIA 1205
    - Floodplains are located along both side of SR 70 west of Placid View Dr.
    - The northern FIA is located directly within the conservation area.
    - Alternative 1 consists of FPC 1205A, which is located west of the channel within parcel C023829A0000800000.
    - Alternative 2 consists of FPC 1205B, which is located east of the channel within parcel C023829A0000800000.
    - FDOT Drainage and HNTB discussed Alternative 3 on improving the culverts under SR 70 to lower the southern floodplain to offset the encroachment, and obtaining flood right within the conservation area.
      - FDOT Drainage concurred to explore this further. FDOT Drainage will coordinate with FDOT OEM.
  - FIA 1206
    - Floodplains are located along both side of SR 70 east of Placid View Dr.
    - The northern FIA is located directly within the conservation area.
    - Alternative 1 consists of FPC 1206A, which is located west of the channel within parcel C013829A0000600000.

- Alternative 2 consists of FPC 1206B, which is located east of the channel within parcel C013829A0000600000.
- FDOT Drainage and HNTB discussed Alternative 3 on improving the culverts under SR 70 to lower the southern floodplain to offset the encroachment, and obtaining flood right within the conservation area.
    - FDOT Drainage concurred to explore this further. FDOT Drainage will coordinate with FDOT OEM.

o FIA 1208

- Floodplains are located along both side of SR 70 from 2,350-feet west of Monroe St to 500-feet west of Monroe St.
- The northern FIA is located directly within the conservation area.
- The portion of the southern FIA is located directly within the FWC parcel.
- Alternative 1 consists of FPC 1208A, which is located south of SR 70 in parcel C013829A0000500000, immediately west of the FWC parcel. The FPC will connect to the floodplain via a culvert.
- Alternative 2 consists of FPC 1208B, which is located south of SR 70 in parcel C063830A0000100000, immediately east of the FWC parcel. The FPC will connect to the floodplain via a culvert.
- FDOT Drainage and HNTB discussed Alternative 3 on improving the culverts under SR 70 to lower the southern floodplain to offset the encroachment, and obtaining flood right within the conservation area.
    - FDOT Drainage concurred to explore this further. FDOT Drainage will coordinate with FDOT OEM.

o FIA 1214

- HNTB evaluated about upsizing the culvert under Old SR 8 and R/R to lower the stages in FIA 1214. The preliminary results show that upsizing the culverts do not affect the flood stages at SR 70.
- HNTB suggested modeling the compensation areas to reduce the FPC footprint. FDOT Drainage concurred.

APPENDIX 3

POND CALCULATIONS

Basin 1301

SMF:	SMF 1301A

Basin Type:	CLOSED
Side of Road	RIGHT

SMF Location:	Same Outfall as Pre-Development

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1266+51.98	Basin 6-1, Basin 6-2, Basin 6-3, Basin 6-4,
To STA. =	1314+74.89	Basin 6-5, Basin 6-6, Basin 6-7

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			8.10	98	794
Pervious - 'Fair' Open Spaces	A	[1] PAOLA, [9] ASTATULA, [45] PAOLA-BASINGER	72.72	49	3563
SUBTOTAL			**80.8**		**4357**
				TOTAL WEIGHTED CN =	**53.9**

PROPOSED CONDITION

From STA. =	1266+51.98	Basin 1301
To STA. =	1312+49.07	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			13.78	98	1350
SMF Bottom	WATER		0.00	100	0
Pervious - 'Fair' Open Spaces	A	[1] PAOLA, [9] ASTATULA, [45] PAOLA-BASINGER	65.05	49	3188
SUBTOTAL			**78.8**		**4538**
				TOTAL WEIGHTED CN =	**57.6**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in
Treatment Area	13.8	ac
IN OFW?	NO	
Pollution Abatement Vol.	**0.57**	**ac-ft**

Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
In OFW, value increased 50%
Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 15.00 in

Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST
Maximum Retention, S	8.55	7.37
Runoff Depth, Q_R (in)	8.09	8.75
Runoff Volume (ac-ft)	54.47	57.50
Attenuation Volume (ac-ft)		3.04

Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in) = $(P - 0.2 * S)^2 / (P + 0.8 * S)$
Runoff Volume (ac-ft) = Q_R * Drainage Area

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	YES
Existing Attenuation Volume (ac-ft)	0.00
Existing Treatment Volume (ac-ft)	0.15

Note: Existing Storage derived from **Permit No. 25519.001**

SMF 1301A POND DESIGN

SHW EL.:	117.30	ft	Maint. Berm Width:	15.00	ft	Source:	[45] PAOLA-BASINGER
SHW Point(s) of Reference	PBA13-SMF6-1 PBA13-SMF6-2 PBA13-SMF6-3		Freeboard:	1.00	ft		
Treatment System:	DRY		Pond Side Slope (1:X):	4			
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15			
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		AVG Exist Ground in SMF:	119.80 ft
Estimated DHW_{10}:	120.26						
LEOP:	122.43	ft					
Distance to LEOP:	350	ft @ STA. 1310+00					
Clearance to LEOP:	2.00	ft					

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
Pond Bottom (Dry Pond)	118.30			1.47	0.00	0.00
Treatment Vol. EL. (Weir EL.)	119.50	1.20	1.20	1.61	1.85	1.85
Detention Vol. EL.	121.40	1.90	3.10	1.82	3.26	5.11
Bottom of Maintenance Berm (Freeboard)	122.40	1.00	4.10	1.94	1.88	6.99
Top of Maintenance Berm	123.40	1.00	5.10	2.40	2.17	
Tie Down (To Existing Ground EL.)	119.80	-3.60		2.87		

TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment	0.73 ac-ft	1.85 ac-ft	GOOD
Attenuation	3.04 ac-ft	3.26 ac-ft	GOOD
TOTAL	**3.76 ac-ft**	**5.11 ac-ft**	

Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements in addition to replace the loss of existing dry retention linear ponds removed as part of the proposed improvements.

Basin 1301

SMF:	SMF 1301B

Basin Type:	CLOSED
Side of Road	RIGHT

SMF Location:	Same Outfall as Pre-Development

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1266+51.98	Basin 6-1, Basin 6-2, Basin 6-3, Basin 6-4,
To STA. =	1314+74.89	Basin 6-5, Basin 6-6, Basin 6-7

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			8.10	98	794
Pervious - 'Fair' Open Spaces	A	[1] PAOLA, [9] ASTATULA, [45] PAOLA-BASINGER	72.72	49	3563
SUBTOTAL			**80.8**		**4357**
				TOTAL WEIGHTED CN =	**53.9**

PROPOSED CONDITION

From STA. =	1266+51.98	Basin 1301
To STA. =	1312+49.07	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			13.78	98	1350
SMF Bottom	WATER		0.00	100	0
Pervious - 'Fair' Open Spaces	A	[1] PAOLA, [9] ASTATULA, [45] PAOLA-BASINGER	65.42	49	3205
SUBTOTAL			**79.2**		**4555**
				TOTAL WEIGHTED CN =	**57.5**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in
Treatment Area	13.8	ac
IN OFW?	NO	
Pollution Abatement Vol.	**0.57**	**ac-ft**

Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
In OFW, value increased 50%
Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 15.00 in

Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST
Maximum Retention, S	8.55	7.38
Runoff Depth, Q_R (in)	8.09	8.75
Runoff Volume (ac-ft)	54.47	57.72
Attenuation Volume (ac-ft)		3.26

Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in) = $(P - 0.2 * S)^2 / (P + 0.8 * S)$
Runoff Volume (ac-ft) = Q_R * Drainage Area

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	YES
Existing Attenuation Volume (ac-ft)	0.00
Existing Treatment Volume (ac-ft)	0.15

Note: Existing Storage derived from **Permit No. 25519.001**

SMF 1301B POND DESIGN

SHW EL.:	117.90	ft	Maint. Berm Width:	15.00	ft	Source:	[45] PAOLA-BASINGER	
SHW Point(s) of Reference	PBA-SMF1301B-1 PBA-SMF1301B-2		Freeboard:	1.00	ft			
Treatment System:	DRY		Pond Side Slope (1:X):	4				
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15				
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		AVG Exist Ground in SMF:	119.50	ft
Estimated DHW_{10}:	120.44							
LEOP:	122.43	ft						
Distance to LEOP:	650	ft @ STA. 1310+00						
Clearance to LEOP:	1.66	ft						

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
Pond Bottom (Dry Pond)	118.90			1.89	0.00	0.00
Treatment Vol. EL. (Weir EL.)	119.80	0.90	0.90	2.01	1.75	1.75
Detention Vol. EL.	121.40	1.60	2.50	2.23	3.39	5.14
Bottom of Maintenance Berm (Freeboard)	122.40	1.00	3.50	2.37	2.30	7.44
Top of Maintenance Berm	123.40	1.00	4.50	2.91	2.64	
Tie Down (To Existing Ground EL.)	119.50	-3.90		3.51		

TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment	0.73 ac-ft	1.75 ac-ft	GOOD
Attenuation	3.26 ac-ft	3.39 ac-ft	GOOD
TOTAL	**3.98 ac-ft**	**5.14 ac-ft**	

Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements in addition to replace the loss of existing dry retention linear ponds removed as part of the proposed improvements.

Basin 1301

SMF:	SMF 1301C

Basin Type:	CLOSED
Side of Road	LEFT

SMF Location:	Same Outfall as Pre-Development

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1266+51.98	Basin 6-1, Basin 6-2, Basin 6-3, Basin 6-4,
To STA. =	1314+74.89	Basin 6-5, Basin 6-6, Basin 6-7

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			8.10	98	794
Pervious - 'Fair' Open Spaces	A		72.72	49	3563
SUBTOTAL			**80.8**		**4357**
				TOTAL WEIGHTED CN =	**53.9**

PROPOSED CONDITION

From STA. =	1266+51.98	Basin 1301
To STA. =	1312+49.07	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			13.78	98	1350
SMF Bottom	WATER		0.00	100	0
Pervious - 'Fair' Open Spaces	A		66.45	49	3256
SUBTOTAL			**80.2**		**4606**
				TOTAL WEIGHTED CN =	**57.4**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in
Treatment Area	13.8	ac
IN OFW?	NO	
Pollution Abatement Vol.	**0.57**	**ac-ft**

Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
In OFW, value increased 50%
Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 15.00 in

Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST
Maximum Retention, S	8.55	7.42
Runoff Depth, Q_R (in)	8.09	8.73
Runoff Volume (ac-ft)	54.47	58.35
Attenuation Volume (ac-ft)		3.88

Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in) = $(P - 0.2 * S)^2 / (P + 0.8 * S)$
Runoff Volume (ac-ft) = Q_R * Drainage Area

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	YES
Existing Attenuation Volume (ac-ft)	0.00
Existing Treatment Volume (ac-ft)	0.15

Note: Existing Storage derived from **Permit No. 25519.001**

SMF 1301C POND DESIGN

SHW EL.:	117.70	ft	Maint. Berm Width:	15.00	ft	Source:	[45] PAOLA-BASINGER	
SHW Point(s) of Reference	PBA-FPC1301A-1 PBA-SMF1301C-1		Freeboard:	1.00	ft			
Treatment System:	DRY		Pond Side Slope (1:X):	4				
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15				
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		AVG Exist Ground in SMF:	121.00	ft
Estimated DHW_{10}:	120.26							
LEOP:	122.43	ft						
Distance to LEOP:	300	ft @ STA. 1310+00						
Clearance to LEOP:	2.02	ft						

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
Pond Bottom (Dry Pond)	118.70			1.99	0.00	0.00
Treatment Vol. EL. (Weir EL.)	119.50	0.80	0.80	2.07	1.62	1.62
Detention Vol. EL.	121.40	1.90	2.70	2.34	4.19	5.82
Bottom of Maintenance Berm (Freeboard)	122.40	1.00	3.70	2.46	2.40	8.22
Top of Maintenance Berm	123.40	1.00	4.70	2.91	2.69	
Tie Down (To Existing Ground EL.)	121.00	-2.40		3.22		

TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment	0.73 ac-ft	1.62 ac-ft	GOOD
Attenuation	3.88 ac-ft	4.19 ac-ft	GOOD
TOTAL	**4.60 ac-ft**	**5.82 ac-ft**	

Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements in addition to replace the loss of existing dry retention linear ponds removed as part of the proposed improvements.

Basin 1302

SMF:	SMF 1302A

Basin Type:	CLOSED
Side of Road	LEFT

SMF Location:	Same Outfall as Pre-Development

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1314+74.89	Basin 7-1, Basin 7-2, Basin 7-3, Basin 7-5,
To STA. =	1357+06.43	Basin 7-6, Basin 7-9, Basin 8-1, and Basin 8-2

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			5.21	98	510
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	60.70	49	2974
	SUBTOTAL		**65.9**		**3485**
				TOTAL WEIGHTED CN =	**52.9**

PROPOSED CONDITION

From STA. =	1312+49.07	Basin 1302
To STA. =	1354+83.93	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			10.45	98	1024
SMF Bottom	WATER		0.00	100	0
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	57.07	49	2796
	SUBTOTAL		**67.5**		**3821**
				TOTAL WEIGHTED CN =	**56.6**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in	Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Treatment Area	10.5	ac	Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
IN OFW?	NO		In OFW, value increased 50%
Pollution Abatement Vol.	**0.44**	**ac-ft**	Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 14.90 in

Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST	
Maximum Retention, S	8.91	7.67	Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in)	7.81	8.49	Runoff Depth, Q_R (in) = $(P - 0.2 * S)^2 / (P + 0.8 * S)$
Runoff Volume (ac-ft)	42.90	47.78	Runoff Volume (ac-ft) = Q_R * Drainage Area
Attenuation Volume (ac-ft)		4.88	

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	YES
Existing Attenuation and Storage Volume (ac-ft)	4.60
Existing Treatment Volume (ac-ft)	0.07

Note: Existing Storage derived from **Permit No. 27810.000** and Existing Depressional Storage

SMF 1302A POND DESIGN

SHW EL.:	102.10	ft	Maint. Berm Width:	15.00	ft			
SHW Point(s) of Reference	PBA13-SMF7-1 PBA13-SMF7-2 PBA13-SMF7-3 PBA13-SMF7-4 PBA13-SMF7-5		Freeboard:	1.00	ft	Source:	[45] PAOLA-BASINGER	
Treatment System:	DRY		Pond Side Slope (1:X):	4				
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15				
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		Low Exist Ground in SMF:	110.00	ft
Estimated DHW_{10}:	109.02							
LEOP:	113.20	ft						
Distance to LEOP:	950	ft @ STA. 1351+00						
Clearance to LEOP:	3.71	ft						

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
Pond Bottom (Dry Pond)	105.90			1.40	0.00	0.00
Treatment Vol. EL. (Weir EL.)	106.90	1.00	1.00	1.51	1.45	1.45
Detention Vol. EL.	112.20	5.30	6.30	2.10	9.56	11.01
Bottom of Maintenance Berm (Freeboard)	113.20	1.00	7.30	2.22	2.16	13.17
Top of Maintenance Berm	114.20	1.00	8.30	2.69	2.45	
Tie Down (To Existing Ground EL.)	110.30	-3.90		3.21		

TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment	0.51 ac-ft	1.45 ac-ft	GOOD
Attenuation	9.48 ac-ft	9.56 ac-ft	GOOD
TOTAL	**9.98 ac-ft**	**11.01 ac-ft**	

Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements in addition to replace the loss of existing dry retention linear ponds removed as part of the proposed improvements.

Basin 1302

SMF:	SMF 1302B

Basin Type:	CLOSED
Side of Road	LEFT

SMF Location:	Same Outfall as Pre-Development

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1314+74.89	Basin 7-1, Basin 7-2, Basin 7-3, Basin 7-5,
To STA. =	1357+06.43	Basin 7-6, Basin 7-9, Basin 8-1, and Basin 8-2

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			5.21	98	510
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	60.70	49	2974
	SUBTOTAL		**65.9**		**3485**
				TOTAL WEIGHTED CN =	**52.9**

PROPOSED CONDITION

From STA. =	1312+49.07	Basin 1302
To STA. =	1354+83.93	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			10.45	98	1024
SMF Bottom	WATER		0.00	100	0
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	56.28	49	2758
	SUBTOTAL		**66.7**		**3782**
				TOTAL WEIGHTED CN =	**56.7**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in	Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Treatment Area	10.5	ac	Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
IN OFW?	NO		In OFW, value increased 50%
Pollution Abatement Vol.	**0.44**	**ac-ft**	Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 14.90 in — Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST	
Maximum Retention, S	8.91	7.64	Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in)	7.81	8.51	Runoff Depth, Q_R (in) = $(P - 0.2 * S)^2 / (P + 0.8 * S)$
Runoff Volume (ac-ft)	42.90	47.31	Runoff Volume (ac-ft) = Q_R * Drainage Area
Attenuation Volume (ac-ft)		4.41	

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	YES
Existing Attenuation and Storage Volume (ac-ft)	4.43
Existing Treatment Volume (ac-ft)	0.07

Note: Existing Storage derived from **Permit No. 27810.000** and Existing Depressional Storage

SMF 1302B POND DESIGN

SHW EL.:	93.60	ft	Maint. Berm Width:	15.00	ft			
SHW Point(s) of Reference	SH13-410R PBA-SMF1302B-2		Freeboard:	1.00	ft	Source:	[45] PAOLA-BASINGER	
Treatment System:	DRY		Pond Side Slope (1:X):	4				
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15				
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		Avg Exist Ground in SMF:	108.00	ft
Estimated DHW_{10}:	105.66							
LEOP:	113.20	ft						
Distance to LEOP:	200	ft @ STA. 1351+00						
Clearance to LEOP:	7.44	ft						

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
Pond Bottom (Dry Pond)	97.40			0.25	0.00	0.00
Treatment Vol. EL. (Weir EL.)	101.30	3.90	3.90	0.46	1.38	1.38
Detention Vol. EL.	112.20	10.90	14.80	1.26	9.37	10.75
Bottom of Maintenance Berm (Freeboard)	113.20	1.00	15.80	1.35	1.31	12.06
Top of Maintenance Berm	114.20	1.00	16.80	1.70	1.53	13.59
Tie Down (To Existing Ground EL.)	111.00	-3.20		2.03		

TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment	0.51 ac-ft	1.38 ac-ft	GOOD
Attenuation	8.84 ac-ft	9.37 ac-ft	GOOD
TOTAL	**9.35 ac-ft**	**10.75 ac-ft**	

Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements in addition to replace the loss of existing dry retention linear ponds removed as part of the proposed improvements.

Basin 1302

SMF:	SMF 1302C

Basin Type:	CLOSED
Side of Road	RIGHT

SMF Location:	Same Outfall as Pre-Development

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1314+71.18	Basin 7-1, Basin 7-2, Basin 7-3, Basin 7-5,
To STA. =	1357+06.06	Basin 7-6, Basin 7-9, Basin 8-1, and Basin 8-2

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			5.21	98	510
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	60.70	49	2974
	SUBTOTAL		**65.9**		**3485**
				TOTAL WEIGHTED CN =	**52.9**

PROPOSED CONDITION

From STA. =	1314+74.89	Basin 1302
To STA. =	1357+06.43	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			10.45	98	1024
SMF Bottom	WATER		0.00	100	0
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	56.95	49	2790
	SUBTOTAL		**67.4**		**3815**
				TOTAL WEIGHTED CN =	**56.6**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in	Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Treatment Area	10.5	ac	Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
IN OFW?	NO		In OFW, value increased 50%
Pollution Abatement Vol.	**0.44**	**ac-ft**	Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 14.90 in

Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST	
Maximum Retention, S	8.91	7.67	Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in)	7.81	8.49	Runoff Depth, Q_R (in) = $(P - 0.2 * S)^2 / (P + 0.8 * S)$
Runoff Volume (ac-ft)	42.90	47.70	Runoff Volume (ac-ft) = Q_R * Drainage Area
Attenuation Volume (ac-ft)		4.81	

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	YES
Existing Attenuation and Storage Volume (ac-ft)	3.31
Existing Treatment Volume (ac-ft)	0.07

Note: Existing Storage derived from **Permit No. 27810.000** and Existing Depressional Storage

SMF 1302C POND DESIGN

SHW EL.:	99.90	ft	Maint. Berm Width:	15.00	ft	Source:	[45] PAOLA-BASINGER	
SHW Point(s) of Reference	PBA-SMF1302C-2		Freeboard:	1.00	ft			
Treatment System:	DRY		Pond Side Slope (1:X):	4				
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15				
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		Avg Exist Ground in SMF:	115.00	ft
Estimated DHW_{10}:	108.12							
LEOP:	113.20	ft						
Distance to LEOP:	100	ft @ STA. 1351+00						
Clearance to LEOP:	5.03	ft						

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
Pond Bottom (Dry Pond)	103.70			0.86	0.00	0.00
Treatment Vol. EL. (Weir EL.)	105.40	1.70	1.70	0.98	1.56	1.56
Detention Vol. EL.	112.20	6.80	8.50	1.59	8.72	10.28
Bottom of Maintenance Berm (Freeboard)	113.20	1.00	9.50	1.68	1.64	11.92
Top of Maintenance Berm	114.20	1.00	10.50	2.07	1.88	
Tie Down (To Existing Ground EL.)	108.00	-6.20		2.77		

TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment	0.51 ac-ft	1.56 ac-ft	GOOD
Attenuation	8.12 ac-ft	8.72 ac-ft	GOOD
TOTAL	**8.63 ac-ft**	**10.28 ac-ft**	

Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements in addition to replace the loss of existing dry retention linear ponds removed as part of the proposed improvements.

Basin 1303

SMF:	SMF 1303A

Basin Type:	OPEN
Side of Road	RIGHT

SMF Location:	Same Outfall as Pre-Development

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1357+06.43	Basin 8-3, Basin 8-4, Basin 8-5, Basin 8-6, Basin 8-7, Basin 8-8, Basin 8-9, Basin 8-10, Basin 8-11, Basin 9-1, Basin 9-2, and Basin 9-3
To STA. =	1428+71.71	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			7.30	98	716
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	39.42	49	1932
Pervious - 'Fair' Open Spaces	A/D	[13] FELDA FINE, [20] SAMSULA, [21] HONTOON, [26] TEQUESTA	48.39	49	2371
Pervious - 'Fair' Open Spaces	B/D	[8] IMMOKALEE	0.78	69	54
	SUBTOTAL		**95.9**		**5073**
				TOTAL WEIGHTED CN =	**52.9**

PROPOSED CONDITION

From STA. =	1354+83.93	Basin 1303
To STA. =	1428+71.95	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			18.52	98	1815
SMF Bottom	WATER		0.00	100	0
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	37.62	49	1843
Pervious - 'Fair' Open Spaces	A/D	[13] FELDA FINE, [20] SAMSULA, [21] HONTOON, [26] TEQUESTA	39.67	49	1944
Pervious - 'Fair' Open Spaces	B/D	[8] IMMOKALEE	0.28	69	19
	SUBTOTAL		**96.1**		**5621**
				TOTAL WEIGHTED CN =	**58.5**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in	Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Treatment Area	18.5	ac	Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
IN OFW?	NO		In OFW, value increased 50%
Pollution Abatement Vol.	**0.77**	**ac-ft**	Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 7.04 in

Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST	
Maximum Retention, S	8.91	7.09	Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in)	1.95	2.49	Runoff Depth, Q_R (in) = (P - 0.2 * S)^2 / (P + 0.8 * S)
Runoff Volume (ac-ft)	15.60	19.90	Runoff Volume (ac-ft) = Q_R * Drainage Area
Attenuation Volume (ac-ft)		4.29	

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	NO
Existing Attenuation Volume (ac-ft)	0.00
Existing Treatment Volume (ac-ft)	0.00

SMF 1303A POND DESIGN

SHW EL.:	43.30	ft	Maint. Berm Width:	15.00	ft		
SHW Point(s) of Reference	PBA13-SMF8-9A-1 PBA13-SMF8-9A-2 PBA13-SMF8-9A-3 PBA13-SMF8-9A-4		Freeboard:	1.00	ft	Source:	[13] FELDA FINE
Treatment System:	DRY		Pond Side Slope (1:X):	4			
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15			
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		Low Exist Ground in SMF:	44.40 ft
Estimated DHW_{10}:	45.8						
LEOP:	47.70	ft					
Distance to LEOP:	250	ft @ STA. 1413+40					
Clearance to LEOP:	1.78	ft					

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
Pond Bottom (Dry Pond)	44.30			2.79	0.00	0.00
Treatment Vol. EL. (Weir EL.)	45.20	0.90	0.90	2.91	2.56	2.56
Detention Vol. EL.	46.70	1.50	2.40	3.10	4.51	7.07
Bottom of Maintenance Berm (Freeboard)	47.70	1.00	3.40	3.24	3.17	10.24
Top of Maintenance Berm	48.70	1.00	4.40	3.76	3.50	
Tie Down (To Existing Ground EL.)	44.40	-4.30		4.40		

TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment	0.77 ac-ft	2.56 ac-ft	GOOD
Attenuation	4.29 ac-ft	4.51 ac-ft	GOOD
TOTAL	**5.07 ac-ft**	**7.07 ac-ft**	

Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements.

Basin 1303

SMF:	SMF 1303B

Basin Type:	OPEN
Side of Road	RIGHT

SMF Location:	Direct Discharge

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1357+06.43	Basin 8-3, Basin 8-4, Basin 8-5, Basin 8-6, Basin 8-7, Basin 8-8,
To STA. =	1428+71.71	Basin 8-9, Basin 8-10, Basin 8-11, Basin 9-1, Basin 9-2, and Basin 9-3

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			7.30	98	716
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	39.42	49	1932
Pervious - 'Fair' Open Spaces	A/D	[13] FELDA FINE, [20] SAMSULA, [21] HONTOON, [26] TEQUESTA	41.82	49	2049
Pervious - 'Fair' Open Spaces	B/D	[8] IMMOKALEE	0.78	69	54
	SUBTOTAL		**89.3**		**4750**
				TOTAL WEIGHTED CN =	**53.2**

PROPOSED CONDITION

From STA. =	1354+83.93	Basin 1303
To STA. =	1428+71.95	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			18.52	98	1815
SMF Bottom	WATER		0.00	100	0
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	37.62	49	1843
Pervious - 'Fair' Open Spaces	A/D	[13] FELDA FINE, [20] SAMSULA, [21] HONTOON, [26] TEQUESTA	37.30	49	1828
Pervious - 'Fair' Open Spaces	B/D	[8] IMMOKALEE	0.28	69	19
	SUBTOTAL		**93.7**		**5505**
				TOTAL WEIGHTED CN =	**58.7**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in	Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Treatment Area	18.5	ac	Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
IN OFW?	NO		In OFW, value increased 50%
Pollution Abatement Vol.	**0.77**	**ac-ft**	Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 7.04 in

Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST	
Maximum Retention, S	8.80	7.02	Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in)	1.98	2.51	Runoff Depth, Q_R (in) = (P - 0.2 * S)^2 / (P + 0.8 * S)
Runoff Volume (ac-ft)	14.73	19.59	Runoff Volume (ac-ft) = Q_R * Drainage Area
Attenuation Volume (ac-ft)		4.86	

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	NO
Existing Attenuation Volume (ac-ft)	0.00
Existing Treatment Volume (ac-ft)	0.00

SMF 1303B POND DESIGN

SHW EL.:	41.80	ft	Maint. Berm Width:	15.00	ft	Source:	[13] FELDA FINE	
SHW Point(s) of Reference	PBA-SMF1303B-1 PBA-SMF1303B-2		Freeboard:	1.00	ft			
Treatment System:	DRY		Pond Side Slope (1:X):	4				
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15				
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		Low Exist Ground in SMF:	43.00	ft
Estimated DHW_{10}:	45.08							
LEOP:	47.70	ft						
Distance to LEOP:	200	ft @ STA. 1413+40						
Clearance to LEOP:	2.52	ft						

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
Pond Bottom (Dry Pond)	42.80			1.69	0.00	0.00
Treatment Vol. EL. (Weir EL.)	44.00	1.20	1.20	1.82	2.10	2.10
Detention Vol. EL.	46.70	2.70	3.90	2.13	5.32	7.43
Bottom of Maintenance Berm (Freeboard)	47.70	1.00	4.90	2.24	2.18	9.61
Top of Maintenance Berm	48.70	1.00	5.90	2.71	2.47	
Tie Down (To Existing Ground EL.)	43.00	-5.70		3.47		

TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment	0.77 ac-ft	2.10 ac-ft	GOOD
Attenuation	4.86 ac-ft	5.32 ac-ft	GOOD
TOTAL	**5.63 ac-ft**	**7.43 ac-ft**	

Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements.

Basin 1303

SMF:	SMF 1303C

Basin Type:	OPEN
Side of Road:	RIGHT

SMF Location:	Direct Discharge

WEIGHTED CN CALCULATIONS

EXISTING CONDITION

From STA. =	1357+06.43	Basin 8-3, Basin 8-4, Basin 8-5, Basin 8-6, Basin 8-7, Basin 8-8,
To STA. =	1428+71.71	Basin 8-9, Basin 8-10, Basin 8-11, Basin 9-1, Basin 9-2, and Basin 9-3

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			7.30	98	716
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	39.42	49	1932
Pervious - 'Fair' Open Spaces	A/D	[13] FELDA FINE, [20] SAMSULA, [21] HONTOON, [26] TEQUESTA	41.82	49	2049
Pervious - 'Fair' Open Spaces	B/D	[8] IMMOKALEE	0.78	69	54
	SUBTOTAL		**89.3**		**4750**
				TOTAL WEIGHTED CN =	**53.2**

PROPOSED CONDITION

From STA. =	1354+83.93	Basin 1303
To STA. =	1428+71.95	

LAND USE	SOILS	SOIL NAME	AREA (ac)	CN	PRODUCT
Impervious -			18.52	98	1815
SMF Bottom	WATER		3.86	100	386
Pervious - 'Fair' Open Spaces	A	[45] PAOLA-BASINGER	37.62	49	1843
Pervious - 'Fair' Open Spaces	A/D	[13] FELDA FINE, [20] SAMSULA, [21] HONTOON, [26] TEQUESTA	39.96	49	1958
Pervious - 'Fair' Open Spaces	B/D	[8] IMMOKALEE	0.28	69	19
	SUBTOTAL		**100.2**		**6022**
				TOTAL WEIGHTED CN =	**60.1**

REQUIRED POLLUTION ABATEMENT VOLUME

Runoff Criteria	0.5	in	Dry Retention Treatment criteria is **1/2"** over DCIA || Wet Detention Treatment criteria is **1"** over DCIA
Treatment Area	18.5	ac	Proposed DCIA for Basin Contributing to SMF || New Impervious Area for Direct Discharge Basin for compensatory Treatment
IN OFW?	NO		In OFW, value increased 50%
Pollution Abatement Vol.	**0.77**	**ac-ft**	Pollution Abatement Volume (ac-ft) = Runoff Criteria (in) x Treatment Area (ac) / 12

ESTIMATE OF PEAK ATTENUATION VOLUME

Rainfall Depth (P) 7.04 in

Open Basin: SWFWMD's 25-YR/24-HR Storm Event || Closed Basin: FDOT's 100-YR/240-HR Storm Event

	PRE	POST	
Maximum Retention, S	8.80	6.65	Maximum Retention / Soil Storage, S (in) = (1000 / CN) - 10
Runoff Depth, Q_R (in)	1.98	2.64	Runoff Depth, Q_R (in) = (P - 0.2 * S)^2 / (P + 0.8 * S)
Runoff Volume (ac-ft)	14.73	22.04	Runoff Volume (ac-ft) = Q_R * Drainage Area
Attenuation Volume (ac-ft)		7.31	

EXISTING STORAGE CHECK

Existing Storage in Basin Impacted?	NO
Existing Attenuation Volume (ac-ft)	0.00
Existing Treatment Volume (ac-ft)	0.00

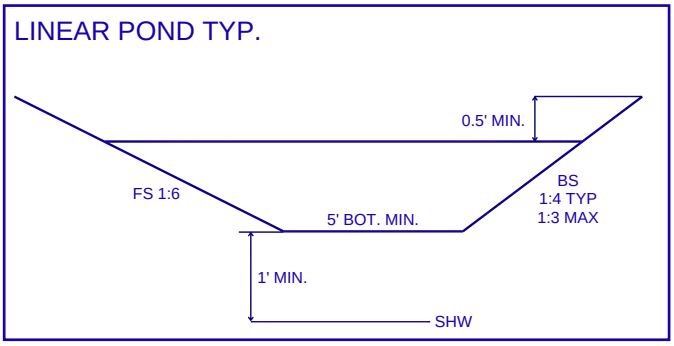
SMF 1303C POND DESIGN

SHW EL.:	43.80	ft	Maint. Berm Width:	15.00	ft	Source:	[13] FELDA FINE [26] TEQUESTA	
SHW Point(s) of Reference	PBA-SMF1303C-1		Freeboard:	1.00	ft			
Treatment System:	WET		Pond Side Slope (1:X):	4				
Hydraulic Feasibility = LEOP - HGL≥ 1' Clearance			Maint. Berm Slope (1:X):	15				
LEOP - (Proposed DHW + Distance to LEOP × 0.0005)≥ 1			Tie-Down Slope (1:X):	4		Low Exist Ground in SMF:	44.40	ft
Estimated DHW_{10}:	45.02							
LEOP:	47.70	ft						
Distance to LEOP:	300	ft @ STA. 1413+40						
Clearance to LEOP:	2.53	ft						

	Stage (ft)	Inc. Depth (ft)	Total Depth (ft)	Area (ac)	Inc. Volume (ac-ft)	Total Volume (ac-ft)
SHW EL. (Wet Pond)	43.80			3.86	0.00	0.00
Treatment Vol. EL. (Weir EL.)	44.30	0.50	0.50	3.94	1.95	1.95
Detention Vol. EL.	46.10	1.80	2.30	4.23	7.36	9.31
Bottom of Maintenance Berm (Freeboard)	47.10	1.00	3.30	4.40	4.32	13.62
Top of Maintenance Berm	48.10	1.00	4.30	5.05	4.72	
Tie Down (To Existing Ground EL.)	44.40	-3.70		5.82		

	SMF 1303-D1L	SMF 1303-D2L	SMF 1303-D3L
SHW	72.40	70.50	68.60
SHW Point(s) of Reference	SH13-435R SH13-440L	SH13-435R SH13-440L	SH13-440L
LOW END			
STA.	1378+00.00	1379+50.00	1381+00.00
EOS EL.	84.02	79.58	75.09
DHW	80.08	75.58	72.58
CROSS SECTIONAL AREA (sq. ft.)	106.22	157.72	183.43
POND BOTTOM EL.	76.00	72.50	70.60
HIGH END			
STA.	1379+00.00	1380+50.00	1381+50.00
EOS EL.	81.08	76.58	73.58
DHW	80.08	75.58	72.58
CROSS SECTIONAL AREA (sq. ft.)	350.14	291.35	236.20
POND BOTTOM EL.	74.40	72.50	70.60
LENGTH OF POND (ft)	100.00	100.00	50.00
POND VOLUME (ac-ft)	0.524	0.515	0.241
TOTAL POND VOLUME (ac-ft)		**1.280**	

	SMF 1303-E1L
SHW	44.17
SHW Point(s) of Reference	SH13-470L SH13-465L SH13-460L
LOW END	
STA.	1411+10.00
EOS EL.	47.69
DHW	47.19
CROSS SECTIONAL AREA (sq. ft.)	45.57
POND BOTTOM EL.	45.22
HIGH END	
STA.	1400+00.00
EOS EL.	48.80
DHW	47.19
CROSS SECTIONAL AREA (sq. ft.)	15.10
POND BOTTOM EL.	46.33
LENGTH OF POND (ft)	1110.00
TOTAL POND VOLUME (ac-ft)	**0.773**



TOTAL DETENTION (TREATMENT + ATTENUATION) VOLUME

	REQUIRED	PROVIDED	CHECK
Treatment [1]	0.77 ac-ft	4.59 ac-ft	GOOD
Attenuation [2]	7.31 ac-ft	8.05 ac-ft	GOOD
TOTAL	**8.08 ac-ft**	**12.64 ac-ft**	

[1] Note: Additional volume beyond the previous presumptive volume to meet stormwater quality nutrient permitting requirements.

[2] Note: Additional volume beyond the required attenuation volume is provided above the linear treatment cells to accommodate hydraulic head.

TREATMENT VOLUME CHECK

	Contributing Area (ac)	Runoff Depth (in)	Treatment Volume Required (ac-ft)	Total Pond Volume Available (ac-ft)
SMF 1303-D1L	15.4324	0.400	**0.514**	**0.524**
SMF 1303-D2L	1.3704	0.400	**0.046**	**0.515**
SMF 1303-D3L	0.7152	0.400	**0.024**	**0.241**
SMF 1303-E1L	31.7000	0.292	**0.771**	**0.773**

See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1301A
Date: 11/26/2025 8:04:48 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Pond)	Agricultural	Wetlands	Urban: Residential High Density	Urban: Residential Low Density	Urban: Commercial
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Single-Family: TN=2.070 TP=0.327	Low-Density Residential: TN=1.645 TP= 0.27	High-Intensity Commercial: TN=2.40 TP=0.345
Area (acres)	22.73	41.43	1.11	2.59	8.38	4.57
Rational Coefficient (0-1)	0.21	0.02	0.91	0.37	0.14	0.01
Non DCIA Curve Number	49.00	49.00	100.00	49.00	49.00	49.00
DCIA Percent (0-100)	24.82	0.72	0.00	45.10	15.37	0.01
Nitrogen EMC (mg/l)	1.190	2.800	1.095	2.070	1.645	2.400
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.327	0.270	0.345
Runoff Volume (ac-ft/yr)	20.055	3.411	4.224	4.027	4.754	0.268
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	29.427	11.776	5.703	10.279	9.643	0.793
Phosphorus Loading (kg/yr)	3.833	2.048	0.078	1.624	1.583	0.114

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Single-Family: TN=2.070 TP=0.327	Low-Density Residential: TN=1.645 TP= 0.27	High-Intensity Commercial: TN=2.40 TP=0.345
Area (acres)	26.58	39.84	1.97	2.56	6.85	1.03
Rational Coefficient (0-1)	0.37	0.02	0.91	0.38	0.05	0.01
Non DCIA Curve Number	59.04	49.00	100.00	49.00	49.00	49.00
DCIA Percent (0-100)	44.02	0.76	0.00	45.61	4.40	0.00
Wet Pond Area (ac)	0.00	0.00	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	1.095	2.070	1.645	2.400
Phosphorus EMC						

(mg/l)	0.155	0.487	0.015	0.327	0.270	0.345
Runoff Volume (ac-ft/yr)	41.243	3.333	7.497	4.023	1.404	0.060
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	60.514	11.508	10.122	10.269	2.848	0.178
Phosphorus Loading (kg/yr)	7.882	2.002	0.139	1.622	0.467	0.026

Catchment Number: 1 Name: Transportation (Pond)

Project: 75614 Segment 13 SMF 1301A
Date: 11/26/2025

Retention Design

Retention Depth (in)	0.855
Retention Volume (ac-ft)	1.894

Watershed Characteristics

Catchment Area (acres)	26.58
Contributing Area (acres)	26.580
Non-DCIA Curve Number	59.04
DCIA Percent	44.02
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	84
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	84

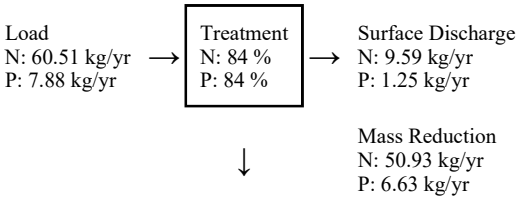
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

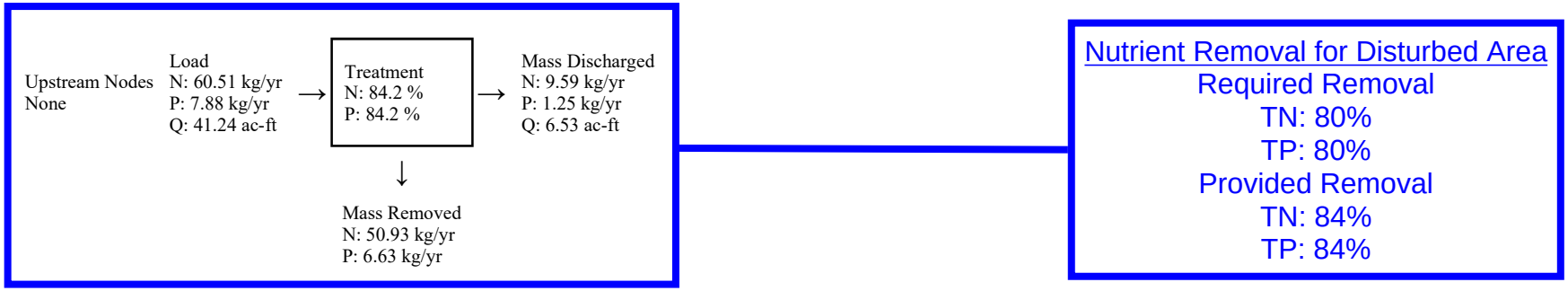
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	10.768
TN Mass Load (kg/yr)	50.927
TN Concentration (mg/L)	1.190
TP Mass Load (kg/yr)	6.633
TP Concentration (mg/L)	0.155

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Catchment Number: 2 Name: Agricultural

Project: 75614 Segment 13 SMF 1301A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	39.84
Contributing Area (acres)	39.840
Non-DCIA Curve Number	49.00
DCIA Percent	0.76
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

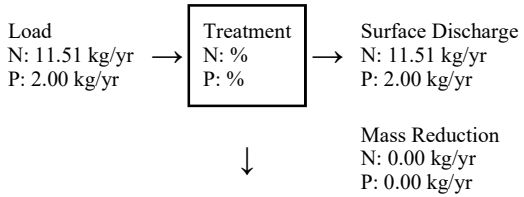
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

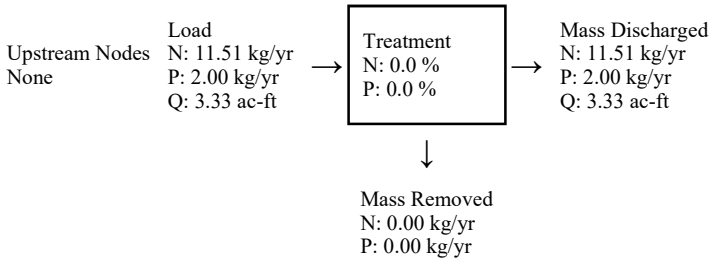
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Wetlands

Project: 75614 Segment 13 SMF 1301A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.97
Contributing Area (acres)	1.970
Non-DCIA Curve Number	100.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

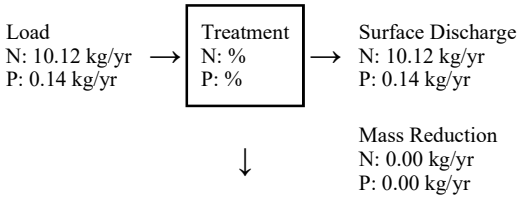
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

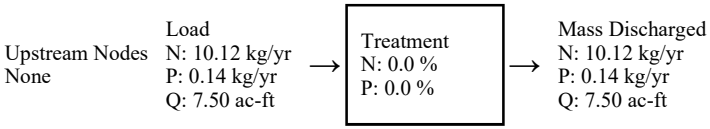
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Mass Removed
N: 0.00 kg/yr
P: 0.00 kg/yr

Catchment Number: 4 Name: Urban: Residential High Density

Project: 75614 Segment 13 SMF 1301A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.56
Contributing Area (acres)	2.560
Non-DCIA Curve Number	49.00
DCIA Percent	45.61
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

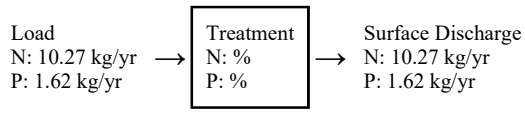
Media Mix Information

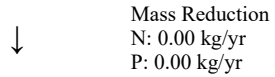
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

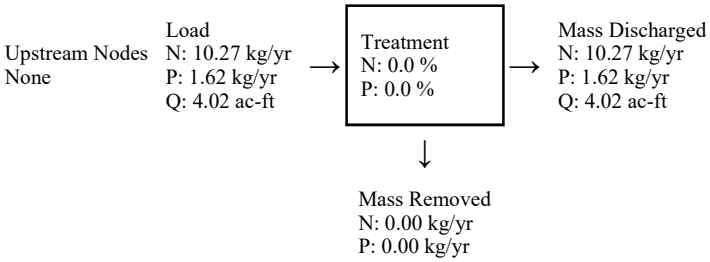
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 5 Name: Urban: Residential Low Density

Project: 75614 Segment 13 SMF 1301A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	6.85
Contributing Area (acres)	6.850
Non-DCIA Curve Number	49.00
DCIA Percent	4.40
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

Media Mix Information

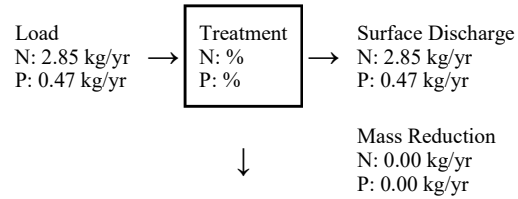
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

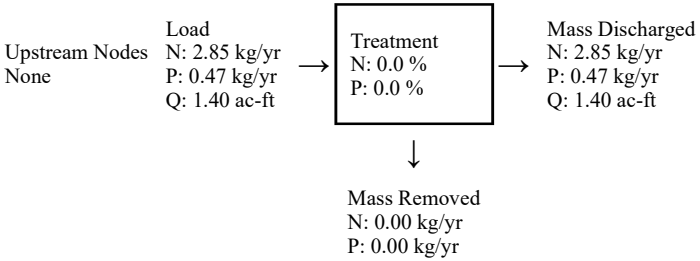
Treatment Rate (MG/yr)	0.000

TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 6 Name: Urban: Commercial

Project: 75614 Segment 13 SMF 1301A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.03
Contributing Area (acres)	1.030
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80

Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

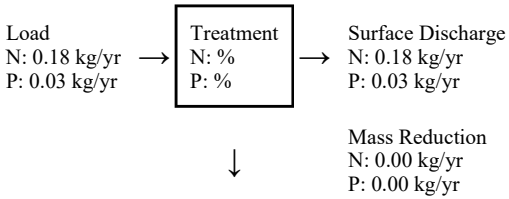
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

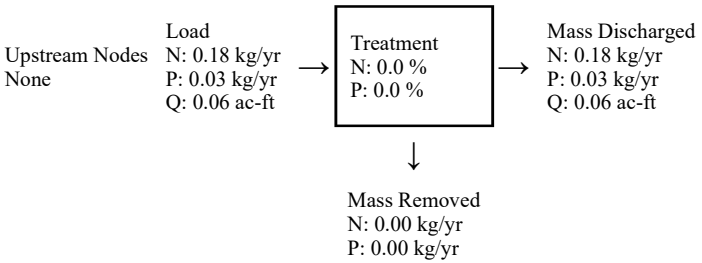
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1301B
Date: 11/26/2025 8:08:10 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Pond)	Agricultural	Wetlands	Urban: Residential High Density	Urban: Residential Low Density	Urban: Commercial
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Single-Family: TN=2.070 TP=0.327	Low-Density Residential: TN=1.645 TP= 0.27	High-Intensity Commercial: TN=2.40 TP=0.345
Area (acres)	22.73	41.43	1.11	2.59	8.38	4.57
Rational Coefficient (0-1)	0.21	0.02	0.91	0.37	0.14	0.01
Non DCIA Curve Number	49.00	49.00	100.00	49.00	49.00	49.00
DCIA Percent (0-100)	24.82	0.72	0.00	45.10	15.37	0.01
Nitrogen EMC (mg/l)	1.190	2.800	1.095	2.070	1.645	2.400
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.327	0.270	0.345
Runoff Volume (ac-ft/yr)	20.055	3.411	4.224	4.027	4.754	0.268
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	29.427	11.776	5.703	10.279	9.643	0.793
Phosphorus Loading (kg/yr)	3.833	2.048	0.078	1.624	1.583	0.114

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Single-Family: TN=2.070 TP=0.327	Low-Density Residential: TN=1.645 TP= 0.27	High-Intensity Commercial: TN=2.40 TP=0.345
Area (acres)	28.88	36.51	1.96	2.56	6.85	2.42
Rational Coefficient (0-1)	0.35	0.02	0.91	0.38	0.05	0.01
Non DCIA Curve Number	59.59	49.00	100.00	49.00	49.00	49.00
DCIA Percent (0-100)	40.51	0.82	0.00	45.45	4.40	0.00
Wet Pond Area (ac)	0.00	0.00	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	1.095	2.070	1.645	2.400
Phosphorus EMC						

(mg/l)	0.155	0.487	0.015	0.327	0.270	0.345
Runoff Volume (ac-ft/yr)	41.583	3.128	7.459	4.010	1.404	0.141
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	61.014	10.798	10.071	10.235	2.848	0.418
Phosphorus Loading (kg/yr)	7.947	1.878	0.138	1.617	0.467	0.060

Catchment Number: 1 Name: Transportation (Pond)

Project: 75614 Segment 13 SMF 1301B
Date: 11/26/2025

Retention Design

Retention Depth (in)	0.729
Retention Volume (ac-ft)	1.754

Watershed Characteristics

Catchment Area (acres)	28.88
Contributing Area (acres)	28.880
Non-DCIA Curve Number	59.59
DCIA Percent	40.51
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	82
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	82

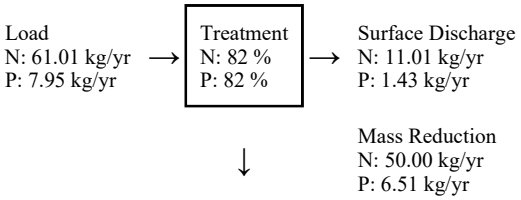
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

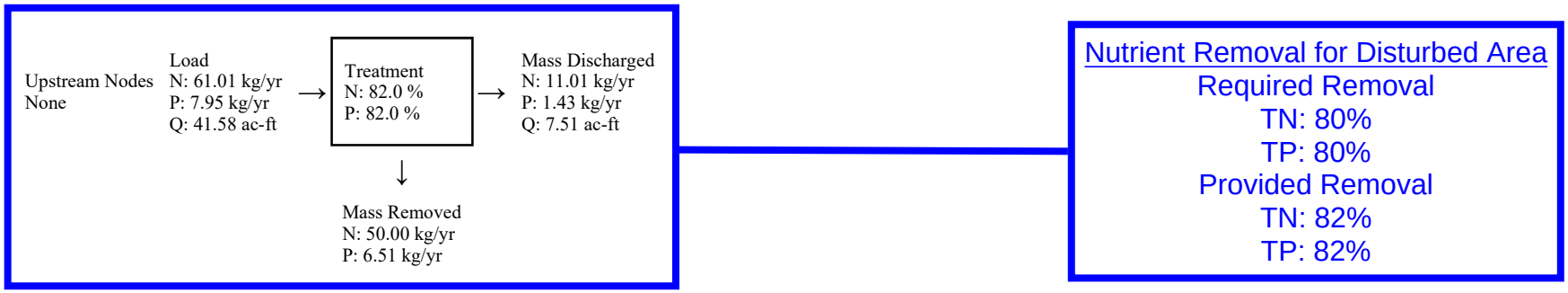
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	50.001
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	6.513
TP Concentration (mg/L)	0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Catchment Number: 2 Name: Agricultural

Project: 75614 Segment 13 SMF 1301B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	36.51
Contributing Area (acres)	36.510
Non-DCIA Curve Number	49.00
DCIA Percent	0.82
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

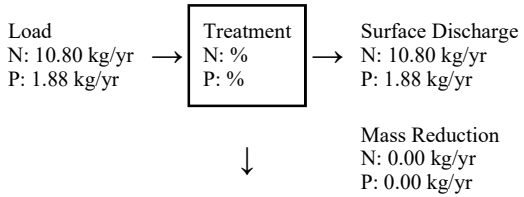
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

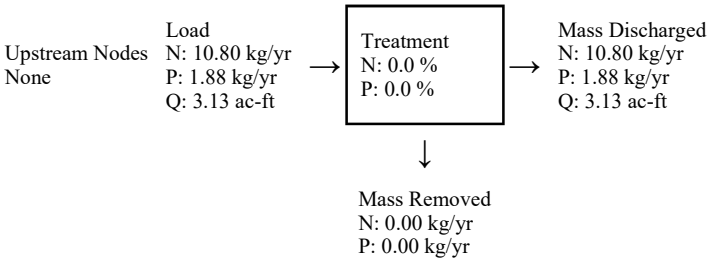
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Wetlands

Project: 75614 Segment 13 SMF 1301B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.96
Contributing Area (acres)	1.960
Non-DCIA Curve Number	100.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

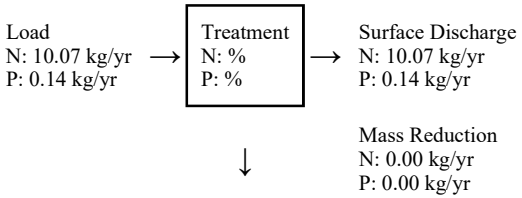
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

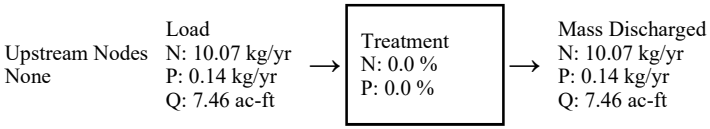
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Mass Removed
N: 0.00 kg/yr
P: 0.00 kg/yr

Catchment Number: 4 Name: Urban: Residential High Density

Project: 75614 Segment 13 SMF 1301B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.56
Contributing Area (acres)	2.560
Non-DCIA Curve Number	49.00
DCIA Percent	45.45
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

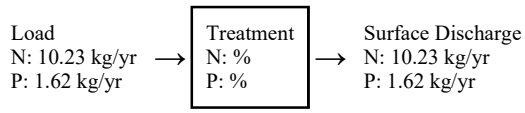
Media Mix Information

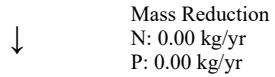
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

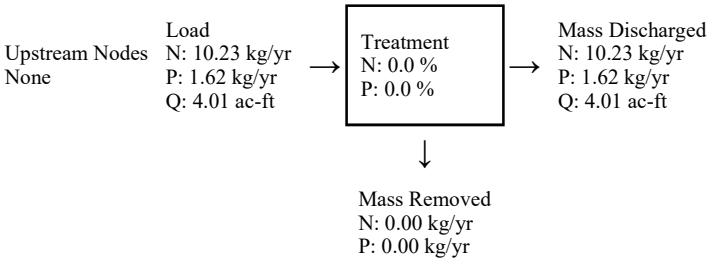
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 5 Name: Urban: Residential Low Density

Project: 75614 Segment 13 SMF 1301B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	6.85
Contributing Area (acres)	6.850
Non-DCIA Curve Number	49.00
DCIA Percent	4.40
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

Media Mix Information

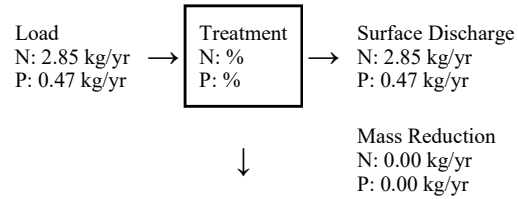
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

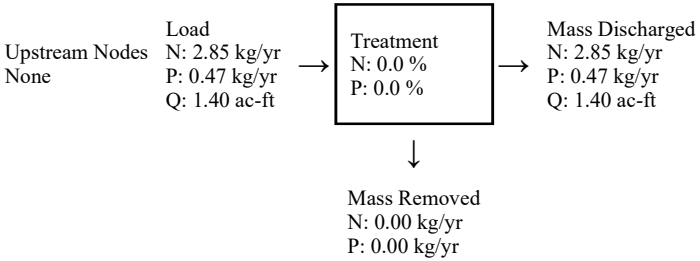
Treatment Rate (MG/yr)	0.000

TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 6 Name: Urban: Commercial

Project: 75614 Segment 13 SMF 1301B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.42
Contributing Area (acres)	2.420
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80

Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

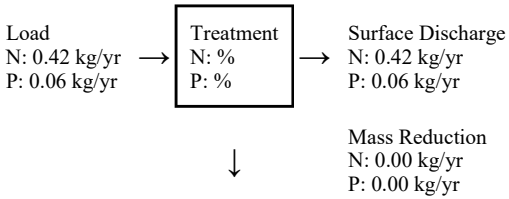
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

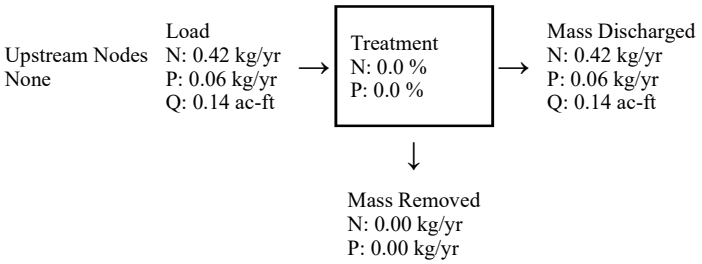
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1301C
Date: 11/26/2025 8:09:01 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Pond)	Agricultural	Wetlands	Urban: Residential High Density	Urban: Residential Low Density	Urban: Commercial
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Single-Family: TN=2.070 TP=0.327	Low-Density Residential: TN=1.645 TP= 0.27	High-Intensity Commercial: TN=2.40 TP=0.345
Area (acres)	22.73	41.43	1.11	2.59	8.38	4.57
Rational Coefficient (0-1)	0.21	0.02	0.91	0.37	0.14	0.01
Non DCIA Curve Number	49.00	49.00	100.00	49.00	49.00	49.00
DCIA Percent (0-100)	24.82	0.72	0.00	45.10	15.37	0.01
Nitrogen EMC (mg/l)	1.190	2.800	1.095	2.070	1.645	2.400
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.327	0.270	0.345
Runoff Volume (ac-ft/yr)	20.055	3.411	4.224	4.027	4.754	0.268
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	29.427	11.776	5.703	10.279	9.643	0.793
Phosphorus Loading (kg/yr)	3.833	2.048	0.078	1.624	1.583	0.114

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Single-Family: TN=2.070 TP=0.327	Low-Density Residential: TN=1.645 TP= 0.27	High-Intensity Commercial: TN=2.40 TP=0.345
Area (acres)	28.41	38.01	1.96	2.56	6.85	2.42
Rational Coefficient (0-1)	0.35	0.02	0.91	0.45	0.05	0.01
Non DCIA Curve Number	59.58	49.00	100.00	49.00	49.00	49.00
DCIA Percent (0-100)	41.19	0.79	0.00	54.55	4.40	0.00
Wet Pond Area (ac)	0.00	0.00	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	1.095	2.070	1.645	2.400
Phosphorus EMC						

(mg/l)	0.155	0.487	0.015	0.327	0.270	0.345
Runoff Volume (ac-ft/yr)	41.533	3.218	7.459	4.779	1.404	0.141
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	60.941	11.110	10.071	12.197	2.848	0.418
Phosphorus Loading (kg/yr)	7.938	1.932	0.138	1.927	0.467	0.060

Catchment Number: 1 Name: Transportation (Pond)

Project: 75614 Segment 13 SMF 1301C
Date: 11/26/2025

Retention Design

Retention Depth (in)	0.772
Retention Volume (ac-ft)	1.828

Watershed Characteristics

Catchment Area (acres)	28.41
Contributing Area (acres)	28.410
Non-DCIA Curve Number	59.58
DCIA Percent	41.19
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	83
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	83

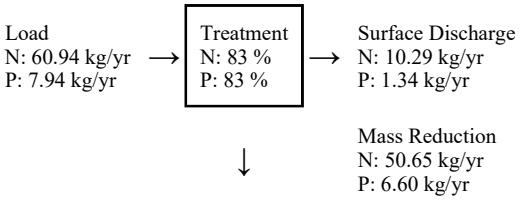
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

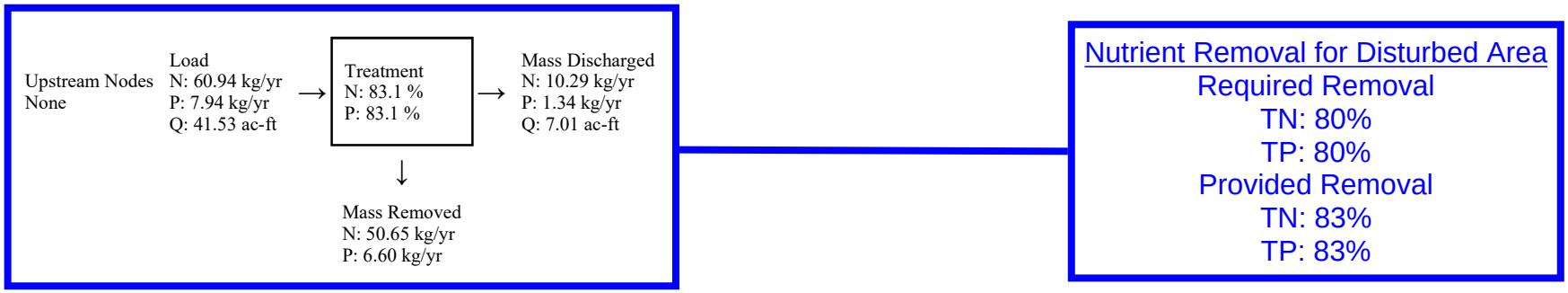
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	50.649
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	6.597
TP Concentration (mg/L)	0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Catchment Number: 2 Name: Agricultural

Project: 75614 Segment 13 SMF 1301C
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	38.01
Contributing Area (acres)	38.010
Non-DCIA Curve Number	49.00
DCIA Percent	0.79
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

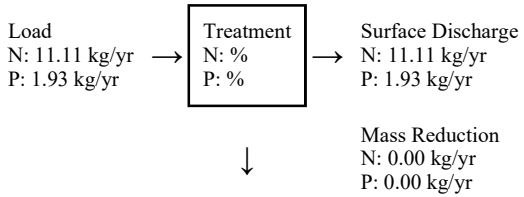
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

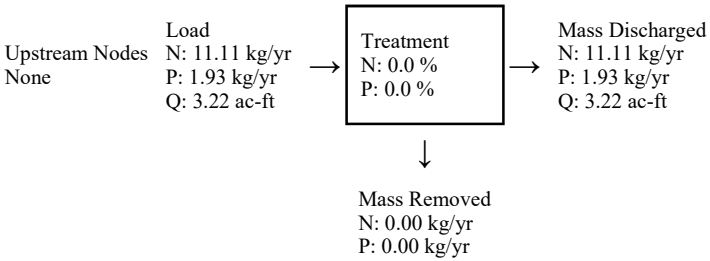
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Wetlands

Project: 75614 Segment 13 SMF 1301C
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.96
Contributing Area (acres)	1.960
Non-DCIA Curve Number	100.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

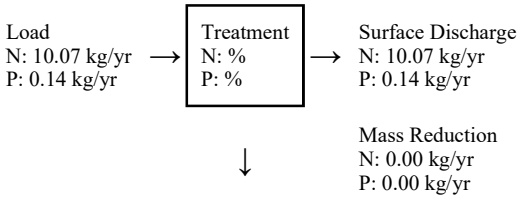
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

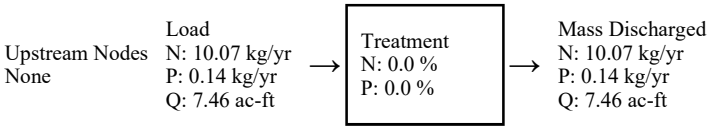
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Mass Removed
N: 0.00 kg/yr
P: 0.00 kg/yr

Catchment Number: 4 Name: Urban: Residential High Density

Project: 75614 Segment 13 SMF 1301C
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.56
Contributing Area (acres)	2.560
Non-DCIA Curve Number	49.00
DCIA Percent	54.55
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

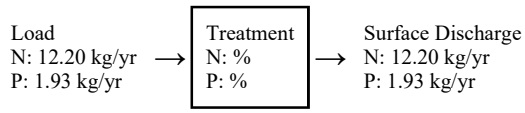
Media Mix Information

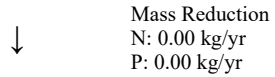
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

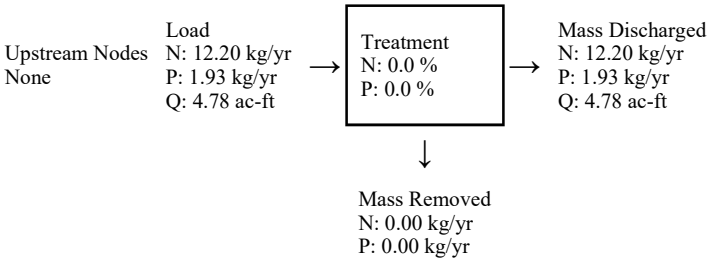
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 5 Name: Urban: Residential Low Density

Project: 75614 Segment 13 SMF 1301C
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	6.85
Contributing Area (acres)	6.850
Non-DCIA Curve Number	49.00
DCIA Percent	4.40
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

Media Mix Information

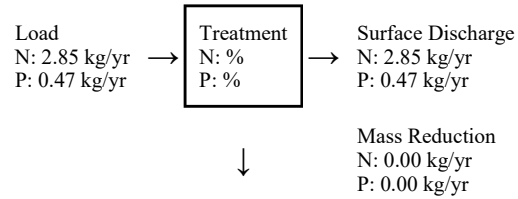
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

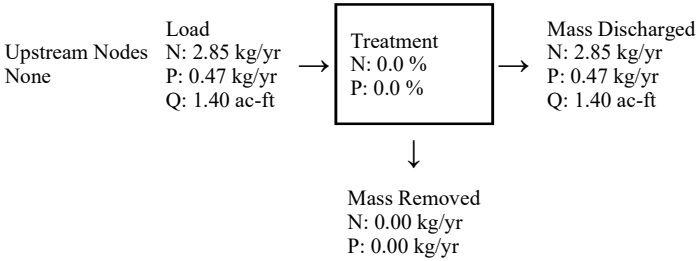
Treatment Rate (MG/yr)	0.000

TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 6 Name: Urban: Commercial

Project: 75614 Segment 13 SMF 1301C
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.42
Contributing Area (acres)	2.420
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80

Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

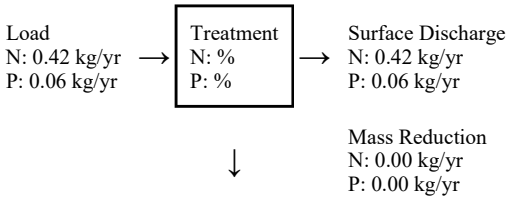
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

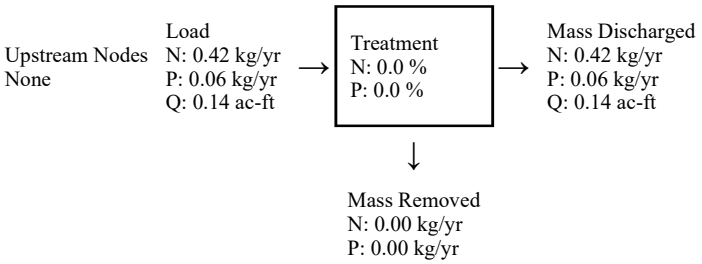
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1302A
Date: 11/26/2025 8:09:35 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Pond)	Agricultural	Wetlands	Urban: Residential Low Density
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27
Area (acres)	19.59	24.93	2.94	18.45
Rational Coefficient (0-1)	0.01	0.01	0.91	0.04
Non DCIA Curve Number	49.00	49.00	100.00	49.00
DCIA Percent (0-100)	0.00	0.00	0.00	3.11
Nitrogen EMC (mg/l)	1.190	2.800	1.095	1.645
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.270
Runoff Volume (ac-ft/yr)	1.143	1.454	11.188	2.989
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	1.677	5.021	15.106	6.062
Phosphorus Loading (kg/yr)	0.218	0.873	0.207	0.995

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27
Area (acres)	26.20	23.22	2.04	16.06
Rational Coefficient (0-1)	0.32	0.02	0.91	0.05
Non DCIA Curve Number	49.00	49.00	100.00	49.00
DCIA Percent (0-100)	37.87	1.30	0.00	4.17
Wet Pond Area (ac)	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	1.095	1.645
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.270
Runoff Volume (ac-ft/yr)	34.427	2.361	7.763	3.169
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	50.513	8.150	10.482	6.428
Phosphorus Loading (kg/yr)	6.579	1.418	0.144	1.055

Catchment Number: 1 Name: Transportation (Pond)

Project: 75614 Segment 13 SMF 1302A
Date: 11/26/2025

Retention Design

Retention Depth (in)	0.666
Retention Volume (ac-ft)	1.454

Watershed Characteristics

Catchment Area (acres)	26.20
Contributing Area (acres)	26.200
Non-DCIA Curve Number	49.00
DCIA Percent	37.87
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	83
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	83

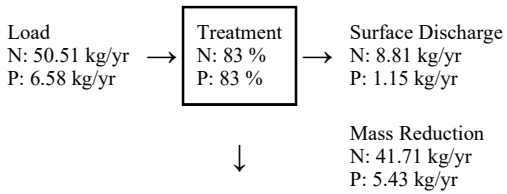
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

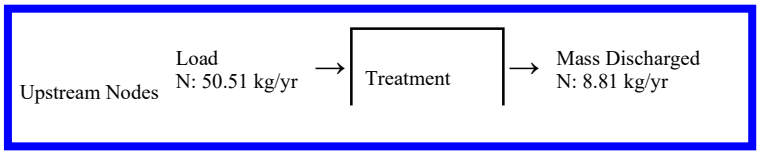
Groundwater Discharge (Stand-Alone)

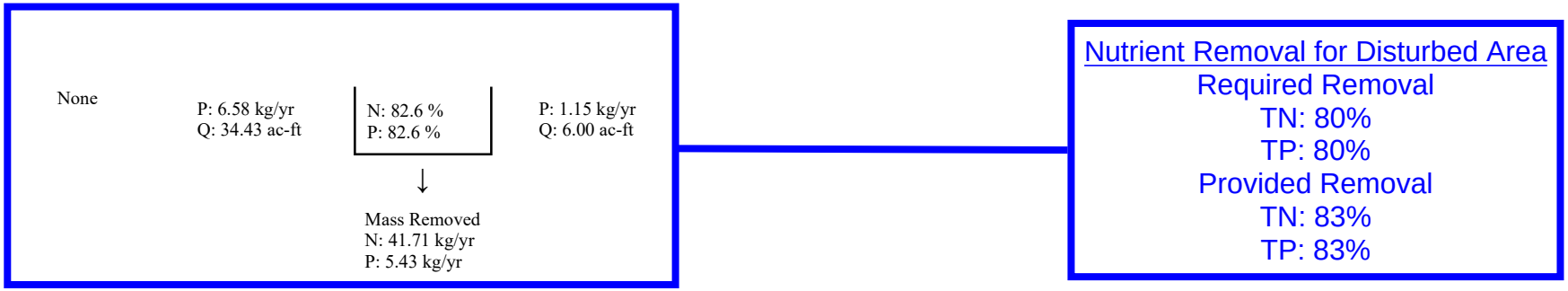
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	41.705
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	5.432
TP Concentration (mg/L)	0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)





Catchment Number: 2 Name: Agricultural

Project: 75614 Segment 13 SMF 1302A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	23.22
Contributing Area (acres)	23.220
Non-DCIA Curve Number	49.00
DCIA Percent	1.30
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

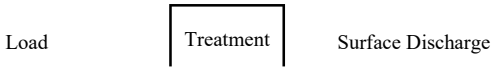
Media Mix Information

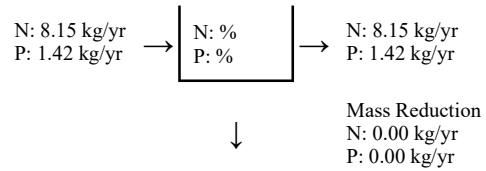
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

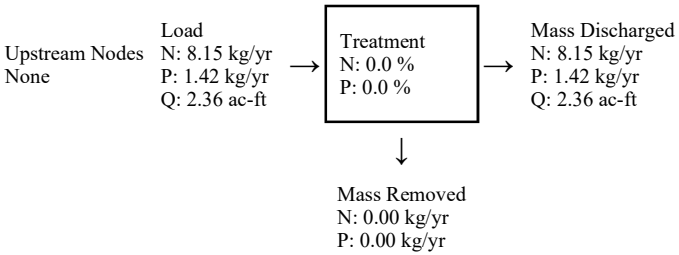
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Wetlands

Project: 75614 Segment 13 SMF 1302A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.04
Contributing Area (acres)	2.040
Non-DCIA Curve Number	100.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

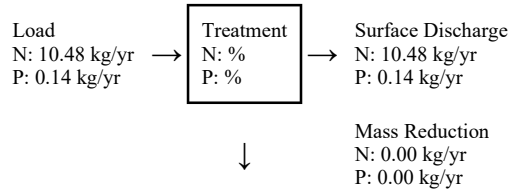
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

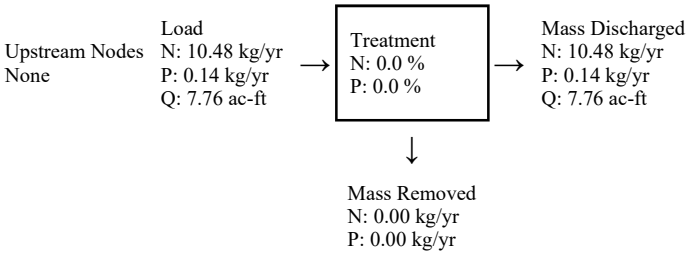
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 4 Name: Urban: Residential Low Density

Project: 75614 Segment 13 SMF 1302A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	16.06
Contributing Area (acres)	16.060
Non-DCIA Curve Number	49.00
DCIA Percent	4.17
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

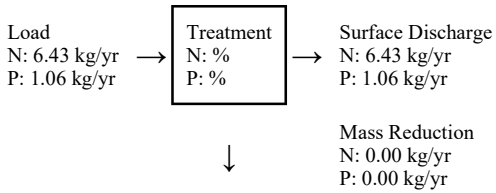
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

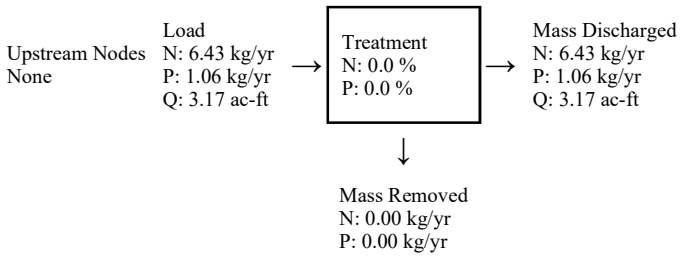
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1302B
Date: 11/26/2025 8:10:36 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Pond)	Agricultural	Wetlands	Urban: Residential Low Density
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27
Area (acres)	19.59	24.93	2.94	18.45
Rational Coefficient (0-1)	0.01	0.01	0.91	0.04
Non DCIA Curve Number	49.00	49.00	100.00	49.00
DCIA Percent (0-100)	0.00	0.00	0.00	3.11
Nitrogen EMC (mg/l)	1.190	2.800	1.095	1.645
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.270
Runoff Volume (ac-ft/yr)	1.143	1.454	11.188	2.989
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	1.677	5.021	15.106	6.062
Phosphorus Loading (kg/yr)	0.218	0.873	0.207	0.995

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27
Area (acres)	24.97	23.22	2.36	16.17
Rational Coefficient (0-1)	0.33	0.01	0.91	0.05
Non DCIA Curve Number	49.00	49.00	100.00	49.00
DCIA Percent (0-100)	39.74	0.06	0.00	4.14
Wet Pond Area (ac)	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	1.095	1.645
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.270
Runoff Volume (ac-ft/yr)	34.367	1.401	8.981	3.175
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	50.426	4.837	12.126	6.439
Phosphorus Loading (kg/yr)	6.568	0.841	0.166	1.057

Catchment Number: 1 Name: Transportation (Pond)

Project: 75614 Segment 13 SMF 1302B
Date: 11/26/2025

Retention Design

Retention Depth (in)	0.664
Retention Volume (ac-ft)	1.382

Watershed Characteristics

Catchment Area (acres)	24.97
Contributing Area (acres)	24.970
Non-DCIA Curve Number	49.00
DCIA Percent	39.74
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	81
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	81

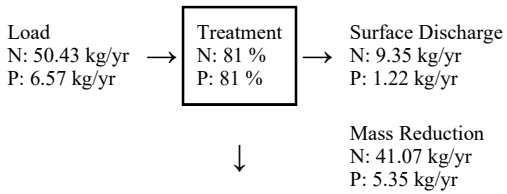
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

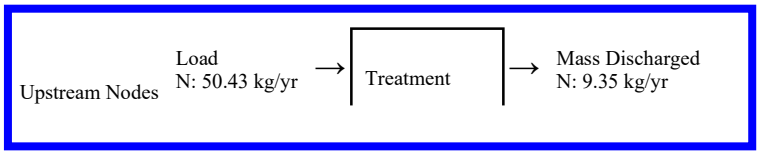
Groundwater Discharge (Stand-Alone)

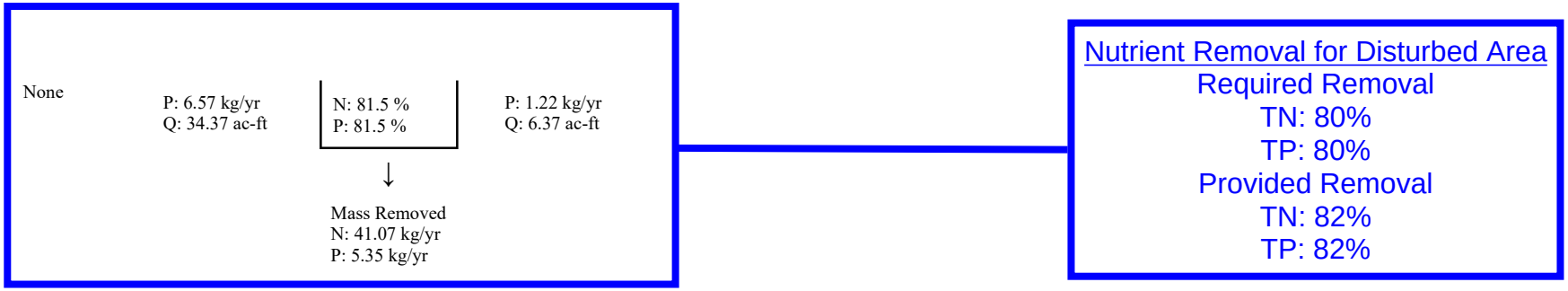
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	41.072
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	5.350
TP Concentration (mg/L)	0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)





Catchment Number: 2 Name: Agricultural

Project: 75614 Segment 13 SMF 1302B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	23.22
Contributing Area (acres)	23.220
Non-DCIA Curve Number	49.00
DCIA Percent	0.06
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

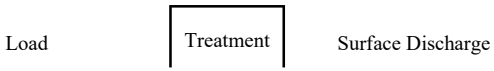
Media Mix Information

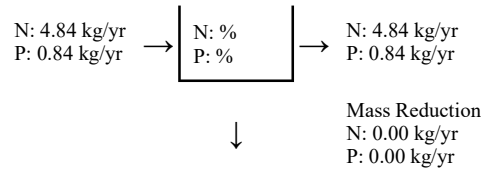
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

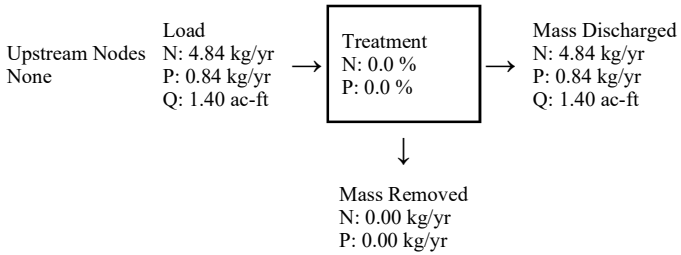
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Wetlands

Project: 75614 Segment 13 SMF 1302B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.36
Contributing Area (acres)	2.360
Non-DCIA Curve Number	100.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

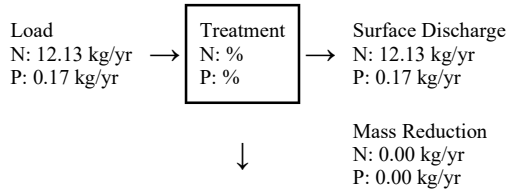
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

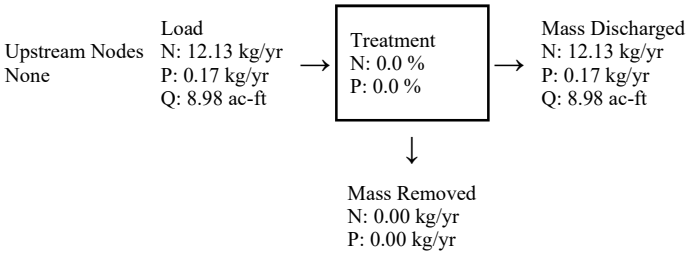
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 4 Name: Urban: Residential Low Density

Project: 75614 Segment 13 SMF 1302B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	16.17
Contributing Area (acres)	16.170
Non-DCIA Curve Number	49.00
DCIA Percent	4.14
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

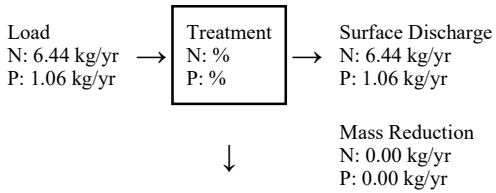
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

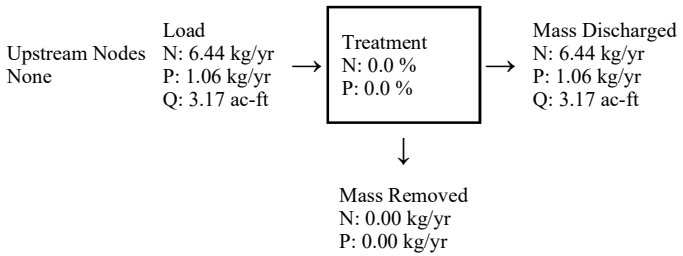
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1302C
Date: 11/26/2025 8:11:34 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Pond)	Agricultural	Wetlands	Urban: Residential Low Density
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27
Area (acres)	19.59	24.93	2.94	18.45
Rational Coefficient (0-1)	0.01	0.01	0.91	0.04
Non DCIA Curve Number	49.00	49.00	100.00	49.00
DCIA Percent (0-100)	0.00	0.00	0.00	3.11
Nitrogen EMC (mg/l)	1.190	2.800	1.095	1.645
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.270
Runoff Volume (ac-ft/yr)	1.143	1.454	11.188	2.989
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	1.677	5.021	15.106	6.062
Phosphorus Loading (kg/yr)	0.218	0.873	0.207	0.995

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27
Area (acres)	25.87	20.48	2.36	18.69
Rational Coefficient (0-1)	0.32	0.01	0.91	0.04
Non DCIA Curve Number	49.00	49.00	100.00	49.00
DCIA Percent (0-100)	38.36	0.06	0.00	3.58
Wet Pond Area (ac)	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	1.095	1.645
Phosphorus EMC (mg/l)	0.155	0.487	0.015	0.270
Runoff Volume (ac-ft/yr)	34.416	1.236	8.981	3.321
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	50.497	4.266	12.126	6.735
Phosphorus Loading (kg/yr)	6.577	0.742	0.166	1.105

Catchment Number: 1 Name: Transportation (Pond)

Project: 75614 Segment 13 SMF 1302C
Date: 11/26/2025

Retention Design

Retention Depth (in)	0.724
Retention Volume (ac-ft)	1.561

Watershed Characteristics

Catchment Area (acres)	25.87
Contributing Area (acres)	25.870
Non-DCIA Curve Number	49.00
DCIA Percent	38.36
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	85
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	85

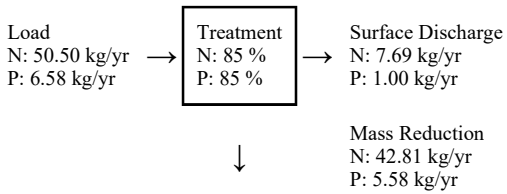
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

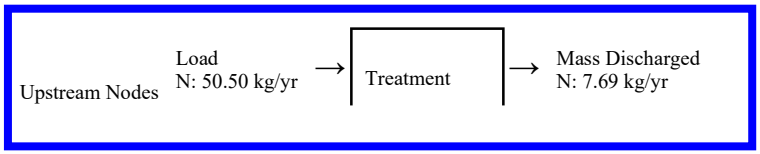
Groundwater Discharge (Stand-Alone)

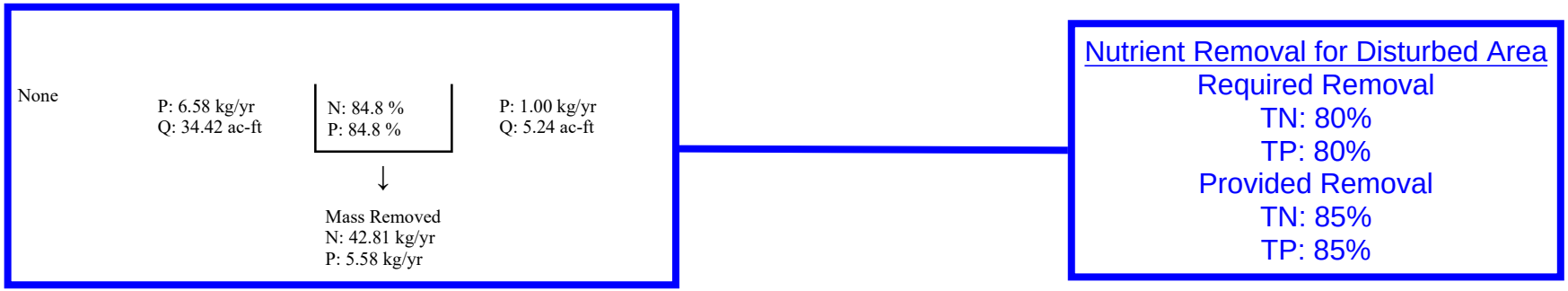
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	42.809
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	5.576
TP Concentration (mg/L)	0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)





Catchment Number: 2 Name: Agricultural

Project: 75614 Segment 13 SMF 1302C
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	20.48
Contributing Area (acres)	20.480
Non-DCIA Curve Number	49.00
DCIA Percent	0.06
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

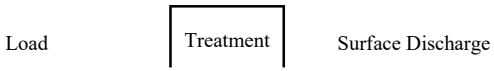
Media Mix Information

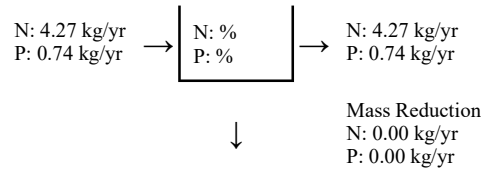
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

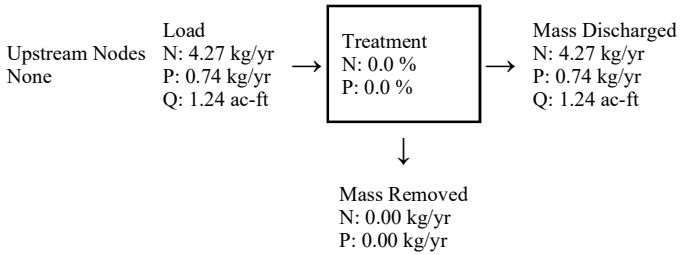
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Wetlands

Project: 75614 Segment 13 SMF 1302C
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.36
Contributing Area (acres)	2.360
Non-DCIA Curve Number	100.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

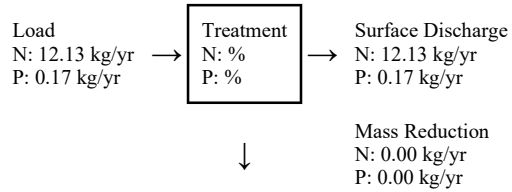
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

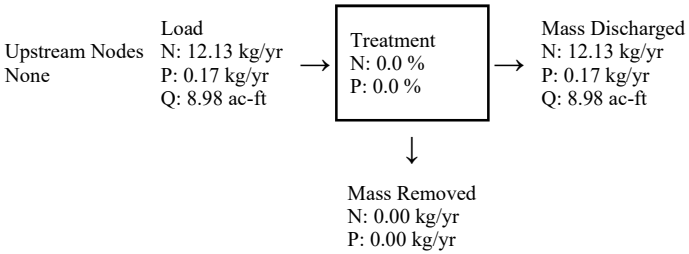
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 4 Name: Urban: Residential Low Density

Project: 75614 Segment 13 SMF 1302C
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	18.69
Contributing Area (acres)	18.690
Non-DCIA Curve Number	49.00
DCIA Percent	3.58
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

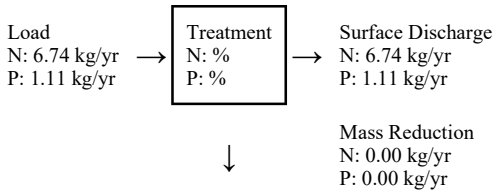
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

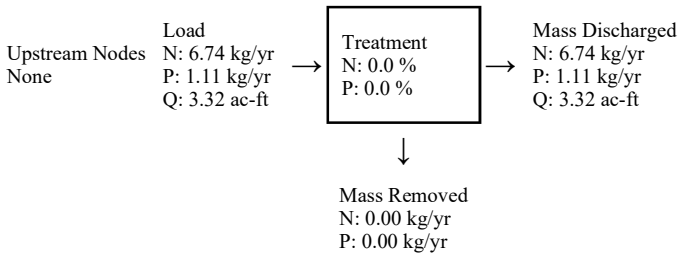
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025 8:19:06 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Uphill)	Agricultural: General (Uphill)	Agricultural: Citrus (Uphill)	Urban: Residential Low Density (Uphill)	Upland Forest (Uphill)	Transportation (Downhill)	Agricultural: General (Downhill)	Agricultural: Pastures (Downhill)	Agricultural: Citrus (Downhill)	Wetlands (Downhill)	Urban: Residential Low Density (Downhill)	Upland Forest (Downhill)
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Citrus: TN=2.240 TP=0.183	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Pasture: TN=3.510TP=0.686	Agricultural - Citrus: TN=2.240 TP=0.183	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346
Area (acres)	9.91	0.57	8.06	19.25	0.00	9.64	1.10	17.01	6.67	1.74	10.18	5.19
Rational Coefficient (0-1)	0.16	0.01	0.01	0.03	0.00	0.31	0.01	0.02	0.01	0.91	0.11	0.02
Non DCIA Curve Number	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	100.00	49.00	49.00
DCIA Percent (0-100)	18.20	0.00	0.00	2.58	0.00	37.42	0.00	1.03	0.08	0.00	12.04	0.14
Nitrogen EMC (mg/l)	1.190	2.800	2.240	1.645	1.042	1.190	2.800	3.510	2.240	1.095	1.645	1.042
Phosphorus EMC (mg/l)	0.155	0.487	0.183	0.270	0.346	0.155	0.487	0.686	0.183	0.015	0.270	0.346
Runoff Volume (ac-ft/yr)	6.557	0.033	0.470	2.778	0.000	12.522	0.064	1.576	0.407	6.622	4.666	0.327
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Nitrogen

Loading (kg/yr)	9.621	0.115	1.299	5.635	0.000	18.374	0.222	6.822	1.124	8.940	9.463	0.420
Phosphorus Loading (kg/yr)	1.253	0.020	0.106	0.925	0.000	2.393	0.039	1.333	0.092	0.122	1.553	0.139

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Citrus: TN=2.240 TP=0.183	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Pasture: TN=3.510TP=0.686	Agricultural - Citrus: TN=2.240 TP=0.183	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346
Area (acres)	18.12	0.47	5.33	21.21	0.01	27.51	1.11	8.67	1.76	0.72	6.44	0.96
Rational Coefficient (0-1)	0.30	0.01	0.01	0.04	0.01	0.32	0.02	0.02	0.01	0.91	0.09	0.01
Non DCIA Curve Number	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	100.00	49.00	49.00
DCIA Percent (0-100)	36.06	0.00	0.00	3.41	0.00	38.63	0.14	1.13	0.00	0.00	9.57	0.00
Wet Pond Area (ac)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	2.240	1.645	1.042	1.190	2.800	3.510	2.240	1.095	1.645	1.042
Phosphorus EMC (mg/l)	0.155	0.487	0.183	0.270	0.346	0.155	0.487	0.686	0.183	0.015	0.270	0.346
Runoff Volume (ac-ft/yr)	22.716	0.027	0.311	3.648	0.001	36.845	0.070	0.832	0.103	2.740	2.430	0.056
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	33.331	0.095	0.859	7.399	0.001	54.062	0.241	3.602	0.284	3.699	4.929	0.072
Phosphorus Loading (kg/yr)	4.341	0.016	0.070	1.214	0.000	7.042	0.042	0.704	0.023	0.051	0.809	0.024

Catchment Number: 1 Name: Transportation (Uphill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	18.12
Contributing Area (acres)	18.120
Non-DCIA Curve Number	49.00
DCIA Percent	36.06
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

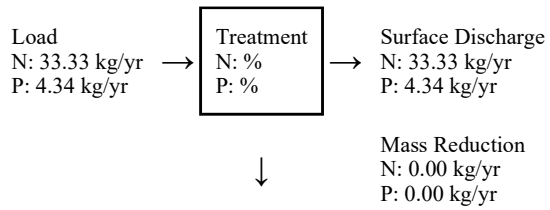
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

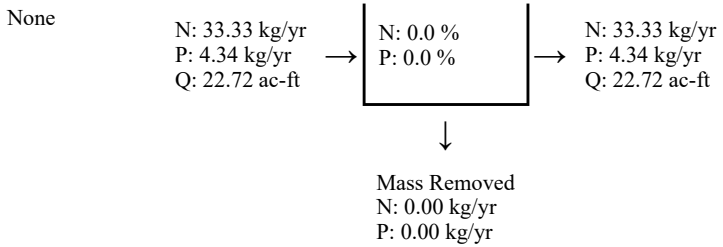
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)





Catchment Number: 2 Name: Agricultural: General (Uphill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.47
Contributing Area (acres)	0.470
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

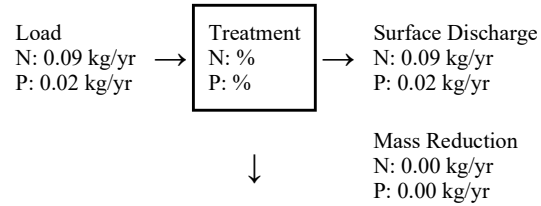
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

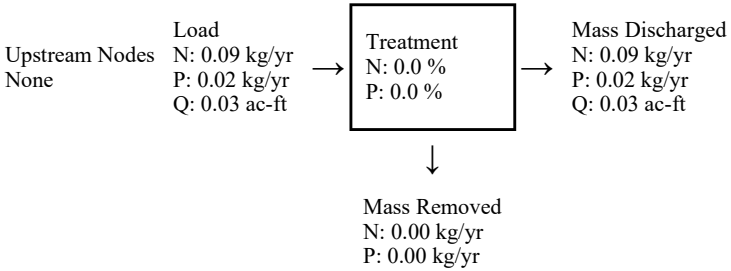
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Agricultural: Citrus (Uphill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	5.33
Contributing Area (acres)	5.330
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

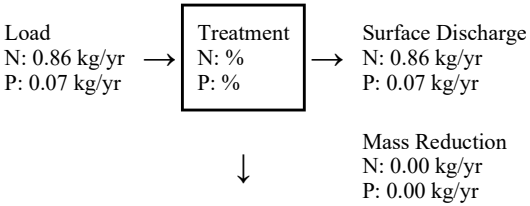
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

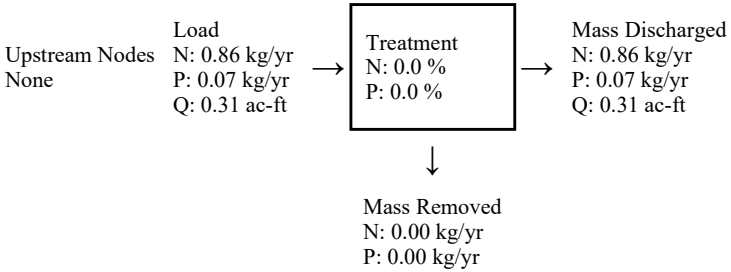
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 4 Name: Urban: Residential Low Density (Uphill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	21.21
Contributing Area (acres)	21.210
Non-DCIA Curve Number	49.00
DCIA Percent	3.41
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

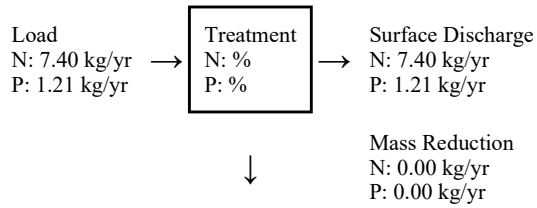
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

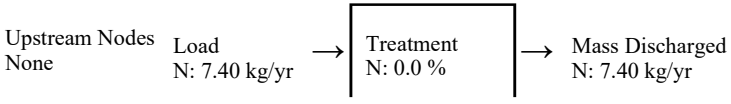
Groundwater Discharge (Stand-Alone)

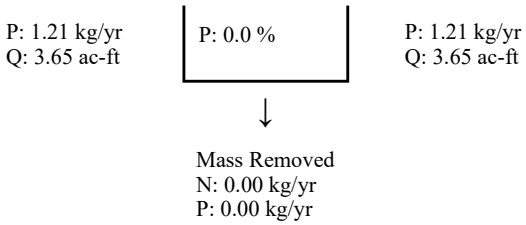
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)





Catchment Number: 5 Name: Upland Forest (Uphill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.01
Contributing Area (acres)	0.010
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

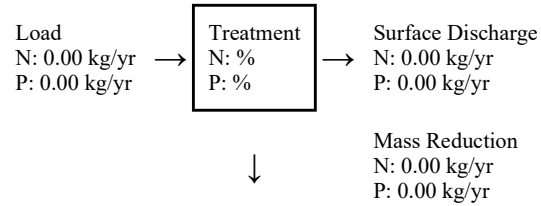
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

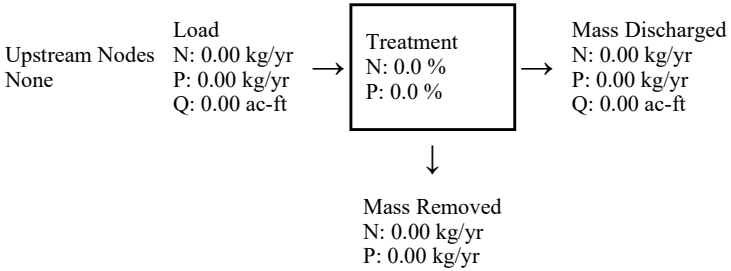
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 6 Name: Transportation (Downhill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

Retention Design

Retention Depth (in)	1.115
Retention Volume (ac-ft)	2.556

Watershed Characteristics

Catchment Area (acres)	27.51
Contributing Area (acres)	27.510
Non-DCIA Curve Number	49.00
DCIA Percent	38.63
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	92
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	92

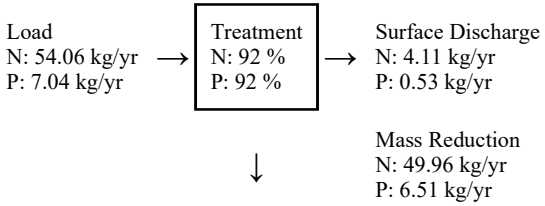
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

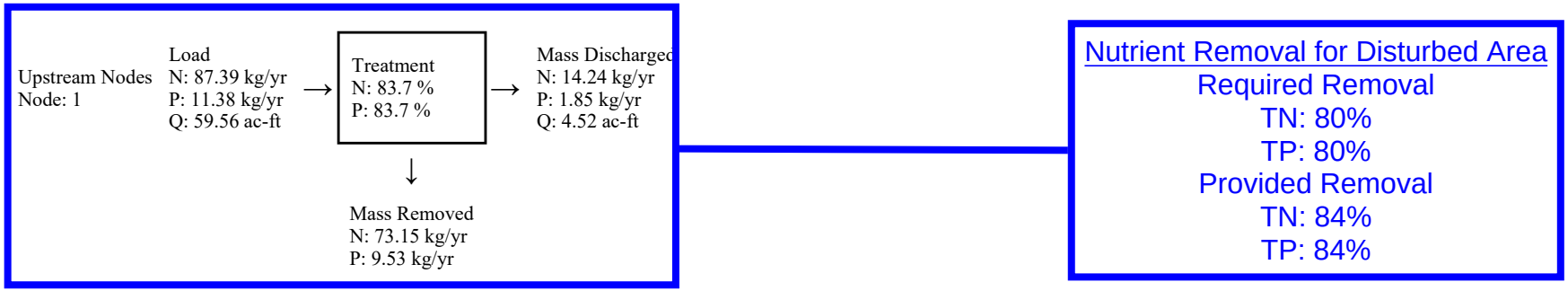
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	8.710
TN Mass Load (kg/yr)	49.956
TN Concentration (mg/L)	1.190
TP Mass Load (kg/yr)	6.507
TP Concentration (mg/L)	0.155

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Catchment Number: 7 Name: Agricultural: General (Downhill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.11
Contributing Area (acres)	1.110
Non-DCIA Curve Number	49.00
DCIA Percent	0.14
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

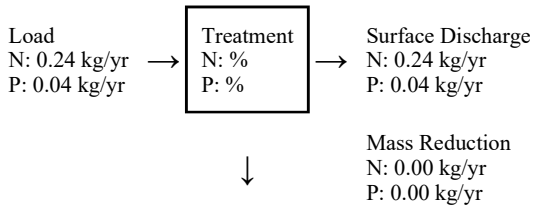
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

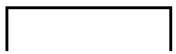
Groundwater Discharge (Stand-Alone)

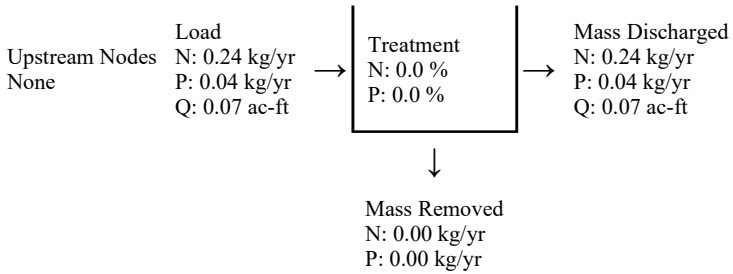
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)





Catchment Number: 8 Name: Agricultural: Pastures (Downhill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	8.67
Contributing Area (acres)	8.670
Non-DCIA Curve Number	49.00
DCIA Percent	1.13
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

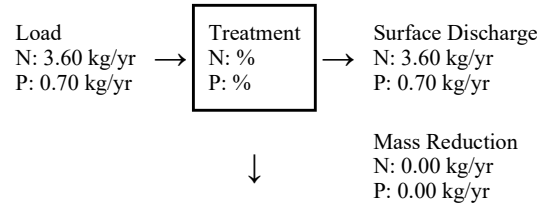
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

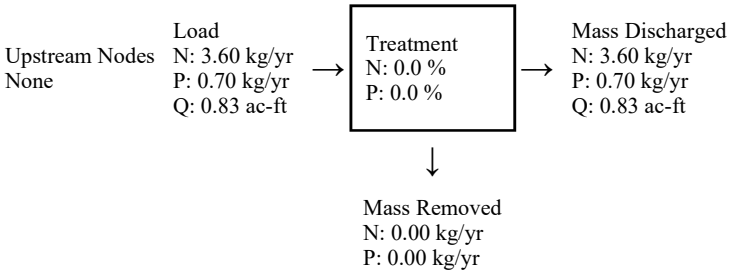
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 9 Name: Agricultural: Citrus (Downhill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.76
Contributing Area (acres)	1.760
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

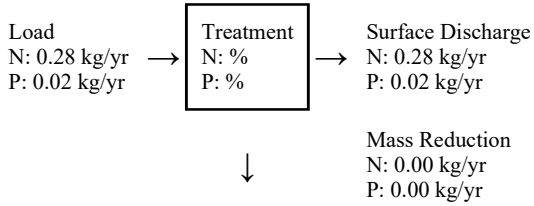
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

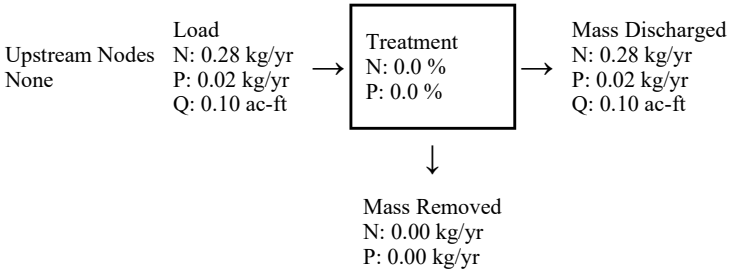
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 10 Name: Wetlands (Downhill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.72
Contributing Area (acres)	0.720
Non-DCIA Curve Number	100.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

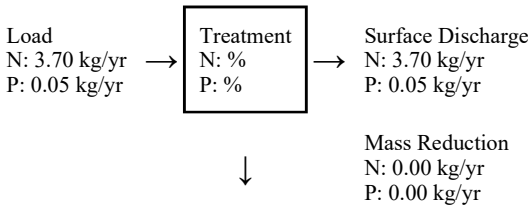
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

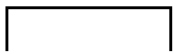
Groundwater Discharge (Stand-Alone)

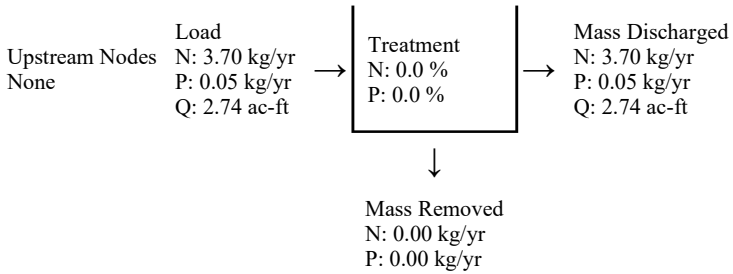
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)





Catchment Number: 11 Name: Urban: Residential Low Density (Downhill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	6.44
Contributing Area (acres)	6.440
Non-DCIA Curve Number	49.00
DCIA Percent	9.57
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

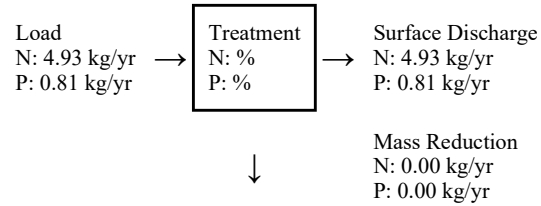
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

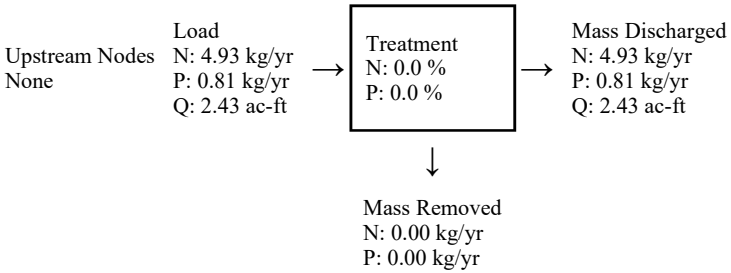
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 12 Name: Upland Forest (Downhill)

Project: 75614 Segment 13 SMF 1303A
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.96
Contributing Area (acres)	0.960
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

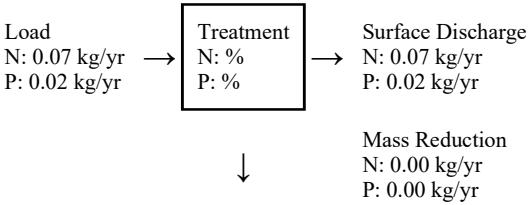
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

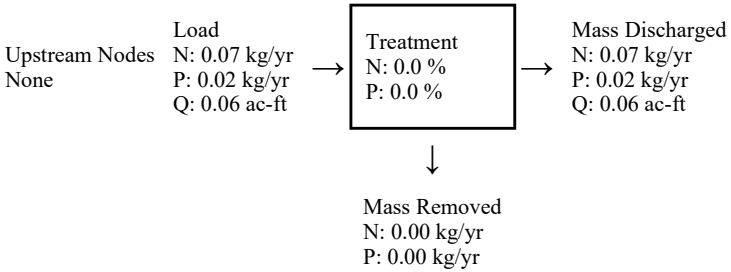
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025 8:13:03 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Uphill)	Agricultural: General (Uphill)	Agricultural: Citrus (Uphill)	Urban: Residential Low Density (Uphill)	Upland Forest (Uphill)	Transportation (Downhill)	Agricultural: General (Downhill)	Agricultural: Pastures (Downhill)	Agricultural: Citrus (Downhill)	Wetlands (Downhill)	Urban: Residential Low Density (Downhill)	Upland Forest (Downhill)	Transportation (DD - Downhill)
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Citrus: TN=2.240 TP=0.183	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Pasture: TN=3.510TP=0.686	Agricultural - Citrus: TN=2.240 TP=0.183	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values
Area (acres)	19.55	0.57	8.06	19.25	0.00	0.00	1.10	17.01	6.67	1.74	10.18	5.19	0.00
Rational Coefficient (0-1)	0.01	0.01	0.01	0.03	0.00	0.00	0.01	0.02	0.01	0.60	0.02	0.02	0.00
Non DCIA Curve Number	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	98.00	49.00	49.00	49.00
DCIA Percent (0-100)	0.00	0.00	0.00	2.58	0.00	0.00	0.00	1.03	0.08	0.00	0.14	0.14	0.00
Nitrogen EMC (mg/l)	1.190	2.800	2.240	1.645	1.042	1.190	2.800	3.510	2.240	1.095	1.645	1.042	1.190
Phosphorus EMC (mg/l)	0.155	0.487	0.183	0.270	0.346	0.155	0.487	0.686	0.183	0.015	0.270	0.346	0.155
Runoff Volume (ac-ft/yr)	1.140	0.033	0.470	2.778	0.000	0.000	0.064	1.576	0.407	4.314	0.641	0.327	0.000
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	1.673	0.115	1.299	5.635	0.000	0.000	0.222	6.822	1.124	5.824	1.301	0.420	0.000
Phosphorus Loading	0.218	0.020	0.106	0.925	0.000	0.000	0.039	1.333	0.092	0.080	0.214	0.139	0.000

(kg/yr)

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Citrus: TN=2.240 TP=0.183	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Pasture: TN=3.510TP=0.686	Agricultural - Citrus: TN=2.240 TP=0.183	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values
Area (acres)	18.12	0.47	5.33	21.22	0.01	27.43	1.11	7.22	1.76	0.72	6.43	0.97	2.95
Rational Coefficient (0-1)	0.30	0.01	0.01	0.04	0.01	0.32	0.02	0.02	0.01	0.60	0.01	0.01	0.01
Non DCIA Curve Number	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	98.00	49.00	49.00	49.00
DCIA Percent (0-100)	36.06	0.00	0.00	3.41	0.00	38.74	0.14	1.36	0.00	0.00	0.00	0.00	0.00
Wet Pond Area (ac)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	2.240	1.645	1.042	1.190	2.800	3.510	2.240	1.095	1.645	1.042	1.190
Phosphorus EMC (mg/l)	0.155	0.487	0.183	0.270	0.346	0.155	0.487	0.686	0.183	0.015	0.270	0.346	0.155
Runoff Volume (ac-ft/yr)	22.716	0.027	0.311	3.650	0.001	36.838	0.070	0.748	0.103	1.785	0.375	0.057	0.172
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	33.331	0.095	0.859	7.403	0.001	54.052	0.241	3.239	0.284	2.410	0.761	0.073	0.252
Phosphorus Loading (kg/yr)	4.341	0.016	0.070	1.215	0.000	7.040	0.042	0.633	0.023	0.033	0.125	0.024	0.033

Catchment Number: 1 Name: Transportation (Uphill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	18.12
Contributing Area (acres)	18.120
Non-DCIA Curve Number	49.00
DCIA Percent	36.06
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

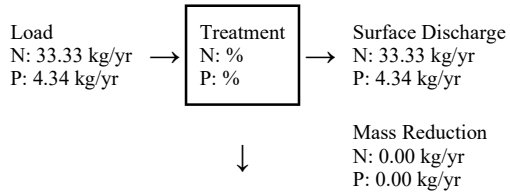
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

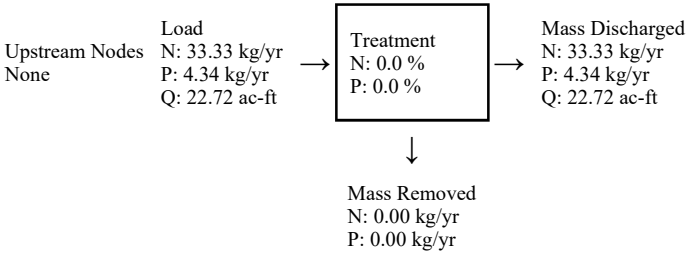
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 2 Name: Agricultural: General (Uphill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.47
Contributing Area (acres)	0.470
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

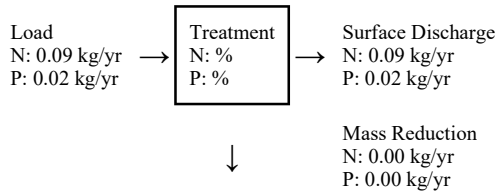
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

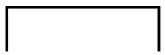
Groundwater Discharge (Stand-Alone)

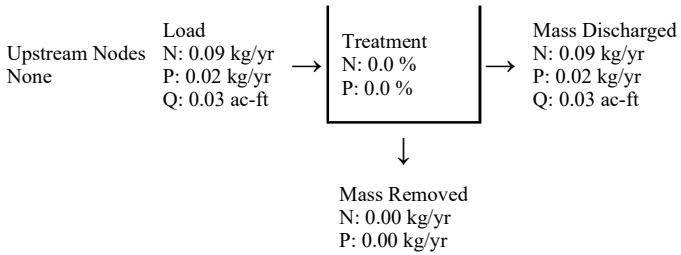
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)





Catchment Number: 3 Name: Agricultural: Citrus (Uphill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	5.33
Contributing Area (acres)	5.330
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

Media Mix Information

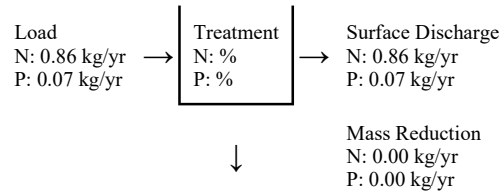
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

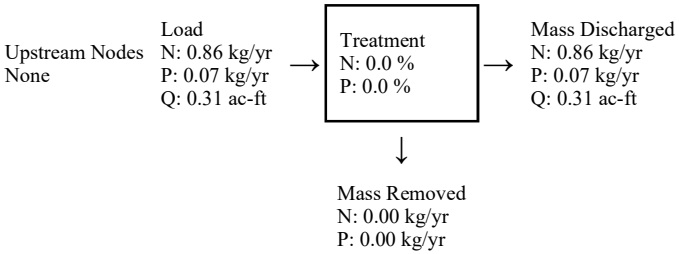
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 4 Name: Urban: Residential Low Density (Uphill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	21.22
Contributing Area (acres)	21.220
Non-DCIA Curve Number	49.00
DCIA Percent	3.41
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

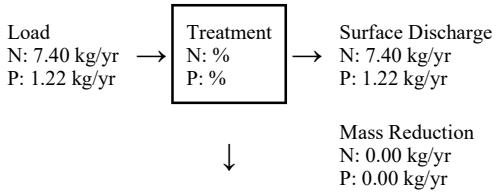
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

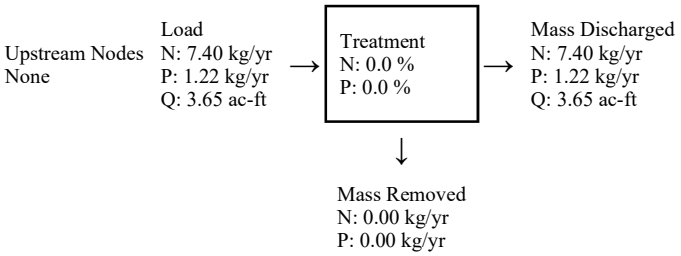
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 5 Name: Upland Forest (Uphill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.01
Contributing Area (acres)	0.010
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

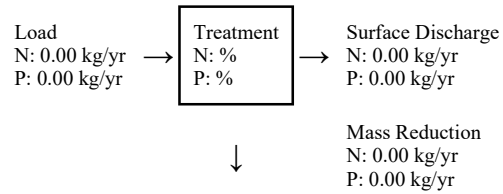
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

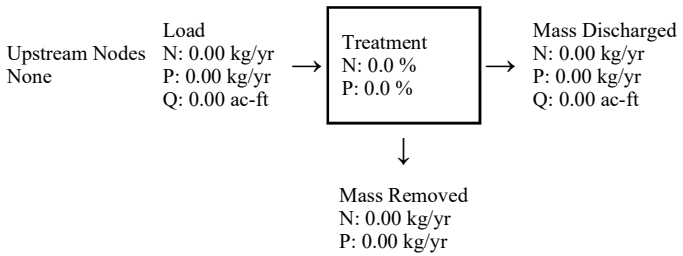
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 6 Name: Transportation (Downhill)

Project: 75614 Segment 13 SMF 1303B

Date: 11/26/2025

Retention Design

Retention Depth (in)	1.393
Retention Volume (ac-ft)	3.184

Watershed Characteristics

Catchment Area (acres)	27.43
Contributing Area (acres)	27.430
Non-DCIA Curve Number	49.00
DCIA Percent	38.74
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	95
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	95

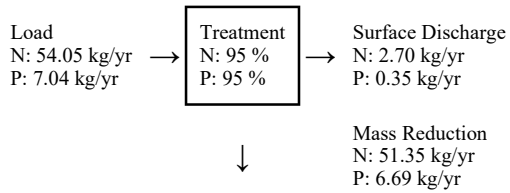
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

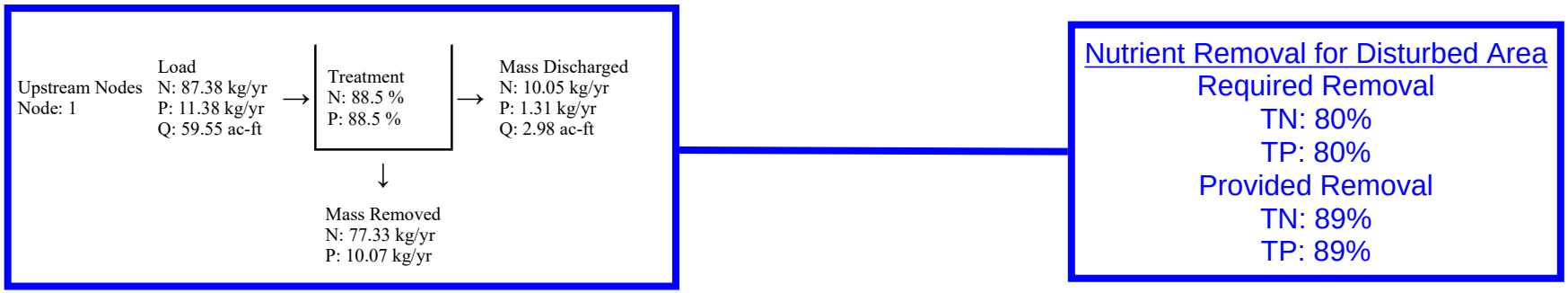
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	51.352
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	6.689
TP Concentration (mg/L)	0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Catchment Number: 7 Name: Agricultural: General (Downhill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.11
Contributing Area (acres)	1.110
Non-DCIA Curve Number	49.00
DCIA Percent	0.14
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

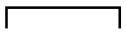
Media Mix Information

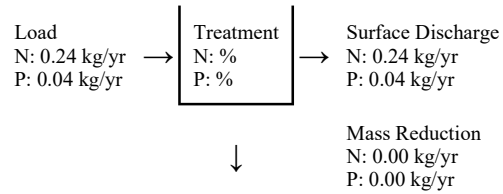
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

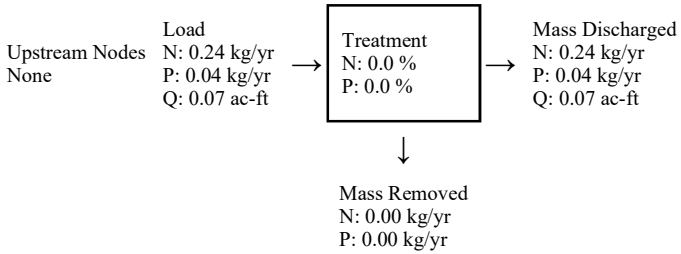
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 8 Name: Agricultural: Pastures (Downhill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	7.22
Contributing Area (acres)	7.220
Non-DCIA Curve Number	49.00
DCIA Percent	1.36
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

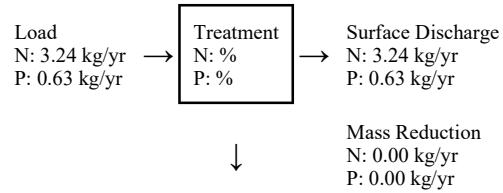
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

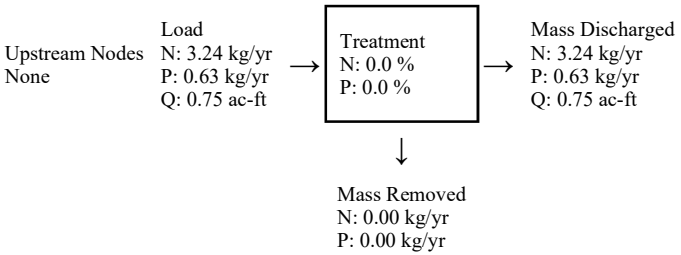
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 9 Name: Agricultural: Citrus (Downhill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.76
Contributing Area (acres)	1.760
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

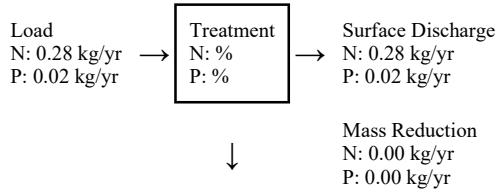
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

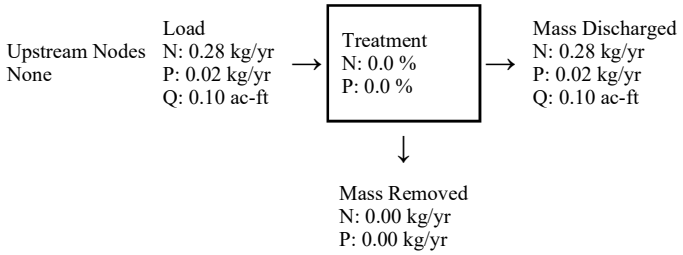
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 10 Name: Wetlands (Downhill)

Project: 75614 Segment 13 SMF 1303B

Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.72
Contributing Area (acres)	0.720
Non-DCIA Curve Number	98.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

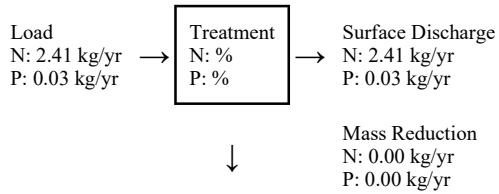
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

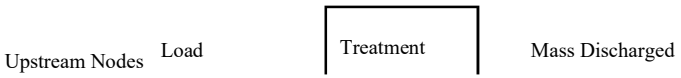
Groundwater Discharge (Stand-Alone)

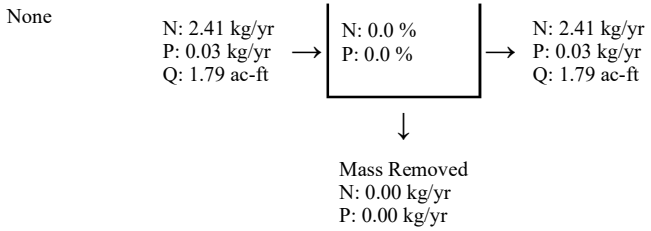
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)





Catchment Number: 11 Name: Urban: Residential Low Density (Downhill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	6.43
Contributing Area (acres)	6.430
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

Media Mix Information

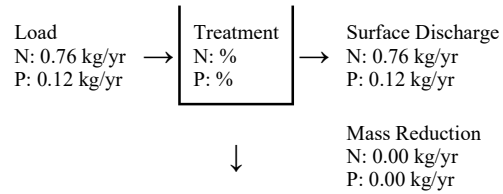
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

Groundwater Discharge (Stand-Alone)

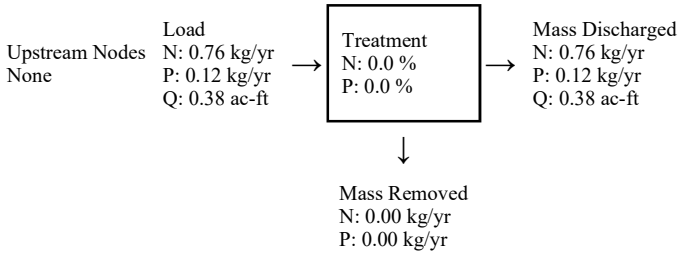
Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)





Load Diagram for None (As Used In Routing)



Catchment Number: 12 Name: Upland Forest (Downhill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.97
Contributing Area (acres)	0.970
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

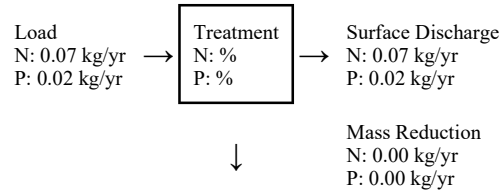
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

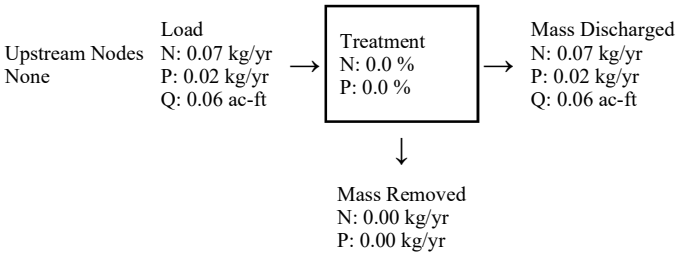
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 13 Name: Transportation (DD - Downhill)

Project: 75614 Segment 13 SMF 1303B
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	2.95
Contributing Area (acres)	2.950
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

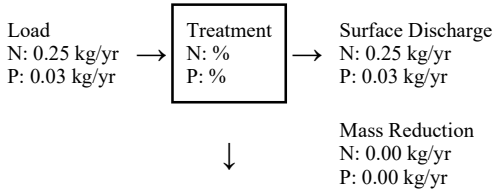
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

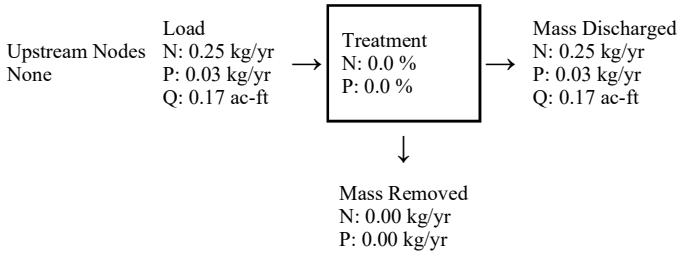
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



See BLUE MARKUPS for relevant Nutrient Loading summaries

Complete Report (not including cost) Ver 4.3.5

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025 8:14:05 AM

Site and Catchment Information

Analysis: Specified Removal Efficiency

Catchment Name	Transportation (Uphill)	Agricultural: General (Uphill)	Agricultural: Citrus (Uphill)	Urban: Residential Low Density (Uphill)	Upland Forest (Uphill)	Transportation (Downhill)	Agricultural: General (Downhill)	Agricultural: Pastures (Downhill)	Agricultural: Citrus (Downhill)	Wetlands (Downhill)	Urban: Residential Low Density (Downhill)	Upland Forest (Downhill)	Transportation (DD - Downhill)
Rainfall Zone	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2	Florida Zone 2
Annual Mean Rainfall	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00

Pre-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Citrus: TN=2.240 TP=0.183	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Pasture: TN=3.510TP=0.686	Agricultural - Citrus: TN=2.240 TP=0.183	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values
Area (acres)	9.91	0.57	8.06	19.25	0.00	9.64	1.10	17.01	6.67	1.74	10.18	5.19	0.00
Rational Coefficient (0-1)	0.01	0.01	0.01	0.03	0.00	0.01	0.01	0.02	0.01	0.91	0.11	0.02	0.00
Non DCIA Curve Number	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	100.00	49.00	49.00	49.00
DCIA Percent (0-100)	0.00	0.00	0.00	2.58	0.00	0.00	0.00	1.03	0.08	0.00	12.04	0.14	0.00
Nitrogen EMC (mg/l)	1.190	2.800	2.240	1.645	1.042	1.190	2.800	3.510	2.240	1.095	1.645	1.042	1.190
Phosphorus EMC (mg/l)	0.155	0.487	0.183	0.270	0.346	0.155	0.487	0.686	0.183	0.015	0.270	0.346	0.155
Runoff Volume (ac-ft/yr)	0.578	0.033	0.470	2.778	0.000	0.562	0.064	1.576	0.407	6.622	4.666	0.327	0.000
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	0.848	0.115	1.299	5.635	0.000	0.825	0.222	6.822	1.124	8.940	9.463	0.420	0.000
Phosphorus Loading	0.110	0.020	0.106	0.925	0.000	0.107	0.039	1.333	0.092	0.122	1.553	0.139	0.000

(kg/yr)

Post-Condition Landuse Information

Landuse	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Citrus: TN=2.240 TP=0.183	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values	Agricultural - General: TN=2.800 TP=0.487	Agricultural - Pasture: TN=3.510TP=0.686	Agricultural - Citrus: TN=2.240 TP=0.183	Undeveloped - Wet Prairie: TN=1.095 TP=0.015	Low-Density Residential: TN=1.645 TP= 0.27	Undeveloped - Upland Hardwood: TN=1.042 TP=0.346	User Defined Values
Area (acres)	15.69	0.47	5.35	18.15	0.01	31.70	1.11	8.62	1.76	0.72	9.35	0.97	6.87
Rational Coefficient (0-1)	0.30	0.01	0.01	0.04	0.01	0.31	0.02	0.02	0.01	0.91	0.07	0.01	0.01
Non DCIA Curve Number	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	49.00	100.00	49.00	49.00	49.00
DCIA Percent (0-100)	36.12	0.00	0.00	2.65	0.00	36.69	0.14	1.14	0.00	0.00	7.19	0.00	0.00
Wet Pond Area (ac)	0.00	0.00	0.00	0.00	0.00	3.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.190	2.800	2.240	1.645	1.042	1.190	2.800	3.510	2.240	1.095	1.645	1.042	1.190
Phosphorus EMC (mg/l)	0.155	0.487	0.183	0.270	0.346	0.155	0.487	0.686	0.183	0.015	0.270	0.346	0.155
Runoff Volume (ac-ft/yr)	19.701	0.027	0.312	2.662	0.001	35.487	0.070	0.830	0.103	2.740	2.786	0.057	0.401
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	28.907	0.095	0.862	5.399	0.001	52.069	0.241	3.594	0.284	3.699	5.651	0.073	0.588
Phosphorus Loading (kg/yr)	3.765	0.016	0.070	0.886	0.000	6.782	0.042	0.702	0.023	0.051	0.928	0.024	0.077

Catchment Number: 1 Name: Transportation (Uphill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

Retention Design

Retention Depth (in)	0.447
Retention Volume (ac-ft)	0.584

Watershed Characteristics

Catchment Area (acres)	15.69
Contributing Area (acres)	15.690
Non-DCIA Curve Number	49.00
DCIA Percent	36.12

Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	72
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	72

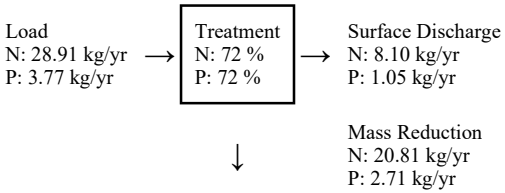
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

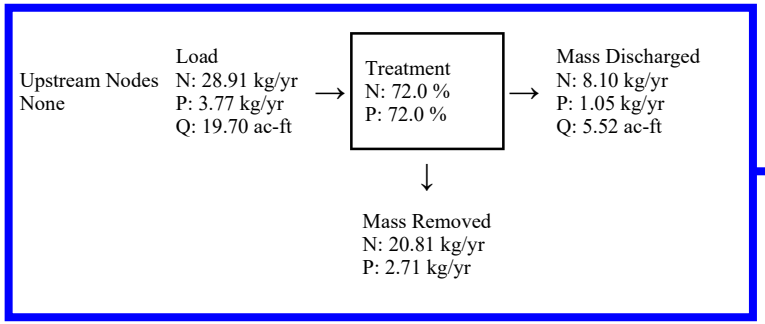
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	20.809
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	2.710
TP Concentration (mg/L)	0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Included in BMP in Series Calculation. See Page 121-122.

Catchment Number: 2 Name: Agricultural: General (Uphill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.47
Contributing Area (acres)	0.470
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

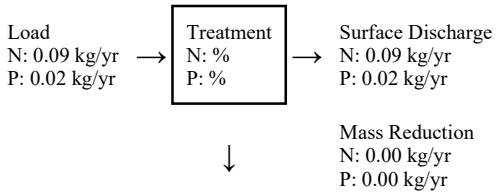
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

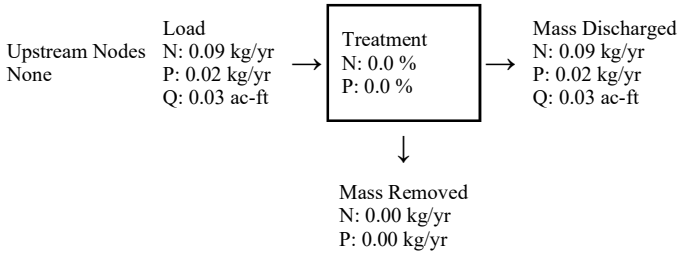
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 3 Name: Agricultural: Citrus (Uphill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	5.35
Contributing Area (acres)	5.350
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

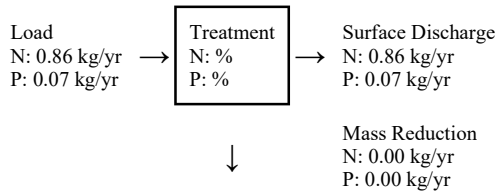
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

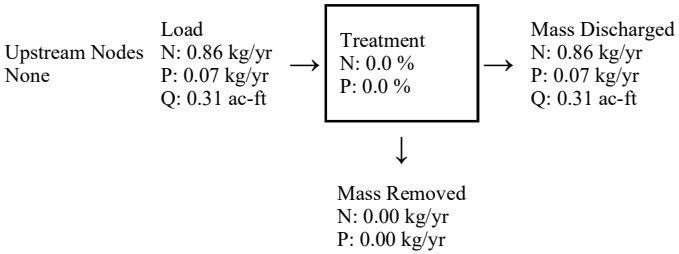
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 4 Name: Urban: Residential Low Density (Uphill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	18.15
Contributing Area (acres)	18.150
Non-DCIA Curve Number	49.00
DCIA Percent	2.65
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

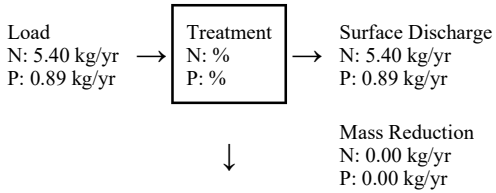
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

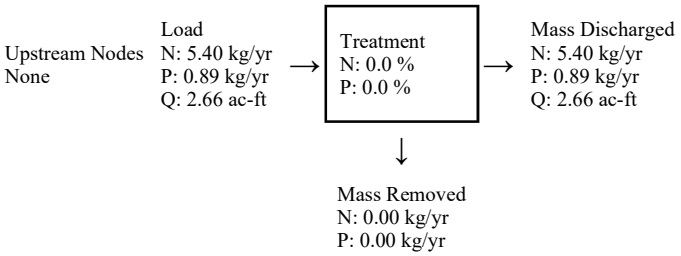
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 5 Name: Upland Forest (Uphill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.01
Contributing Area (acres)	0.010
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

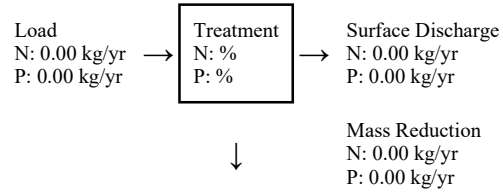
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

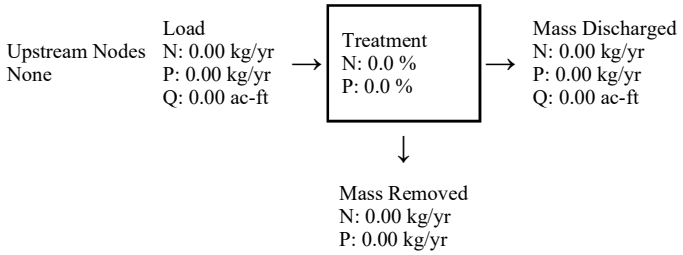
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 6 Name: Transportation (Downhill)

Project: 75614 Segment 13 SMF 1303C/D/E

Date: 11/26/2025

Multiple BMP in Series Design Parameters

BMP in Series Number: 1
BMP Type: Retention

Retention Depth (in)	0.331
Retention Volume (ac-ft)	0.768

BMP in Series Number: 2
BMP Type: Wet Detention

Permanent Pool Volume (ac-ft)	19.196
Permanent Pool Volume (ac-ft) for 31 days residence	3.014
Annual Residence Time (days)	197
Littoral Zone Efficiency Credit	10
Wetland Efficiency Credit	

BMP in Series Number: 3
BMP Type: None

BMP in Series Number: 4
BMP Type: None

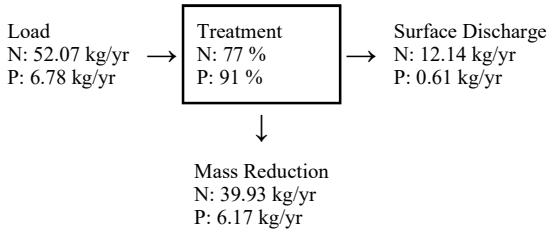
Watershed Characteristics

Catchment Area (acres)	31.70
Contributing Area (acres)	27.840
Non-DCIA Curve Number	49.00
DCIA Percent	36.69
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

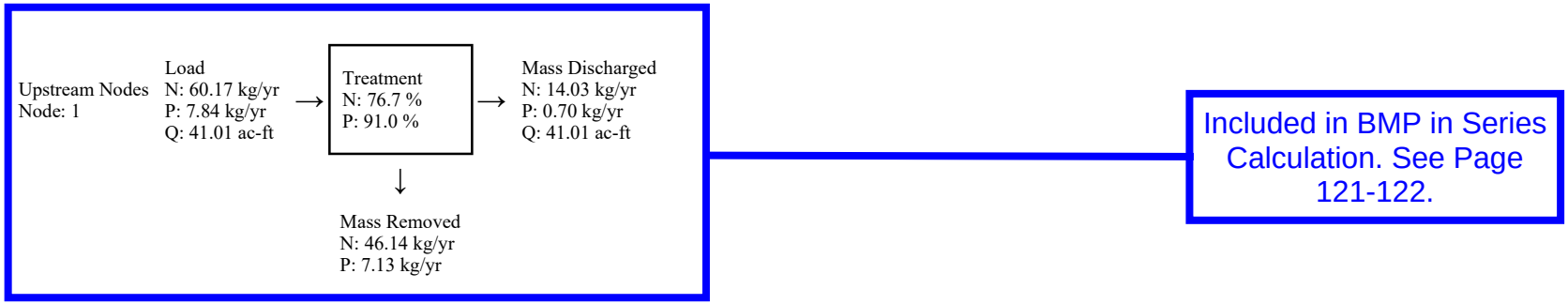
Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	77
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	91

Load for Multiple BMP in Series



Load Diagram for Multiple BMP (As Used In Routing)



Catchment Number: 7 Name: Agricultural: General (Downhill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.11
Contributing Area (acres)	1.110
Non-DCIA Curve Number	49.00
DCIA Percent	0.14
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

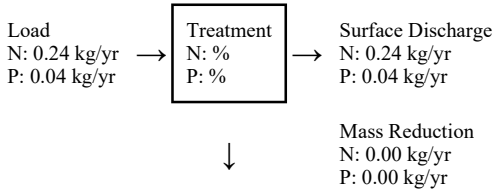
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

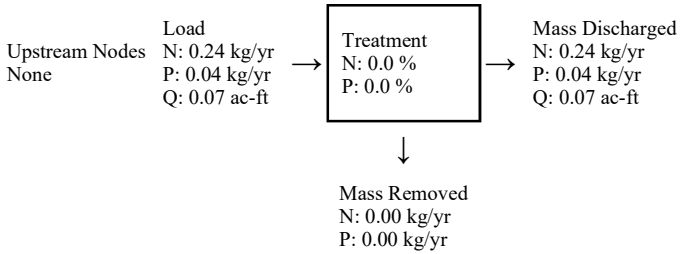
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 8 Name: Agricultural: Pastures (Downhill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	8.62
Contributing Area (acres)	8.620
Non-DCIA Curve Number	49.00
DCIA Percent	1.14
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

Media Mix Information

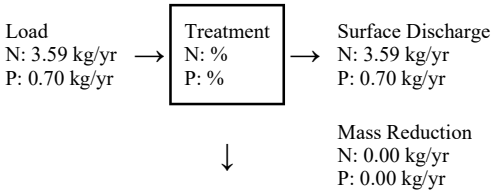
Type of Media Mix	Not Specified

Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

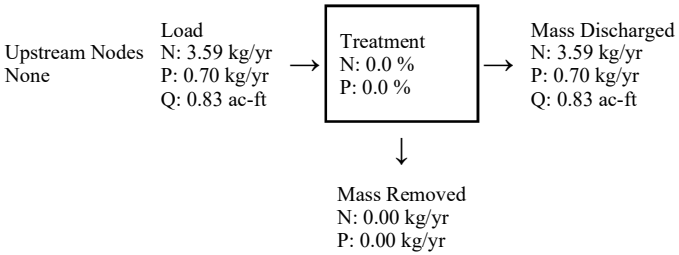
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 9 Name: Agricultural: Citrus (Downhill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	1.76
Contributing Area (acres)	1.760
Non-DCIA Curve Number	49.00
DCIA Percent	0.00

Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

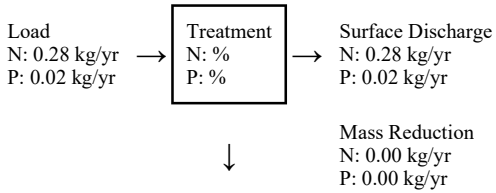
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

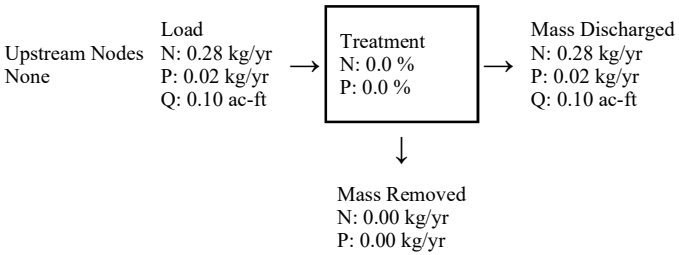
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 10 Name: Wetlands (Downhill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.72
Contributing Area (acres)	0.720
Non-DCIA Curve Number	100.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

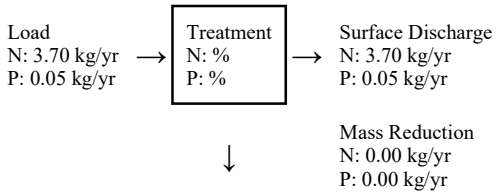
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

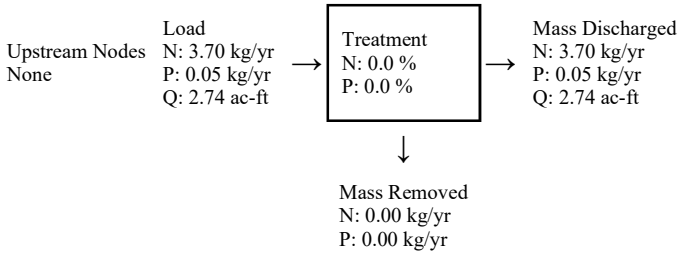
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 11 Name: Urban: Residential Low Density (Downhill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	9.35
Contributing Area (acres)	9.350
Non-DCIA Curve Number	49.00
DCIA Percent	7.19
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

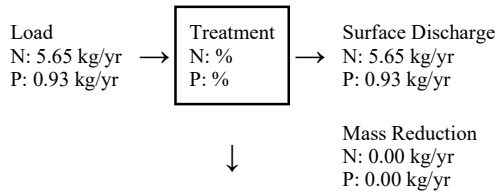
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

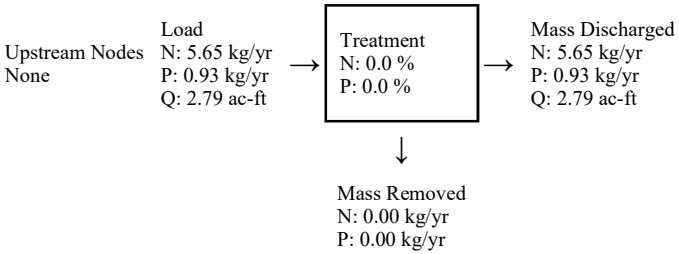
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 12 Name: Upland Forest (Downhill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	0.97
Contributing Area (acres)	0.970
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

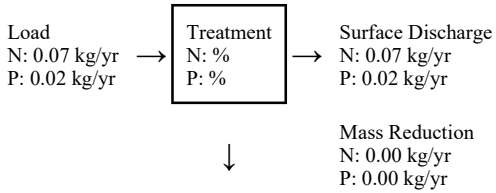
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

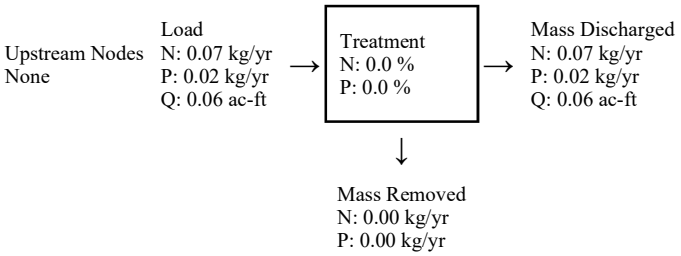
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Catchment Number: 13 Name: Transportation (DD - Downhill)

Project: 75614 Segment 13 SMF 1303C/D/E
Date: 11/26/2025

None Design

Watershed Characteristics

Catchment Area (acres)	6.87
Contributing Area (acres)	6.870
Non-DCIA Curve Number	49.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	80
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	

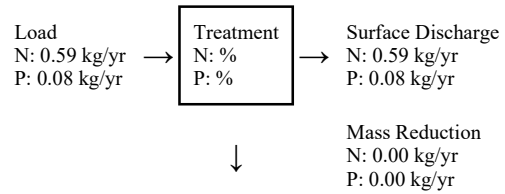
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	0.000
Media P Reduction (%)	0.000

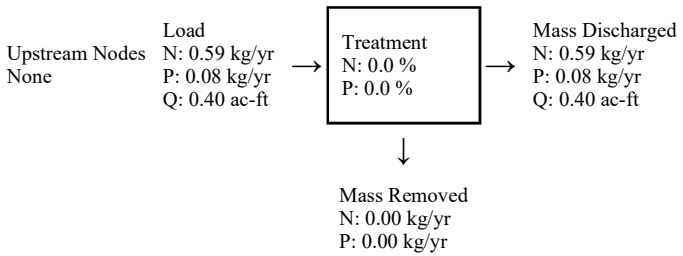
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)

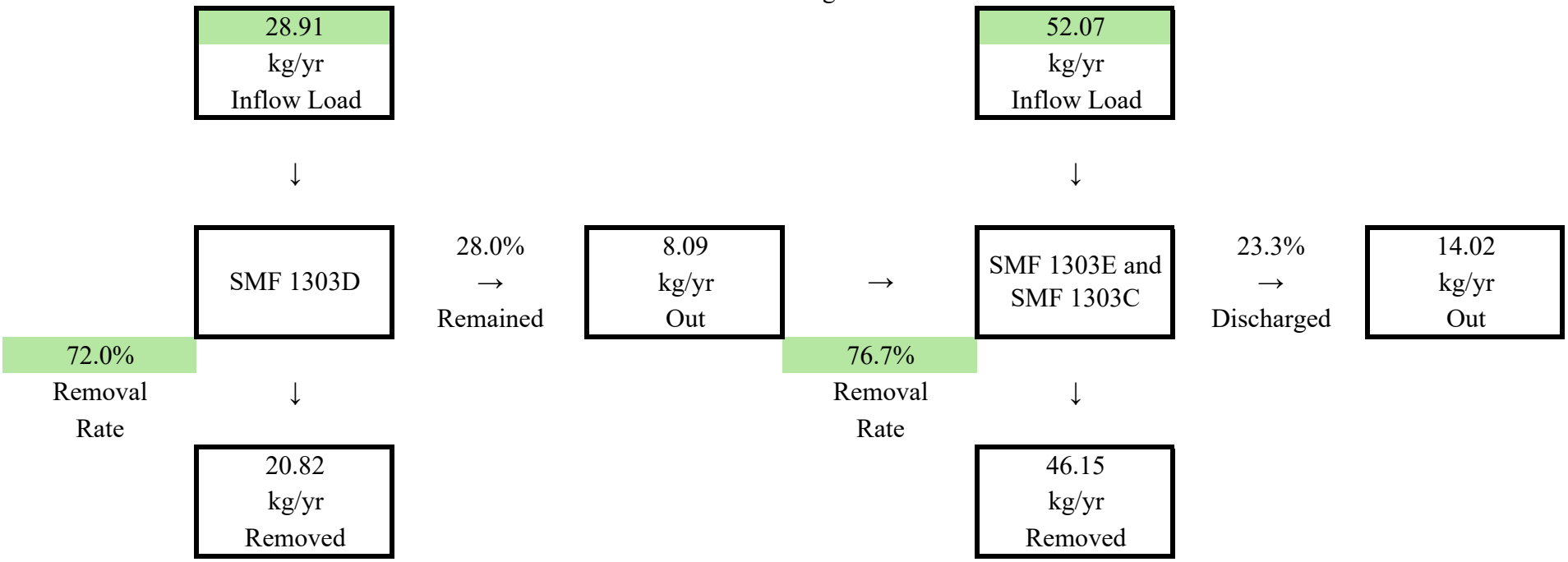


Load Diagram for None (As Used In Routing)

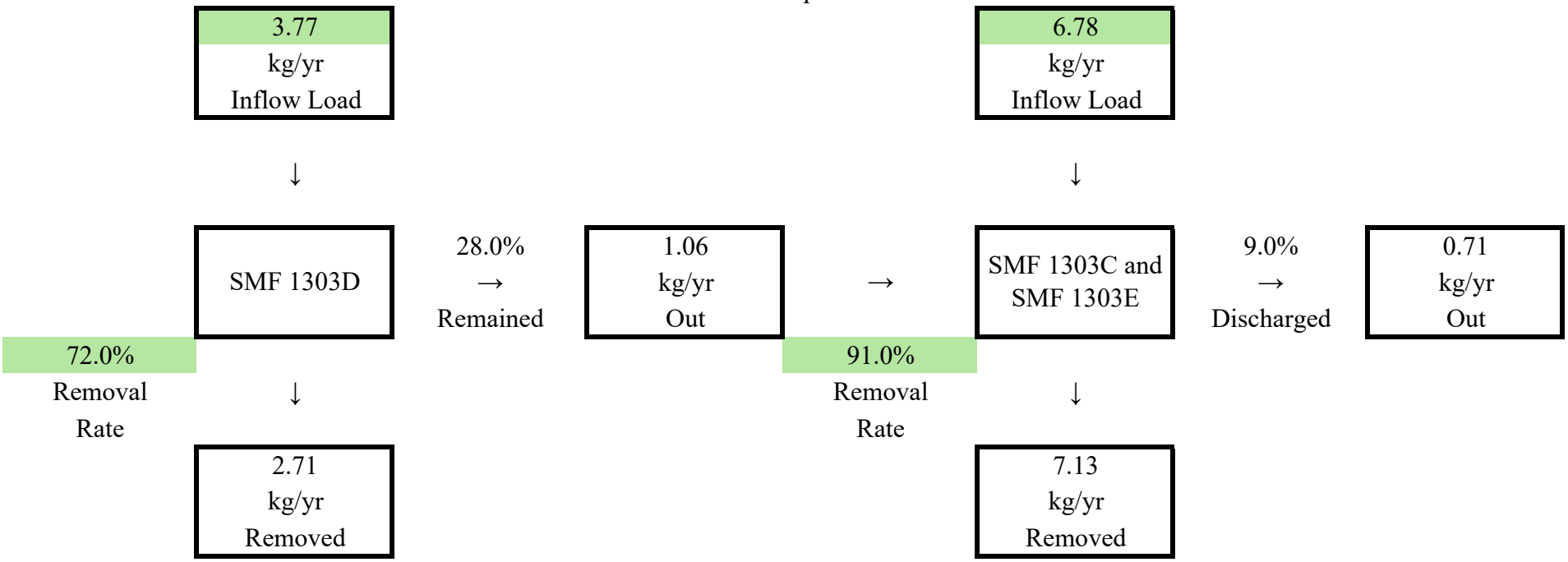


Nutrient Loading Calculations conducted separately due to multiple BMPs in series. See following pages.

SMF 1303C/D Nitrogen Removal

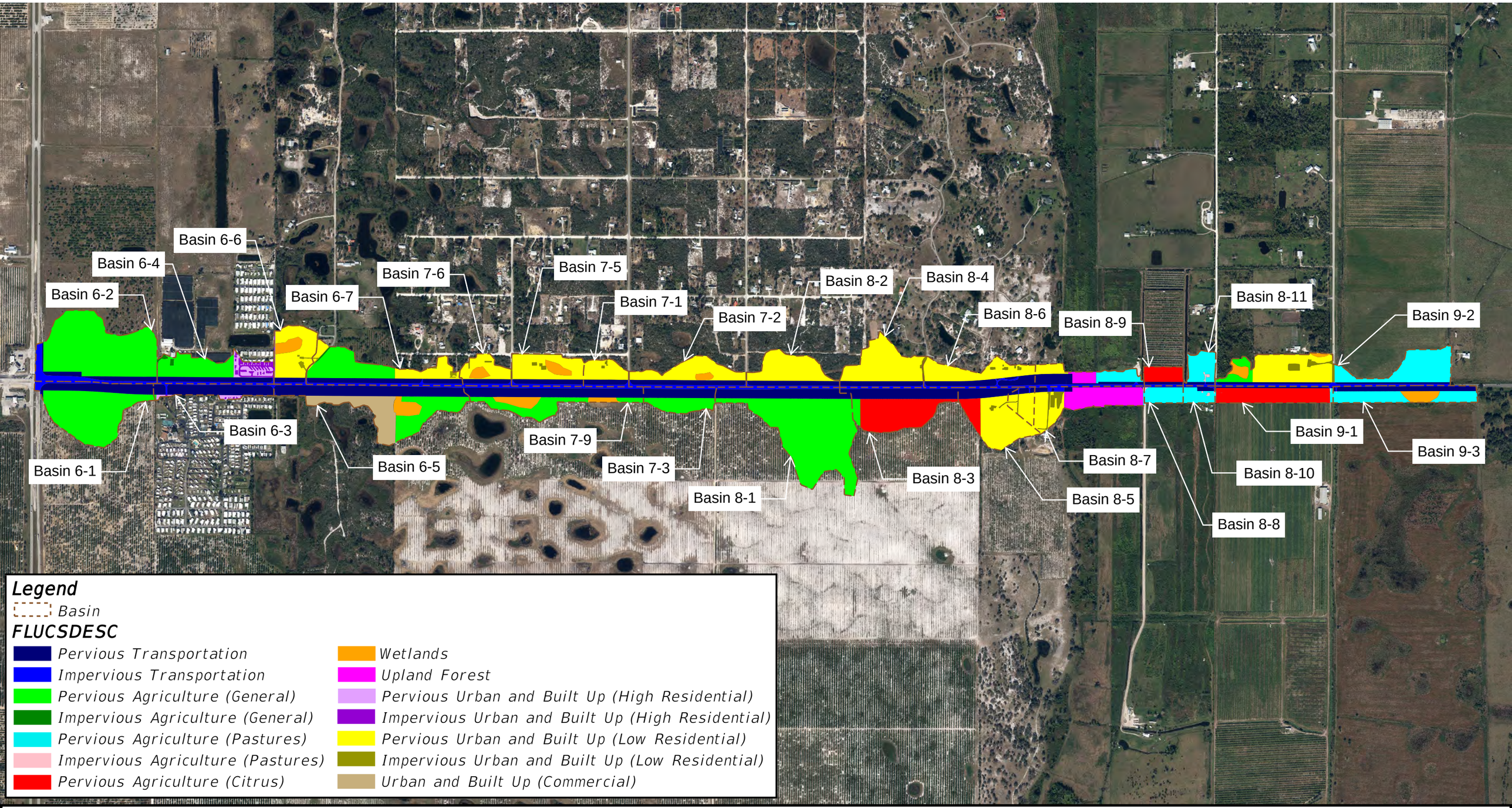


SMF 1303C/D Phosphorus Removal



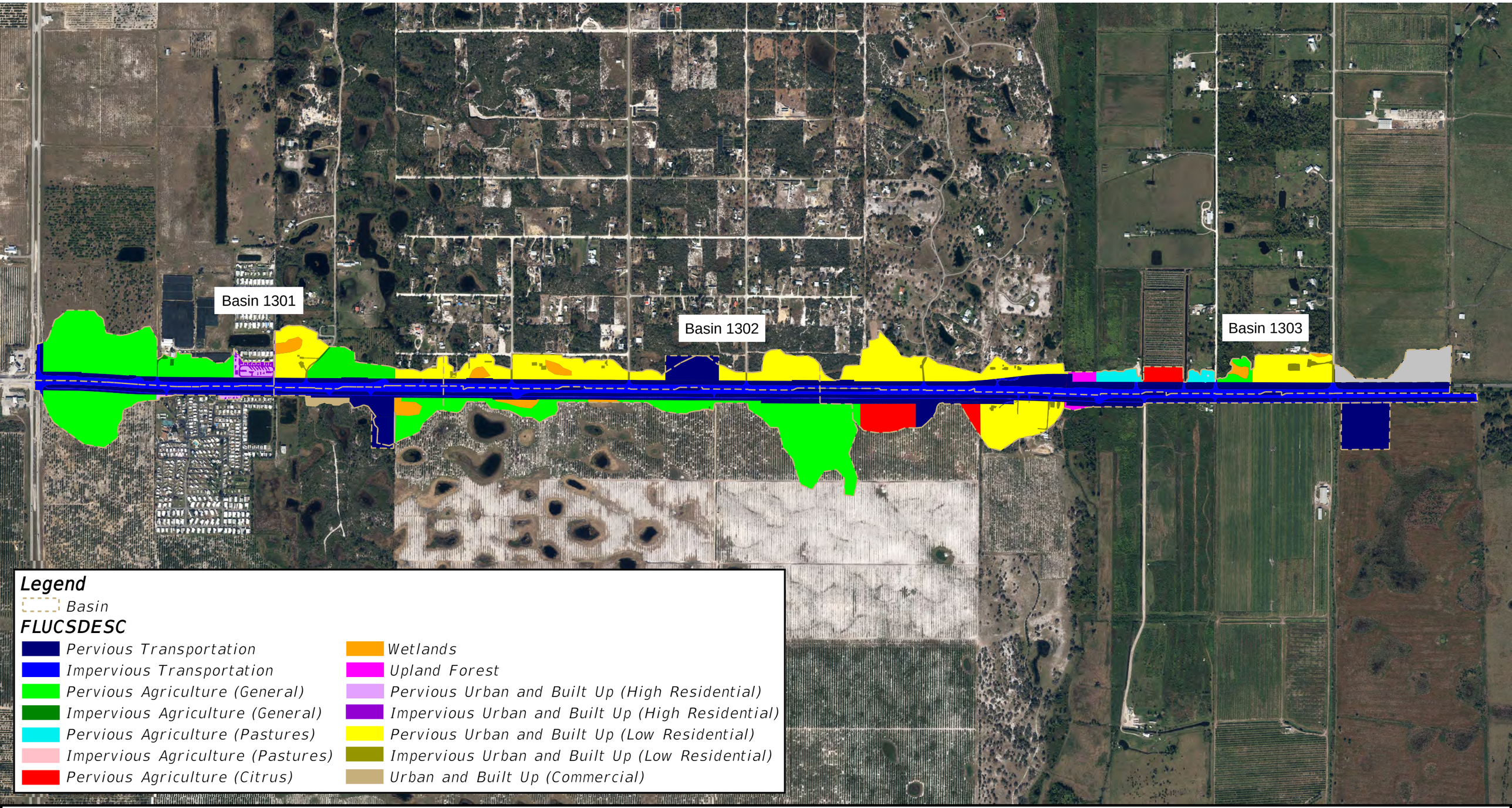
Target Mass Removal	8.44
Overall Removal Efficiency Target	80.0%

Overall Mass Removed	9.84
Overall Removal Efficiency	93.3%



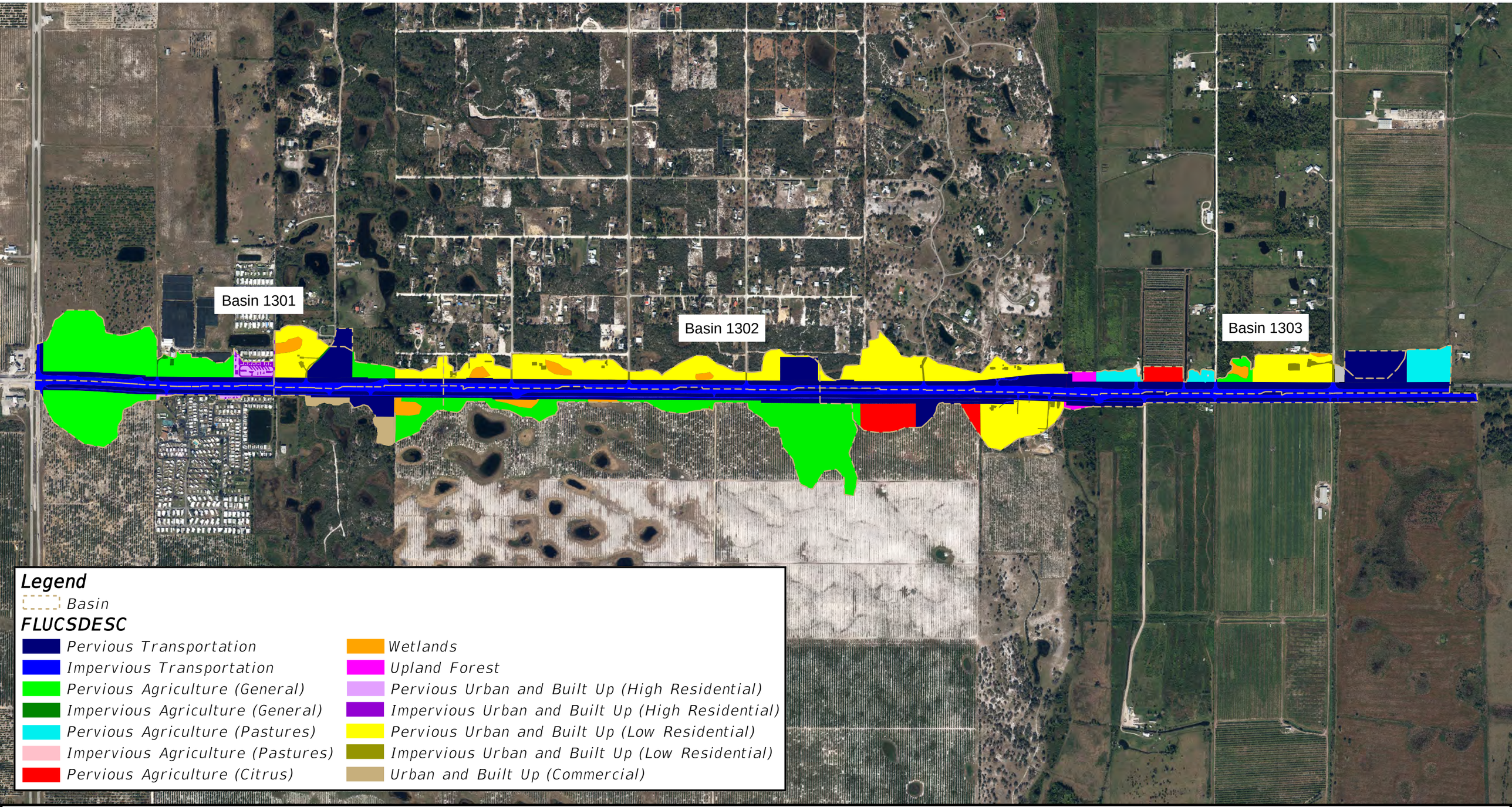
Land Use and Existing Impervious Area

State Road 70 Segment 13
FPID 414506-4-52-01



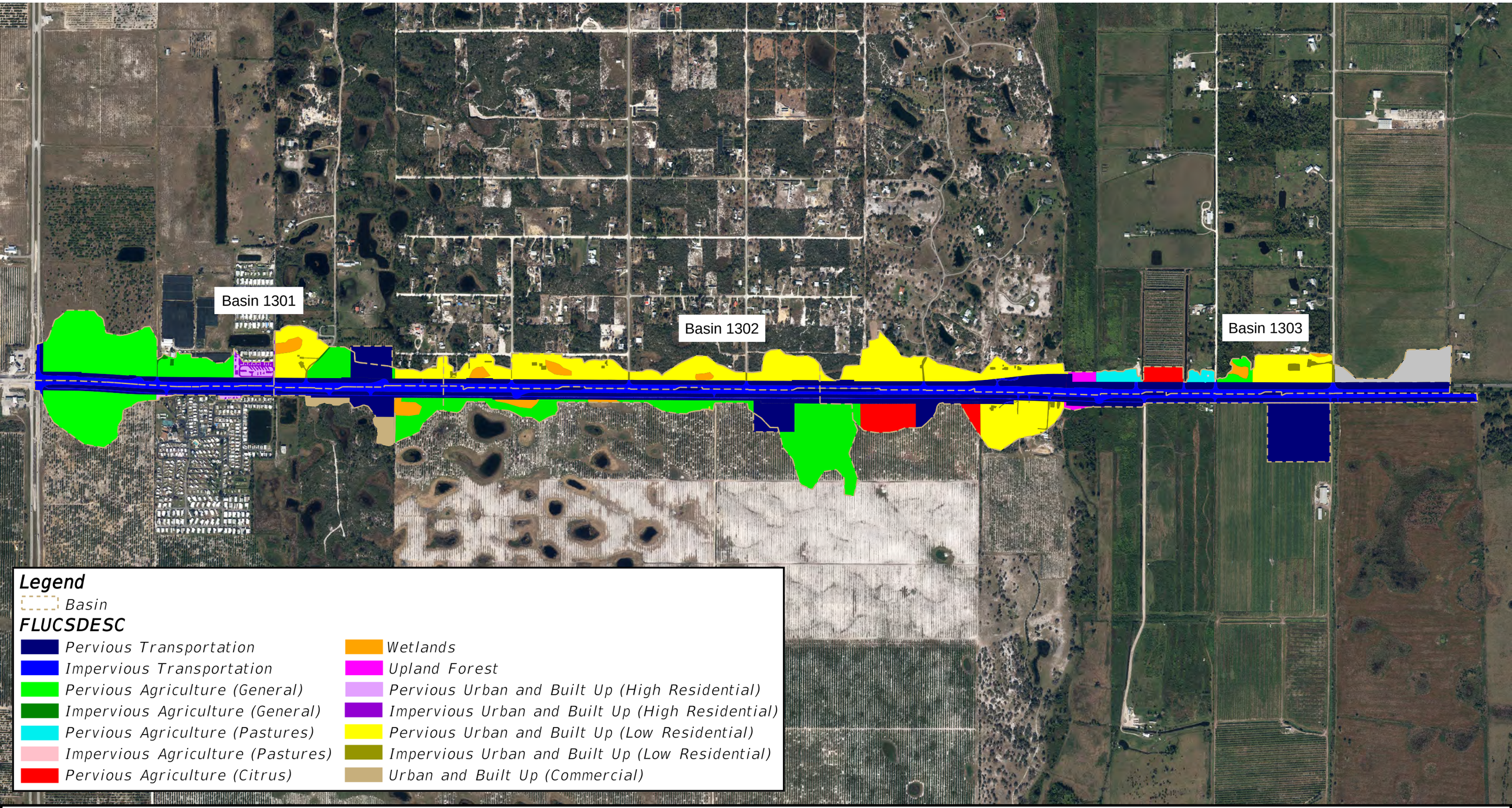
Land Use and Proposed Impervious Area

State Road 70 Segment 13 Alternative 1
FPID 414506-4-52-01



Land Use and Proposed Impervious Area

State Road 70 Segment 13 Alternative 2
FPID 414506-4-52-01



Land Use and Proposed Impervious Area

State Road 70 Segment 13 Alternative 3
FPID 414506-4-52-01

APPENDIX 4

FLOODPLAIN CALCULATIONS

Floodplain Encroachment Calculations for Proposed Roadway Development

FIA #	Basin Name	Node Name	SHWL EL. (ft, NAVD 88)	100 Yr Elevation (ft, NAVD 88)	FPC Required (Acre*ft)
1301	106	N-106	117.30	119.19	4.02
	107	N-107	117.83	118.65	0.43
1303	109	N-109	114.50	116.02	1.98
	108	N-108	114.50	116.02	0.18
1306	109A	N-109A	110.00	114.06	0.27
	109B	N-109B	108.50	112.86	0.18
1309	119	N-119	77.20	80.00	1.08

Floodplain Encroachment Calculations for SMFs

SMF #	Site	Basin Name	Node Name	SHW EL. (Initial stage) (ft)	100-Yr EL. (ft)	FPC Needed per Basin (Acre*ft)	FPC Needed per site (Acre*ft)
1301	A	B106A	N106A	117.25	119.55	0.000	0.093
		B106	N106	117.3	119.19	0.093	
	B	B107	N107	117.83	118.65	0.320	0.320
		B107A	N107A	117.68	117.81	0.000	
		B107B	N107B	116.74	116.99	0.000	
	C	B107	N107	117.83	118.65	0.536	0.891
		B107B	N107B	116.74	116.99	0.000	
		B107C	N107C	117.83	118.21	0.355	
1302	A	B112	N112	102.1	109.21	1.940	1.940
	B	B114	N114	91.4	106.44	1.511	1.511
	C	B115	N115	91.7	98.57	0.063	0.073
		B115A	N115A	94.45	104.3	0.011	
1303	A	B128	N128	43	43.24	0.000	0.079
		B128A	N128A	43.1	44.93	0.000	
		B128B	N128B	43.1	44.69	0.000	
		B128C	N128C	43.2	45.14	0.079	
	B	B126	N126	40.95	42.8	0.000	2.064
		B126A	N126A	41.95	44.08	2.064	
	C	B127A	N127A	43.8	44.08	0.095	2.346
		B127B	N127B	43.3	45.22	2.251	

Floodplain Combined Encroachments and Compensations for Different Alternatives

FIA					
FPC Name	Basin Name	SHWL	100-YR Floodplain EL. (ft)	FIA (acre-ft)	FPC Required (acre-ft)
1301	106 107	117.30 117.83	119.19 118.65	4.02 0.43	4.45
1303	109 108	114.50 114.50	116.02 116.02	1.98 0.18	2.17
1306	109A 109B	110.00 108.50	114.06 112.86	0.27 0.18	0.45
1309	119	77.20	80.00	1.08	1.08

FPC Name	Alternative # 1							
	Bottom Elevation	Avg SHWL EL. (ft)	Top Elevation	Depth (ft)	Bottom Area (Acre)	Top Area (Acre)	Average Area (Acre)	FPC Provided (Acre-ft)
1301A	117.60	117.65	119.19	1.59	2.99	3.24	3.12	4.96
1303A	114.50	114.50	116.02	1.52	1.65	1.53	1.59	2.41
1306A	111.00	108.50	114.06	3.06	0.33	0.17	0.25	0.76
1309A	77.20	<85.7	80.01	2.81	0.35	0.52	0.43	1.21

FPC Name	Alternative # 2							
	Bottom Elevation	Avg SHWL EL. (ft)	Top Elevation	Depth (ft)	Bottom Area (Acre)	Top Area (Acre)	Average Area (Acre)	FPC Provided (Acre-ft)
1301B	117.20	117.30	118.50	1.30	4.62	4.05	4.33	5.63
1309B	SWALE							

FPC Name	Alternative # 3							
	Bottom Elevation	Avg SHWL EL. (ft)	Top Elevation	Depth (ft)	Bottom Area (Acre)	Top Area (Acre)	Average Area (Acre)	FPC Provided (Acre-ft)
1309C	77.20	<85.7	80.01	2.81	0.39	0.42	0.41	1.14

Floodplain Encroachments and Compensations for SMFs

SMF Name	Alternative # 1							
	Bottom Elevation	Avg SHWL EL. (ft)	Top Elevation	Depth (ft)	Bottom Area (Acre)	Top Area (Acre)	Average Area (Acre)	FPC Provided (Acre-ft)
1303A	44.40	45.20	45.14	0.74	0.14	0.10	0.12	0.09

SMF Name	Alternative # 2							
	Bottom Elevation	Avg SHWL EL. (ft)	Top Elevation	Depth (ft)	Bottom Area (Acre)	Top Area (Acre)	Average Area (Acre)	FPC Provided (Acre-ft)
1302B	91.40	91.40	106.56	15.16	0.01	0.38	0.20	2.98
1303B	38.94	39.00	42.79	3.85	0.45	0.68	0.57	2.18

SMF Name	Alternative # 3							
	Bottom Elevation	Avg SHWL EL. (ft)	Top Elevation	Depth (ft)	Bottom Area (Acre)	Top Area (Acre)	Average Area (Acre)	FPC Provided (Acre-ft)
1302C	94.45	94.5	103.79	9.34	0.08	0.59	0.34	3.14
1303C	43.3	43.3	44.08	0.78	3.08	3.14	3.11	2.43

Runoff and Encroachment Volume Comparison

FIA # (Basin 101)							
Runoff to Pond					Floodplain Encroachment		
CN	48	98			100-yr Floodplain Elevation (ft)	123.64	
P (in)	9.41				SHW Elevation (ft)	119.66	
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.878	per survey
A (ac)	0.927	0.718			Fill Volume SHWL (ac-ft)	0.002	per survey
Q (in)	2.902	9.169					
Volume	0.224	0.549	**0.773** Acre-ft		**Volume**	**0.876**	Acre-ft

FIA # (Basin 102)							
Runoff to Pond					Floodplain Encroachment		
CN	48	98			100-yr Floodplain Elevation (ft)	123.64	
P (in)	9.41				SHW Elevation (ft)	119.49	
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.833	per survey
A (ac)	2.230	0.859			Fill Volume SHWL (ac-ft)	0.000	per survey
Q (in)	2.902	9.169					
Volume	0.539	0.656	**1.196** Acre-ft		**Volume**	**0.833**	Acre-ft
TOTAL Volume (101 & 102)			**1.969**		TOTAL Volume (101 & 102)	1.709	

FIA # (Basin 103)							
Runoff to Pond					Floodplain Encroachment		
CN	48	98			100-yr Floodplain Elevation (ft)	122.03	
P (in)	9.41				SHW Elevation (ft)	120.50	
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.381	per survey
A (ac)	1.129	0.603			Fill Volume SHWL (ac-ft)	0.004	per survey
Q (in)	2.902	9.169					
Volume	0.273	0.460	**0.734** Acre-ft		**Volume**	**0.377**	Acre-ft

FIA # (Basin 104)							
Runoff to Pond					Floodplain Encroachment		
CN	48	98			100-yr Floodplain Elevation (ft)	121.42	
P (in)	9.41				SHW Elevation (ft)	120.82	
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.451	per survey
A (ac)	2.715	0.485			Fill Volume SHWL (ac-ft)	0.112	per survey
Q (in)	2.902	9.169					
Volume	0.657	0.371	**1.028** Acre-ft		**Volume**	**0.338**	Acre-ft

FIA # (Basin 110)							
Runoff to Pond					Floodplain Encroachment		
CN	48	98			100-yr Floodplain Elevation (ft)	115.11	
P (in)	9.41				SHW Elevation (ft)	112.60	
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.022	per survey
A (ac)	0.682	0.000			Fill Volume SHWL (ac-ft)	0.000	per survey
Q (in)	2.902	9.169					
Volume	0.165	0.000	**0.165** Acre-ft		**Volume**	**0.022**	Acre-ft

Note: Assumed 14' offset from exist. ROW to back of ditch berm

FIA # (Basin 111)							
Runoff to Pond					Floodplain Encroachment		
CN	48	98			100-yr Floodplain Elevation (ft)	115.11	
P (in)	9.41				SHW Elevation (ft)	110.00	
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.218	per survey
A (ac)	0.428	0.000			Fill Volume SHWL (ac-ft)	0.000	per survey
Q (in)	2.902	9.169					
Volume	0.104	0.000	**0.104** Acre-ft		**Volume**	**0.218**	Acre-ft
TOTAL Volume (110 & 111)			**0.269**		TOTAL Volume (110 & 111)	0.240	

Note: Assumed 14' offset from exist. ROW to back of ditch berm

Runoff and Encroachment Volume Comparison

FIA # (Basin 114)						
Runoff to Pond					Floodplain Encroachment	
CN	48	98			100-yr Floodplain Elevation (ft)	106.44
P (in)	9.41				SHW Elevation (ft)	91.40
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.001
A (ac)	0.665	0.396			Fill Volume SHWL (ac-ft)	0.000
Q (in)	2.902	9.169				
Volume	0.161	0.303	**0.463** Acre-ft		**Volume**	**0.001** Acre-ft

FIA # (Basin 115A)						
Runoff to Pond					Floodplain Encroachment	
CN	48	98			100-yr Floodplain Elevation (ft)	104.3
P (in)	9.41				SHW Elevation (ft)	94.45
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.011 per survey LiDAR
A (ac)	1.157	0.000			Fill Volume SHWL (ac-ft)	0.000 per survey LiDAR
Q (in)	2.902	9.169				
Volume	0.280	0.000	**0.280** Acre-ft		**Volume**	**0.011** Acre-ft

FIA # (Basin 115)						
Runoff to Pond					Floodplain Encroachment	
CN	48	98			100-yr Floodplain Elevation (ft)	98.57
P (in)	9.41				SHW Elevation (ft)	91.70
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.063 per survey
A (ac)	1.843	0.203			Fill Volume SHWL (ac-ft)	0.000 per survey
Q (in)	2.902	9.169				
Volume	0.446	0.155	**0.601** Acre-ft		**Volume**	**0.063** Acre-ft

Note: Assumed 44' offset from prop. ROW to back of ditch berm

FIA # (Basin 116)						
Runoff to Pond					Floodplain Encroachment	
CN	48	98			100-yr Floodplain Elevation (ft)	99.07
P (in)	9.41				SHW Elevation (ft)	96.21
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.003 per survey
A (ac)	0.779	0.361			Fill Volume SHWL (ac-ft)	0.000 per survey
Q (in)	2.902	9.169				
Volume	0.188	0.276	**0.464** Acre-ft		**Volume**	**0.003** Acre-ft

Note: Assumed 16' offset from exist. ROW to back of ditch berm

FIA # (Basin 117)						
Runoff to Pond					Floodplain Encroachment	
CN	48	98			100-yr Floodplain Elevation (ft)	97.19
P (in)	9.41				SHW Elevation (ft)	84.43
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	0.169 per survey
A (ac)	3.620	0.483			Fill Volume SHWL (ac-ft)	0.000 per survey
Q (in)	2.902	9.169				
Volume	0.876	0.369	**1.244** Acre-ft		**Volume**	**0.169** Acre-ft

Note: Assumed 44' offset from prop. ROW to back of ditch berm

Floodplain 1309 (Basin 119)						
Runoff to Pond [1]					Floodplain Encroachment [2]	
CN	48	98			100-yr Floodplain Elevation (ft)	80
P (in)	9.41				SHW Elevation (ft)	77.2
S (in)	10.833	0.204			Fill Volume 100-yr (ac-ft)	1.070 per survey
A (ac)	2.989	0.263			Fill Volume SHWL (ac-ft)	0.184 per survey
Q (in)	2.902	9.169				
Volume	0.723	0.201	**0.924** Acre-ft		**Volume**	**0.885** Acre-ft

[1] Calculation includes additional 1.27 ac. pervious area runoff directed from offsite to SMF via proposed swale

[2] Calculation assumes retaining wall at back of SUP

Runoff and Encroachment Volume Comparison

FIA # (Basin 123)						
Runoff to Pond				Floodplain Encroachment		
CN	48	98		100-yr Floodplain Elevation (ft)	46.1	
P (in)	9.41			SHW Elevation (ft)	45.40	
S (in)	10.833	0.204		Fill Volume 100-yr (ac-ft)	0.501	per survey
A (ac)	0.562	0.135		Fill Volume SHWL (ac-ft)	0.314	per survey
Q (in)	2.902	9.169				
Volume	0.136	0.103	**0.239** Acre-ft	**Volume**	**0.186**	Acre-ft

FIA # (Basin 123A)						
Runoff to Pond				Floodplain Encroachment		
CN	48	98		100-yr Floodplain Elevation (ft)	45.91	
P (in)	9.41			SHW Elevation (ft)	45.40	
S (in)	10.833	0.204		Fill Volume 100-yr (ac-ft)	0.790	per survey
A (ac)	1.572	0.000		Fill Volume SHWL (ac-ft)	0.289	per survey
Q (in)	2.902	9.169				
Volume	0.380	0.000	**0.380** Acre-ft	**Volume**	**0.501**	Acre-ft

FIA # (Basin 125)						
Runoff to Pond				Floodplain Encroachment		
CN	48	98		100-yr Floodplain Elevation (ft)	45.42	
P (in)	9.41			SHW Elevation (ft)	42.80	
S (in)	10.833	0.204		Fill Volume 100-yr (ac-ft)	0.347	per survey
A (ac)	0.592	0.106		Fill Volume SHWL (ac-ft)	0.020	per survey
Q (in)	2.902	9.169				
Volume	0.143	0.081	**0.224** Acre-ft	**Volume**	**0.327**	Acre-ft

FIA # (Basin 125A)						
Runoff to Pond				Floodplain Encroachment		
CN	48	98		100-yr Floodplain Elevation (ft)	45.39	
P (in)	9.41			SHW Elevation (ft)	42.80	
S (in)	10.833	0.204		Fill Volume 100-yr (ac-ft)	0.158	per survey
A (ac)	0.568	0.000		Fill Volume SHWL (ac-ft)	0.000	per survey
Q (in)	2.902	9.169				
Volume	0.137	0.000	**0.137** Acre-ft	**Volume**	**0.158**	Acre-ft

FIA # (Basin 127)						
Runoff to Pond				Floodplain Encroachment		
CN	48	98		100-yr Floodplain Elevation (ft)	43.33	
P (in)	9.41			SHW Elevation (ft)	43.00	
S (in)	10.833	0.204		Fill Volume 100-yr (ac-ft)	1.745	per survey
A (ac)	1.728	0.292		Fill Volume SHWL (ac-ft)	1.550	per survey
Q (in)	2.902	9.169				
Volume	0.418	0.223	**0.641** Acre-ft	**Volume**	**0.195**	Acre-ft
TOTAL Volume [1]			**1.622**	TOTAL Volume [1]	1.367	

[1] Total volume of connected Basins 123, 123A, 125, 125A, & 127

FIA # (Basin 127A)						
Runoff to Pond				Floodplain Encroachment		
CN	48	98		100-yr Floodplain Elevation (ft)	44.08	
P (in)	9.41			SHW Elevation (ft)	43.80	
S (in)	10.833	0.204		Fill Volume 100-yr (ac-ft)	0.078	per survey
A (ac)	2.389	0.000		Fill Volume SHWL (ac-ft)	0.035	per survey
Q (in)	2.902	9.169				
Volume	0.578	0.000	**0.578** Acre-ft	**Volume**	**0.042**	Acre-ft

FIA # (Basin 127B)						
Runoff to Pond				Floodplain Encroachment		
CN	48	98		100-yr Floodplain Elevation (ft)	45.22	
P (in)	9.41			SHW Elevation (ft)	43.30	
S (in)	10.833	0.204		Fill Volume 100-yr (ac-ft)	1.536	per survey
A (ac)	1.355	0.000		Fill Volume SHWL (ac-ft)	0.000	per survey
Q (in)	2.902	9.169				
Volume	0.328	0.000	**0.328** Acre-ft	**Volume**	**1.536**	Acre-ft

Hydraulic Conductivity Table for ICPR model

Used in Model		NRCS Info			Factorized Conductivity	
Basin Name	**Percolation Link Name**	**Map Unit Symbol**	**Soil Hydro Group**	**Soil Composition**	***Horiz Conductivity**	****Vert. Conductivity**
105	PC-105	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
106	PC-106	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
108	PC-108	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
109	PC-109	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
111	PC-111	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
112	PC-112	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
114	PC-114	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
119	PC-119	45	A & A/D	Paola-Basinger sands, rolling	2	1
118	PC-118	21	A/D	Hontoon muck, frequently ponded	39.96	19.98
		45	A & A/D	Paola-Basinger sands, rolling		
120	PC-120	21	A/D	Hontoon muck, frequently ponded	45	18.5
		45	A & A/D	Paola-Basinger sands, rolling		
128	PC-128	13	A/D	Felda fine sand	12	6
		8	B/D	Immokalee sand		
126-1	PC_126-1	26	A/D	Tequesta muck, frequently ponded	11.9	5.95
110	PC-110	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
113	PC-113	45	A & A/D	Paola-Basinger sands, rolling	45	22.5
115A	PC-115A	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
115	PC-115	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
115-1	PC-115-1	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
117	PC-117	45	A & A/D	Paola-Basinger sands, rolling	9	4.5
117-1	PC-117-1	45	A & A/D	Paola-Basinger sands, rolling	9	4.5

*Vertical Factor of Safety 0.5

**The horizontal hydraulic conductivity is assumed to be twice the vertical conductivity.

Manual Basin: 100

Scenario: Scenario1
Node: N-100
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.9145 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.6722	Transportation	A			
0.2423	Other Open Lands <Rural>	A			

Comment:

Manual Basin: 101

Scenario: Scenario1
Node: N-101
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 15.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 12.2248 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.3593	Transportation	A			
0.0007	Residential High Density	A			
10.8208	Other Open Lands <Rural>	A			
0.0439	Nurseries and Vineyards	A			

Comment:

Manual Basin: 102

Scenario: Scenario1
Node: N-102

Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 17.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 14.3224 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
11.4689	Tree Crops	A			
2.8535	Transportation	A			

Comment:

Manual Basin: 103

Scenario: Scenario1
Node: N-103
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 8.6241 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
2.8300	Residential High Density	A			
1.5132	Other Open Lands <Rural>	A			
4.2810	Nurseries and Vineyards	A			

Comment:

Manual Basin: 104

Scenario: Scenario1
Node: N-104
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr

Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 3.8066 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0476	Tree Crops	A			
3.6962	Residential High Density	A			
0.0616	Transportation	A			
0.0012	Other Open Lands <Rural>	A			

Comment:

Manual Basin: 105

Scenario: Scenario1
Node: N-105
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 9.6542 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
8.4867	Residential Low Density	A			
0.0033	Open Land	A			
0.2725	Residential High Density	A			
0.8917	Vegetated Non-Forested Wetlands	A			

Comment:

Manual Basin: 106

Scenario: Scenario1
Node: N-106
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 15.1390 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
6.8217	Open Land	A			
6.3186	Tree Crops	A			
1.1441	Vegetated Non-Forested Wetlands	A			
0.6780	Commercial and Services	A			
0.0577	Residential High Density	A			
0.1188	Residential Low Density	A			

Comment:

Manual Basin: 106A

Scenario: Scenario1
Node: N-106A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 5.5559 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
4.9591	Open Land	A			
0.5968	Vegetated Non-Forested Wetlands	A			

Comment:

Manual Basin: 106B

Scenario: Scenario1
Node: N-106B
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number

Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 5.9703 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
4.2348	Open Land	A			
1.7355	Vegetated Non-Forested Wetlands	A			

Comment:

Manual Basin: 107

Scenario: Scenario1
Node: N-107
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 10.9646 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
4.1927	Residential Low Density	A			
0.0986	Open Land	A			
6.6733	Tree Crops	A			

Comment:

Manual Basin: 107A

Scenario: Scenario1
Node: N-107A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0

Area: 2.3027 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.2743	Tree Crops	A			
2.0284	Residential Low Density	A			

Comment:

Manual Basin: 107B

Scenario: Scenario1
Node: N-107B
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 2.6368 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.8020	Tree Crops	A			
0.8349	Residential Low Density	A			

Comment:

Manual Basin: 107C

Scenario: Scenario1
Node: N-107C
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 2.1962 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
2.1947	Tree Crops	A			
0.0016	Residential Low Density	A			

Comment:

Manual Basin: 108

Scenario: Scenario1
Node: N-108
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 3.7099 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
3.2244	Residential Low Density	A			
0.4855	Vegetated Non-Forested Wetlands	A			

Comment:

Manual Basin: 109

Scenario: Scenario1
Node: N-109
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 5.3584 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
3.1891	Tree Crops	A			
1.8488	Vegetated Non-Forested Wetlands	A			
0.3205	Residential Low Density	A			

Comment:

Manual Basin: 109A

Scenario: Scenario1
Node: N-109A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 1.9637 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.3820	Tree Crops	A			
0.5817	Residential Low Density	A			

Comment:

Manual Basin: 109B

Scenario: Scenario1
Node: N-109B
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 10.4576 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
9.1292	Tree Crops	A			
1.3285	Vegetated Non-Forested Wetlands	A			

Comment:

Manual Basin: 109C

Scenario: Scenario1
Node: N-109C
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min

Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 9.1684 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
4.4524	Tree Crops	A			
4.7160	Vegetated Non-Forested Wetlands	A			

Comment:

Manual Basin: 109D

Scenario: Scenario1
Node: N-109D
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 1.1975 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.0775	Tree Crops	A			
0.0011	Vegetated Non-Forested Wetlands	A			
0.1189	Residential Low Density	A			

Comment:

Manual Basin: 110

Scenario: Scenario1
Node: N-110
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256

Peaking Factor: 256.0
Area: 6.5217 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
5.8537	Residential Low Density	A			
0.6680	Vegetated Non-Forested Wetlands	A			

Comment:

Manual Basin: 111

Scenario: Scenario1
Node: N-111
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 3.2183 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
3.2183	Residential Low Density	A			

Comment:

Manual Basin: 112

Scenario: Scenario1
Node: N-112
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 7.0891 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
6.7673	Residential Low Density	A			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3218	Vegetated Non-Forested Wetlands	A			

Comment:

Manual Basin: 113

Scenario: Scenario1
Node: N-113
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 4.7939 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
4.4124	Tree Crops	A			
0.3815	Residential Low Density	A			

Comment:

Manual Basin: 114

Scenario: Scenario1
Node: N-114
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 6.8120 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
6.8120	Residential Low Density	A			

Comment:

Manual Basin: 115

Scenario: Scenario1
Node: N-115
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 17.7007 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
17.4340	Tree Crops	A			
0.2667	Residential Low Density	A			

Comment:

Manual Basin: 115A

Scenario: Scenario1
Node: N-115A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 4.9144 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
4.5123	Tree Crops	A			
0.4021	Residential Low Density	A			

Comment:

Manual Basin: 116

Scenario: Scenario1
Node: N-116
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 8.5513 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
8.1543	Residential Low Density	A			
0.3969	Open Land	A			

Comment:

Manual Basin: 117

Scenario: Scenario1
Node: N-117
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 11.1053 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
10.5184	Tree Crops	A			
0.5690	Residential Low Density	A			
0.0180	Open Land	A			

Comment:

Manual Basin: 118

Scenario: Scenario1
Node: N-118
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 12.6706 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
9.0474	Residential Low Density	A			
0.3706	Residential Low Density	A/D			
1.2823	Upland Hardwood Forests	A/D			
1.9512	Cropland and Pastureland	A/D			
0.0192	Tree Crops	A/D			

Comment:

Manual Basin: 119

Scenario: Scenario1
Node: N-119
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 8.7329 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
6.8138	Residential Low Density	A			
1.9191	Tree Crops	A			

Comment:

Manual Basin: 120

Scenario: Scenario1
Node: N-120
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 8.8374 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
5.3460	Residential Low Density	A			
0.1517	Residential Low Density	A/D			
3.3201	Upland Hardwood Forests	A/D			
0.0196	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 120A

Scenario: Scenario1
Node: N-120A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 5.2580 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
3.6155	Cropland and Pastureland	A/D			
0.0142	Cropland and Pastureland	A			
0.2074	Residential Low Density	A			
0.1264	Residential Low Density	A/D			
1.2945	Upland Hardwood Forests	A/D			

Comment:

Manual Basin: 120B

Scenario: Scenario1
Node: N-120B
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min

Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 2.0149 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.6137	Cropland and Pastureland	A/D			
1.4012	Upland Hardwood Forests	A/D			

Comment:

Manual Basin: 122

Scenario: Scenario1
Node: N-122
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 2.1958 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0714	Cropland and Pastureland	A/D			
2.1244	Tree Crops	A/D			

Comment:

Manual Basin: 123

Scenario: Scenario1
Node: N-123
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.7485 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
0.7485	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 123A

Scenario: Scenario1
Node: N-123A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 4.0071 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
4.0071	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 124

Scenario: Scenario1
Node: N-124
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 2.7119 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
2.6857	Cropland and Pastureland	A/D			
0.0236	Tree Crops	A/D			
0.0027	Wetland Hardwood Forests	A/D			

Comment:

Manual Basin: 125

Scenario: Scenario1
Node: N-125
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 0.6975 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.6975	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 125A

Scenario: Scenario1
Node: N-125A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 1.5266 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.5266	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 126

Scenario: Scenario1
Node: N-126
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256

Peaking Factor: 256.0
Area: 17.0222 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1960	Tree Crops	A/D			
7.3863	Cropland and Pastureland	A/D			
7.2695	Residential Low Density	A/D			
0.0145	Wetland Coniferous Forests	A/D			
1.4250	Other Open Lands <Rural>	A/D			
0.7309	Wetland Hardwood Forests	A/D			

Comment:

Manual Basin: 126A

Scenario: Scenario1
Node: N-126A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 17.3516 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
17.3516	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 127

Scenario: Scenario1
Node: N-127
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256

Peaking Factor: 256.0
Area: 2.0201 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0642	Cropland and Pastureland	A/D			
1.9559	Tree Crops	A/D			

Comment:

Manual Basin: 127A

Scenario: Scenario1
Node: N-127A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 11.4058 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
11.3171	Tree Crops	A/D			
0.0888	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 127B

Scenario: Scenario1
Node: N-127B
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 11.5862 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
11.3218	Tree Crops	A/D			
0.2644	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 127C

Scenario: Scenario1
Node: N-127C
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 11.2005 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
11.0348	Tree Crops	A/D			
0.1657	Cropland and Pastureland	A/D			

Comment:

Manual Basin: 128

Scenario: Scenario1
Node: N-128
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 12.7075 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
9.3529	Cropland and Pastureland	A/D			
1.5479	Cropland and Pastureland	B/D			
1.8065	Wetland Coniferous Forests	A/D			
0.0001	Residential Low Density	A/D			

Comment:

Manual Basin: 128A

Scenario: Scenario1
Node: N-128A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 55.1118 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
25.5401	Cropland and Pastureland	A/D			
16.7636	Cropland and Pastureland	B/D			
11.7400	Vegetated Non-Forested Wetlands	A/D			
1.0682	Vegetated Non-Forested Wetlands	B/D			

Comment:

Manual Basin: 128B

Scenario: Scenario1
Node: N-128B
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 7.6367 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
5.2221	Cropland and Pastureland	A/D			
2.4147	Cropland and Pastureland	B/D			

Comment:

Manual Basin: 128C

Scenario: Scenario1
Node: N-128C
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 4.1551 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
4.1551	Cropland and Pastureland	A/D			

Comment:

Node: N-0350C

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage: S CANAL N0350C

Comment:

Node: GT-105

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

Comment:

Node: GT-106

Scenario: Scenario1

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

Comment:

Node: GT-108

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

Comment:

Node: GT-109

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

Comment:

Node: GT-110

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

Comment:

Node: GT-111

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

Comment:

Node: GT-112

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

Comment:

Node: GT-113

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

Comment:

Node: GT-114

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

Comment:

Node: GT-115

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

Comment:

Node: GT-115A

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

Comment:

Node: GT-115_1

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

Comment:

Node: GT-117

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

Warning Stage: 0.00 ft
Boundary Stage:

Comment:

Node: GT-117-1

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

Comment:

Node: GT-118

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

Comment:

Node: GT-119

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

Comment:

Node: GT-120

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

Comment:

Node: GT-126

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

Comment:

Node: GT-128

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

Comment:

Node: N-0410

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage: N CANAL N0410

Comment:

Node: N-100

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 123.49 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
125.51	0.0001	6
126.00	0.0082	356
126.50	0.0307	1338
127.00	0.0577	2512
127.50	0.1112	4844
128.00	0.1524	6637
128.50	0.1808	7875
129.00	0.2179	9494
129.50	0.2753	11994
130.00	0.3324	14481
130.50	0.3917	17062
131.00	0.4448	19375
131.50	0.4987	21725
132.00	0.5556	24200
132.50	0.6333	27588
133.00	0.7049	30706
133.50	0.7589	33056
134.00	0.7966	34700
134.50	0.8300	36156
135.00	0.8635	37612
135.50	0.8945	38963
136.00	0.9071	39515
136.50	0.9120	39726
137.00	0.9120	39726
123.49	0.0100	436

Comment:

Node: N-101

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 119.66 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
120.37	0.0004	19
120.50	0.0016	69
121.00	0.0204	887

Stage [ft]	Area [ac]	Area [ft2]
121.50	0.0554	2412
122.00	0.1400	6100
122.50	0.2742	11944
123.00	0.4372	19044
123.50	0.8366	36444
124.00	1.5988	69644
124.50	2.8702	125025
125.00	4.2806	186463
125.50	5.2916	230500
126.00	5.9820	260575
126.50	6.4697	281819
127.00	6.9823	304150
127.50	7.6067	331350
128.00	8.2518	359450
128.50	8.9321	389081
129.00	9.5216	414763
129.50	10.1003	439969
130.00	10.6993	466063
130.50	11.3054	492462
131.00	11.7419	511475
131.50	11.9918	522363
132.00	12.1097	527500
132.50	12.1518	529331
133.00	12.1953	531229
133.50	12.1953	531229
119.66	0.0100	436

Comment:

Node: N-102

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 119.49 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
120.12	0.0001	6
120.50	0.0053	231
121.00	0.0607	2644
121.50	0.1369	5962
122.00	0.2311	10069
122.50	0.3680	16031
123.00	0.5250	22869
123.50	0.7085	30863
124.00	1.0246	44631

Stage [ft]	Area [ac]	Area [ft2]
124.50	1.5266	66500
125.00	2.1047	91681
125.50	2.5468	110938
126.00	2.9512	128556
126.50	3.3308	145088
127.00	3.7398	162906
127.50	4.1912	182569
128.00	4.6501	202556
128.50	5.1356	223706
129.00	5.6537	246275
129.50	6.2638	272850
130.00	6.8140	296819
130.50	7.6944	335169
131.00	8.5309	371606
131.50	9.5495	415975
132.00	10.5601	460000
132.50	11.4912	500556
133.00	12.2602	534056
133.50	12.8520	559831
134.00	13.3412	581144
134.50	13.9051	605706
135.00	14.2542	620913
135.50	14.2921	622563
136.00	14.2921	622563
119.49	0.0100	436

Comment:

Node: N-103

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 120.50 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
119.98	0.0003	13
120.00	0.0006	25
120.50	0.0991	4319
121.00	0.2316	10087
121.50	0.3693	16087
122.00	0.8300	36156
122.50	2.1666	94375
123.00	3.2302	140706
123.50	5.6148	244581
124.00	6.6480	289587

Stage [ft]	Area [ac]	Area [ft2]
124.50	8.0317	349863
125.00	8.5696	373294
125.50	8.5879	374087
126.00	8.5888	374128
126.50	8.5891	374143
127.00	8.5896	374161
127.50	8.5900	374180
128.00	8.5904	374199
128.50	8.6002	374626
129.00	8.6002	374626

Comment:

Node: N-104

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 120.82 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
119.77	0.0001	6
120.00	0.0653	2844
120.50	0.2373	10337
121.00	0.5690	24788
121.50	1.0329	44994
122.00	1.7753	77331
122.50	2.2446	97775
123.00	2.4746	107794
123.50	2.6758	116556
124.00	2.9211	127244
124.50	3.2587	141950
125.00	3.5217	153406
125.50	3.7049	161387
126.00	3.7796	164638
126.50	3.7845	164851
127.00	3.7845	164851

Comment:

Node: N-105

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs

Initial Stage: 116.50 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
115.19	0.0003	13
115.50	0.0428	1862
116.00	0.7688	33487
116.50	1.6591	72269
117.00	2.4486	106662
117.50	3.1894	138931
118.00	3.8956	169694
118.50	4.6208	201281
119.00	5.4247	236300
119.50	6.1255	266825
120.00	6.6824	291087
120.50	7.1435	311169
121.00	7.7103	335862
121.50	8.5837	373906
122.00	9.1509	398613
122.50	9.3727	408275
123.00	9.4678	412419
123.50	9.5914	417800
124.00	9.6380	419832
124.50	9.6380	419832

Comment: **THE GROUND EL FOR THE WETLAND SHAPE IS 116.5'

**SHGWT 355R IS OPPOSITE SIDE AND EL IS 119.8'.

**SHW1303L: SHW 116.8 CLOSEST HISTORICAL BORING

Node: N-106

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 117.30 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
114.79	0.0001	6
115.00	0.0016	69
115.50	0.0627	2731
116.00	0.2412	10506
116.50	0.6276	27338
117.00	1.1189	48737
117.50	1.8796	81875

Stage [ft]	Area [ac]	Area [ft2]
118.00	2.7584	120156
118.50	3.7298	162469
119.00	4.6262	201519
119.50	5.5769	242931
120.00	6.6077	287831
120.50	7.9063	344400
121.00	9.1441	398319
121.50	10.1488	442081
122.00	10.9800	478287
122.50	11.9291	519631
123.00	12.9071	562231
123.50	14.1127	614750
124.00	14.7572	642825
124.50	14.9904	652981
125.00	15.1188	658573
125.50	15.1188	658573

Comment: ** PIPE INVERT: 114.63

**SH13-370R, LOCATED CLOSE TO WETLAND SHAPE AND SHGWT EL IS 116.9'.

**SHW1303R SHW 116.4'

** WL-1307-R-1023 SHW 118

**WL-1323-R-1049 SHW

3-27-2025:
updated boring from geotech
PBA13-SMF6-6 117.3

Node: N-106A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 117.25 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
116.43	0.0003	13
116.50	0.0178	775
117.00	0.1547	6738
117.50	0.1697	7394
118.00	0.1862	8112
118.50	0.2105	9169
119.00	0.2593	11294

Stage [ft]	Area [ac]	Area [ft2]
119.50	0.4091	17819
120.00	1.1748	51175
120.50	2.0245	88187
121.00	2.8218	122919
121.50	3.4141	148719
122.00	4.3182	188100
122.50	4.9522	215719
123.00	5.3373	232494
123.50	5.4807	238738
124.00	5.5302	240894
124.50	5.5419	241406
125.00	5.5437	241485
125.50	5.5465	241607
126.00	5.5465	241607

Comment: Point: PBA13-SMF6-5
PBA13-SMF6-4

Node: N-106B

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 118.40 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
116.69	0.0001	6
117.00	0.1672	7281
117.50	0.8775	38225
118.00	1.2585	54819
118.50	1.4137	61581
119.00	1.5400	67081
119.50	1.7403	75806
120.00	2.0620	89819
120.50	2.4970	108769
121.00	2.9666	129225
121.50	3.4942	152206
122.00	4.0368	175844
122.50	4.4911	195631
123.00	4.8405	210850
123.50	5.1261	223294
124.00	5.4228	236219
124.50	5.6764	247263
125.00	5.8355	254194
125.50	5.9384	258675
126.00	5.9589	259568

Stage [ft]	Area [ac]	Area [ft2]
126.50	5.9589	259568

Comment: boring PBA-FPC1301B-4

Node: N-107

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 117.83 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
115.62	0.0003	13
116.00	0.0080	350
116.50	0.1267	5519
117.00	0.4721	20562
117.50	0.9154	39875
118.00	1.5190	66169
118.50	2.3155	100862
119.00	3.2576	141900
119.50	4.3246	188381
120.00	5.4594	237813
120.50	6.6535	289825
121.00	7.4304	323669
121.50	8.0550	350875
122.00	8.7367	380569
122.50	9.2668	403663
123.00	10.1192	440794
123.50	10.6395	463456
124.00	10.7247	467169
124.50	10.7982	470369
125.00	10.8695	473475
125.50	10.9108	475275
126.00	10.9353	476344
126.50	10.9495	476959
127.00	10.9495	476959

Comment: ** PIPE INVERT: 119.04
** SH13-365L
SHGWT: 117.6

EXIST POND 1 SHGWT: 114.5

Update: 3-5-2025
117.9+118+117.7+117.6= 117.8

Boring Avg for below points : 117.83'
PBA-SMF1301C-2
PBA-SMF1301B-6
PBA-SMF1301B-4

Node: N-107A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 117.68 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
115.05	0.0001	6
115.50	0.0251	1094
116.00	0.0575	2506
116.50	0.1455	6338
117.00	0.2812	12250
117.50	0.5415	23587
118.00	0.7956	34656
118.50	1.0455	45544
119.00	1.2775	55650
119.50	1.4816	64537
120.00	1.6642	72494
120.50	1.8020	78494
121.00	1.9452	84731
121.50	2.0882	90963
122.00	2.1993	95800
122.50	2.2357	97387
123.00	2.2638	98612
123.50	2.2818	99394
124.00	2.2965	100038
124.50	2.2986	100129
125.00	2.2986	100129

Comment: Close to N-107

Node: N-107B

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 116.74 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
115.41	0.0001	6
115.50	0.0009	40
116.00	0.0179	781
116.50	0.1717	7481
117.00	0.6742	29369
117.50	1.0516	45806
118.00	1.3952	60775
118.50	1.6549	72087
119.00	1.8586	80962
119.50	2.0393	88831
120.00	2.2093	96238
120.50	2.3790	103631
121.00	2.4739	107763
121.50	2.5409	110681
122.00	2.5680	111863
122.50	2.5898	112813
123.00	2.6139	113862
123.50	2.6264	114406
124.00	2.6296	114545
124.50	2.6296	114545

Comment: Close to N-107

Node: N-107C

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 117.83 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
115.15	0.0001	6
115.50	0.0136	594
116.00	0.0538	2344
116.50	0.2304	10037
117.00	0.4655	20275
117.50	0.6589	28700
118.00	0.8211	35769
118.50	0.9962	43394
119.00	1.1565	50375
119.50	1.3138	57231
120.00	1.4723	64131
120.50	1.6251	70787
121.00	1.7631	76800
121.50	1.8872	82206
122.00	1.9793	86219

Stage [ft]	Area [ac]	Area [ft2]
122.50	2.0247	88194
123.00	2.0526	89413
123.50	2.0790	90563
124.00	2.1070	91781
124.50	2.1318	92863
125.00	2.1522	93750
125.50	2.1668	94385
126.00	2.1795	94937
126.50	2.1875	95288
127.00	2.1889	95349
127.50	2.1889	95349

Comment: Close to N-107

Node: N-108

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 114.50 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
112.65	0.0003	13
113.00	0.0115	500
113.50	0.0719	3131
114.00	0.1486	6475
114.50	0.2220	9669
115.00	0.3240	14112
115.50	0.4250	18513
116.00	0.5279	22994
116.50	0.6274	27331
117.00	0.7425	32344
117.50	0.9270	40381
118.00	1.1348	49431
118.50	1.3425	58481
119.00	1.6010	69738
119.50	1.9153	83431
120.00	2.1404	93237
120.50	2.3208	101094
121.00	2.4768	107887
121.50	2.6548	115644
122.00	2.8327	123394
122.50	3.0122	131213
123.00	3.1609	137687
123.50	3.2755	142681
124.00	3.3960	147931

Stage [ft]	Area [ac]	Area [ft2]
124.50	3.4945	152219
125.00	3.5603	155087
125.50	3.6118	157331
126.00	3.6437	158719
126.50	3.6631	159563
127.00	3.6796	160281
127.50	3.6915	160800
128.00	3.6955	160976
128.50	3.7006	161198
129.00	3.7006	161198

Comment: **PIPE INVERT 114.02
** WL-1316-L-1056 SHW 114.4

[HTC]
114.5 BASED ON GEOTECH

Node: N-109

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 114.50 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
111.38	0.0003	13
111.50	0.0083	363
112.00	0.4148	18069
112.50	0.5896	25681
113.00	0.7563	32944
113.50	0.8623	37562
114.00	1.0434	45450
114.50	1.2744	55513
115.00	1.5394	67056
115.50	1.7991	78369
116.00	1.9819	86331
116.50	2.2039	96000
117.00	2.5514	111138
117.50	2.9138	126925
118.00	3.1815	138587
118.50	3.4299	149406
119.00	3.6642	159613
119.50	3.8687	168519
120.00	4.1215	179531
120.50	4.4043	191850
121.00	4.6931	204431

Stage [ft]	Area [ac]	Area [ft2]
121.50	4.9139	214050
122.00	5.0739	221019
122.50	5.1974	226400
123.00	5.2893	230400
123.50	5.3524	233150
124.00	5.3524	233150

Comment:
GEOTECH:
SHWL:
SH13-380R LOCATED IN THAT LOCATION EXACTLY AND SHWL EL IS 114.10'.
MEASURED AVG GW EL 112.6'

THE AVG CONTOUR LINE FOR THE SHAPE IS115.1''

1-22:
SH13-380R 114.1. but pipe invert is in 113.68

[HTC]
114.5 BASED ON GEOTECH

Node: N-109A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 110.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
111.83	0.0001	6
112.00	0.0128	556
112.50	0.0845	3681
113.00	0.1706	7431
113.50	0.2431	10588
114.00	0.3081	13419
114.50	0.3817	16625
115.00	0.4824	21013
115.50	0.5906	25725
116.00	0.7497	32656
116.50	0.9197	40062
117.00	1.0824	47150
117.50	1.2448	54225
118.00	1.3757	59925
118.50	1.5245	66406
119.00	1.6520	71963
119.50	1.7505	76250

Stage [ft]	Area [ac]	Area [ft2]
120.00	1.8027	78525
120.50	1.8287	79656
121.00	1.8541	80763
121.50	1.8769	81756
122.00	1.8988	82713
122.50	1.9170	83506
123.00	1.9300	84069
123.50	1.9429	84631
124.00	1.9610	85422
124.50	1.9610	85422

Comment: SH13-390R:
SHGWT EL: 110

Node: N-109B

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 108.50 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
109.75	0.0001	6
110.00	0.0027	119
110.50	0.0795	3462
111.00	0.2118	9225
111.50	0.5564	24237
112.00	1.1672	50844
112.50	1.9397	84494
113.00	2.6732	116444
113.50	3.3198	144612
114.00	3.9202	170763
114.50	4.5942	200125
115.00	5.2525	228800
115.50	5.9309	258350
116.00	6.5599	285750
116.50	7.1347	310787
117.00	7.7410	337200
117.50	8.2762	360512
118.00	8.7470	381019
118.50	9.1644	399200
119.00	9.4427	411325
119.50	9.6696	421206
120.00	9.8732	430075
120.50	10.0418	437419
121.00	10.1750	443225

Stage [ft]	Area [ac]	Area [ft2]
121.50	10.3013	448725
122.00	10.3676	451612
122.50	10.3986	452962
123.00	10.4137	453619
123.50	10.4190	453850
124.00	10.4227	454013
124.50	10.4245	454093
125.00	10.4253	454127
125.50	10.4253	454127

Comment: PBA-FPC1306A-2 biring data for initial stage

Node: N-109C

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 114.50 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
112.83	0.0003	13
113.00	0.0172	750
113.50	0.6032	26275
114.00	1.6081	70050
114.50	1.8483	80513
115.00	2.1836	95119
115.50	2.5630	111644
116.00	2.8900	125887
116.50	3.2127	139944
117.00	3.5481	154556
117.50	3.9596	172481
118.00	4.3116	187813
118.50	4.6767	203719
119.00	5.0805	221306
119.50	5.5445	241519
120.00	5.9836	260644
120.50	6.4104	279238
121.00	6.7754	295138
121.50	7.1476	311350
122.00	7.5343	328194
122.50	7.8917	343762
123.00	8.1946	356956
123.50	8.4751	369175
124.00	8.7130	379537
124.50	8.8578	385844
125.00	8.9668	390594

Stage [ft]	Area [ac]	Area [ft2]
125.50	9.0588	394600
126.00	9.1164	397113
126.50	9.1429	398263
127.00	9.1429	398263

Comment:

Node: N-109D

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 115.60 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
115.73	0.0001	6
116.00	0.0321	1400
116.50	0.1458	6350
117.00	0.1686	7344
117.50	0.1852	8069
118.00	0.2042	8894
118.50	0.2220	9669
119.00	0.2479	10800
119.50	0.2878	12537
120.00	0.3359	14631
120.50	0.3907	17019
121.00	0.4894	21319
121.50	0.5910	25744
122.00	0.7359	32056
122.50	0.8955	39006
123.00	1.0688	46556
123.50	1.1407	49687
124.00	1.1699	50962
124.50	1.1970	52142
125.00	1.1970	52142

Comment:

Node: N-110

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 112.60 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
110.62	0.0001	6
111.00	0.0077	338
111.50	0.0320	1394
112.00	0.0847	3687
112.50	0.1867	8131
113.00	0.3099	13500
113.50	0.4567	19894
114.00	0.6325	27550
114.50	0.8293	36125
115.00	1.0325	44975
115.50	1.2672	55200
116.00	1.5414	67144
116.50	1.9934	86831
117.00	2.5755	112188
117.50	3.2177	140162
118.00	3.8149	166175
118.50	4.3503	189500
119.00	4.7872	208531
119.50	5.1778	225544
120.00	5.4568	237700
120.50	5.6920	247944
121.00	5.8587	255206
121.50	5.9471	259056
122.00	6.0220	262319
122.50	6.0757	264656
123.00	6.1329	267150
123.50	6.2001	270075
124.00	6.2718	273200
124.50	6.3526	276719
125.00	6.4015	278850
125.50	6.4440	280700
126.00	6.4768	282131
126.50	6.5022	283237
127.00	6.5072	283453
127.50	6.5072	283453

Comment: **WL-1323-R-1049 SHW112 (OPPOSITE)
**SH13-385R SHGWT 112.6 (OPPOSITE)

Node: N-111

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 110.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
110.94	0.0001	6
111.00	0.0002	10
111.50	0.0280	1219
112.00	0.0963	4194
112.50	0.1596	6950
113.00	0.2251	9806
113.50	0.2957	12881
114.00	0.3792	16519
114.50	0.5096	22200
115.00	0.6635	28900
115.50	0.8187	35662
116.00	1.0638	46338
116.50	1.3615	59306
117.00	1.6213	70625
117.50	1.8526	80700
118.00	2.0463	89137
118.50	2.2308	97175
119.00	2.4136	105138
119.50	2.5511	111125
120.00	2.6649	116081
120.50	2.7443	119544
121.00	2.8144	122594
121.50	2.8926	126000
122.00	2.9584	128869
122.50	3.0161	131381
123.00	3.0715	133794
123.50	3.1188	135856
124.00	3.1576	137544
124.50	3.1878	138862
125.00	3.2065	139675
125.50	3.2118	139907
126.00	3.2118	139907
110.00	0.0000	0

Comment: **SH13-390R
SHGWT: 110' (OPPOSITE)

**FROM LIDAR:
DEPRESSION LOOKS @ 111

Node: N-112

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 102.10 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
103.41	0.0003	13
103.50	0.0011	46
104.00	0.0362	1575
104.50	0.0907	3950
105.00	0.1630	7100
105.50	0.2791	12156
106.00	0.4027	17544
106.50	0.4980	21694
107.00	0.5761	25094
107.50	0.6497	28300
108.00	0.7612	33156
108.50	0.9184	40006
109.00	1.0731	46744
109.50	1.2369	53881
110.00	1.4704	64050
110.50	1.7635	76819
111.00	2.0994	91450
111.50	2.4307	105881
112.00	2.8072	122281
112.50	3.1942	139137
113.00	3.5785	155881
113.50	3.9855	173606
114.00	4.6488	202500
114.50	5.1461	224163
115.00	5.5343	241075
115.50	5.8762	255969
116.00	6.2014	270131
116.50	6.4002	278794
117.00	6.5368	284744
117.50	6.6715	290613
118.00	6.8254	297313
118.50	6.9470	302612
119.00	7.0579	307444
119.50	7.0710	308014
120.00	7.0710	308014

Comment: *PIPE INVERT: 108.48

**SH13-395R JUST OPPOSITE SITE AND SHGWT IS 107.2.

**THE AVG CONTOUR LINE FOR THE SHAPE IS 106.5'

Update: 3-5-2025:
102.6+101+101.4+101.1+104.4=

Node: N-113

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 107.20 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
108.47	0.0001	6
108.50	0.0002	8
109.00	0.0008	35
109.50	0.0105	456
110.00	0.1987	8656
110.50	0.4940	21519
111.00	0.8947	38975
111.50	1.1841	51581
112.00	1.4480	63075
112.50	1.6626	72425
113.00	1.8790	81850
113.50	2.1166	92200
114.00	2.4436	106444
114.50	2.8326	123387
115.00	3.1306	136369
115.50	3.3803	147244
116.00	3.5718	155588
116.50	3.7156	161850
117.00	3.8354	167069
117.50	3.9625	172606
118.00	4.1417	180412
118.50	4.2667	185856
119.00	4.3459	189306
119.50	4.4155	192337
120.00	4.4776	195044
120.50	4.5381	197681
121.00	4.5970	200244
121.50	4.6729	203550
122.00	4.7749	207994
122.50	4.7912	208703
123.00	4.7912	208703
107.20	0.0000	0

Comment: **PIPE INVERT: 108.39

** SH13-395R SHGWT EL. 107.2

Node: N-114

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 91.40 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
101.41	0.0001	6
101.50	0.0003	14
102.00	0.0264	1150
102.50	0.1013	4412
103.00	0.1709	7444
103.50	0.2399	10450
104.00	0.3042	13250
104.50	0.3723	16219
105.00	0.4416	19237
105.50	0.5201	22656
106.00	0.6039	26306
106.50	0.7022	30587
107.00	0.9084	39569
107.50	1.1325	49331
108.00	1.3801	60119
108.50	1.5998	69688
109.00	1.8681	81375
109.50	2.1017	91550
110.00	2.3247	101262
110.50	2.5461	110906
111.00	2.8020	122056
111.50	3.0898	134594
112.00	3.3540	146100
112.50	3.6392	158525
113.00	3.9503	172075
113.50	4.2594	185538
114.00	4.8178	209862
114.50	5.1791	225600
115.00	5.4180	236006
115.50	5.6858	247675
116.00	5.9313	258369
116.50	6.1566	268181
117.00	6.3721	277569
117.50	6.5515	285381
118.00	6.6974	291737
118.50	6.7967	296064
119.00	6.7967	296064

Stage [ft]	Area [ac]	Area [ft2]
93.50	0.0001	6

Comment: 91.4

Node: N-115

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 91.70 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
92.62	0.0004	19
93.00	0.0228	994
93.50	0.0736	3206
94.00	0.1243	5413
94.50	0.1795	7819
95.00	0.2405	10475
95.50	0.3017	13144
96.00	0.3643	15869
96.50	0.4607	20069
97.00	0.5685	24763
97.50	0.6751	29406
98.00	0.7850	34194
98.50	0.9011	39250
99.00	1.0154	44231
99.50	1.1486	50031
100.00	1.3057	56875
100.50	1.4748	64244
101.00	1.7208	74956
101.50	1.9985	87056
102.00	2.3643	102988
102.50	2.8609	124619
103.00	3.3639	146531
103.50	3.8103	165975
104.00	4.2836	186594
104.50	4.7865	208500
105.00	5.2251	227606
105.50	5.7841	251956
106.00	6.2648	272894
106.50	6.7348	293369
107.00	7.1851	312981
107.50	7.6222	332025
108.00	8.0764	351806
108.50	8.5533	372581
109.00	9.0365	393631

Stage [ft]	Area [ac]	Area [ft2]
109.50	9.4995	413800
110.00	9.9552	433650
110.50	10.4283	454256
111.00	10.9831	478425
111.50	11.5614	503612
112.00	12.1634	529837
112.50	12.7049	553425
113.00	13.1421	572469
113.50	13.5506	590262
114.00	14.0278	611050
114.50	14.6067	636269
115.00	14.9852	652756
115.50	15.3726	669631
116.00	15.7794	687350
116.50	16.1586	703869
117.00	16.5608	721387
117.50	16.8462	733819
118.00	17.0439	742431
118.50	17.2103	749681
119.00	17.3417	755406
119.50	17.4136	758538
120.00	17.4621	760650
120.50	17.5103	762750
121.00	17.5491	764437
121.50	17.5776	765681
122.00	17.5990	766612
122.50	17.6221	767619
123.00	17.6442	768581
123.50	17.6565	769119
124.00	17.6616	769338
124.50	17.6629	769398
125.00	17.6649	769484
125.50	17.6649	769484

Comment: **SH13-415R SHGWT EL. 92.7

**MINIMUM CONTOUR 93
** DEPRESSION STARTS @ 96.5

90.7+92.7=91.7

Node: N-115A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 94.45 ft

Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
101.31	0.0001	6
101.50	0.0053	231
102.00	0.0628	2737
102.50	0.1198	5219
103.00	0.1765	7688
103.50	0.2347	10225
104.00	0.2894	12606
104.50	0.3541	15425
105.00	0.4296	18713
105.50	0.5115	22281
106.00	0.5850	25481
106.50	0.6626	28863
107.00	0.7401	32237
107.50	0.8231	35856
108.00	0.9111	39688
108.50	1.0120	44081
109.00	1.1104	48369
109.50	1.2105	52731
110.00	1.3126	57175
110.50	1.4407	62756
111.00	1.7005	74075
111.50	1.9341	84250
112.00	2.1511	93700
112.50	2.4057	104794
113.00	2.6337	114725
113.50	2.8306	123300
114.00	3.1092	135437
114.50	3.5952	156606
115.00	3.7427	163031
115.50	3.8603	168156
116.00	4.0022	174337
116.50	4.1781	182000
117.00	4.3826	190906
117.50	4.5473	198081
118.00	4.6703	203437
118.50	4.7400	206475
119.00	4.8128	209644
119.50	4.8660	211962
120.00	4.8760	212400
120.50	4.8874	212894
121.00	4.8946	213210
121.50	4.9027	213562
122.00	4.9048	213651
122.50	4.9048	213651
93.60	0.0001	4

Comment: **SH13-410R SHGWT EL. 93.6

95.3+93.6=94.45

Node: N-116

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 96.21 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
97.52	0.0001	6
98.00	0.0066	287
98.50	0.0291	1269
99.00	0.0595	2594
99.50	0.0931	4056
100.00	0.1395	6075
100.50	0.1990	8669
101.00	0.2578	11231
101.50	0.3336	14531
102.00	0.4402	19175
102.50	0.5604	24413
103.00	0.7264	31644
103.50	0.9650	42037
104.00	1.3004	56644
104.50	1.7308	75394
105.00	2.2004	95850
105.50	2.5904	112838
106.00	2.9906	130269
106.50	3.3356	145300
107.00	3.6750	160081
107.50	4.0226	175225
108.00	4.3774	190681
108.50	4.6419	202200
109.00	4.8887	212950
109.50	5.1078	222494
110.00	5.3145	231500
110.50	5.5178	240356
111.00	5.7378	249937
111.50	6.0041	261538
112.00	6.2857	273806
112.50	6.5982	287419
113.00	6.8816	299762
113.50	7.1463	311294
114.00	7.3881	321825
114.50	7.6728	334225
115.00	7.9323	345531

Stage [ft]	Area [ac]	Area [ft2]
115.50	8.1735	356037
116.00	8.3256	362662
116.50	8.3972	365781
117.00	8.4339	367381
117.50	8.4784	369319
118.00	8.5016	370331
118.50	8.5161	370962
119.00	8.5296	371550
119.50	8.5299	371563
120.00	8.5299	371563

Comment: **PIPE INVERT 96.21

Node: N-117

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 84.43 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
91.94	0.0003	13
92.00	0.0016	69
92.50	0.0472	2056
93.00	0.1006	4381
93.50	0.1532	6675
94.00	0.2174	9469
94.50	0.2930	12763
95.00	0.3957	17238
95.50	0.5620	24481
96.00	0.7504	32688
96.50	0.9319	40594
97.00	1.1197	48775
97.50	1.3021	56719
98.00	1.5040	65512
98.50	1.7262	75194
99.00	1.9444	84700
99.50	2.1684	94456
100.00	2.4079	104888
100.50	2.6577	115769
101.00	2.9266	127481
101.50	3.2042	139575
102.00	3.4695	151131
102.50	3.7586	163725
103.00	4.0394	175956
103.50	4.3285	188550

Stage [ft]	Area [ac]	Area [ft2]
104.00	4.6469	202419
104.50	4.9468	215481
105.00	5.2372	228131
105.50	5.5079	239925
106.00	5.7597	250894
106.50	6.0012	261412
107.00	6.2411	271862
107.50	6.4870	282575
108.00	6.7134	292437
108.50	6.9218	301513
109.00	7.1225	310256
109.50	7.3330	319425
110.00	7.5380	328356
110.50	7.7587	337969
111.00	8.0052	348706
111.50	8.2175	357956
112.00	8.4157	366587
112.50	8.6147	375256
113.00	8.8087	383706
113.50	8.9896	391587
114.00	9.1562	398844
114.50	9.3024	405213
115.00	9.4518	411719
115.50	9.6060	418437
116.00	9.7722	425675
116.50	9.9250	432331
117.00	10.0706	438675
117.50	10.2161	445012
118.00	10.3586	451219
118.50	10.4976	457275
119.00	10.6270	462913
119.50	10.7369	467700
120.00	10.8392	472156
120.50	10.9137	475400
121.00	10.9646	477619
121.50	11.0018	479237
122.00	11.0392	480869
122.50	11.0688	482156
123.00	11.0760	482469
123.50	11.0863	482918
124.00	11.0863	482918

Comment: **SH13-425R WITHIN THE BASIN AND SHGWT EL 84.2

**PIPE INVERT 96.15

86.7+83.5+83.1=

Node: N-118

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 46.20 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
59.00	3.0032	130819
59.50	3.0270	131856
60.00	3.0518	132937
60.50	3.0718	133806
61.00	3.0921	134694
61.50	3.1104	135487
62.00	3.1253	136138
62.50	3.1414	136838
63.00	3.1540	137387
63.50	3.1678	137987
64.00	3.1866	138806
64.50	3.2085	139763
65.00	3.2297	140688
65.50	3.2540	141744
66.00	3.2857	143125
66.50	3.3221	144713
67.00	3.3596	146344
67.50	3.4074	148425
68.00	3.4428	149969
68.50	3.4813	151644
69.00	3.5094	152869
69.50	3.5382	154125
70.00	3.5649	155287
70.50	3.5986	156756
71.00	3.6306	158150
71.50	3.6669	159731
72.00	3.7061	161437
72.50	3.7441	163094
73.00	3.7869	164956
73.50	3.8295	166812
74.00	3.8652	168369
74.50	3.9008	169919
75.00	3.9370	171494
75.50	3.9771	173244
76.00	4.0271	175419
76.50	4.0767	177581
77.00	4.1235	179619
77.50	4.1744	181838
78.00	4.2480	185044
78.50	4.3179	188088
79.00	4.3855	191031
79.50	4.4607	194306

Stage [ft]	Area [ac]	Area [ft2]
80.00	4.5274	197212
80.50	4.5932	200081
81.00	4.6693	203394
81.50	4.7620	207431
82.00	4.8442	211012
82.50	4.9103	213894
83.00	4.9729	216619
83.50	5.0340	219281
84.00	5.0902	221731
84.50	5.1451	224119
85.00	5.2006	226537
85.50	5.2575	229019
86.00	5.3244	231931
86.50	5.3887	234731
87.00	5.4581	237756
87.50	5.5330	241019
88.00	5.6280	245156
88.50	5.7455	250275
89.00	5.8658	255513
89.50	5.9725	260162
90.00	6.0795	264825
90.50	6.2273	271262
91.00	6.3534	276756
91.50	6.5120	283663
92.00	6.6984	291781
92.50	6.8733	299400
93.00	7.0631	307669
93.50	7.2502	315819
94.00	7.4605	324981
94.50	7.7030	335544
95.00	8.0013	348537
95.50	8.3356	363100
96.00	8.7602	381594
96.50	9.0562	394488
97.00	9.3434	407000
97.50	9.6551	420575
98.00	9.9287	432494
98.50	10.2037	444475
99.00	10.5081	457731
99.50	10.7742	469325
100.00	11.0171	479906
100.50	11.2476	489944
101.00	11.4220	497544
101.50	11.5657	503800
102.00	11.6992	509619
102.50	11.8077	514344
103.00	11.9057	518613
103.50	12.0017	522794
104.00	12.1041	527256

Stage [ft]	Area [ac]	Area [ft2]
104.50	12.2400	533175
105.00	12.3275	536988
105.50	12.3842	539456
106.00	12.4090	540538
106.50	12.4359	541706
107.00	12.4618	542837
107.50	12.4875	543956
108.00	12.5102	544944
108.50	12.5346	546006
109.00	12.5636	547271
109.50	12.5875	548313
110.00	12.6040	549031
110.50	12.6184	549656
111.00	12.6317	550235
111.50	12.6317	550235
58.50	2.9788	129756

Comment: SH13-450 L
Avg Exst Contour= 59'
**SHW: 46.2'
GW: 44.3
GW DEPTH: 1.9'

**PIPE INVERT: 42.06'

** Final Change on 4-15-2025 from 72 to 46.2

Node: N-119

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 77.20 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
74.93	0.0003	13
75.00	0.0017	75
75.50	0.0564	2456
76.00	0.1670	7275
76.50	0.2745	11956
77.00	0.4046	17625
77.50	0.5434	23669
78.00	0.6649	28963
78.50	0.7732	33681
79.00	0.8778	38237
79.50	0.9701	42256

Stage [ft]	Area [ac]	Area [ft2]
80.00	1.0734	46756
80.50	1.2021	52363
81.00	1.3279	57844
81.50	1.4757	64281
82.00	1.6671	72619
82.50	1.8635	81175
83.00	1.9796	86231
83.50	2.0790	90563
84.00	2.1800	94962
84.50	2.2858	99569
85.00	2.3874	103994
85.50	2.5176	109669
86.00	2.6819	116825
86.50	2.9477	128400
87.00	3.1907	138988
87.50	3.4817	151663
88.00	3.6118	157331
88.50	3.6946	160938
89.00	3.7780	164569
89.50	3.8665	168425
90.00	3.9573	172381
90.50	4.0565	176700
91.00	4.1626	181325
91.50	4.2858	186687
92.00	4.4426	193519
92.50	4.5836	199662
93.00	4.6841	204037
93.50	4.7813	208275
94.00	4.8732	212275
94.50	4.9511	215669
95.00	5.0300	219106
95.50	5.1070	222462
96.00	5.1914	226138
96.50	5.2862	230269
97.00	5.4421	237056
97.50	5.6193	244775
98.00	5.7233	249306
98.50	5.8272	253831
99.00	5.9303	258325
99.50	6.0210	262275
100.00	6.1065	266000
100.50	6.1860	269463
101.00	6.2603	272700
101.50	6.3243	275488
102.00	6.3850	278131
102.50	6.4440	280700
103.00	6.5100	283575
103.50	6.5746	286387
104.00	6.6337	288962

Stage [ft]	Area [ac]	Area [ft2]
104.50	6.6977	291750
105.00	6.7672	294781
105.50	6.8476	298281
106.00	6.9472	302619
106.50	7.0595	307513
107.00	7.1653	312119
107.50	7.2554	316044
108.00	7.3347	319500
108.50	7.4062	322613
109.00	7.4792	325794
109.50	7.5518	328956
110.00	7.6171	331800
110.50	7.6861	334806
111.00	7.7532	337731
111.50	7.8248	340850
112.00	7.9002	344131
112.50	7.9643	346925
113.00	8.0333	349931
113.50	8.1026	352950
114.00	8.1838	356488
114.50	8.2973	361431
115.00	8.4023	366006
115.50	8.4919	369906
116.00	8.5768	373606
116.50	8.6616	377300
117.00	8.7137	379568
117.50	8.7137	379568

Comment: SHWL: 75.5
SH13 435R

GW: 73.5
Avg Contour EXST EL: 76.75

75.5+78.9+

Node: N-120

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 45.70 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
49.00	0.4380	19081
49.50	0.6412	27931

Stage [ft]	Area [ac]	Area [ft2]
50.00	0.8444	36781
50.50	1.0714	46669
51.00	1.2992	56594
51.50	1.5718	68469
52.00	1.7635	76819
52.50	1.8921	82419
53.00	2.0387	88806
53.50	2.1641	94269
54.00	2.2813	99375
54.50	2.3735	103387
55.00	2.4511	106769
55.50	2.5235	109925
56.00	2.5814	112444
56.50	2.6301	114569
57.00	2.6762	116575
57.50	2.7392	119319
58.00	2.7864	121375
58.50	2.8293	123244
59.00	2.8606	124606
59.50	2.8834	125600
60.00	2.9045	126519
60.50	2.9224	127300
61.00	2.9415	128131
61.50	2.9584	128869
62.00	2.9792	129775
62.50	2.9934	130394
63.00	3.0106	131144
63.50	3.0254	131788
64.00	3.0424	132525
64.50	3.0606	133319
65.00	3.0804	134181
65.50	3.0977	134938
66.00	3.1157	135719
66.50	3.1449	136994
67.00	3.1699	138081
67.50	3.1874	138844
68.00	3.2088	139775
68.50	3.2319	140781
69.00	3.2524	141675
69.50	3.2757	142687
70.00	3.3052	143975
70.50	3.3402	145500
71.00	3.3791	147194
71.50	3.4150	148756
72.00	3.4662	150987
72.50	3.5833	156088
73.00	3.8900	169450
73.50	4.0044	174431
74.00	4.0784	177656

Stage [ft]	Area [ac]	Area [ft2]
74.50	4.1286	179844
75.00	4.1849	182294
75.50	4.5502	198206
76.00	4.8072	209400
76.50	4.9687	216437
77.00	5.0852	221512
77.50	5.1825	225750
78.00	5.2881	230350
78.50	5.3897	234775
79.00	5.4914	239206
79.50	5.6323	245344
80.00	5.7269	249463
80.50	5.8158	253338
81.00	5.8983	256931
81.50	5.9810	260531
82.00	6.0684	264338
82.50	6.1577	268231
83.00	6.2560	272512
83.50	6.4116	279288
84.00	6.6040	287669
84.50	6.8041	296388
85.00	6.9763	303887
85.50	7.2073	313950
86.00	7.5050	326919
86.50	7.7451	337375
87.00	7.9125	344669
87.50	8.0690	351488
88.00	8.1597	355437
88.50	8.2190	358019
89.00	8.2691	360200
89.50	8.3145	362181
90.00	8.3589	364113
90.50	8.3965	365750
91.00	8.4338	367375
91.50	8.4695	368931
92.00	8.5081	370612
92.50	8.5484	372369
93.00	8.5833	373888
93.50	8.6170	375356
94.00	8.6653	377463
94.50	8.6995	378950
95.00	8.7247	380050
95.50	8.7524	381256
96.00	8.7823	382556
96.50	8.8308	384669
97.00	8.8350	384854
97.50	8.8350	384854

Comment: SH13-445R

**SHW: <49
EXST CONTOUR: 47.25
GW:47.7
DEPTH OF GW: 1.3'
AB: 46.4

**PIPE INVERT: 43.17

Node: N-120A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.17 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
46.84	0.0001	6
47.00	0.0004	19
47.50	0.0024	103
48.00	0.0164	713
48.50	0.0626	2725
49.00	0.1664	7250
49.50	0.3218	14019
50.00	0.4854	21144
50.50	0.6375	27769
51.00	0.8800	38331
51.50	1.1668	50825
52.00	1.4817	64544
52.50	1.8457	80400
53.00	2.2370	97444
53.50	2.5826	112500
54.00	2.8689	124969
54.50	3.0810	134206
55.00	3.2419	141219
55.50	3.4005	148125
56.00	3.5729	155637
56.50	3.7299	162475
57.00	3.8675	168469
57.50	4.0050	174456
58.00	4.1622	181306
58.50	4.2843	186625
59.00	4.3674	190244
59.50	4.4198	192525
60.00	4.4599	194275
60.50	4.4915	195650
61.00	4.5159	196713
61.50	4.5413	197819

Stage [ft]	Area [ac]	Area [ft2]
62.00	4.5644	198825
62.50	4.5859	199763
63.00	4.6079	200719
63.50	4.6305	201706
64.00	4.6499	202550
64.50	4.6721	203519
65.00	4.6951	204519
65.50	4.7165	205450
66.00	4.7369	206337
66.50	4.7605	207369
67.00	4.7790	208175
67.50	4.8024	209194
68.00	4.8288	210344
68.50	4.8598	211694
69.00	4.8861	212838
69.50	4.9080	213794
70.00	4.9293	214719
70.50	4.9505	215644
71.00	4.9692	216460
71.50	4.9938	217531
72.00	5.0201	218675
72.50	5.0449	219756
73.00	5.0677	220750
73.50	5.0953	221950
74.00	5.1181	222944
74.50	5.1359	223719
75.00	5.1488	224281
75.50	5.1604	224788
76.00	5.1689	225158
76.50	5.1748	225413
77.00	5.1812	225694
77.50	5.1881	225992
78.00	5.1942	226261
78.50	5.1997	226500
79.00	5.2053	226743
79.50	5.2110	226992
80.00	5.2159	227206
80.50	5.2202	227394
81.00	5.2236	227541
81.50	5.2268	227681
82.00	5.2305	227840
82.50	5.2333	227964
83.00	5.2356	228063
83.50	5.2377	228156
84.00	5.2393	228225
84.50	5.2404	228274
85.00	5.2414	228314
85.50	5.2414	228314

Comment:

Node: N-120B

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 45.70 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
46.04	0.0001	6
46.50	0.0133	581
47.00	0.2429	10581
47.50	0.8243	35906
48.00	1.2610	54931
48.50	1.5417	67156
49.00	1.6754	72981
49.50	1.7684	77031
50.00	1.8321	79806
50.50	1.8850	82113
51.00	1.9278	83975
51.50	1.9655	85619
52.00	1.9849	86463
52.50	1.9954	86919
53.00	2.0004	87138
53.50	2.0029	87245
54.00	2.0040	87295
54.50	2.0043	87308
55.00	2.0045	87317
55.50	2.0045	87317

Comment:

Node: N-122

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 44.50 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
42.84	0.0001	6
43.00	0.0085	369
43.50	0.0704	3069
44.00	0.1283	5587

Stage [ft]	Area [ac]	Area [ft2]
44.50	0.2390	10412
45.00	0.3231	14075
45.50	0.4702	20481
46.00	0.7731	33675
46.50	1.2484	54381
47.00	1.5522	67612
47.50	1.7648	76875
48.00	1.8409	80188
48.50	1.8817	81969
49.00	1.9113	83256
49.50	1.9423	84606
50.00	1.9797	86238
50.50	2.0545	89494
51.00	2.1445	93413
51.50	2.1871	95271
52.00	2.1871	95271

Comment:

Node: N-123

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 45.40 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
43.75	0.0001	6
44.00	0.0009	38
44.50	0.0113	494
45.00	0.0247	1075
45.50	0.0400	1744
46.00	0.0577	2512
46.50	0.0829	3613
47.00	0.1188	5175
47.50	0.1634	7119
48.00	0.2089	9100
48.50	0.2587	11269
49.00	0.3155	13744
49.50	0.3939	17156
50.00	0.4837	21069
50.50	0.5853	25494
51.00	0.7206	31388
51.50	0.7480	32585
52.00	0.7480	32585

Comment:

Node: N-123A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 45.40 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
42.68	0.0001	6
43.00	0.0030	131
43.50	0.0096	419
44.00	0.0245	1069
44.50	0.0448	1950
45.00	0.0694	3025
45.50	0.1499	6531
46.00	1.3799	60106
46.50	2.4811	108075
47.00	3.0283	131912
47.50	3.4127	148656
48.00	3.6428	158681
48.50	3.7570	163656
49.00	3.8242	166581
49.50	3.8720	168662
50.00	3.9078	170225
50.50	3.9418	171706
51.00	3.9592	172462
51.50	3.9725	173044
52.00	3.9793	173337
52.50	3.9817	173441
53.00	3.9842	173550
53.50	3.9853	173600
54.00	3.9863	173641
54.50	3.9872	173681
55.00	3.9886	173741
55.50	3.9886	173741

Comment:

Node: N-124

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 44.90 ft

Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
43.66	0.0001	6
44.00	0.0069	300
44.50	0.0308	1344
45.00	0.1093	4763
45.50	0.4571	19912
46.00	1.2563	54725
46.50	1.8690	81413
47.00	2.2744	99075
47.50	2.4551	106944
48.00	2.5037	109062
48.50	2.5205	109794
49.00	2.5418	110719
49.50	2.5818	112463
50.00	2.6752	116531
50.50	2.6991	117573
51.00	2.6991	117573

Comment:

Node: N-125

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 42.80 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
41.95	0.0003	13
42.00	0.0007	30
42.50	0.0189	825
43.00	0.0383	1669
43.50	0.0577	2512
44.00	0.0653	2844
44.50	0.0805	3506
45.00	0.0981	4275
45.50	0.1508	6569
46.00	0.1954	8512
46.50	0.2716	11831
47.00	0.3099	13500
47.50	0.3385	14744
48.00	0.3652	15906
48.50	0.3949	17200
49.00	0.4425	19275
49.50	0.5294	23062

Stage [ft]	Area [ac]	Area [ft2]
50.00	0.6424	27981
50.50	0.6974	30377
51.00	0.6974	30377

Comment: ** PIPE INVERT: 42.03
**SHW1399R: 42.8
**WL-1398-R-1068: SHW EL 45

Node: N-125A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 42.80 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
42.65	0.0001	6
43.00	0.0022	94
43.50	0.0347	1512
44.00	0.0583	2538
44.50	0.0895	3900
45.00	0.2319	10100
45.50	0.9095	39619
46.00	1.1034	48062
46.50	1.2814	55819
47.00	1.3819	60194
47.50	1.4579	63506
48.00	1.5096	65756
48.50	1.5219	66294
49.00	1.5220	66298
49.50	1.5220	66298

Comment:

Node: N-126

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 40.95 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
38.70	0.0001	6
39.00	0.0504	2194

Stage [ft]	Area [ac]	Area [ft2]
39.50	0.2660	11587
40.00	0.4464	19444
40.50	0.6104	26587
41.00	0.7481	32587
41.50	0.8679	37806
42.00	0.9985	43494
42.50	1.2638	55050
43.00	2.3403	101944
43.50	4.1134	179181
44.00	6.5576	285650
44.50	8.7982	383250
45.00	11.3852	495937
45.50	13.0501	568462
46.00	14.1229	615194
46.50	15.0725	656556
47.00	15.5171	675925
47.50	15.9319	693994
48.00	16.1893	705206
48.50	16.4480	716475
49.00	16.7807	730969
49.50	16.9110	736644
50.00	16.9502	738350
50.50	16.9630	738906
51.00	16.9723	739313
51.50	16.9819	739731
52.00	16.9848	739857
52.50	16.9848	739857

Comment: **SHW-14-1414-C
SHW EL. 41.0
** SHW-13-LS-A
SHW EL. 40.9

** PIPE INVER: 38.94

Node: N-126A

Scenario:	Scenario1
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	41.95 ft
Warning Stage:	0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
41.63	0.0001	6
42.00	0.0435	1894
42.50	0.3428	14931
43.00	3.1244	136100
43.50	8.0871	352275
44.00	14.0512	612069
44.50	16.6218	724044
45.00	16.9773	739531
45.50	17.1125	745419
46.00	17.2578	751750
46.50	17.3151	754246
47.00	17.3151	754246

Comment: PBA-SMF1303B-3
PBA-SMF1303B-4

Node: N-127

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
39.72	0.0001	6
40.00	0.0020	88
40.50	0.0880	3831
41.00	0.2267	9875
41.50	0.3250	14156
42.00	0.3918	17069
42.50	0.4415	19231
43.00	0.4759	20731
43.50	0.5117	22288
44.00	0.5543	24144
44.50	0.5891	25663
45.00	0.6227	27125
45.50	0.6599	28744
46.00	0.7277	31700
46.50	0.8514	37088
47.00	1.0546	45938
47.50	1.3832	60250
48.00	1.6552	72100
48.50	1.8345	79913
49.00	2.0160	87819
49.50	2.0203	88004
50.00	2.0203	88004

Comment:

Node: N-127A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.80 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
41.54	0.0003	13
42.00	0.0082	356
42.50	0.1238	5394
43.00	0.4312	18781
43.50	1.0876	47375
44.00	1.8912	82381
44.50	3.4226	149087
45.00	5.9414	258806
45.50	9.1450	398356
46.00	10.5772	460744
46.50	10.8468	472487
47.00	11.0605	481794
47.50	11.2768	491219
48.00	11.3958	496400
48.50	11.4056	496828
49.00	11.4057	496834
49.50	11.4057	496834

Comment: PBA-SMF1303C-3

Node: N-127B

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.30 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
39.90	0.0001	6
40.00	0.0023	100
40.50	0.0459	2000
41.00	0.1195	5206
41.50	0.1913	8331
42.00	0.3063	13344

Stage [ft]	Area [ac]	Area [ft2]
42.50	0.5237	22813
43.00	0.8781	38250
43.50	1.3513	58862
44.00	2.0262	88262
44.50	3.6006	156844
45.00	6.4149	279431
45.50	8.3048	361756
46.00	9.2928	404794
46.50	10.1187	440769
47.00	10.6632	464488
47.50	11.1440	485431
48.00	11.4860	500331
48.50	11.5365	502531
49.00	11.5464	502962
49.50	11.5541	503296
50.00	11.5541	503296

Comment: PBA-SMF1303C-4

Node: N-127C

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.80 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
41.86	0.0001	6
42.00	0.0012	51
42.50	0.0238	1038
43.00	0.1723	7506
43.50	0.7175	31256
44.00	1.5898	69250
44.50	2.5353	110437
45.00	4.2157	183638
45.50	7.4798	325819
46.00	10.4032	453163
46.50	10.7759	469400
47.00	10.9341	476287
47.50	11.0872	482956
48.00	11.1622	486225
48.50	11.1640	486304
49.00	11.1640	486304

Comment:

Node: N-128

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
38.11	0.0001	6
38.50	0.0044	194
39.00	0.0287	1250
39.50	0.0947	4125
40.00	0.2214	9644
40.50	0.3805	16575
41.00	0.4908	21381
41.50	0.5655	24631
42.00	0.6511	28362
42.50	1.0102	44006
43.00	1.7090	74444
43.50	2.5174	109656
44.00	3.5537	154800
44.50	4.6340	201856
45.00	6.4413	280581
45.50	8.5174	371019
46.00	10.9411	476594
46.50	11.6780	508694
47.00	11.9840	522025
47.50	12.3178	536562
48.00	12.4162	540850
48.50	12.5050	544719
49.00	12.6070	549162
49.50	12.7049	553425
50.00	12.7049	553425

Comment: 36.27

GEOTECH:

NO BORING DATA IN THIS LOCATION.

THE AVG CONTOUR LINE FOR THE SHAPE IS 42.75'.

SOIL SYMBOL 13. FROM NRCS SHWL DEPTH 0.3-1.5'.
ESTIMATED SHWL: 41.25

1-21-2025:
IS changed from 43.3 to 36.27

3-27-2025: changed from 36.27 to 43.5' due to new boring data of
PBA13-SMF8-9A-7

Node: N-128A

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.10 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
41.61	0.0001	6
42.00	0.0115	500
42.50	0.9135	39794
43.00	5.1349	223675
43.50	12.5845	548181
44.00	19.7218	859081
44.50	24.8980	1084556
45.00	32.9507	1435331
45.50	44.4994	1938394
46.00	53.2602	2320012
46.50	54.8496	2389250
47.00	54.9960	2395625
47.50	55.0389	2397494
48.00	55.0389	2397494

Comment: PBA13-SMF8-9A-8

Node: N-128B

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.10 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
41.95	0.0001	6
42.00	0.0017	75
42.50	0.0515	2244
43.00	0.1136	4950
43.50	0.1596	6950
44.00	0.3386	14750
44.50	2.1536	93813
45.00	5.9191	257838
45.50	7.1935	313350
46.00	7.5395	328419
46.50	7.6121	331581
47.00	7.6257	332174
47.50	7.6257	332174

Comment: no boring data, but closest data considered 128A

Node: N-128C

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.20 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
41.47	0.0001	6
41.50	0.0004	19
42.00	0.0132	575
42.50	0.0297	1294
43.00	0.0568	2475
43.50	0.1096	4775
44.00	0.2748	11969
44.50	0.4749	20688
45.00	1.1717	51038
45.50	2.3113	100681
46.00	3.5712	155563
46.50	4.0067	174531
47.00	4.1024	178700
47.50	4.1305	179925
48.00	4.1391	180297
48.50	4.1391	180297

Comment: PBA13-SMF8-9A-6 and
PBA13-SMF8-9A-5

Node: NTZ-1040

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 43.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
37.70	0.0500	2178
99999.00	0.0500	2178

Comment:

Node: NTZ-1080

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 122.68 ft
Warning Stage: 0.00 ft
Boundary Stage:

Comment: Basin SHWT form Page 6:

"J:\75614 Arterial Corridors Program\TECHPROD\75614-DS-010_Seg_12-14\Drainage\Segment 13\Research\ERP 25519.001 SR 25 (US 27) at SR 70 Report.pdf"

Node: NTZ-1520

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

Comment:

Node: NTZ-1530

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage: SOUTH CANAL NTZ-1530

Comment:

Node: NTZ-1540

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

Boundary Stage:

Comment:

Node: NTZ-1550

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft
Boundary Stage: NORTH CANAL NTZ-1550

Comment:

Node: NTZ-1570

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

Comment:

Pipe Link: L-0010P

		Upstream		Downstream	
Scenario:	Scenario1	Invert:	119.66 ft	Invert:	119.49 ft
From Node:	N-101	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-102	Geometry: Circular		Geometry: Circular	
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:	181.04 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.20	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:	0.0130	Manning's N:	0.0130

Comment:

Weir Link: L-0010W			
Scenario:	Scenario1	Bottom Clip	
From Node:	N-100	Default:	0.00 ft
To Node:	N-102	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	128.48 ft	Discharge Coefficients	
Control Elevation:	128.48 ft	Weir Default:	2.800
Cross Section:	X-0010W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: L-0020W			
Scenario:	Scenario1	Bottom Clip	
From Node:	N-115A	Default:	0.00 ft
To Node:	N-115	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	110.50 ft	Discharge Coefficients	
Control Elevation:	110.50 ft	Weir Default:	2.800
Cross Section:	X-0020W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Pipe Link: L-0030P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	114.02 ft	Invert:	113.68 ft
From Node:	N-108	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-109	Geometry: Circular		Geometry: Circular	
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:	137.26 ft	Op Table:		Op Table:	

FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.20	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:	0.0130	Manning's N:	0.0130

Comment:

Pipe Link: L-0050P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	96.21 ft	Invert:	96.15 ft
From Node:	N-116	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-117	Geometry: Circular		Geometry: Circular	
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:	92.16 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.20	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:	0.0130	Manning's N:	0.0130

Comment:

Weir Link: L-0050W			
Scenario:	Scenario1	Bottom Clip	
From Node:	N-100	Default:	0.00 ft
To Node:	N-101	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	125.54 ft	Discharge Coefficients	
Control Elevation:	125.54 ft	Weir Default:	2.800
Cross Section:	X-0050W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Pipe Link: L-0070P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	108.48 ft	Invert:	108.39 ft
From Node:	N-112	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-113	Geometry: Circular		Geometry: Circular	
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:	152.22 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.20	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:	0.0130	Manning's N:	0.0130

Comment:

Weir Link: L-0070W			
Scenario:	Scenario1	Bottom Clip	
From Node:	N-104	Default:	0.00 ft
To Node:	NTZ-1520	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	121.15 ft	Discharge Coefficients	
Control Elevation:	121.15 ft	Weir Default:	2.800
Cross Section:	X-0070W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: L-0220W			
Scenario:	Scenario1	Bottom Clip	
From Node:	N-109	Default:	0.00 ft
To Node:	N-109A	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	116.26 ft	Discharge Coefficients	
Control Elevation:	116.26 ft	Weir Default:	2.800
Cross Section:	X-0220W	Weir Table:	

Orifice Default:	0.600
Orifice Table:	

Comment:

Pipe Link: L-0430P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	39.04 ft	Invert:	38.94 ft
From Node:	N-126	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-0410	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	30.00 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.20	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:

Pipe Link: L-0590P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	36.27 ft	Invert:	35.95 ft
From Node:	N-128	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-0350C	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	6.00 ft	Max Depth:	6.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	160.93 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.25	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:

Pipe Link: L-0610P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	37.70 ft	Invert:	37.31 ft
From Node:	NTZ-1040	Manning's N:	0.0130	Manning's N:	0.0130

To Node:	N-127	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.50 ft	Max Depth:	3.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	48.56 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.25	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:	0.0130	Manning's N:	0.0130

Comment:

Pipe Link: L-0630P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	43.17 ft	Invert:	43.11 ft
From Node:	N-120	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-123	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	438.84 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0130	Manning's N:	0.0130
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:	0.0130	Manning's N:	0.0130

Comment:

Pipe Link: L-0640P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	123.49 ft	Invert:	123.99 ft
From Node:	N-100	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-102	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	139.82 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.20	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:	0.0130	Manning's N:	0.0130

Comment:

Pipe Link: L-0650P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	42.03 ft	Invert:	37.31 ft
From Node:	N-125	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	N-127	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	51.17 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.25	Manning's N:	0.0120	Manning's N:	0.0120
Exit Loss Coef:	0.50	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:	0.0120	Manning's N:	0.0120

Comment:

Pipe Link: L-0660P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	119.04 ft	Invert:	114.63 ft
From Node:	N-107	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-106	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	86.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.20	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:	0.0130	Manning's N:	0.0130

Comment:

Pipe Link: L-0720P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	38.01 ft	Invert:	36.27 ft
From Node:	NTZ-1040	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-128	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	5.00 ft	Max Depth:	5.00 ft

		Bottom Clip			
Flow Direction:	Both				
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	50.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.50	Top Clip			
Bend Loss Coef:	0.25	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:	0.0130	Manning's N:	0.0130

Comment:

Weir Link: L-0730W

		Bottom Clip	
Scenario:	Scenario1		
From Node:	N-102	Default:	0.00 ft
To Node:	NTZ-1080	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	124.55 ft	Discharge Coefficients	
Control Elevation:	124.55 ft	Weir Default:	2.800
Cross Section:	X-0730W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: L-0740W

		Bottom Clip	
Scenario:	Scenario1		
From Node:	N-104	Default:	0.00 ft
To Node:	N-106	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	121.39 ft	Discharge Coefficients	
Control Elevation:	121.39 ft	Weir Default:	2.800
Cross Section:	X-0740W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: L-0760W

Scenario:	Scenario1
From Node:	N-107
To Node:	N-108
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	121.97 ft
Control Elevation:	121.97 ft
Cross Section:	X-0760W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0770W

Scenario:	Scenario1
From Node:	N-124
To Node:	N-126
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	47.65 ft
Control Elevation:	47.65 ft
Cross Section:	X-0040W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0800W

Scenario:	Scenario1
From Node:	N-120
To Node:	N-120A
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	48.58 ft
Control Elevation:	48.58 ft
Cross Section:	X-0280W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600

Orifice Table:	

Comment:

Weir Link: L-0810W

Scenario:	Scenario1
From Node:	N-123
To Node:	N-123A
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	45.40 ft
Control Elevation:	45.40 ft
Cross Section:	X-0320W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Use survey to create best fit trapezoidal section but add bottom clip measured upward from the bottom of tapezoidal section (invert elevation) to top of clip 45.4

Weir Link: L-0820W

Scenario:	Scenario1
From Node:	N-110
To Node:	N-111
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	114.92 ft
Control Elevation:	114.92 ft
Cross Section:	X-0820W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0830W

Scenario:	Scenario1
From Node:	N-105
To Node:	NTZ-1540
Link Count:	1

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	117.32 ft
Control Elevation:	117.32 ft
Cross Section:	X-0110W

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0840W

Scenario:	Scenario1
From Node:	N-107
To Node:	NTZ-1540
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	118.47 ft
Control Elevation:	118.47 ft
Cross Section:	X-0120W

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0850W

Scenario:	Scenario1
From Node:	N-118
To Node:	NTZ-1550
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	45.56 ft
Control Elevation:	45.56 ft
Cross Section:	X-0130W

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0860W

Scenario:	Scenario1	**Bottom Clip**	
From Node:	N-122	Default:	0.00 ft
To Node:	NTZ-1550	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	46.74 ft	**Discharge Coefficients**	
Control Elevation:	46.74 ft	Weir Default:	2.800
Cross Section:	X-0160W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: L-0870W

Scenario:	Scenario1	**Bottom Clip**	
From Node:	N-124	Default:	0.00 ft
To Node:	NTZ-1550	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	44.40 ft	**Discharge Coefficients**	
Control Elevation:	44.40 ft	Weir Default:	2.800
Cross Section:	X-0170W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: L-0890W

Scenario:	Scenario1	**Bottom Clip**	
From Node:	N-125	Default:	0.00 ft
To Node:	N-123A	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	47.98 ft	**Discharge Coefficients**	
Control Elevation:	47.98 ft	Weir Default:	2.800
Cross Section:	X-0330W	Weir Table:	
		Orifice Default:	0.600

Orifice Table:	

Comment:

Weir Link: L-0900W

Scenario:	Scenario1
From Node:	N-112
To Node:	NTZ-1570
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	111.37 ft
Control Elevation:	111.37 ft
Cross Section:	X-0180W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0909W

Scenario:	Scenario1
From Node:	N-107B
To Node:	NTZ-1540
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	116.67 ft
Control Elevation:	116.67 ft
Cross Section:	X-0240W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: X-0240W

Weir Link: L-0910W

Scenario:	Scenario1
From Node:	N-106
To Node:	NTZ-1520
Link Count:	1
Flow Direction:	Both

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	121.27 ft
Control Elevation:	121.27 ft
Cross Section:	X-0250W

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0930W

Scenario:	Scenario1
From Node:	N-117
To Node:	N-119
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	99.12 ft
Control Elevation:	99.12 ft
Cross Section:	X-0930W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0940W

Scenario:	Scenario1
From Node:	N-106
To Node:	N-106B
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	118.19 ft
Control Elevation:	118.19 ft
Cross Section:	X-0260W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0950W

Scenario:	Scenario1
From Node:	N-106B
To Node:	N-106A
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	119.20 ft
Control Elevation:	119.20 ft
Cross Section:	X-0270W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: X-0270W

Weir Link: L-0970W

Scenario:	Scenario1
From Node:	N-120
To Node:	N-123
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	49.16 ft
Control Elevation:	49.16 ft
Cross Section:	X-0970W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-0980W

Scenario:	Scenario1
From Node:	N-107A
To Node:	NTZ-1540
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	117.67 ft
Control Elevation:	117.67 ft
Cross Section:	X-0230W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600

	Orifice Table:

Comment:

Weir Link: L-0990W

Scenario:	Scenario1
From Node:	N-118
To Node:	N-122
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	47.54 ft
Control Elevation:	47.54 ft
Cross Section:	X-0990W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1000W

Scenario:	Scenario1
From Node:	N-120A
To Node:	N-120B
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	47.76 ft
Control Elevation:	47.76 ft
Cross Section:	X-0290W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1010W

Scenario:	Scenario1
From Node:	N-122
To Node:	N-124
Link Count:	1
Flow Direction:	Both

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	48.01 ft
Control Elevation:	48.01 ft
Cross Section:	X-1010W

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Pipe Link: L-102

Scenario:	Scenario1
From Node:	N-104
To Node:	N-102
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Length:	51.82 ft
FHWA Code:	1
Entr Loss Coef:	0.00
Exit Loss Coef:	0.50
Bend Loss Coef:	0.25
Bend Location:	0.00 dec
Energy Switch:	Energy

Upstream		Downstream	
Invert:	121.16 ft	Invert:	120.09 ft
Manning's N:	0.0130	Manning's N:	0.0130
Geometry: Circular		Geometry: Circular	
Max Depth:	1.50 ft	Max Depth:	1.50 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0130	Manning's N:	0.0130
Top Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0130	Manning's N:	0.0130

Comment:

Weir Link: L-1020W

Scenario:	Scenario1
From Node:	N-123
To Node:	N-125
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	45.40 ft
Control Elevation:	45.40 ft
Cross Section:	X-1020W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Use survey to create best fit trapezoidal section but add bottom clip measured upward from the bottom of tapezoidal section (invert elevation) to top of clip 45.4

Weir Link: L-1030W

Scenario:	Scenario1
From Node:	N-120A
To Node:	NTZ-1530
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	48.36 ft
Control Elevation:	48.36 ft
Cross Section:	X-0350W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1040W

Scenario:	Scenario1
From Node:	N-120B
To Node:	NTZ-1530
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	47.11 ft
Control Elevation:	47.11 ft
Cross Section:	X-0360W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1050W

Scenario:	Scenario1
From Node:	N-125
To Node:	N-127
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	47.33 ft
Control Elevation:	47.33 ft
Cross Section:	X-1050W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600

Orifice Table:	

Comment:

Weir Link: L-1060W

Scenario:	Scenario1
From Node:	N-125A
To Node:	NTZ-1530
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	44.76 ft
Control Elevation:	44.76 ft
Cross Section:	X-0380W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1070W

Scenario:	Scenario1
From Node:	N-127A
To Node:	N-127C
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	42.46 ft
Control Elevation:	42.46 ft
Cross Section:	X-0390W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1080W

Scenario:	Scenario1
From Node:	N-120B
To Node:	N-123A
Link Count:	1
Flow Direction:	Both

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	47.83 ft
Control Elevation:	47.83 ft
Cross Section:	X-0400W

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1090W

Scenario:	Scenario1
From Node:	N-127C
To Node:	NTZ-1530
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	42.87 ft
Control Elevation:	42.87 ft
Cross Section:	X-0410W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1100W

Scenario:	Scenario1
From Node:	N-125
To Node:	N-125A
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	44.86 ft
Control Elevation:	44.86 ft
Cross Section:	X-0340W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1130W

Scenario:	Scenario1
From Node:	N-128C
To Node:	N-128
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	44.70 ft
Control Elevation:	44.70 ft
Cross Section:	X-0420W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1140W

Scenario:	Scenario1
From Node:	N-128
To Node:	N-0350C
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	43.39 ft
Control Elevation:	43.39 ft
Cross Section:	X-0460W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1150W

Scenario:	Scenario1
From Node:	N-101
To Node:	N-103
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	123.41 ft
Control Elevation:	123.41 ft
Cross Section:	X-1150W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600

	Orifice Table:

Comment: X-0430W

Weir Link: L-1160W

Scenario:	Scenario1
From Node:	N-102
To Node:	N-104
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	123.42 ft
Control Elevation:	123.42 ft
Cross Section:	X-1160W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1170W

Scenario:	Scenario1
From Node:	N-109A
To Node:	N-113
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	114.00 ft
Control Elevation:	114.00 ft
Cross Section:	X-0850W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-1180W

Scenario:	Scenario1
From Node:	N-103
To Node:	N-105
Link Count:	1
Flow Direction:	Both

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Damping:	0.0000 ft		
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Irregular	Op Table:	
Invert:	121.78 ft	Ref Node:	
Control Elevation:	121.78 ft	Discharge Coefficients	
Cross Section:	X-1180W	Weir Default:	2.800
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Pipe Link: L-1190P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	40.09 ft	Invert:	39.60 ft
From Node:	N-127B	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	N-127	Geometry: Circular		Geometry: Circular	
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:	41.00 ft	Op Table:		Op Table:	
FHWA Code:	6	Ref Node:		Ref Node:	
Entr Loss Coef:	0.90	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:

Weir Link: L-1190W			
Scenario:	Scenario1	Bottom Clip	
From Node:	N-105	Default:	0.00 ft
To Node:	N-107	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	118.72 ft	Discharge Coefficients	
Control Elevation:	118.72 ft	Weir Default:	2.800
Cross Section:	X-1190W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Pipe Link: L-1200P		Upstream		Downstream	
Scenario:	Scenario1	Invert:	44.57 ft	Invert:	43.96 ft
From Node:	N-125	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-123A	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	0.83 ft	Max Depth:	0.83 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	19.00 ft	Op Table:		Op Table:	
FHWA Code:	6	Ref Node:		Ref Node:	
Entr Loss Coef:	0.90	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:

Weir Link: L-1550W			
Scenario:	Scenario1	Bottom Clip	
From Node:	N-123A	Default:	0.00 ft
To Node:	NTZ-1530	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	45.54 ft	Discharge Coefficients	
Control Elevation:	45.54 ft	Weir Default:	2.800
Cross Section:	X-0370W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: L-2050W			
Scenario:	Scenario1	Bottom Clip	
From Node:	N-120	Default:	0.00 ft
To Node:	N-120B	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	47.32 ft	Discharge Coefficients	
Control Elevation:	47.32 ft	Weir Default:	2.800
Cross Section:	X-0300W	Weir Table:	

Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-5550W

Scenario:	Scenario1
From Node:	N-128C
To Node:	N-128A
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	44.87 ft
Control Elevation:	44.87 ft
Cross Section:	X-0430W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: L-6660W

Scenario:	Scenario1
From Node:	N-128B
To Node:	N-0350C
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	44.01 ft
Control Elevation:	44.01 ft
Cross Section:	X-0440W

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Percolation Link: PC-105

Scenario:	Scenario1
From Node:	N-105
To Node:	GT-105
Link Count:	1
Surface Area Option:	Use 1st Point in Stage/Area Table
Vertical Flow Termination:	Horizontal Flow Algorithm
Perimeter 1:	1717.47 ft

Flow Direction:	Both		
Aquifer Base Elevation:	106.50 ft	Perimeter 2:	1828.20 ft
Water Table Elevation:	116.50 ft	Perimeter 3:	1994.32 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	20.00 ft
Horizontal Conductivity:	9.000 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	4.500 fpd	# of Cells P1 to P2:	4
Fillable Porosity:	0.250	# of Cells P2 to P3:	5
Layer Thickness:	0.81 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' = 116.5- 10= 106.5'
WATER TABLE EL: SHWL = 116.5
LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTHN ARE SAME EL) = 115.69- 116.5= 0.81

BORING : SH13- 355R

Percolation Link: PC-106

Scenario:	Scenario1	Surface Area Option:	Use 1st Point in Stage/Area Table
From Node:	N-106		
To Node:	GT-106	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	799.65 ft
Flow Direction:	Both	Perimeter 2:	923.13 ft
Aquifer Base Elevation:	105.50 ft	Perimeter 3:	1107.48 ft
Water Table Elevation:	114.10 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	9.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	4.500 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	0.53 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' = 115.5- 10= 105.5
WATER TABLE EL: SHWL = 114.1
**SH13-370R SHGWT 116.9
**SH13-360R SHGWT 118.2
SH13-380 R SHGWT 114.1

LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTHN ARE SAME EL) = 114.63-114.1=0.53

**THE CONTOUR LINE FOR THE SHAPE IS 117.75"

Percolation Link: PC-108

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-108		
To Node:	GT-108	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	532.35 ft

Flow Direction:	Both		
Aquifer Base Elevation:	105.25 ft	Perimeter 2:	657.88 ft
Water Table Elevation:	115.00 ft	Perimeter 3:	846.20 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	20.00 ft
Horizontal Conductivity:	9.000 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	4.500 fpd	# of Cells P1 to P2:	4
Fillable Porosity:	0.250	# of Cells P2 to P3:	5
Layer Thickness:	0.85 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' = 115.25- 10= 105.25
**WATER TABLE EL: 114.4
WL-1316-L-1056 SHW 114.4

**LAYER THICKNESS: SA BOTTOM -WT = 115.25-114.4=0.85

**THE AVG CONTOUR LINE FOR THE SHAPE IS 115.25''

Percolation Link: PC-109

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-109		
To Node:	GT-109	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1119.03 ft
Flow Direction:	Both	Perimeter 2:	1244.36 ft
Aquifer Base Elevation:	104.10 ft	Perimeter 3:	1432.36 ft
Water Table Elevation:	114.50 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	9.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	4.500 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	2.72 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' = 114.1- 10= 104.1
WATER TABLE EL: SHWL = 114.1
LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTH ARE SAME EL) = 111.38-114.1 = 2.72
BORING : SH13- 380R

Percolation Link: PC-110

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-110		

To Node:	GT-110		
Link Count:	1	Vertical Flow Termination:	Horizontal Flow Algorithm
Flow Direction:	Both	Perimeter 1:	778.59 ft
Aquifer Base Elevation:	100.00 ft	Perimeter 2:	904.62 ft
Water Table Elevation:	112.60 ft	Perimeter 3:	1092.17 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	20.00 ft
Horizontal Conductivity:	9.000 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	4.500 fpd	# of Cells P1 to P2:	4
Fillable Porosity:	0.250	# of Cells P2 to P3:	5
Layer Thickness:	2.16 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' = 110- 10=100
**WATER TABLE EL: SHWL = 112.6
**LAYER THICKNESS: SA BOTTOM -WT = 110-112.6 = 2.16

THE AVG CONTOUR LINE FOR THE SHAPE IS 114.5' (AVG)
LOWEST SURFACE EL 110

Percolation Link: PC-111

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-111		
To Node:	GT-111	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	447.44 ft
Flow Direction:	Both	Perimeter 2:	572.96 ft
Aquifer Base Elevation:	101.00 ft	Perimeter 3:	761.55 ft
Water Table Elevation:	110.00 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	9.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	4.500 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	1.00 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' = 111 - 10= 101
**WATER TABLE: SHWL = 110
**LAYER THICKNESS: SA BOTTOM - WT (OR SHWL IF, BOTH ARE SAME EL) =111-110=1

SURFACE BOTTOM EL 111

Percolation Link: PC-112

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-112		

To Node:	GT-112		
Link Count:	1	Vertical Flow Termination:	Horizontal Flow Algorithm
Flow Direction:	Both	Perimeter 1:	503.45 ft
Aquifer Base Elevation:	93.50 ft	Perimeter 2:	628.97 ft
Water Table Elevation:	105.20 ft	Perimeter 3:	817.25 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	20.00 ft
Horizontal Conductivity:	9.000 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	4.500 fpd	# of Cells P1 to P2:	4
Fillable Porosity:	0.250	# of Cells P2 to P3:	5
Layer Thickness:	11.70 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' =103.5- 10= 93.5
**WATER TABLE EL: (107.2+103.2)/2=105.2
SH13-395R: SHGWT 107.2 (OPPOSITE)
SH13-400R: SHGWT 103.2 (OPPOSITE)
**LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTH ARE SAME EL) = 105.2- 93.5=11.7

MINIMUM SURFACE EL 103.5
THE AVG CONTOUR LINE FOR THE SHAPE IS 106.5'

Percolation Link: PC-113

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-113		
To Node:	GT-113	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1084.82 ft
Flow Direction:	Both	Perimeter 2:	1210.09 ft
Aquifer Base Elevation:	99.50 ft	Perimeter 3:	1398.00 ft
Water Table Elevation:	105.20 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	45.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	22.500 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	4.30 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' = 109.5- 10= 99.5
**WATER TABLE EL: SHGWL = 105.2
**LAYER THICKNESS: SA BOTTOM -WT = 109.5- 105.2=4.3

MINIMUM SURFACE EL 109.5
** SH13-395R SHGWT EL. 107.2

Percolation Link: PC-114

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-114		
To Node:	GT-114	Vertical Flow Termination:	Horizontal Flow Algorithm

Link Count:	1		
Flow Direction:	Both	Perimeter 1:	278.35 ft
Aquifer Base Elevation:	92.70 ft	Perimeter 2:	403.81 ft
Water Table Elevation:	92.70 ft	Perimeter 3:	592.29 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	20.00 ft
Horizontal Conductivity:	9.000 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	4.500 fpd	# of Cells P1 to P2:	4
Fillable Porosity:	0.250	# of Cells P2 to P3:	5
Layer Thickness:	0.00 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' = 102.7- 10=92.7
(NOT CORRECT)
WATER TABLE EL: SHWL =92.7. BUT SHWL CAN'T BE LOWER THAN AQUIFER BASE EL. SO AQUIFER BASE EL: 93.6''
LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTH ARE SAME EL) =0
BORING :
SH13- 415R

Percolation Link: PC-115

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-115		
To Node:	GT-115	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	509.95 ft
Flow Direction:	Both	Perimeter 2:	530.11 ft
Aquifer Base Elevation:	83.00 ft	Perimeter 3:	718.67 ft
Water Table Elevation:	92.70 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	9.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	4.500 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	0.30 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' = 93- 10=83
**WATER TABLE EL: 92.7 (SH13-415R SHGWT EL)
**LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTHN ARE SAME EL) = 93-92.7=0.3

BORING : SH13- 415R

Percolation Link: PC-115-1

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-115		
To Node:	GT-115_1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	580.32 ft

Flow Direction:	Both		
Aquifer Base Elevation:	83.00 ft	Perimeter 2:	705.84 ft
Water Table Elevation:	92.70 ft	Perimeter 3:	894.16 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	20.00 ft
Horizontal Conductivity:	9.000 fpd	Distance P2 to P3:	50.00 ft
Vertical Conductivity:	4.500 fpd	# of Cells P1 to P2:	4
Fillable Porosity:	0.250	# of Cells P2 to P3:	5
Layer Thickness:	0.30 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' = 93- 10=83
**WATER TABLE EL: 92.7 (SH13-415R SHGWT EL)
**LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTHN ARE SAME EL) = 93-92.7=0.3

BORING : SH13- 415R

Percolation Link: PC-115A

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-115A		
To Node:	GT-115A	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	404.56 ft
Flow Direction:	Both	Perimeter 2:	530.11 ft
Aquifer Base Elevation:	89.50 ft	Perimeter 3:	718.67 ft
Water Table Elevation:	90.50 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	9.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	4.500 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	11.00 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-12' =101.5- 12=89.5
**WATER TABLE EL: 90.5
**LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTHN ARE SAME EL) = 101.5-90.5=11

BORING : SH13- 410R

Percolation Link: PC-117

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-117		
To Node:	GT-117	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1005.94 ft
Flow Direction:	Both	Perimeter 2:	1130.92 ft
Aquifer Base Elevation:	79.00 ft	Perimeter 3:	1318.40 ft
Water Table Elevation:	81.20 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft

Horizontal Conductivity:	9.000 fpd		
Vertical Conductivity:	4.500 fpd	# of Cells P1 to P2:	4
Fillable Porosity:	0.250	# of Cells P2 to P3:	5
Layer Thickness:	12.80 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' =94- 15=79
**WATER TABLE EL: 81.2
**LAYER THICKNESS: 94-81.2= 12.8

BORING : SH13- 425R

Percolation Link: PC-117-1

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-117		
To Node:	GT-117-1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1044.33 ft
Flow Direction:	Both	Perimeter 2:	1163.41 ft
Aquifer Base Elevation:	79.00 ft	Perimeter 3:	1342.06 ft
Water Table Elevation:	81.20 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	9.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	4.500 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	12.80 ft		

Comment: **AQUIFER BASE EL: SURFACE EL @ BORING-10' =94- 15=79
**WATER TABLE EL: 81.2
**LAYER THICKNESS: 94-81.2= 12.8

BORING : SH13- 425R

Percolation Link: PC-118

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-118		
To Node:	GT-118	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	909.09 ft
Flow Direction:	Both	Perimeter 2:	1034.61 ft
Aquifer Base Elevation:	36.20 ft	Perimeter 3:	1222.88 ft
Water Table Elevation:	44.30 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	39.960 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	19.980 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	1.90 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' = 46.2- 10= 36.2

WATER TABLE EL: SHWL =46.2
LAYER THICKNESS: 46.2-44.3=1.9
BORING : SH13- 450L

46.2

Percolation Link: PC-119

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-119		
To Node:	GT-119	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	358.53 ft
Flow Direction:	Both	Perimeter 2:	484.07 ft
Aquifer Base Elevation:	73.00 ft	Perimeter 3:	672.64 ft
Water Table Elevation:	75.50 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	2.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	1.000 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	0.57 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' = 83- 10= 73
WATER TABLE EL: SHWL =75.5
LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTH ARE SAME EL) =74.93-75.5=0.57
BORING : SH13- 435R

Percolation Link: PC-120

Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-120		
To Node:	GT-120	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	211.75 ft
Flow Direction:	Both	Perimeter 2:	337.28 ft
Aquifer Base Elevation:	39.00 ft	Perimeter 3:	525.89 ft
Water Table Elevation:	49.00 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	45.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	18.500 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	0.00 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' =49- 10= 39
WATER TABLE EL: SHWL =49
LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTH ARE SAME EL) =0
BORING : SH13- 445R

Percolation Link: PC-128			
Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-128		
To Node:	GT-128	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1208.12 ft
Flow Direction:	Both	Perimeter 2:	1333.66 ft
Aquifer Base Elevation:	34.80 ft	Perimeter 3:	1521.97 ft
Water Table Elevation:	43.30 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	12.000 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	6.000 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	5.19 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' =44.8- 10= 34.8
WATER TABLE EL: SHWL =43.3
LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTH ARE SAME EL) =38.11-43.3=5.19
BORING : SH14- 10010R

Percolation Link: PC_126-1			
Scenario:	Scenario1	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	N-126		
To Node:	GT-126	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1130.85 ft
Flow Direction:	Both	Perimeter 2:	1224.52 ft
Aquifer Base Elevation:	35.30 ft	Perimeter 3:	1331.71 ft
Water Table Elevation:	43.80 ft	Distance P1 to P2:	20.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	50.00 ft
Horizontal Conductivity:	11.900 fpd	# of Cells P1 to P2:	4
Vertical Conductivity:	5.950 fpd	# of Cells P2 to P3:	5
Fillable Porosity:	0.250		
Layer Thickness:	1.50 ft		

Comment: AQUIFER BASE EL: SURFACE EL @ BORING-10' = 45.3- 10= 35.3
**WATER TABLE EL: SHGWT EL. 43.8
**LAYER THICKNESS: SA BOTTOM -SHWL (OR SHWL IF, BOTHN ARE SAME EL) = 45.3-43.8=1.5

SH13-470L

Pipe Link: I-118		Upstream		Downstream	
Scenario:	Scenario1	Invert:	42.06 ft	Invert:	41.65 ft
From Node:	N-118	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	N-122	Geometry: Circular		Geometry: Circular	
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:	51.56 ft	Op Table:		Op Table:	

FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0130	Manning's N:	0.0130
Exit Loss Coef:	0.25	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:	0.0130	Manning's N:	0.0130

Comment:

Simulation: 100 YR-24 HR

Scenario: Scenario1
Run Date/Time: 4/23/2025 11:50:25 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	36.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.0010	900.0000
Max Calculation Time:		10.0000	

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	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources		Lookup Tables	
Rainfall Folder:		Boundary Stage Set:	100YR24HR
Reference ET Folder:		Extern Hydrograph Set:	External Hydro
Unit Hydrograph Folder:		Curve Number Set:	CN_1
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	Impervious Set_1
		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:	0.0000 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0000 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	9.20 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
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:

Simulation: 100 YR-24 HR

Scenario:	Scenario1
Run Date/Time:	4/23/2025 11:50:25 AM
Program Version:	ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	36.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.0010	900.0000
Max Calculation Time:		10.0000	

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	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set: 100YR24HR
Extern Hydrograph Set: External Hydro
Curve Number Set: CN_1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Impervious Set_1
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: 0.0000 ft
Max dZ: 1.0000 ft
IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Opt: Global
OF Region Rain Opt: Global

Link Optimizer Tol:	0.0000 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	9.20 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
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:

Weir Cross Section: X-0010W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	136.02
1	1.98	136.03
2	3.96	136.05
3	5.94	136.06
4	7.92	136.01
5	9.90	135.99
6	11.88	135.96
7	13.87	135.93
8	15.85	135.93
9	17.83	135.90
10	19.81	135.87
11	21.79	135.82
12	23.77	135.75
13	25.75	135.70
14	27.73	135.68
15	29.71	135.63
16	31.69	135.57
17	33.67	135.54
18	35.65	135.51
19	37.63	135.46
20	39.62	135.42
21	41.60	135.40
22	43.58	135.35
23	45.56	135.31
24	47.54	135.28
25	49.52	135.26
26	51.50	135.25
27	53.48	135.21
28	55.46	135.21
29	57.44	135.15

Order	Station [ft]	Elevation [ft]
30	59.42	135.10
31	61.40	135.05
32	63.38	135.01
33	65.37	135.01
34	67.35	134.98
35	69.33	134.93
36	71.31	134.89
37	73.29	134.84
38	75.27	134.79
39	77.25	134.75
40	79.23	134.71
41	81.21	134.67
42	83.19	134.63
43	85.17	134.57
44	87.15	134.55
45	89.13	134.52
46	91.12	134.45
47	93.10	134.48
48	95.08	134.46
49	97.06	134.44
50	99.04	134.42
51	101.02	134.42
52	103.00	134.34
53	104.98	134.31
54	106.96	134.28
55	108.94	134.27
56	110.92	134.28
57	112.90	134.22
58	114.88	134.19
59	116.87	134.17
60	118.85	134.15
61	120.83	134.13
62	122.81	134.09
63	124.79	134.06
64	126.77	134.03
65	128.36	134.00
66	129.95	133.97
67	131.54	133.93
68	133.13	133.91
69	134.72	133.91
70	136.31	133.92
71	137.90	133.91
72	139.49	133.88
73	141.08	133.85
74	142.67	133.81
75	144.26	133.80
76	145.85	133.82
77	147.44	133.71
78	149.03	133.65

Order	Station [ft]	Elevation [ft]
79	150.63	133.67
80	152.22	133.64
81	153.81	133.60
82	155.40	133.59
83	156.99	133.60
84	158.58	133.62
85	160.17	133.57
86	161.76	133.50
87	163.35	133.42
88	164.94	133.44
89	166.53	133.44
90	168.12	133.42
91	169.71	133.41
92	171.30	133.39
93	172.89	133.33
94	174.48	133.34
95	176.07	133.36
96	177.66	133.32
97	179.25	133.27
98	180.84	133.21
99	182.43	133.23
100	184.02	133.23
101	185.61	133.21
102	187.20	133.16
103	188.80	133.11
104	190.39	133.11
105	191.98	133.07
106	193.57	133.03
107	195.16	133.00
108	196.75	132.97
109	198.34	132.96
110	199.93	132.96
111	201.52	132.95
112	203.11	132.91
113	204.70	132.89
114	206.29	132.87
115	207.88	132.87
116	209.47	132.85
117	211.06	132.82
118	212.65	132.78
119	214.24	132.74
120	215.83	132.72
121	217.42	132.71
122	219.01	132.71
123	220.60	132.72
124	222.19	132.69
125	223.78	132.65
126	225.37	132.62
127	226.96	132.61

Order	Station [ft]	Elevation [ft]
128	228.56	132.59
129	230.15	132.55
130	231.74	132.53
131	233.33	132.53
132	234.92	132.52
133	236.51	132.51
134	238.10	132.47
135	239.69	132.43
136	241.28	132.40
137	242.87	132.42
138	244.46	132.43
139	246.05	132.45
140	247.64	132.48
141	249.23	132.45
142	250.82	132.38
143	252.41	132.36
144	254.00	132.34
145	255.59	132.29
146	257.18	132.26
147	258.77	132.22
148	260.36	132.20
149	261.95	132.17
150	263.54	132.14
151	265.13	132.14
152	266.73	132.12
153	268.32	132.07
154	269.91	132.02
155	271.50	131.99
156	273.09	132.01
157	274.68	131.98
158	276.27	131.95
159	277.86	131.92
160	279.45	131.90
161	281.04	131.89
162	282.63	131.82
163	284.22	131.79
164	285.81	131.78
165	287.40	131.76
166	288.99	131.73
167	290.58	131.71
168	292.17	131.69
169	293.76	131.66
170	295.35	131.64
171	296.94	131.62
172	298.53	131.59
173	300.12	131.56
174	301.71	131.54
175	303.30	131.53
176	304.89	131.49

Order	Station [ft]	Elevation [ft]
177	306.49	131.45
178	308.08	131.43
179	309.67	131.42
180	311.26	131.41
181	312.85	131.39
182	314.44	131.36
183	316.03	131.34
184	317.62	131.32
185	319.21	131.30
186	320.80	131.27
187	322.39	131.23
188	323.98	131.20
189	325.57	131.18
190	327.16	131.16
191	328.75	131.14
192	330.34	131.11
193	332.69	131.08
194	335.04	131.04
195	337.39	131.02
196	339.74	130.99
197	342.08	130.95
198	344.43	130.89
199	346.78	130.85
200	349.13	130.82
201	351.48	130.79
202	353.83	130.74
203	356.17	130.72
204	358.52	130.67
205	360.87	130.67
206	363.22	130.64
207	365.57	130.58
208	367.92	130.57
209	370.27	130.54
210	372.61	130.51
211	374.96	130.48
212	377.31	130.43
213	379.66	130.37
214	382.01	130.32
215	384.36	130.26
216	386.70	130.23
217	389.05	130.22
218	391.40	130.18
219	393.75	130.15
220	396.10	130.12
221	398.45	130.10
222	400.80	130.05
223	403.14	130.01
224	405.49	129.99
225	407.84	129.95

Order	Station [ft]	Elevation [ft]
226	410.19	129.92
227	412.54	129.90
228	414.89	129.85
229	417.23	129.80
230	419.58	129.78
231	421.93	129.75
232	424.28	129.71
233	426.63	129.67
234	428.98	129.61
235	431.33	129.58
236	433.67	129.60
237	436.02	129.56
238	438.37	129.52
239	440.72	129.49
240	443.07	129.48
241	445.42	129.44
242	447.77	129.40
243	450.11	129.38
244	452.46	129.34
245	454.81	129.27
246	457.16	129.23
247	459.51	129.21
248	461.86	129.21
249	464.20	129.20
250	466.55	129.16
251	468.90	129.11
252	471.25	129.06
253	473.60	129.02
254	475.95	129.05
255	478.30	129.04
256	480.64	128.99
257	482.38	128.96
258	484.12	128.93
259	485.85	128.90
260	487.59	128.89
261	489.33	128.87
262	491.07	128.86
263	492.80	128.84
264	494.54	128.80
265	496.28	128.76
266	498.01	128.74
267	499.75	128.72
268	501.49	128.68
269	503.23	128.64
270	504.96	128.61
271	506.70	128.58
272	508.44	128.55
273	510.59	128.56
274	512.73	128.53

Order	Station [ft]	Elevation [ft]
275	514.88	128.49
276	517.03	128.48

Comment:

Weir Cross Section: X-0020W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	119.13
1	2.13	119.20
2	4.27	119.33
3	6.40	119.22
4	8.53	119.13
5	10.66	119.08
6	12.80	118.92
7	14.93	118.91
8	17.06	118.87
9	19.20	118.82
10	21.33	118.86
11	23.46	118.89
12	25.59	118.84
13	27.73	118.82
14	29.86	118.88
15	31.99	118.89
16	34.13	118.92
17	36.26	119.07
18	38.39	119.24
19	40.53	119.32
20	42.66	119.36
21	44.79	119.37
22	46.92	119.30
23	49.06	119.19
24	51.19	119.10
25	53.32	119.02
26	55.46	119.08
27	57.59	119.06
28	59.72	118.99
29	61.85	118.91
30	63.99	118.96
31	66.12	118.92
32	68.25	118.84
33	70.39	118.81
34	72.52	118.82

Order	Station [ft]	Elevation [ft]
35	74.65	118.88
36	76.78	119.08
37	78.92	119.31
38	81.05	119.35
39	83.18	119.23
40	85.32	119.17
41	87.45	119.04
42	89.58	118.79
43	91.71	118.65
44	93.85	118.57
45	95.98	118.51
46	98.11	118.44
47	100.25	118.35
48	102.38	118.22
49	104.51	118.16
50	106.64	118.17
51	108.78	118.11
52	110.91	117.95
53	113.04	117.86
54	115.18	117.85
55	117.31	117.86
56	119.44	117.97
57	121.58	118.12
58	123.71	117.90
59	125.84	117.72
60	127.97	117.60
61	130.11	117.47
62	132.24	117.28
63	134.37	117.10
64	136.51	116.89
65	138.64	116.69
66	140.77	116.38
67	142.90	116.03
68	145.04	115.69
69	147.17	115.56
70	149.30	115.58
71	151.44	115.49
72	153.57	115.32
73	155.70	115.23
74	157.83	115.16
75	159.97	115.18
76	162.10	115.14
77	164.23	114.96
78	166.37	114.90
79	168.50	114.90
80	170.63	114.83
81	172.76	114.68
82	174.90	114.55
83	177.03	114.36

Order	Station [ft]	Elevation [ft]
84	179.16	114.18
85	181.30	113.90
86	183.43	113.61
87	185.56	113.49
88	187.70	113.49
89	189.83	113.43
90	191.96	113.40
91	194.09	113.32
92	196.23	113.17
93	198.36	113.11
94	200.49	113.09
95	202.63	113.04
96	204.76	112.94
97	206.89	112.92
98	209.02	112.95
99	211.16	112.99
100	213.29	112.87
101	215.42	112.90
102	217.56	112.98
103	219.69	113.03
104	221.82	113.03
105	223.95	113.02
106	226.09	112.97
107	228.22	112.80
108	230.35	112.60
109	232.49	112.56
110	234.62	112.63
111	236.75	112.74
112	238.88	112.82
113	241.02	112.94
114	243.15	113.09
115	245.28	113.14
116	247.42	113.14
117	249.55	113.32
118	251.68	113.46
119	253.82	113.49
120	255.95	113.63
121	258.08	113.71
122	260.21	113.80
123	262.35	113.91
124	264.48	113.96
125	266.61	113.98
126	268.75	113.95
127	270.88	113.96
128	273.01	113.94
129	275.24	113.97
130	277.48	114.09
131	279.71	114.27
132	281.95	114.43

Order	Station [ft]	Elevation [ft]
133	284.18	114.49
134	286.41	114.49
135	288.65	114.46
136	290.88	114.49
137	293.11	114.74
138	295.35	114.86
139	297.58	114.86
140	299.81	114.88
141	302.05	114.87
142	304.28	114.85
143	306.52	114.92
144	308.75	115.04
145	310.98	115.18
146	313.22	115.22
147	315.45	115.29
148	317.68	115.34
149	319.92	115.22
150	322.15	115.04
151	324.38	115.19
152	326.62	115.31
153	328.85	115.33
154	331.08	115.32
155	333.32	115.28
156	335.55	115.28
157	337.79	115.34
158	340.02	115.42
159	342.25	115.48
160	344.49	115.54
161	346.72	115.56
162	348.95	115.60
163	351.19	115.67
164	353.42	115.71
165	355.65	115.72
166	357.89	115.75
167	360.12	115.73
168	362.36	115.72
169	364.59	115.75
170	366.82	115.84
171	369.06	115.95
172	371.29	116.07
173	373.52	116.24
174	375.76	116.31
175	377.99	116.41
176	380.22	116.51
177	382.46	116.56
178	384.69	116.50
179	386.92	116.37
180	389.16	116.16
181	391.39	115.92

Order	Station [ft]	Elevation [ft]
182	393.63	115.67
183	395.86	115.61
184	398.09	115.55
185	400.33	115.58
186	402.56	116.26
187	404.79	116.93
188	407.03	117.22
189	409.26	117.43
190	411.49	117.53
191	413.73	117.61
192	415.96	117.69
193	418.32	117.76
194	420.67	117.65
195	423.02	117.62
196	425.38	117.56
197	427.73	117.47
198	430.09	117.39
199	432.44	117.45
200	434.80	117.59
201	437.15	117.62
202	439.51	117.39
203	441.86	117.00
204	444.21	116.57
205	446.57	116.07
206	448.92	115.46
207	451.28	114.92
208	453.63	114.21
209	455.47	113.39
210	457.31	112.65
211	459.14	111.97
212	460.98	111.31
213	462.82	110.92
214	464.65	110.67
215	466.49	110.55
216	468.33	110.50
217	470.16	110.52
218	472.00	110.62
219	473.84	110.77
220	475.67	111.10
221	477.51	111.43
222	479.35	111.78
223	481.18	112.17
224	483.02	112.56
225	484.86	112.93
226	486.69	113.29
227	488.53	113.65
228	490.37	113.90
229	492.20	114.06
230	494.04	114.13

Order	Station [ft]	Elevation [ft]
231	495.88	114.24
232	497.71	114.30
233	499.55	114.31
234	501.39	114.30
235	503.22	114.29
236	505.06	114.27
237	506.90	114.25
238	508.73	114.22
239	510.57	114.20
240	512.41	114.18

Comment:

Weir Cross Section: X-0040W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	49.91
1	1.75	49.93
2	3.50	49.95
3	5.26	49.92
4	7.01	49.88
5	8.76	49.80
6	10.51	49.75
7	12.27	49.71
8	14.02	49.67
9	15.77	49.59
10	17.52	49.51
11	19.27	49.41
12	21.03	49.27
13	22.78	49.15
14	24.53	49.03
15	26.28	48.89
16	28.04	48.79
17	29.79	48.71
18	31.54	48.65
19	33.29	48.58
20	35.05	48.50
21	36.80	48.44
22	38.55	48.39
23	40.30	48.33
24	42.05	48.27
25	43.81	48.21
26	45.56	48.15

Order	Station [ft]	Elevation [ft]
27	47.31	48.09
28	49.06	48.03
29	50.82	47.97
30	52.57	47.93
31	54.32	47.89
32	56.07	47.83
33	57.57	47.81
34	59.08	47.78
35	60.58	47.70
36	62.08	47.66
37	63.58	47.66
38	65.08	47.65
39	66.59	47.65
40	68.09	47.72
41	69.59	47.77
42	71.09	47.76
43	72.59	47.78
44	74.10	47.81
45	75.60	47.83
46	77.10	47.85
47	78.60	47.86
48	80.11	47.85

Comment:

Weir Cross Section: X-0050W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	128.48
1	1.80	128.63
2	3.60	128.66
3	5.40	128.66
4	7.20	128.68
5	8.99	128.77
6	10.79	128.84
7	12.59	128.87
8	14.39	128.85
9	16.19	128.81
10	17.99	128.80
11	19.79	128.83
12	21.59	128.89
13	23.39	128.92
14	25.18	128.94

Order	Station [ft]	Elevation [ft]
15	26.98	128.99
16	28.78	128.99
17	30.58	128.96
18	32.38	128.90
19	34.18	128.92
20	35.98	128.92
21	37.78	128.88
22	39.57	128.78
23	41.37	128.56
24	43.17	128.31
25	44.97	128.05
26	46.77	127.80
27	48.57	127.52
28	50.37	127.25
29	52.17	127.05
30	53.97	126.88
31	55.76	126.72
32	57.56	126.54
33	59.31	126.33
34	61.06	126.14
35	62.81	125.97
36	64.56	125.84
37	66.30	125.76
38	68.05	125.69
39	69.80	125.58
40	71.55	125.54
41	73.30	125.56
42	75.05	125.67
43	76.80	125.79
44	78.54	125.93
45	80.29	126.15
46	82.04	126.18
47	83.79	126.14
48	85.54	126.06
49	87.75	126.13
50	89.97	126.23
51	92.18	126.31
52	94.39	126.31
53	96.61	126.33
54	98.82	126.45
55	101.04	126.36
56	103.25	126.35
57	105.47	126.32
58	107.68	126.33
59	109.89	126.37
60	112.11	126.37
61	114.32	126.34
62	116.54	126.41
63	118.75	126.41

Order	Station [ft]	Elevation [ft]
64	120.97	126.40
65	122.35	126.40
66	123.73	126.39
67	125.11	126.39
68	126.49	126.38
69	127.87	126.36
70	129.25	126.35
71	130.63	126.35
72	132.01	126.33
73	133.39	126.28
74	134.77	126.26
75	136.15	126.28
76	137.53	126.30
77	138.91	126.30
78	140.29	126.30
79	141.67	126.30
80	143.05	126.27
81	144.43	126.25
82	145.81	126.28
83	147.19	126.31
84	148.57	126.31
85	149.95	126.32
86	151.33	126.35
87	152.71	126.35
88	154.09	126.34
89	155.48	126.36
90	156.86	126.38
91	158.24	126.38
92	159.62	126.38
93	161.00	126.37
94	162.38	126.35
95	163.76	126.36
96	165.14	126.37
97	166.49	126.38
98	167.85	126.39
99	169.20	126.39
100	170.56	126.45
101	171.91	126.52
102	173.27	126.57
103	174.63	126.63
104	175.98	126.70
105	177.34	126.77
106	178.69	126.87
107	180.05	126.96
108	181.40	127.05
109	182.76	127.14
110	184.11	127.21
111	185.47	127.27
112	186.82	127.30

Order	Station [ft]	Elevation [ft]
113	188.18	127.31
114	189.53	127.32
115	190.89	127.43
116	192.24	127.59
117	193.60	127.63
118	194.96	127.66
119	196.31	127.63
120	197.67	127.60
121	199.02	127.55
122	200.38	127.51
123	201.73	127.50
124	203.09	127.50
125	204.44	127.55
126	205.80	127.61
127	207.15	127.65
128	208.51	127.67
129	211.00	127.70
130	213.49	127.70
131	215.98	127.69
132	218.47	127.71
133	220.96	127.76
134	223.45	127.83
135	225.94	127.92
136	228.43	127.95
137	230.92	127.87
138	233.41	127.71
139	235.90	127.67
140	238.39	127.71
141	240.88	127.71
142	243.37	127.70
143	245.86	127.74
144	248.35	127.73
145	250.84	127.82
146	253.34	127.86
147	255.83	127.90
148	258.32	127.91
149	260.81	127.95
150	263.30	127.90
151	265.79	127.91
152	268.28	127.95
153	270.77	127.96
154	273.26	128.00
155	275.75	127.97
156	278.24	128.00
157	280.73	128.05
158	283.22	128.04
159	285.71	128.12
160	288.20	128.20
161	290.33	128.25

Order	Station [ft]	Elevation [ft]
162	292.45	128.29
163	294.58	128.31
164	296.70	128.34
165	298.83	128.36
166	300.96	128.37
167	303.08	128.37
168	305.21	128.42
169	307.33	128.48
170	309.46	128.51
171	311.59	128.52
172	313.71	128.54
173	315.84	128.58
174	317.96	128.60
175	320.09	128.67
176	322.22	128.73
177	324.34	128.78
178	326.47	128.84
179	328.59	128.91
180	330.72	129.00
181	332.85	129.05
182	334.97	129.12
183	337.10	129.15
184	339.22	129.22
185	341.35	129.30
186	343.47	129.36
187	345.60	129.40
188	347.73	129.48
189	349.85	129.52
190	351.98	129.58
191	354.10	129.62
192	356.23	129.66
193	358.36	129.74
194	360.48	129.82
195	362.61	129.86
196	364.73	129.91
197	366.86	129.98
198	368.99	130.04
199	371.11	130.10
200	373.24	130.16
201	375.36	130.21
202	377.49	130.30
203	379.62	130.40
204	381.74	130.49
205	383.87	130.59
206	385.99	130.66
207	388.12	130.71
208	390.25	130.78
209	392.37	130.84
210	394.50	130.91

Order	Station [ft]	Elevation [ft]
211	396.62	130.98
212	398.75	131.04
213	400.88	131.09
214	403.00	131.14
215	405.13	131.21
216	407.25	131.28
217	409.38	131.34
218	411.51	131.40
219	413.63	131.45
220	415.76	131.48
221	417.88	131.55
222	420.01	131.66
223	422.14	131.72
224	424.26	131.83
225	425.94	131.92
226	427.63	132.01
227	429.31	132.09
228	430.99	132.17
229	432.68	132.24
230	434.36	132.31
231	436.04	132.35
232	437.73	132.35
233	439.41	132.40
234	441.09	132.46
235	442.78	132.52
236	444.46	132.58
237	446.14	132.62
238	447.83	132.64
239	449.51	132.69
240	451.19	132.74
241	452.88	132.77
242	454.56	132.86
243	456.24	132.87
244	457.92	132.83
245	459.61	132.88
246	461.29	132.92
247	462.97	132.96
248	464.66	132.97
249	466.34	132.95
250	468.02	132.92
251	469.71	132.85
252	471.39	132.80
253	473.07	132.77
254	474.76	132.72
255	476.44	132.72
256	478.12	132.74
257	480.10	132.76
258	482.07	132.74
259	484.04	132.80

Order	Station [ft]	Elevation [ft]
260	486.02	132.85
261	487.99	132.89
262	489.97	132.91
263	491.94	132.91
264	493.91	132.93
265	495.89	132.92
266	497.86	132.93
267	499.84	133.00
268	501.81	133.04
269	503.78	133.05
270	505.76	133.04
271	507.73	133.05
272	509.71	133.13

Comment:

Weir Cross Section: X-0070W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	127.16
1	2.44	126.30
2	4.88	125.94
3	7.32	125.95
4	9.76	125.98
5	12.20	126.02
6	14.64	126.08
7	17.08	126.15
8	19.52	126.19
9	21.96	126.24
10	24.40	126.29
11	26.84	126.35
12	29.28	126.49
13	31.72	126.61
14	34.16	126.70
15	36.60	126.73
16	39.04	126.72
17	41.44	126.77
18	43.84	126.81
19	46.23	126.94
20	48.63	127.01
21	51.03	126.98
22	53.42	126.94
23	55.82	126.89

Order	Station [ft]	Elevation [ft]
24	58.22	126.89
25	60.61	126.97
26	63.01	127.02
27	65.41	127.03
28	67.80	127.07
29	70.20	127.23
30	72.60	127.50
31	74.99	127.59
32	77.39	127.71
33	79.82	127.83
34	82.26	127.96
35	84.69	128.03
36	87.13	127.91
37	89.56	127.88
38	91.99	128.01
39	94.43	128.16
40	96.86	128.37
41	99.30	128.46
42	101.73	128.50
43	104.16	128.38
44	106.60	128.21
45	109.03	128.18
46	111.47	128.36
47	113.90	128.44
48	116.33	128.28
49	118.77	128.02
50	121.20	127.74
51	123.63	127.42
52	126.07	127.12
53	128.50	126.82
54	130.94	126.37
55	133.37	126.00
56	135.80	125.86
57	138.24	125.81
58	140.67	125.78
59	143.11	125.78
60	145.54	125.85
61	147.97	125.86
62	150.41	125.91
63	152.84	125.87
64	155.28	125.84
65	156.68	125.82
66	158.09	125.79
67	159.50	125.76
68	160.91	125.76
69	162.32	125.77
70	163.73	125.82
71	165.14	125.87
72	166.54	125.90

Order	Station [ft]	Elevation [ft]
73	167.95	125.94
74	169.36	125.96
75	170.77	125.98
76	172.18	126.01
77	173.59	126.05
78	175.00	126.11
79	176.40	126.20
80	177.81	126.29
81	179.22	126.40
82	180.63	126.53
83	182.04	126.69
84	183.45	126.79
85	184.86	126.85
86	186.26	126.87
87	187.67	126.89
88	189.08	126.98
89	190.49	127.06
90	191.90	127.13
91	193.31	127.21
92	194.72	127.28
93	196.12	127.35
94	197.53	127.41
95	198.94	127.37
96	200.35	127.33
97	202.37	127.35
98	204.40	127.32
99	206.42	127.24
100	208.44	127.10
101	210.46	126.94
102	212.49	126.70
103	214.51	126.43
104	216.53	126.15
105	218.56	125.95
106	220.58	125.82
107	222.60	125.63
108	224.63	125.44
109	226.65	125.34
110	228.67	125.31
111	230.69	125.37
112	232.72	125.48
113	234.74	125.61
114	236.76	125.62
115	238.79	125.59
116	240.81	125.56
117	242.83	125.54
118	244.85	125.37
119	246.88	125.15
120	248.90	124.92
121	250.92	124.73

Order	Station [ft]	Elevation [ft]
122	252.95	124.66
123	254.97	124.58
124	256.99	124.49
125	259.01	124.49
126	261.04	124.49
127	263.06	124.49
128	265.08	124.48
129	267.11	124.46
130	269.13	124.41
131	271.15	124.37
132	273.17	124.33
133	275.20	124.31
134	277.22	124.32
135	279.24	124.29
136	281.27	124.24
137	283.29	124.18
138	285.31	124.14
139	287.34	124.09
140	289.36	124.05
141	291.38	124.00
142	293.40	123.95
143	295.43	123.91
144	297.45	123.90
145	299.47	123.88
146	301.50	123.85
147	303.52	123.84
148	305.54	123.83
149	307.56	123.83
150	309.59	123.84
151	311.61	123.86
152	313.63	123.84
153	315.66	123.84
154	317.68	123.82
155	319.70	123.80
156	321.72	123.79
157	323.75	123.77
158	325.77	123.74
159	327.79	123.71
160	329.82	123.73
161	331.84	123.71
162	333.86	123.70
163	335.88	123.68
164	337.91	123.63
165	339.93	123.60
166	341.95	123.56
167	343.98	123.52
168	346.00	123.47
169	348.02	123.44
170	350.05	123.41

Order	Station [ft]	Elevation [ft]
171	352.07	123.40
172	354.09	123.38
173	356.11	123.35
174	358.14	123.32
175	360.16	123.31
176	362.18	123.27
177	364.21	123.26
178	366.23	123.25
179	368.25	123.25
180	370.27	123.21
181	372.30	123.20
182	374.32	123.20
183	376.34	123.19
184	378.37	123.18
185	380.39	123.17
186	382.41	123.16
187	384.43	123.15
188	386.46	123.15
189	388.48	123.14
190	390.50	123.13
191	392.53	123.12
192	394.55	123.12
193	396.57	123.11
194	398.59	123.09
195	400.62	123.05
196	402.64	123.01
197	404.66	123.01
198	406.69	122.99
199	408.71	122.96
200	410.73	122.92
201	412.75	122.86
202	414.78	122.81
203	416.80	122.76
204	418.82	122.72
205	420.85	122.66
206	422.87	122.60
207	424.89	122.52
208	426.92	122.49
209	428.94	122.47
210	430.96	122.41
211	432.98	122.34
212	435.01	122.29
213	437.03	122.25
214	439.05	122.22
215	441.08	122.19
216	443.10	122.16
217	445.12	122.17
218	447.14	122.17
219	449.17	122.17

Order	Station [ft]	Elevation [ft]
220	451.19	122.19
221	453.21	122.23
222	455.24	122.22
223	457.26	122.18
224	459.28	122.15
225	460.65	122.13
226	462.03	122.09
227	463.40	122.05
228	464.77	122.01
229	466.14	121.98
230	467.51	121.96
231	468.88	121.93
232	470.26	121.90
233	471.63	121.88
234	473.00	121.86
235	474.37	121.86
236	475.74	121.85
237	477.11	121.85
238	478.49	121.84
239	479.86	121.87
240	481.23	121.88
241	482.60	121.89
242	483.97	121.89
243	485.34	121.89
244	486.72	121.88
245	488.09	121.86
246	489.46	121.84
247	490.83	121.82
248	492.20	121.82
249	493.58	121.83
250	494.95	121.82
251	496.32	121.83
252	497.69	121.83
253	499.06	121.83
254	500.43	121.81
255	501.81	121.80
256	503.18	121.80
257	504.55	121.80
258	505.92	121.80
259	507.29	121.79
260	508.66	121.79
261	510.04	121.80
262	511.41	121.81
263	512.78	121.79
264	514.15	121.79
265	515.52	121.79
266	516.89	121.78
267	518.27	121.76
268	519.64	121.76

Order	Station [ft]	Elevation [ft]
269	521.01	121.76
270	522.38	121.76
271	523.75	121.77
272	525.13	121.78
273	526.50	121.78
274	527.87	121.75
275	529.24	121.74
276	530.61	121.74
277	531.98	121.74
278	533.36	121.75
279	534.73	121.75
280	536.10	121.76
281	537.47	121.79
282	538.84	121.81
283	540.21	121.82
284	541.59	121.82
285	542.96	121.82
286	544.33	121.82
287	545.70	121.83
288	547.07	121.81
289	548.44	121.79
290	549.82	121.74
291	551.19	121.71
292	552.56	121.75
293	553.93	121.78
294	555.30	121.79
295	556.68	121.80
296	558.05	121.81
297	559.42	121.83
298	560.79	121.84
299	562.16	121.84
300	563.53	121.83
301	564.91	121.80
302	566.28	121.79
303	567.65	121.81
304	569.02	121.81
305	570.39	121.80
306	571.76	121.80
307	573.14	121.80
308	574.51	121.79
309	575.88	121.77
310	577.25	121.76
311	578.62	121.75
312	579.99	121.73
313	581.37	121.72
314	582.74	121.72
315	584.11	121.72
316	585.48	121.72
317	586.85	121.72

Order	Station [ft]	Elevation [ft]
318	588.23	121.71
319	589.60	121.70
320	590.97	121.69
321	592.34	121.69
322	593.71	121.68
323	595.08	121.68
324	596.46	121.66
325	597.83	121.64
326	599.20	121.63
327	600.57	121.63
328	601.94	121.66
329	603.31	121.70
330	604.69	121.71
331	606.06	121.71
332	607.43	121.73
333	608.80	121.74
334	610.17	121.75
335	611.54	121.77
336	612.92	121.78
337	614.29	121.79
338	615.66	121.80
339	617.03	121.80
340	618.40	121.81
341	619.78	121.78
342	621.15	121.74
343	622.52	121.69
344	623.89	121.64
345	625.26	121.60
346	626.63	121.57
347	628.01	121.55
348	629.38	121.55
349	630.75	121.56
350	632.12	121.56
351	633.49	121.55
352	634.86	121.56
353	637.17	121.55
354	639.48	121.54
355	641.79	121.53
356	644.10	121.53
357	646.41	121.53
358	648.72	121.53
359	651.03	121.51
360	653.34	121.50
361	655.65	121.50
362	657.96	121.52
363	660.27	121.52
364	662.58	121.52
365	664.89	121.52
366	667.20	121.53

Order	Station [ft]	Elevation [ft]
367	669.51	121.54
368	671.82	121.57
369	674.13	121.59
370	676.44	121.62
371	678.75	121.64
372	681.06	121.64
373	683.37	121.64
374	685.68	121.65
375	687.99	121.64
376	690.30	121.63
377	692.61	121.63
378	694.92	121.64
379	697.23	121.61
380	699.54	121.60
381	701.85	121.61
382	704.16	121.61
383	706.47	121.62
384	708.78	121.62
385	710.96	121.61
386	713.13	121.63
387	715.31	121.65
388	717.48	121.65
389	719.66	121.66
390	721.83	121.69
391	724.00	121.71
392	726.18	121.76
393	728.35	121.79
394	730.53	121.79
395	732.70	121.82
396	734.88	121.86
397	737.05	121.84
398	739.23	121.84
399	741.40	121.82
400	743.58	121.83
401	745.75	121.82
402	747.93	121.84
403	750.10	121.88
404	752.28	121.90
405	754.45	121.91
406	756.63	121.93
407	758.80	121.92
408	760.98	121.86
409	763.15	121.90
410	765.33	121.97
411	767.50	122.05
412	769.67	122.07
413	771.85	122.10
414	774.02	122.15
415	776.20	122.07

Order	Station [ft]	Elevation [ft]
416	778.37	122.00
417	779.90	121.84
418	781.42	121.72
419	782.95	121.62
420	784.47	121.57
421	786.00	121.54
422	787.52	121.57
423	789.05	121.61
424	790.58	121.68
425	792.10	121.76
426	793.63	121.84
427	795.15	121.86
428	796.68	121.88
429	798.20	121.91
430	799.73	121.92
431	801.25	121.93
432	802.78	121.92
433	804.30	121.92
434	805.83	121.93
435	807.35	121.94
436	808.88	121.93
437	810.40	121.96
438	811.93	122.00
439	813.45	122.04
440	814.98	122.08
441	816.50	122.12
442	818.03	122.15
443	819.55	122.16
444	821.08	122.17
445	822.60	122.18
446	824.13	122.20
447	825.65	122.24
448	827.18	122.30
449	828.48	122.34
450	829.79	122.38
451	831.10	122.44
452	832.40	122.49
453	833.71	122.51
454	835.01	122.52
455	836.32	122.51
456	837.63	122.46
457	838.93	122.36
458	840.24	122.28
459	841.54	122.23
460	842.85	122.23
461	844.16	122.25
462	845.46	122.27
463	846.77	122.29
464	848.07	122.30

Order	Station [ft]	Elevation [ft]
465	849.38	122.31
466	850.69	122.32
467	851.99	122.32
468	853.30	122.36
469	854.60	122.39
470	855.91	122.42
471	857.22	122.44
472	858.52	122.44
473	859.83	122.43
474	861.13	122.40
475	862.44	122.37
476	863.75	122.33
477	865.05	122.28
478	866.36	122.25
479	867.66	122.23
480	868.97	122.22
481	870.27	122.22
482	871.58	122.22
483	872.89	122.22
484	874.19	122.23
485	875.50	122.24
486	876.80	122.26
487	878.11	122.29
488	879.42	122.32
489	880.72	122.34
490	882.03	122.36
491	883.33	122.36
492	884.64	122.36
493	885.95	122.35
494	887.25	122.35
495	888.56	122.35
496	889.86	122.36
497	891.17	122.37
498	892.48	122.39
499	893.78	122.39
500	895.09	122.39
501	896.39	122.38
502	897.70	122.39
503	899.01	122.40
504	900.31	122.40
505	901.62	122.38
506	902.92	122.35
507	904.23	122.30
508	905.54	122.27
509	906.84	122.23
510	908.15	122.20
511	909.45	122.17
512	910.76	122.16
513	912.06	122.15

Order	Station [ft]	Elevation [ft]
514	913.37	122.13
515	914.68	122.11
516	915.98	122.10
517	917.29	122.10
518	918.59	122.09
519	919.90	122.09
520	921.21	122.10
521	922.51	122.16
522	923.82	122.33
523	925.12	122.49
524	926.43	122.67
525	927.74	122.73
526	929.04	122.67
527	930.35	122.63
528	931.65	122.62
529	932.96	122.65
530	934.27	122.70
531	935.57	122.75
532	936.88	122.81
533	938.18	122.84
534	939.49	122.87
535	940.80	122.88
536	942.10	122.88
537	943.41	122.80
538	944.71	122.70
539	946.02	122.53
540	947.33	122.38
541	948.63	122.36
542	949.94	122.34
543	951.24	122.34
544	952.55	122.34
545	953.85	122.32
546	955.16	122.32
547	956.47	122.33
548	957.77	122.35
549	959.08	122.39
550	960.38	122.41
551	961.69	122.41
552	963.00	122.43
553	964.30	122.46
554	965.61	122.47
555	966.91	122.48
556	968.22	122.49
557	969.53	122.49
558	970.83	122.53
559	972.14	122.57
560	973.44	122.59
561	974.75	122.61
562	976.06	122.62

Order	Station [ft]	Elevation [ft]
563	977.36	122.62
564	978.67	122.63
565	979.97	122.63
566	981.28	122.63
567	982.59	122.62
568	983.89	122.61
569	985.20	122.59
570	986.50	122.57
571	987.81	122.55
572	989.11	122.53
573	990.42	122.48
574	991.73	122.41
575	993.03	122.36
576	994.34	122.33
577	996.52	122.31
578	998.71	122.36
579	1000.89	122.43
580	1003.08	122.43
581	1005.26	122.39
582	1007.45	122.46
583	1009.63	122.65
584	1011.82	122.67
585	1014.00	122.70
586	1016.19	122.74
587	1018.37	122.77
588	1020.56	122.80
589	1022.74	122.83
590	1024.93	122.85
591	1027.11	122.85
592	1029.30	122.65
593	1031.48	122.56
594	1033.67	122.55
595	1035.85	122.54
596	1038.04	122.54
597	1040.22	122.55
598	1042.41	122.59
599	1044.59	122.65
600	1046.78	122.66
601	1048.96	122.69
602	1051.15	122.70
603	1053.33	122.75
604	1055.52	122.86
605	1057.70	122.87
606	1059.89	122.85
607	1062.07	122.84
608	1064.25	122.82
609	1065.59	122.82
610	1066.93	122.84
611	1068.27	122.87

Order	Station [ft]	Elevation [ft]
612	1069.61	122.92
613	1070.95	122.98
614	1072.29	122.99
615	1073.63	122.95
616	1074.96	122.90
617	1076.30	122.84
618	1077.64	122.80
619	1078.98	122.83
620	1080.32	122.89
621	1081.66	122.92
622	1083.00	122.88
623	1084.33	122.72
624	1085.67	122.56
625	1087.01	122.53
626	1088.35	122.56
627	1089.69	122.60
628	1091.03	122.66
629	1092.37	122.71
630	1093.70	122.70
631	1095.04	122.65
632	1096.38	122.52
633	1097.72	122.38
634	1099.06	122.28
635	1100.40	122.18
636	1101.74	122.17
637	1103.08	122.18
638	1104.41	122.20
639	1105.75	122.25
640	1107.09	122.28
641	1109.07	122.23
642	1111.04	122.15
643	1113.02	122.15
644	1115.00	122.12
645	1116.97	122.14
646	1118.95	122.22
647	1120.93	122.24
648	1122.90	122.11
649	1124.88	122.02
650	1126.86	121.97
651	1128.83	121.93
652	1130.81	121.94
653	1132.79	121.94
654	1134.76	121.95
655	1136.74	121.97
656	1138.72	122.01
657	1141.20	122.07
658	1143.69	122.10
659	1146.17	122.20
660	1148.66	122.24

Order	Station [ft]	Elevation [ft]
661	1151.14	122.18
662	1153.62	122.12
663	1156.11	122.10
664	1158.59	122.06
665	1161.08	122.04
666	1163.56	122.00
667	1166.05	122.00
668	1168.53	122.00
669	1171.02	121.99
670	1173.50	122.01
671	1175.98	121.99
672	1178.47	121.94
673	1180.95	121.96
674	1183.44	121.95
675	1185.92	121.96
676	1188.41	121.98
677	1190.89	121.98
678	1193.38	121.94
679	1195.86	121.96
680	1198.34	122.01
681	1200.83	122.00
682	1203.31	122.00
683	1205.80	122.05
684	1208.28	122.08
685	1210.77	122.05
686	1213.25	122.00
687	1215.74	121.95
688	1218.22	121.98
689	1220.70	122.03
690	1223.19	122.00
691	1225.67	121.98
692	1228.16	121.99
693	1230.64	121.99
694	1233.13	121.96
695	1235.61	121.99
696	1238.10	121.98
697	1240.58	121.93
698	1243.06	121.94
699	1245.55	121.93
700	1248.03	121.90
701	1250.52	121.91
702	1253.00	121.93
703	1255.49	121.93
704	1257.97	121.91
705	1260.46	121.91
706	1262.94	121.85
707	1265.42	121.77
708	1267.91	121.73
709	1270.39	121.57

Order	Station [ft]	Elevation [ft]
710	1272.88	121.61
711	1275.36	121.68
712	1277.85	121.67
713	1280.33	121.67
714	1282.82	121.56
715	1285.30	121.46
716	1287.78	121.41
717	1290.27	121.40
718	1292.75	121.39
719	1295.24	121.35
720	1297.72	121.31
721	1300.21	121.27
722	1302.69	121.31
723	1305.17	121.34
724	1307.66	121.28
725	1310.14	121.23
726	1312.63	121.25
727	1315.11	121.27
728	1317.60	121.26
729	1320.08	121.22
730	1322.57	121.15
731	1325.05	121.18
732	1327.53	121.23
733	1330.02	121.21
734	1332.50	121.18
735	1334.99	121.18
736	1337.47	121.18
737	1339.96	121.17
738	1342.44	121.18
739	1344.93	121.20
740	1347.41	121.21
741	1349.89	121.21
742	1352.38	121.23
743	1354.86	121.24
744	1357.35	121.20
745	1359.83	121.16
746	1362.32	121.15
747	1364.80	121.17
748	1367.29	121.17
749	1369.77	121.20
750	1372.25	121.23
751	1374.74	121.26
752	1377.22	121.28
753	1379.71	121.31
754	1382.19	121.35
755	1384.68	121.36
756	1387.16	121.35
757	1389.65	121.33
758	1392.13	121.40

Order	Station [ft]	Elevation [ft]
759	1394.61	121.48
760	1397.10	121.52
761	1399.58	121.52
762	1402.07	121.52
763	1404.55	121.63
764	1407.04	121.67
765	1409.52	121.62
766	1412.01	121.66
767	1414.49	121.70
768	1416.97	121.71
769	1419.46	121.70
770	1421.94	121.76
771	1424.43	121.86
772	1426.91	121.99
773	1429.40	122.06
774	1431.88	122.03
775	1434.37	122.11
776	1436.85	122.13
777	1439.33	122.11
778	1441.82	122.06
779	1444.30	121.95
780	1446.79	121.90
781	1449.27	121.87
782	1451.76	121.74
783	1454.24	121.69
784	1456.73	121.60

Comment:

Weir Cross Section: X-0110W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	119.26
1	1.30	119.29
2	2.59	119.23
3	3.89	119.20
4	5.19	119.19
5	6.49	119.24
6	7.78	119.38
7	9.08	119.48
8	10.38	119.51
9	11.68	119.49
10	12.97	119.48

Order	Station [ft]	Elevation [ft]
11	14.27	119.47
12	15.57	119.45
13	16.87	119.44
14	18.16	119.43
15	19.46	119.41
16	20.76	119.40
17	22.06	119.44
18	23.35	119.55
19	24.65	119.67
20	25.95	119.71
21	27.25	119.65
22	28.54	119.58
23	29.84	119.51
24	31.14	119.44
25	32.44	119.40
26	33.73	119.35
27	35.03	119.33
28	36.33	119.35
29	37.63	119.38
30	38.92	119.45
31	40.22	119.53
32	41.52	119.56
33	42.82	119.56
34	44.11	119.57
35	45.41	119.60
36	46.71	119.64
37	48.01	119.68
38	49.30	119.74
39	50.60	119.86
40	51.90	120.01
41	53.20	120.10
42	54.49	120.17
43	55.79	120.30
44	57.09	120.38
45	58.39	120.48
46	59.68	120.56
47	60.98	120.50
48	62.28	120.41
49	63.58	120.24
50	64.87	120.08
51	66.17	119.96
52	67.47	119.88
53	68.77	119.91
54	70.06	119.94
55	71.36	119.97
56	72.66	119.99
57	73.96	120.03
58	75.25	120.01
59	76.55	120.03

Order	Station [ft]	Elevation [ft]
60	77.85	120.13
61	79.15	120.25
62	80.44	120.25
63	81.74	120.19
64	83.04	120.15
65	85.50	120.27
66	87.97	120.50
67	90.43	120.78
68	92.90	120.78
69	95.36	120.41
70	97.83	119.98
71	100.29	119.78
72	102.76	119.71
73	105.22	119.67
74	107.69	119.67
75	110.15	119.72
76	112.62	120.00
77	115.08	120.09
78	117.55	119.99
79	120.01	119.81
80	122.47	119.68
81	124.56	119.62
82	126.65	119.63
83	128.73	119.64
84	130.82	119.65
85	132.91	119.63
86	134.99	119.72
87	137.08	119.74
88	139.17	119.69
89	141.25	119.69
90	143.34	119.90
91	145.43	119.97
92	147.51	119.92
93	149.60	119.91
94	151.69	119.82
95	153.77	119.90
96	155.86	119.98
97	157.95	119.82
98	160.03	119.68
99	162.12	119.68
100	164.21	119.74
101	166.29	119.77
102	168.38	119.77
103	170.47	119.68
104	172.55	119.59
105	174.64	119.57
106	176.73	119.61
107	178.81	119.77
108	180.90	119.93

Order	Station [ft]	Elevation [ft]
109	182.99	119.76
110	185.07	119.62
111	187.16	119.59
112	189.25	119.52
113	190.59	119.55
114	191.93	119.60
115	193.27	119.68
116	194.61	119.79
117	195.95	119.75
118	197.29	119.67
119	198.63	119.70
120	199.97	119.74
121	201.31	119.73
122	202.65	119.73
123	203.99	119.68
124	205.33	119.65
125	206.67	119.68
126	208.01	119.71
127	209.35	119.74
128	210.69	119.74
129	212.03	119.69
130	213.37	119.60
131	214.71	119.50
132	216.05	119.44
133	217.39	119.39
134	218.73	119.43
135	220.08	119.47
136	221.42	119.43
137	222.76	119.37
138	224.10	119.45
139	225.44	119.52
140	226.78	119.51
141	228.12	119.50
142	229.46	119.51
143	230.80	119.52
144	232.14	119.48
145	233.48	119.47
146	234.82	119.50
147	236.16	119.58
148	237.50	119.69
149	238.84	119.69
150	240.18	119.65
151	241.52	119.51
152	242.86	119.35
153	244.20	119.35
154	245.54	119.34
155	246.88	119.34
156	248.22	119.35
157	249.56	119.35

Order	Station [ft]	Elevation [ft]
158	250.90	119.36
159	252.24	119.41
160	253.58	119.42
161	254.92	119.38
162	256.26	119.37
163	257.60	119.41
164	258.94	119.34
165	260.28	119.24
166	261.63	119.19
167	262.97	119.16
168	264.31	119.15
169	265.65	119.16
170	266.99	119.32
171	268.33	119.48
172	269.67	119.50
173	271.01	119.50
174	272.35	119.46
175	273.69	119.45
176	275.03	119.46
177	276.94	119.50
178	278.85	119.58
179	280.75	119.73
180	282.66	119.52
181	284.57	119.48
182	286.48	119.51
183	288.39	119.51
184	290.29	119.57
185	292.20	119.61
186	294.11	119.63
187	296.02	119.63
188	297.93	119.62
189	299.84	119.49
190	301.74	119.36
191	303.65	119.31
192	305.56	119.49
193	307.47	119.50
194	309.38	119.56
195	311.29	119.67
196	313.19	119.68
197	315.10	119.61
198	317.01	119.46
199	318.92	119.34
200	320.83	119.40
201	322.74	119.29
202	324.64	119.21
203	326.55	119.19
204	328.46	119.22
205	330.37	119.15
206	332.28	119.04

Order	Station [ft]	Elevation [ft]
207	334.19	118.91
208	336.09	118.77
209	337.57	118.82
210	339.05	118.89
211	340.53	118.97
212	342.00	118.96
213	343.48	119.10
214	344.96	119.31
215	346.44	119.30
216	347.91	119.27
217	349.39	119.11
218	350.87	118.93
219	352.35	118.82
220	353.82	118.83
221	355.30	118.94
222	356.78	119.07
223	358.26	119.20
224	359.73	119.37
225	361.21	119.53
226	362.69	119.58
227	364.17	119.61
228	365.64	119.63
229	367.12	119.65
230	368.60	119.63
231	370.08	119.52
232	371.55	119.43
233	373.03	119.38
234	374.51	119.34
235	375.99	119.31
236	377.46	119.29
237	378.94	119.29
238	380.42	119.34
239	381.90	119.41
240	383.37	119.47
241	385.42	119.41
242	387.47	119.31
243	389.51	119.32
244	391.56	119.31
245	393.60	119.14
246	395.65	118.91
247	397.70	118.83
248	399.74	118.83
249	401.79	118.78
250	403.83	118.79
251	405.88	118.75
252	407.93	118.70
253	409.97	118.63
254	412.02	118.62
255	414.07	118.56

Order	Station [ft]	Elevation [ft]
256	416.11	118.60
257	418.57	118.60
258	421.03	118.49
259	423.49	118.34
260	425.95	118.25
261	428.42	118.29
262	430.88	118.54
263	433.34	118.78
264	435.80	118.73
265	437.59	118.55
266	439.38	118.43
267	441.17	118.50
268	442.96	118.65
269	444.75	118.84
270	446.54	118.89
271	448.33	118.92
272	450.12	118.86
273	451.91	118.77
274	453.70	118.62
275	455.49	118.47
276	457.28	118.45
277	459.07	118.42
278	460.86	118.36
279	462.65	118.27
280	464.44	118.28
281	466.23	118.35
282	468.02	118.49
283	469.81	118.68
284	471.60	118.80
285	473.39	118.90
286	475.18	119.14
287	476.97	119.18
288	478.76	119.10
289	480.55	119.07
290	482.34	119.07
291	484.13	119.08
292	485.92	118.96
293	487.71	118.92
294	489.50	118.91
295	491.29	118.92
296	493.08	118.84
297	494.93	118.74
298	496.77	118.64
299	498.62	118.71
300	500.47	118.86
301	502.31	119.06
302	504.16	119.27
303	506.00	119.21
304	507.85	119.15

Order	Station [ft]	Elevation [ft]
305	509.70	119.07
306	511.54	119.01
307	513.39	118.95
308	515.24	118.92
309	517.08	118.94
310	518.93	119.05
311	520.77	118.95
312	522.62	118.82
313	524.47	118.71
314	526.31	118.69
315	528.16	118.69
316	530.00	118.69
317	531.85	118.66
318	533.70	118.56
319	535.54	118.47
320	537.39	118.46
321	539.23	118.55
322	541.08	118.54
323	542.93	118.49
324	544.77	118.58
325	546.62	118.84
326	548.46	118.88
327	550.31	118.90
328	552.16	118.85
329	553.58	118.75
330	555.01	118.71
331	556.44	118.73
332	557.86	118.74
333	559.29	118.64
334	560.71	118.53
335	562.14	118.29
336	563.57	118.14
337	564.99	118.07
338	566.42	118.00
339	567.85	118.02
340	569.27	118.10
341	570.70	118.16
342	572.12	118.15
343	573.55	118.10
344	574.98	118.14
345	577.38	118.34
346	579.79	118.50
347	582.20	118.40
348	584.60	118.26
349	587.01	118.17
350	589.42	117.92
351	591.82	118.19
352	594.23	118.56
353	596.63	118.60

Order	Station [ft]	Elevation [ft]
354	599.04	118.77
355	601.45	119.09
356	603.85	119.35
357	606.26	119.56
358	608.67	119.77
359	611.07	119.94
360	613.48	120.01
361	615.49	120.12
362	617.50	120.21
363	619.51	120.26
364	621.52	120.30
365	623.53	120.42
366	625.54	120.29
367	627.55	120.28
368	629.56	120.27
369	631.05	120.39
370	632.55	120.10
371	634.04	119.75
372	635.53	119.08
373	637.02	118.50
374	638.51	118.10
375	640.01	117.85
376	641.50	117.82
377	642.99	117.96
378	644.48	118.16
379	645.97	118.27
380	647.47	118.36
381	648.96	118.47
382	650.45	118.59
383	651.94	118.73
384	653.43	118.81
385	654.92	118.84
386	656.40	118.72
387	657.89	118.60
388	659.37	118.47
389	660.86	118.35
390	662.34	118.22
391	663.82	118.09
392	665.31	117.98
393	666.79	117.84
394	668.28	117.75
395	669.76	117.79
396	671.24	117.79
397	672.73	117.79
398	674.21	117.85
399	675.70	117.87
400	677.18	117.83
401	679.57	117.82
402	681.97	117.83

Order	Station [ft]	Elevation [ft]
403	684.36	117.76
404	686.76	117.66
405	689.15	117.69
406	691.54	117.77
407	693.94	117.85
408	696.33	117.92
409	698.72	117.69
410	701.12	117.36
411	703.51	117.32
412	705.91	117.68
413	708.30	117.94
414	710.69	118.01
415	713.09	118.24
416	715.48	118.48
417	716.91	118.67
418	718.34	118.73
419	719.78	118.79
420	721.21	118.75
421	722.64	118.71
422	724.07	118.73
423	725.50	118.75
424	726.93	118.79

Comment:

Weir Cross Section: X-0120W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	123.17
1	2.12	123.24
2	4.23	123.33
3	6.35	123.42
4	8.47	123.40
5	10.58	123.47
6	12.70	123.52
7	14.82	123.46
8	16.94	123.34
9	19.05	123.33
10	21.17	123.72
11	23.29	123.86
12	25.40	123.80
13	27.52	123.69
14	29.64	123.58

Order	Station [ft]	Elevation [ft]
15	31.75	123.52
16	33.87	123.57
17	35.88	123.52
18	37.89	123.48
19	39.90	123.56
20	41.90	123.53
21	43.91	123.29
22	45.92	123.03
23	47.93	122.93
24	49.94	122.72
25	51.95	122.58
26	53.95	122.44
27	55.96	122.37
28	57.97	122.32
29	59.98	122.28
30	61.99	122.23
31	64.00	122.16
32	66.00	122.11
33	68.01	122.07
34	70.02	122.00
35	72.03	121.91
36	74.04	121.85
37	76.05	121.80
38	78.05	121.75
39	80.06	121.68
40	82.07	121.61
41	84.08	121.55
42	86.09	121.50
43	88.10	121.42
44	90.10	121.38
45	92.11	121.34
46	94.12	121.30
47	96.13	121.26
48	98.14	121.23
49	100.15	121.18
50	102.15	121.14
51	104.16	121.11
52	106.17	121.07
53	108.18	121.02
54	110.19	120.98
55	112.20	120.94
56	114.20	120.92
57	116.21	120.88
58	118.22	120.88
59	120.23	120.84
60	122.24	120.76
61	124.25	120.71
62	126.25	120.65
63	128.26	120.63

Order	Station [ft]	Elevation [ft]
64	130.27	120.63
65	132.28	120.64
66	134.29	120.65
67	136.30	120.64
68	138.30	120.63
69	140.31	120.60
70	142.32	120.54
71	144.33	120.51
72	146.34	120.44
73	148.35	120.36
74	150.35	120.30
75	152.36	120.23
76	154.37	120.18
77	156.38	120.15
78	158.39	120.13
79	160.40	120.07
80	162.40	120.03
81	163.77	120.04
82	165.14	120.04
83	166.51	120.04
84	167.87	120.06
85	169.24	120.07
86	170.61	120.06
87	171.98	120.05
88	173.35	120.04
89	174.71	120.02
90	176.08	119.98
91	177.45	119.96
92	178.82	119.93
93	180.18	119.97
94	181.55	120.02
95	182.92	120.02
96	184.29	120.00
97	185.66	119.96
98	187.02	119.91
99	188.39	119.84
100	189.76	119.77
101	191.13	119.70
102	192.49	119.64
103	193.86	119.60
104	195.23	119.55
105	196.60	119.51
106	197.97	119.49
107	199.33	119.47
108	200.70	119.50
109	202.07	119.54
110	203.44	119.62
111	204.80	119.64
112	206.17	119.60

Order	Station [ft]	Elevation [ft]
113	207.54	119.48
114	208.91	119.34
115	210.27	119.26
116	211.64	119.19
117	213.01	119.12
118	214.38	119.06
119	215.75	119.08
120	217.11	119.08
121	218.48	119.07
122	219.85	119.09
123	221.22	119.13
124	222.58	119.20
125	223.95	119.29
126	225.32	119.41
127	226.69	119.52
128	228.06	119.56
129	229.42	119.59
130	230.79	119.63
131	232.16	119.65
132	233.53	119.63
133	234.89	119.54
134	236.26	119.41
135	237.63	119.34
136	239.00	119.30
137	240.37	119.32
138	241.73	119.35
139	243.10	119.37
140	244.47	119.38
141	245.84	119.37
142	247.20	119.38
143	248.57	119.43
144	249.94	119.57
145	251.31	119.78
146	252.67	119.90
147	254.04	119.99
148	255.41	119.93
149	256.78	119.84
150	258.15	119.69
151	259.51	119.58
152	260.88	119.57
153	262.25	119.56
154	263.62	119.56
155	264.98	119.58
156	266.35	119.62
157	267.72	119.60
158	269.09	119.55
159	270.46	119.52
160	271.82	119.51
161	273.19	119.71

Order	Station [ft]	Elevation [ft]
162	274.56	119.87
163	275.93	119.95
164	277.29	119.99
165	278.66	119.97
166	280.03	119.83
167	281.40	119.64
168	282.77	119.57
169	284.13	119.52
170	285.50	119.51
171	286.87	119.51
172	288.24	119.55
173	289.60	119.58
174	290.97	119.61
175	292.34	119.71
176	293.71	119.88
177	295.07	120.02
178	296.44	120.14
179	297.81	120.27
180	299.18	120.40
181	300.55	120.52
182	301.91	120.62
183	303.28	120.62
184	304.65	120.53
185	306.02	120.29
186	307.38	120.14
187	308.75	120.08
188	310.12	120.07
189	311.49	120.10
190	312.86	120.09
191	314.22	120.07
192	315.59	120.05
193	316.96	120.05
194	318.33	120.10
195	319.69	120.21
196	321.06	120.40
197	322.43	120.57
198	323.80	120.72
199	325.17	120.81
200	326.53	120.88
201	327.90	120.97
202	329.27	121.05
203	330.64	121.03
204	332.00	121.04
205	333.37	121.10
206	334.74	121.17
207	336.11	121.27
208	337.47	121.24
209	339.44	121.05
210	341.40	120.90

Order	Station [ft]	Elevation [ft]
211	343.36	120.80
212	345.32	120.89
213	347.29	121.15
214	349.25	121.31
215	351.21	121.35
216	353.17	121.24
217	355.14	120.98
218	357.10	120.59
219	359.06	120.36
220	361.02	120.29
221	362.99	120.30
222	364.95	120.35
223	366.91	120.35
224	368.87	120.36
225	370.84	120.38
226	372.80	120.47
227	374.76	120.56
228	376.72	120.65
229	378.69	120.57
230	380.65	120.48
231	382.61	120.36
232	384.57	120.34
233	386.54	120.38
234	388.50	120.46
235	390.46	120.49
236	392.42	120.69
237	394.38	120.95
238	396.35	120.98
239	398.31	120.93
240	400.27	120.88
241	402.23	120.86
242	404.20	120.89
243	406.16	120.95
244	408.12	121.04
245	410.08	121.12
246	412.05	121.15
247	414.01	121.16
248	415.97	121.17
249	417.93	121.20
250	419.90	121.22
251	421.86	121.10
252	423.82	120.95
253	425.78	120.94
254	427.75	121.02
255	429.71	121.07
256	431.67	121.21
257	433.63	121.35
258	435.60	121.42
259	437.56	121.45

Order	Station [ft]	Elevation [ft]
260	439.52	121.33
261	441.48	121.30
262	443.45	121.33
263	445.41	121.42
264	447.37	121.47
265	449.33	121.52
266	451.29	121.53
267	453.26	121.63
268	455.22	121.85
269	457.18	122.27
270	459.14	122.57
271	461.11	122.76
272	463.07	122.82
273	464.65	122.66
274	466.23	122.44
275	467.80	122.48
276	469.38	122.49
277	470.96	122.45
278	472.54	122.35
279	474.12	122.24
280	475.69	122.08
281	477.27	122.19
282	478.85	122.42
283	480.43	122.42
284	482.01	122.37
285	483.58	122.25
286	485.16	122.16
287	486.74	122.07
288	488.32	121.99
289	489.90	121.98
290	491.47	121.99
291	493.05	121.95
292	494.63	121.96
293	496.21	121.99
294	497.79	122.02
295	499.37	122.06
296	500.94	122.13
297	502.52	122.09
298	504.10	122.03
299	505.68	121.97
300	507.26	121.99
301	508.83	122.08
302	510.41	122.09
303	511.99	122.08
304	513.57	122.05
305	515.15	122.09
306	516.72	122.14
307	518.30	122.18
308	519.88	122.11

Order	Station [ft]	Elevation [ft]
309	521.46	122.00
310	523.04	122.00
311	524.61	122.01
312	526.19	122.03
313	527.77	121.96
314	529.35	121.89
315	530.93	121.84
316	532.50	121.81
317	534.08	121.79
318	535.66	121.77
319	537.24	121.74
320	538.82	121.70
321	540.40	121.68
322	541.97	121.66
323	543.55	121.66
324	545.13	121.63
325	546.71	121.58
326	548.29	121.54
327	549.86	121.50
328	551.44	121.46
329	553.02	121.43
330	554.60	121.43
331	556.18	121.44
332	557.75	121.45
333	559.33	121.46
334	560.91	121.46
335	562.49	121.44
336	564.07	121.42
337	565.97	121.43
338	567.87	121.45
339	569.78	121.39
340	571.68	121.30
341	573.59	121.26
342	575.49	121.36
343	577.40	121.54
344	579.30	121.70
345	581.20	121.68
346	583.11	121.51
347	585.01	121.31
348	586.92	121.09
349	588.82	120.96
350	590.72	120.91
351	592.63	120.84
352	594.53	120.74
353	596.44	120.63
354	598.34	120.63
355	600.24	120.71
356	602.15	120.85
357	604.05	120.90

Order	Station [ft]	Elevation [ft]
358	605.96	120.81
359	607.86	120.63
360	609.77	120.41
361	611.67	120.36
362	613.57	120.29
363	615.48	120.27
364	617.38	120.22
365	619.29	120.09
366	621.19	120.00
367	623.09	119.96
368	625.00	120.03
369	626.88	120.22
370	628.75	120.21
371	630.63	120.00
372	632.51	119.62
373	634.38	119.49
374	636.26	119.47
375	638.14	119.52
376	640.01	119.64
377	641.89	119.65
378	643.77	119.55
379	645.64	119.34
380	647.52	119.06
381	649.40	119.04
382	651.27	119.07
383	653.15	119.03
384	655.02	118.82
385	656.90	118.72
386	658.78	118.68
387	660.65	118.66
388	662.53	118.63
389	664.41	118.61
390	666.28	118.58
391	668.16	118.55
392	670.04	118.52
393	671.91	118.47
394	673.79	118.55
395	675.67	118.80
396	677.54	118.91
397	679.42	118.94
398	681.30	118.89
399	683.17	118.76
400	685.05	118.80
401	687.41	118.84
402	689.77	118.88
403	692.13	118.92
404	694.48	118.95
405	696.84	119.01
406	699.20	119.17

Order	Station [ft]	Elevation [ft]
407	701.56	119.42
408	703.92	119.54
409	706.28	119.26
410	708.63	119.09
411	710.99	119.05
412	713.35	119.13
413	715.71	119.11
414	718.07	119.16
415	720.43	119.33
416	722.78	119.45
417	725.14	119.51
418	727.50	119.49
419	729.86	119.44
420	732.22	119.40
421	734.58	119.42
422	736.93	119.50
423	739.29	119.60
424	741.65	119.68
425	744.01	119.85
426	746.37	120.24
427	748.73	120.77
428	751.08	121.07
429	753.44	120.66
430	755.80	120.07
431	758.16	120.00
432	760.52	120.12
433	761.95	120.21
434	763.39	120.30
435	764.82	120.36
436	766.26	120.40
437	767.70	120.40
438	769.13	120.47
439	770.57	120.67
440	772.00	120.88
441	773.44	121.12
442	774.87	121.09
443	776.31	121.03
444	777.74	120.89
445	779.18	120.77
446	780.62	120.66
447	782.05	120.62
448	783.49	120.62
449	784.92	120.68
450	786.36	120.74
451	787.79	120.79
452	789.23	120.82
453	790.66	120.82
454	792.10	120.85
455	793.54	120.91

Order	Station [ft]	Elevation [ft]
456	794.97	120.98
457	796.41	121.06
458	797.84	121.14
459	799.28	121.21
460	800.71	121.28
461	802.15	121.28
462	803.59	121.23
463	805.02	121.22
464	806.46	121.21
465	807.89	121.26
466	809.33	121.32
467	810.76	121.38
468	812.20	121.44
469	813.63	121.50
470	815.07	121.55
471	816.51	121.59
472	817.94	121.72
473	819.38	121.86
474	820.81	122.07
475	822.25	122.20
476	823.68	122.26
477	825.12	122.24
478	826.55	122.19
479	827.99	122.14
480	829.43	122.11
481	830.86	122.16
482	832.30	122.19
483	833.73	122.22
484	835.17	122.27
485	836.60	122.33
486	838.04	122.34
487	839.48	122.37
488	840.91	122.48
489	842.35	122.58
490	843.78	122.68
491	845.22	122.84
492	846.65	123.05
493	848.09	123.06
494	849.52	123.05
495	850.96	123.01
496	852.40	122.99
497	853.83	123.00
498	855.27	123.04
499	856.70	123.10
500	858.14	123.16
501	859.57	123.22
502	861.01	123.26
503	862.45	123.31
504	863.88	123.39

Order	Station [ft]	Elevation [ft]
505	865.32	123.51
506	866.75	123.67
507	868.19	123.83
508	869.62	123.94
509	871.06	123.88
510	872.49	123.87
511	873.93	123.91
512	875.37	123.93
513	876.80	123.91
514	878.24	123.89
515	879.67	123.86
516	881.11	123.91
517	882.54	123.95
518	883.98	124.01
519	885.41	124.03
520	886.85	124.02
521	888.29	124.08
522	889.72	124.15
523	891.16	124.27
524	892.59	124.39
525	894.03	124.49
526	895.46	124.68
527	896.90	124.93
528	898.34	125.00
529	899.77	125.02
530	901.21	124.95
531	902.64	124.90
532	904.08	124.89
533	905.51	124.96
534	906.95	125.10
535	908.38	125.20
536	909.82	125.28
537	911.26	125.36
538	912.69	125.43
539	914.13	125.52
540	915.56	125.63
541	917.00	125.77
542	918.43	125.94
543	919.87	126.10
544	921.30	126.12
545	922.74	126.14
546	924.18	126.16
547	925.61	126.15
548	927.05	126.11
549	928.48	126.12
550	929.92	126.14
551	931.35	126.24
552	932.79	126.31
553	934.23	126.33

Order	Station [ft]	Elevation [ft]
554	935.66	126.38
555	937.10	126.46
556	938.53	126.56
557	939.97	126.66
558	941.40	126.77
559	942.84	126.86
560	944.27	126.86
561	946.25	126.87
562	948.22	126.83
563	950.19	126.80
564	952.16	126.76
565	954.14	126.73
566	956.11	126.70
567	958.08	126.64
568	960.05	126.62
569	962.03	126.61
570	964.00	126.61
571	965.97	126.62
572	967.94	126.60
573	969.92	126.44
574	971.89	126.25
575	973.86	126.10
576	975.83	125.98
577	977.81	125.88
578	979.78	125.78
579	981.75	125.67
580	983.72	125.55
581	985.70	125.47
582	987.67	125.41
583	989.64	125.36
584	991.61	125.30
585	993.58	125.24
586	995.56	125.16
587	997.53	125.06
588	999.50	125.01
589	1001.47	125.04
590	1003.45	125.09
591	1005.42	125.18
592	1007.39	125.21
593	1009.36	125.18
594	1011.34	125.02
595	1013.31	124.80
596	1015.28	124.80
597	1017.25	124.91
598	1019.23	125.03
599	1021.20	125.15
600	1023.17	125.26
601	1025.14	125.40
602	1027.12	125.41

Order	Station [ft]	Elevation [ft]
603	1029.09	125.31
604	1031.06	125.18
605	1033.03	125.08
606	1035.01	125.06
607	1036.98	125.10
608	1038.95	125.08
609	1040.92	125.02
610	1042.90	125.05
611	1044.87	125.11
612	1046.84	125.21
613	1048.81	125.13
614	1050.78	124.97
615	1052.76	124.82
616	1054.73	124.70
617	1056.70	124.71
618	1058.67	124.94
619	1060.65	125.11
620	1062.62	125.08
621	1064.59	124.87
622	1066.56	124.72
623	1068.54	124.62
624	1070.51	124.58
625	1072.15	124.42
626	1073.78	124.24
627	1075.42	124.05
628	1077.06	123.93
629	1078.69	123.85
630	1080.33	123.81
631	1081.97	123.82
632	1083.60	123.85
633	1085.24	123.89
634	1086.88	123.92
635	1088.51	123.93
636	1090.15	123.92
637	1091.79	123.94
638	1093.43	123.94
639	1095.06	123.93
640	1096.70	123.96
641	1098.34	123.98
642	1099.97	123.96
643	1101.61	123.79
644	1103.25	123.60
645	1104.88	123.45
646	1106.52	123.30
647	1108.16	123.18
648	1109.79	123.06
649	1111.43	122.98
650	1113.07	122.90
651	1114.70	122.84

Order	Station [ft]	Elevation [ft]
652	1116.34	122.74
653	1117.98	122.63
654	1119.62	122.53
655	1121.25	122.41
656	1122.89	122.25
657	1124.53	122.15
658	1126.16	122.05
659	1127.80	121.97
660	1129.44	121.89
661	1131.07	121.86
662	1132.71	121.89
663	1134.35	121.79
664	1135.98	121.67
665	1137.62	121.51
666	1139.26	121.51
667	1140.89	121.49
668	1142.53	121.41
669	1144.17	121.37
670	1145.81	121.34
671	1147.44	121.33
672	1149.08	121.30
673	1150.72	121.26
674	1152.35	121.25
675	1153.99	121.27
676	1155.63	121.29
677	1157.26	121.30
678	1158.90	121.30
679	1160.54	121.26
680	1162.17	121.09
681	1163.81	120.90
682	1165.45	120.73
683	1167.08	120.67
684	1168.72	120.60
685	1170.36	120.51
686	1171.99	120.50
687	1173.63	120.48
688	1175.27	120.44
689	1176.87	120.36
690	1178.48	120.33
691	1180.08	120.36
692	1181.68	120.34
693	1183.29	120.29
694	1184.89	120.23
695	1186.50	120.19
696	1188.10	120.16
697	1189.70	120.13
698	1191.31	120.09
699	1192.91	120.04
700	1194.52	120.06

Order	Station [ft]	Elevation [ft]
701	1196.12	120.07
702	1197.72	120.07
703	1199.33	120.03
704	1200.93	120.01
705	1202.54	120.03
706	1204.14	120.08
707	1205.74	120.11
708	1207.35	120.08
709	1208.95	120.09
710	1210.55	120.13
711	1212.16	120.14
712	1213.76	120.14
713	1215.37	120.14
714	1216.97	120.18
715	1218.57	120.18
716	1220.18	120.13
717	1221.78	120.13
718	1223.39	120.17
719	1224.99	120.30
720	1226.59	120.42
721	1228.49	120.58
722	1230.38	120.74
723	1232.27	120.89
724	1234.17	121.03
725	1236.06	121.15
726	1237.95	121.12
727	1239.85	121.23
728	1241.74	121.33
729	1243.63	121.30
730	1245.52	121.31
731	1247.42	121.35
732	1249.31	121.43
733	1251.20	121.52
734	1253.10	121.40
735	1254.99	121.38
736	1256.88	121.41
737	1258.78	121.46
738	1260.67	121.51
739	1262.56	121.55
740	1264.45	121.55
741	1266.35	121.52
742	1268.24	121.57
743	1270.13	121.62
744	1272.03	121.68
745	1273.92	121.74
746	1275.81	121.78
747	1277.71	121.73
748	1279.60	121.83
749	1281.49	121.95

Order	Station [ft]	Elevation [ft]
750	1283.38	122.07
751	1285.28	122.18
752	1287.17	122.28
753	1288.92	122.38
754	1290.68	122.47
755	1292.43	122.52
756	1294.19	122.49
757	1295.94	122.50
758	1297.70	122.58
759	1299.45	122.64
760	1301.21	122.70
761	1302.96	122.69
762	1304.71	122.61
763	1306.47	122.60
764	1308.22	122.70
765	1309.98	122.84
766	1311.73	122.95
767	1313.49	123.00
768	1315.24	122.96
769	1316.70	122.87
770	1318.16	122.72
771	1319.62	122.55
772	1321.08	122.42
773	1322.54	122.34
774	1324.00	122.27
775	1325.46	122.22
776	1326.92	122.16
777	1328.38	122.00
778	1329.84	121.81
779	1331.30	121.67
780	1332.76	121.61
781	1334.22	121.61
782	1335.68	121.61
783	1337.14	121.62
784	1338.60	121.63
785	1340.06	121.65
786	1341.52	121.66
787	1342.98	121.68
788	1344.44	121.69
789	1345.90	121.69
790	1347.36	121.70
791	1348.82	121.71
792	1350.28	121.73
793	1351.74	121.74
794	1353.20	121.76
795	1354.66	121.77
796	1356.12	121.79
797	1357.58	121.78
798	1359.04	121.74

Order	Station [ft]	Elevation [ft]
799	1360.50	121.70
800	1361.96	121.65
801	1363.42	121.62
802	1364.88	121.60
803	1366.34	121.57
804	1367.80	121.53
805	1369.26	121.51
806	1370.72	121.51
807	1372.18	121.51
808	1373.64	121.50
809	1375.10	121.47
810	1376.56	121.43
811	1378.02	121.39
812	1379.47	121.37
813	1380.93	121.34
814	1382.39	121.32
815	1383.85	121.28
816	1385.31	121.25
817	1386.77	121.23
818	1388.23	121.21
819	1389.69	121.15
820	1391.15	121.09
821	1392.61	121.01
822	1394.07	120.94
823	1395.53	120.87
824	1396.99	120.84
825	1398.45	120.81
826	1399.91	120.79
827	1401.37	120.76
828	1402.83	120.77
829	1404.29	120.76
830	1405.75	120.75
831	1407.21	120.74
832	1408.67	120.73
833	1410.67	120.71
834	1412.67	120.66
835	1414.67	120.61
836	1416.67	120.55
837	1418.67	120.48
838	1420.67	120.43
839	1422.67	120.41
840	1424.67	120.40
841	1426.67	120.37
842	1428.67	120.35
843	1430.67	120.33
844	1432.67	120.31
845	1434.67	120.32
846	1436.67	120.34
847	1438.67	120.35

Order	Station [ft]	Elevation [ft]
848	1440.67	120.32
849	1442.67	120.32
850	1444.67	120.34
851	1446.67	120.34
852	1448.67	120.33
853	1450.67	120.32
854	1452.67	120.27
855	1454.67	120.23
856	1456.67	120.28
857	1458.67	120.40
858	1460.67	120.48
859	1462.67	120.55
860	1464.67	120.62
861	1466.67	120.69
862	1468.67	120.76
863	1470.67	120.82
864	1472.67	120.88
865	1474.75	120.93
866	1476.83	120.91
867	1478.91	120.81
868	1480.99	120.74
869	1483.07	120.71
870	1485.15	120.74
871	1487.23	120.79
872	1489.31	120.79
873	1491.39	120.78
874	1493.47	120.79
875	1495.55	120.79
876	1497.63	120.77
877	1499.71	120.74
878	1501.79	120.72
879	1503.87	120.70
880	1505.95	120.67
881	1507.59	120.65
882	1509.22	120.62
883	1510.86	120.57
884	1512.50	120.53
885	1514.13	120.51
886	1515.77	120.65
887	1517.40	120.71
888	1519.04	120.65
889	1520.68	120.44
890	1522.31	120.26
891	1523.95	120.13
892	1525.58	120.16
893	1527.22	120.19
894	1528.86	120.19
895	1530.49	120.18
896	1532.13	120.17

Order	Station [ft]	Elevation [ft]
897	1533.76	120.13
898	1535.40	120.10
899	1537.03	120.08
900	1538.67	120.11
901	1540.31	120.15
902	1541.94	120.17
903	1543.58	120.20
904	1545.21	120.24
905	1546.85	120.27
906	1548.49	120.32
907	1550.12	120.37
908	1551.76	120.42
909	1553.39	120.45
910	1555.03	120.48
911	1556.67	120.49
912	1558.30	120.48
913	1559.97	120.46
914	1561.64	120.44
915	1563.30	120.42
916	1564.97	120.40
917	1566.64	120.37
918	1568.31	120.34
919	1569.97	120.31
920	1571.64	120.28
921	1573.31	120.24
922	1574.97	120.18
923	1576.64	120.11
924	1578.31	120.05
925	1579.98	120.00
926	1581.64	120.00
927	1583.31	119.98
928	1584.98	119.95
929	1586.65	119.90
930	1588.31	119.88
931	1589.98	119.86
932	1591.65	119.87
933	1593.31	119.86
934	1594.98	119.85
935	1596.65	119.82
936	1598.32	119.81
937	1599.98	119.79
938	1601.65	119.82
939	1603.32	119.85
940	1604.99	119.89
941	1606.65	119.94
942	1608.32	119.98
943	1609.99	120.01
944	1611.66	120.04
945	1613.07	120.05

Order	Station [ft]	Elevation [ft]
946	1614.48	120.05
947	1615.89	120.07
948	1617.30	120.09
949	1618.71	120.13
950	1620.12	120.14
951	1621.53	120.16
952	1622.94	120.18
953	1624.36	120.21
954	1625.77	120.24
955	1627.18	120.26
956	1628.59	120.29
957	1630.00	120.37
958	1631.41	120.47
959	1632.82	120.50
960	1634.23	120.48
961	1635.64	120.47
962	1637.06	120.46
963	1638.47	120.49
964	1639.88	120.52
965	1641.29	120.55
966	1642.70	120.58
967	1644.11	120.62
968	1645.52	120.65
969	1646.93	120.68
970	1648.34	120.68
971	1649.76	120.66
972	1651.17	120.65
973	1652.58	120.64
974	1653.99	120.59
975	1655.40	120.54
976	1656.81	120.47
977	1658.22	120.40
978	1659.63	120.32
979	1661.04	120.27
980	1662.46	120.24
981	1663.87	120.25
982	1665.28	120.25
983	1666.69	120.27
984	1668.10	120.29
985	1669.51	120.31
986	1670.92	120.33
987	1672.33	120.34
988	1673.74	120.32
989	1675.16	120.29
990	1676.57	120.26
991	1677.98	120.23
992	1679.39	120.21
993	1680.80	120.19
994	1682.21	120.18

Order	Station [ft]	Elevation [ft]
995	1683.62	120.17
996	1685.03	120.16
997	1686.44	120.14
998	1687.86	120.13
999	1689.27	120.11
1000	1690.68	120.08
1001	1692.09	120.07
1002	1693.50	120.06
1003	1694.91	120.02
1004	1696.32	120.00
1005	1697.73	120.00
1006	1699.14	119.99
1007	1700.56	119.97
1008	1701.97	119.98
1009	1703.85	119.99
1010	1705.73	119.97
1011	1707.61	119.98
1012	1709.49	120.01
1013	1711.38	119.97
1014	1713.26	119.97
1015	1715.14	119.92
1016	1717.02	119.81
1017	1718.90	119.78
1018	1720.79	119.79
1019	1722.67	119.99
1020	1724.55	120.19
1021	1726.43	120.28
1022	1728.32	120.30
1023	1730.20	120.29
1024	1732.08	120.33
1025	1734.49	120.30
1026	1736.89	120.25
1027	1739.30	120.28
1028	1741.71	120.24
1029	1744.12	120.04
1030	1746.52	119.92
1031	1748.93	120.03
1032	1751.34	120.14
1033	1753.75	120.30
1034	1756.15	120.54
1035	1758.56	120.69
1036	1760.97	120.65
1037	1763.38	120.77
1038	1765.78	120.79
1039	1768.19	120.69
1040	1770.60	120.43
1041	1773.01	120.51
1042	1775.41	120.34
1043	1777.82	120.35

Order	Station [ft]	Elevation [ft]
1044	1780.23	120.37
1045	1782.64	120.40
1046	1785.04	120.37
1047	1787.45	120.37
1048	1789.86	120.49
1049	1792.27	120.52
1050	1794.67	120.29
1051	1797.08	120.14
1052	1799.49	120.21
1053	1801.90	120.24
1054	1804.30	120.26
1055	1806.71	120.26
1056	1809.12	120.12
1057	1811.31	119.72
1058	1813.50	119.97
1059	1815.70	120.13
1060	1817.89	120.23
1061	1820.08	120.38
1062	1822.27	120.56
1063	1824.46	120.77
1064	1826.66	120.90
1065	1828.85	120.97
1066	1831.04	121.04
1067	1833.23	121.02
1068	1835.43	121.05
1069	1837.62	121.13
1070	1839.81	121.24
1071	1842.00	121.20
1072	1844.20	121.13
1073	1846.39	121.20
1074	1848.58	121.28
1075	1850.77	121.29
1076	1852.97	121.45
1077	1855.16	121.65
1078	1857.35	121.74
1079	1859.54	121.83
1080	1861.73	121.91
1081	1863.93	121.97
1082	1866.12	122.06
1083	1868.31	122.15
1084	1870.50	122.22
1085	1872.70	122.32
1086	1874.89	122.49
1087	1877.08	122.72
1088	1879.27	122.80
1089	1881.31	122.81
1090	1883.35	122.76
1091	1885.39	122.54
1092	1887.43	122.45

Order	Station [ft]	Elevation [ft]
1093	1889.47	122.35
1094	1891.51	122.25
1095	1893.55	122.15
1096	1895.59	122.04
1097	1897.63	121.96
1098	1899.67	121.88
1099	1901.70	121.88
1100	1903.74	121.96
1101	1905.78	122.09
1102	1907.82	122.11
1103	1909.86	122.02
1104	1911.90	121.92
1105	1913.94	121.92
1106	1915.98	122.00
1107	1918.02	121.99
1108	1920.06	122.01
1109	1922.10	122.01
1110	1924.14	121.97
1111	1926.17	121.91
1112	1928.21	121.92
1113	1930.25	122.28
1114	1932.29	122.35
1115	1934.33	122.38
1116	1936.37	122.40
1117	1938.41	122.43
1118	1940.45	122.43
1119	1942.49	122.46
1120	1944.53	122.47
1121	1947.02	122.41
1122	1949.52	122.35
1123	1952.01	122.29
1124	1954.51	122.24
1125	1957.00	122.17
1126	1959.50	122.12
1127	1961.99	122.13
1128	1964.49	122.06
1129	1966.98	121.95
1130	1969.48	121.95
1131	1971.97	121.95
1132	1974.47	121.95
1133	1976.96	121.95
1134	1979.46	121.89
1135	1981.95	121.90
1136	1984.45	121.95
1137	1986.94	122.15
1138	1989.44	122.53
1139	1991.93	123.10
1140	1994.43	123.88
1141	1996.92	124.63

Order	Station [ft]	Elevation [ft]
1142	1999.42	125.14
1143	2001.91	125.62
1144	2004.41	125.84
1145	2006.90	125.75
1146	2009.40	125.65
1147	2011.89	125.60
1148	2014.39	125.68
1149	2016.88	125.89
1150	2019.38	126.09
1151	2021.87	126.26
1152	2024.37	126.28

Comment:

Weir Cross Section: X-0130W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	92.06
1	1.52	91.91
2	3.03	91.86
3	4.55	91.89
4	6.07	91.95
5	7.58	91.95
6	9.10	91.82
7	10.62	91.51
8	12.13	91.55
9	13.65	91.68
10	15.17	91.89
11	16.69	91.92
12	18.20	91.77
13	19.72	91.54
14	21.24	91.31
15	22.75	91.10
16	24.27	90.92
17	25.79	90.76
18	27.30	90.74
19	28.82	90.72
20	30.34	90.70
21	31.85	90.65
22	33.37	90.55
23	34.89	90.48
24	36.40	90.41
25	37.92	90.34

Order	Station [ft]	Elevation [ft]
26	39.44	90.27
27	40.95	90.21
28	42.47	90.14
29	43.99	90.08
30	45.51	90.02
31	47.02	90.00
32	48.54	90.01
33	50.06	89.90
34	51.57	89.78
35	53.09	89.63
36	54.61	89.57
37	56.12	89.52
38	57.64	89.42
39	59.16	89.35
40	60.67	89.31
41	62.19	89.26
42	63.71	89.20
43	65.22	89.15
44	66.74	89.11
45	68.26	89.09
46	69.78	89.01
47	71.29	88.92
48	72.81	88.84
49	74.33	88.80
50	75.84	88.78
51	77.36	88.68
52	78.88	88.58
53	80.39	88.52
54	81.91	88.50
55	83.43	88.53
56	84.94	88.53
57	86.46	88.51
58	87.98	88.48
59	89.49	88.48
60	91.01	88.50
61	92.53	88.61
62	94.04	88.71
63	95.56	88.75
64	97.08	88.69
65	98.60	88.59
66	100.11	88.57
67	101.63	88.49
68	103.15	88.34
69	104.66	88.17
70	106.18	87.99
71	107.70	87.85
72	109.21	87.74
73	110.73	87.67
74	112.25	87.60

Order	Station [ft]	Elevation [ft]
75	113.76	87.54
76	115.28	87.49
77	116.80	87.46
78	118.31	87.47
79	119.83	87.42
80	121.35	87.36
81	122.86	87.27
82	124.38	87.19
83	125.90	87.11
84	127.42	87.05
85	128.93	86.98
86	130.45	86.89
87	131.97	86.79
88	133.48	86.69
89	135.00	86.59
90	136.52	86.51
91	138.03	86.46
92	139.55	86.38
93	141.07	86.27
94	142.58	86.17
95	144.10	86.08
96	145.62	85.96
97	147.13	85.83
98	148.65	85.69
99	150.17	85.58
100	151.68	85.42
101	153.20	85.17
102	154.72	84.99
103	156.24	84.84
104	157.75	84.65
105	159.27	84.45
106	160.79	84.24
107	162.30	84.00
108	163.82	83.77
109	165.34	83.62
110	166.85	83.47
111	168.37	83.31
112	169.89	83.18
113	171.40	83.05
114	172.92	82.91
115	174.44	82.75
116	175.95	82.59
117	177.47	82.41
118	178.99	82.24
119	180.50	82.15
120	182.02	82.01
121	183.54	81.82
122	185.06	81.63
123	186.57	81.47

Order	Station [ft]	Elevation [ft]
124	188.09	81.37
125	189.61	81.27
126	191.12	81.16
127	192.64	81.08
128	194.16	80.98
129	195.67	80.86
130	197.19	80.75
131	198.71	80.65
132	200.22	80.53
133	201.74	80.41
134	203.26	80.32
135	204.77	80.25
136	206.29	80.17
137	207.81	80.08
138	209.33	79.99
139	210.84	79.89
140	212.36	79.83
141	213.88	79.79
142	215.39	79.76
143	216.91	79.74
144	218.43	79.75
145	219.94	79.75
146	221.46	79.74
147	222.98	79.78
148	224.49	79.77
149	226.01	79.72
150	227.53	79.70
151	229.04	79.68
152	230.56	79.63
153	232.08	79.61
154	233.59	79.59
155	235.11	79.58
156	236.63	79.57
157	238.15	79.62
158	239.66	79.67
159	241.18	79.72
160	242.70	79.67
161	244.21	79.63
162	245.73	79.64
163	247.25	79.64
164	248.76	79.65
165	250.28	79.62
166	251.80	79.58
167	253.31	79.55
168	254.83	79.55
169	256.35	79.58
170	257.86	79.56
171	259.38	79.53
172	260.90	79.49

Order	Station [ft]	Elevation [ft]
173	262.41	79.42
174	263.93	79.35
175	265.45	79.22
176	266.97	79.11
177	268.48	79.02
178	270.00	78.94
179	271.52	78.88
180	273.03	78.83
181	274.55	78.75
182	276.07	78.64
183	277.58	78.50
184	279.10	78.36
185	280.62	78.24
186	282.13	78.11
187	283.65	77.98
188	285.17	77.88
189	286.68	77.79
190	288.20	77.68
191	289.72	77.56
192	291.23	77.44
193	292.75	77.31
194	294.27	77.19
195	295.79	77.03
196	297.30	76.91
197	298.82	76.80
198	300.34	76.60
199	301.85	76.41
200	303.37	76.26
201	304.89	76.08
202	306.40	75.88
203	307.92	75.54
204	309.44	75.25
205	310.95	75.09
206	312.47	74.92
207	313.99	74.74
208	315.50	74.50
209	317.02	74.25
210	318.54	73.98
211	320.05	73.74
212	321.57	73.51
213	323.09	73.26
214	324.61	73.01
215	326.12	72.77
216	327.64	72.51
217	329.16	72.24
218	330.67	71.96
219	332.19	71.70
220	333.71	71.47
221	335.22	71.23

Order	Station [ft]	Elevation [ft]
222	336.74	70.98
223	338.26	70.70
224	339.77	70.43
225	341.29	70.18
226	342.81	69.94
227	344.32	69.70
228	345.84	69.42
229	347.36	69.16
230	348.88	68.91
231	350.39	68.67
232	351.91	68.42
233	353.43	68.13
234	354.94	67.86
235	356.46	67.62
236	357.98	67.44
237	359.49	67.24
238	361.01	67.02
239	362.53	66.73
240	364.04	66.41
241	365.56	66.20
242	367.08	65.98
243	368.59	65.76
244	370.11	65.57
245	371.63	65.40
246	373.14	65.21
247	374.66	65.03
248	376.18	64.84
249	377.70	64.64
250	379.21	64.43
251	380.73	64.20
252	382.25	63.99
253	383.76	63.81
254	385.28	63.73
255	386.80	63.68
256	388.31	63.60
257	389.85	63.61
258	391.39	63.65
259	392.92	63.71
260	394.46	63.69
261	396.00	63.61
262	397.54	63.47
263	399.07	63.39
264	400.61	63.34
265	402.15	63.30
266	403.68	63.25
267	405.22	63.20
268	406.76	63.26
269	408.29	63.38
270	409.83	63.52

Order	Station [ft]	Elevation [ft]
271	411.37	63.59
272	412.91	63.58
273	414.44	63.51
274	415.98	63.47
275	417.52	63.52
276	419.05	63.55
277	420.59	63.57
278	422.13	63.66
279	423.67	63.76
280	425.20	63.91
281	426.74	63.95
282	428.28	63.93
283	429.81	63.87
284	431.35	63.89
285	432.89	64.04
286	434.42	64.05
287	435.96	64.05
288	437.50	64.04
289	439.04	64.08
290	440.57	64.18
291	442.11	64.25
292	443.65	64.33
293	445.18	64.47
294	446.72	64.54
295	448.26	64.57
296	449.79	64.64
297	451.33	64.74
298	452.87	64.92
299	454.41	65.22
300	455.94	65.61
301	457.48	66.01
302	459.02	66.32
303	460.55	66.53
304	462.09	66.55
305	463.63	66.49
306	465.17	66.51
307	466.70	66.69
308	468.24	67.01
309	469.78	67.20
310	471.31	67.31
311	472.85	67.17
312	474.39	66.99
313	475.92	66.79
314	477.46	66.67
315	479.00	66.58
316	480.54	66.61
317	482.07	66.61
318	483.61	66.62
319	485.15	66.67

Order	Station [ft]	Elevation [ft]
320	486.68	66.69
321	488.29	66.58
322	489.89	66.43
323	491.49	66.07
324	493.10	65.86
325	494.70	65.77
326	496.30	65.65
327	497.91	65.54
328	499.51	65.43
329	501.12	65.49
330	502.72	65.47
331	504.32	65.19
332	505.93	65.09
333	507.53	64.98
334	509.13	64.53
335	510.74	64.26
336	512.34	64.10
337	513.94	64.05
338	515.55	63.91
339	517.15	63.67
340	518.75	63.74
341	520.36	63.84
342	521.96	63.96
343	523.56	63.99
344	525.17	63.92
345	526.77	63.65
346	528.37	63.31
347	529.98	62.91
348	531.58	62.38
349	533.18	61.84
350	534.79	61.32
351	536.39	60.93
352	537.99	60.47
353	539.60	59.95
354	541.20	59.56
355	542.81	59.29
356	544.41	59.22
357	546.01	59.23
358	547.62	59.24
359	549.22	59.25
360	550.82	59.41
361	552.43	59.65
362	554.03	59.87
363	555.63	59.94
364	557.24	59.88
365	558.84	59.54
366	560.44	59.24
367	562.05	59.01
368	563.65	58.95

Order	Station [ft]	Elevation [ft]
369	565.25	59.00
370	566.86	59.26
371	568.46	59.54
372	570.06	59.66
373	571.67	59.07
374	573.27	58.51
375	574.87	57.99
376	576.48	57.58
377	578.08	57.17
378	579.68	56.74
379	581.29	56.35
380	582.89	55.94
381	584.50	55.52
382	586.10	55.11
383	587.70	54.70
384	589.31	54.29
385	590.91	54.00
386	592.51	53.71
387	594.12	53.20
388	595.72	53.07
389	597.32	53.18
390	598.93	53.24
391	600.53	53.15
392	602.13	52.92
393	603.74	52.86
394	605.34	52.73
395	606.94	52.48
396	608.55	52.48
397	610.15	52.57
398	611.75	52.79
399	613.36	53.02
400	614.96	53.23
401	616.56	53.34
402	618.17	53.68
403	619.77	54.17
404	621.37	54.43
405	622.98	54.66
406	624.58	54.86
407	626.19	55.00
408	627.79	55.14
409	629.39	55.27
410	631.00	55.23
411	632.60	55.11
412	634.20	54.85
413	635.81	54.67
414	637.41	54.52
415	639.01	54.33
416	640.62	54.01
417	642.22	53.58

Order	Station [ft]	Elevation [ft]
418	643.82	52.95
419	645.43	52.33
420	647.03	51.74
421	648.63	51.57
422	650.24	51.58
423	651.84	51.87
424	653.44	52.22
425	655.05	52.59
426	656.65	52.96
427	658.25	53.31
428	659.86	53.63
429	661.46	53.75
430	663.06	53.77
431	664.67	53.68
432	666.27	53.77
433	667.88	53.86
434	669.48	53.97
435	671.08	53.76
436	672.69	53.31
437	674.29	52.40
438	675.89	51.63
439	677.50	50.99
440	679.10	50.67
441	680.70	50.36
442	682.31	50.07
443	683.91	49.90
444	685.51	49.80
445	687.12	49.75
446	688.72	49.70
447	690.32	49.63
448	691.93	49.53
449	693.53	49.65
450	695.13	49.80
451	696.74	49.89
452	698.34	50.03
453	699.94	50.19
454	701.55	50.37
455	703.15	50.68
456	704.75	51.06
457	706.36	51.40
458	707.96	51.90
459	709.57	52.61
460	711.17	52.69
461	712.77	52.48
462	714.38	51.81
463	715.98	51.09
464	717.58	50.47
465	719.19	50.25
466	720.79	50.29

Order	Station [ft]	Elevation [ft]
467	722.39	50.40
468	724.00	50.01
469	725.60	49.73
470	727.20	49.55
471	728.81	49.52
472	730.41	49.50
473	732.01	49.48
474	733.62	49.49
475	735.22	49.48
476	736.82	49.41
477	738.43	49.32
478	740.03	49.24
479	741.63	49.22
480	743.24	49.21
481	744.84	49.20
482	746.44	49.18
483	748.05	49.19
484	749.65	49.21
485	751.26	49.16
486	752.86	49.12
487	754.46	49.09
488	756.07	49.25
489	757.67	49.41
490	759.27	49.46
491	760.88	49.24
492	762.48	48.99
493	764.08	49.09
494	765.69	49.14
495	767.29	49.15
496	768.89	49.15
497	770.50	49.17
498	772.10	49.20
499	773.70	49.35
500	775.31	49.53
501	776.91	49.74
502	778.51	49.53
503	780.12	49.27
504	781.72	49.19
505	783.32	49.12
506	784.93	49.06
507	786.53	48.99
508	788.13	48.91
509	789.74	48.83
510	791.34	48.80
511	792.95	48.83
512	794.55	48.90
513	796.15	49.13
514	797.76	49.29
515	799.36	49.26

Order	Station [ft]	Elevation [ft]
516	800.96	49.23
517	802.57	49.21
518	804.17	49.26
519	805.77	49.09
520	807.38	48.83
521	808.98	48.70
522	810.58	48.67
523	812.19	48.74
524	813.79	48.78
525	815.39	48.85
526	817.00	48.95
527	818.60	49.02
528	820.20	49.06
529	821.81	49.04
530	823.41	49.02
531	825.01	49.00
532	826.62	49.00
533	828.22	49.06
534	829.82	49.15
535	831.43	49.28
536	833.03	49.40
537	834.64	49.53
538	836.24	49.61
539	837.84	49.72
540	839.45	49.89
541	841.05	50.09
542	842.65	50.29
543	844.26	50.49
544	845.86	50.62
545	847.46	50.72
546	849.07	50.76
547	850.67	50.81
548	852.27	50.85
549	853.88	50.57
550	855.48	50.39
551	857.08	50.33
552	858.69	50.38
553	860.29	50.41
554	861.89	50.41
555	863.50	50.40
556	865.10	50.38
557	866.70	50.34
558	868.31	50.28
559	869.91	50.20
560	871.51	50.14
561	873.12	50.07
562	874.72	49.99
563	876.33	49.93
564	877.93	49.86

Order	Station [ft]	Elevation [ft]
565	879.53	49.80
566	881.14	49.69
567	882.74	49.59
568	884.34	49.51
569	885.95	49.42
570	887.55	49.33
571	889.15	49.27
572	890.76	49.20
573	892.36	49.14
574	893.96	49.04
575	895.57	48.97
576	897.17	48.91
577	898.74	48.87
578	900.30	48.83
579	901.87	48.76
580	903.43	48.71
581	905.00	48.70
582	906.56	48.70
583	908.13	48.68
584	909.70	48.59
585	911.26	48.52
586	912.83	48.53
587	914.39	48.48
588	915.96	48.40
589	917.52	48.33
590	919.09	48.44
591	920.66	48.73
592	922.22	48.83
593	923.79	48.75
594	925.35	48.66
595	926.92	48.76
596	928.48	48.95
597	930.05	49.06
598	931.61	49.01
599	933.18	49.03
600	934.75	48.96
601	936.31	48.77
602	937.88	48.66
603	939.44	48.74
604	941.01	48.74
605	942.57	48.81
606	944.14	48.77
607	945.71	48.67
608	947.27	48.54
609	949.71	48.46
610	952.15	48.30
611	954.59	48.08
612	957.04	48.02
613	959.48	48.01

Order	Station [ft]	Elevation [ft]
614	961.92	48.01
615	964.36	47.97
616	966.80	47.91
617	969.24	47.85
618	971.68	47.80
619	974.12	47.82
620	976.56	47.94
621	979.00	48.12
622	981.45	48.29
623	983.89	48.48
624	986.33	48.65
625	988.76	48.71
626	991.20	48.66
627	993.63	48.55
628	996.06	48.59
629	998.50	48.66
630	1000.93	48.67
631	1003.37	48.63
632	1005.80	48.56
633	1008.23	48.46
634	1010.67	48.33
635	1013.10	48.23
636	1015.54	48.18
637	1017.97	48.19
638	1020.41	48.13
639	1022.84	48.07
640	1025.27	48.01
641	1027.71	48.00
642	1030.14	47.99
643	1032.58	47.88
644	1035.01	47.85
645	1037.44	47.80
646	1039.88	47.78
647	1042.31	47.69
648	1044.75	47.53
649	1047.18	47.46
650	1049.61	47.36
651	1052.05	47.22
652	1054.48	47.17
653	1056.92	47.18
654	1059.35	47.15
655	1061.78	47.09
656	1064.22	47.05
657	1066.03	47.04
658	1067.85	46.98
659	1069.67	46.89
660	1071.48	46.79
661	1073.30	46.72
662	1075.12	46.68

Order	Station [ft]	Elevation [ft]
663	1076.93	46.66
664	1078.75	46.66
665	1080.56	46.74
666	1082.38	46.90
667	1084.20	47.01
668	1086.01	47.12
669	1087.83	47.30
670	1089.64	47.43
671	1091.46	47.47
672	1093.28	47.45
673	1095.38	47.38
674	1097.49	47.28
675	1099.60	47.16
676	1101.71	47.03
677	1103.82	46.85
678	1105.93	46.71
679	1108.04	46.61
680	1110.15	46.55
681	1112.25	46.53
682	1114.36	46.52
683	1116.47	46.55
684	1118.58	46.55
685	1120.69	46.55
686	1122.80	46.49
687	1124.91	46.49
688	1127.01	46.50
689	1129.12	46.48
690	1131.23	46.49
691	1133.34	46.47
692	1135.45	46.44
693	1137.56	46.42
694	1139.67	46.41
695	1141.78	46.42
696	1143.88	46.42
697	1145.99	46.45
698	1148.10	46.50
699	1150.21	46.54
700	1152.32	46.60
701	1154.43	46.66
702	1156.54	46.69
703	1158.65	46.68
704	1160.75	46.69
705	1162.60	46.64
706	1164.45	46.59
707	1166.29	46.60
708	1168.14	46.65
709	1169.98	46.67
710	1171.83	46.65
711	1173.67	46.65

Order	Station [ft]	Elevation [ft]
712	1175.52	46.63
713	1177.36	46.64
714	1179.21	46.62
715	1181.06	46.64
716	1182.90	46.63
717	1184.75	46.66
718	1186.59	46.70
719	1188.44	46.76
720	1190.28	46.80
721	1191.59	46.82
722	1192.90	46.84
723	1194.21	46.79
724	1195.52	46.74
725	1196.83	46.69
726	1198.13	46.66
727	1199.44	46.62
728	1200.75	46.59
729	1202.06	46.61
730	1203.37	46.64
731	1204.68	46.65
732	1205.98	46.66
733	1207.29	46.66
734	1208.60	46.68
735	1209.91	46.75
736	1211.22	46.79
737	1212.53	46.79
738	1213.84	46.83
739	1215.14	46.90
740	1216.45	46.94
741	1217.76	46.94
742	1219.07	46.97
743	1220.38	47.01
744	1221.69	47.02
745	1222.99	46.99
746	1224.30	46.96
747	1225.61	46.94
748	1226.92	46.92
749	1228.23	46.92
750	1229.54	46.92
751	1230.85	46.91
752	1232.15	46.90
753	1234.52	46.89
754	1236.88	47.07
755	1239.25	47.58
756	1241.61	47.77
757	1243.24	47.31
758	1244.87	46.92
759	1246.50	46.62
760	1248.13	46.55

Order	Station [ft]	Elevation [ft]
761	1249.77	46.49
762	1251.40	46.42
763	1253.03	46.37
764	1254.66	46.36
765	1256.29	46.37
766	1257.92	46.27
767	1259.55	46.28
768	1261.18	46.43
769	1262.82	46.53
770	1264.45	46.59
771	1266.08	46.62
772	1267.71	46.59
773	1269.41	46.54
774	1271.12	46.48
775	1272.82	46.46
776	1274.52	46.44
777	1276.22	46.42
778	1277.93	46.44
779	1279.63	46.44
780	1281.33	46.43
781	1283.04	46.36
782	1284.74	46.32
783	1286.44	46.28
784	1288.14	46.29
785	1289.85	46.31
786	1291.55	46.34
787	1293.25	46.32
788	1294.96	46.33
789	1296.66	46.35
790	1298.36	46.35
791	1300.06	46.35
792	1301.77	46.35
793	1303.47	46.39
794	1305.17	46.41
795	1306.88	46.43
796	1308.58	46.48
797	1310.28	46.48
798	1311.98	46.45
799	1313.69	46.40
800	1315.39	46.38
801	1317.09	46.40
802	1318.80	46.48
803	1320.50	46.46
804	1322.20	46.45
805	1324.33	46.48
806	1326.47	46.46
807	1328.60	46.46
808	1330.73	46.46
809	1332.87	46.45

Order	Station [ft]	Elevation [ft]
810	1335.00	46.45
811	1337.13	46.42
812	1339.26	46.42
813	1341.40	46.37
814	1343.53	46.34
815	1345.66	46.30
816	1347.80	46.28
817	1349.93	46.38
818	1352.06	46.40
819	1354.19	46.40
820	1356.33	46.40
821	1358.46	46.41
822	1360.59	46.40
823	1362.73	46.39
824	1364.86	46.42
825	1366.99	46.38
826	1369.12	46.40
827	1371.26	46.38
828	1373.39	46.39
829	1375.52	46.41
830	1377.66	46.37
831	1379.79	46.34
832	1381.92	46.32
833	1384.05	46.33
834	1386.19	46.34
835	1388.32	46.35
836	1390.45	46.38
837	1392.26	46.40
838	1394.07	46.42
839	1395.88	46.44
840	1397.69	46.44
841	1399.50	46.46
842	1401.31	46.47
843	1403.12	46.48
844	1404.93	46.51
845	1406.74	46.50
846	1408.55	46.53
847	1410.36	46.55
848	1412.17	46.54
849	1413.98	46.54
850	1415.79	46.52
851	1417.60	46.49
852	1419.41	46.45
853	1421.76	46.48
854	1424.11	46.46
855	1426.46	46.46
856	1428.80	46.47
857	1431.15	46.43
858	1433.50	46.46

Order	Station [ft]	Elevation [ft]
859	1435.85	46.48
860	1438.19	46.49
861	1440.54	46.51
862	1442.89	46.52
863	1445.24	46.54
864	1447.58	46.51
865	1449.93	46.45
866	1452.28	46.34
867	1454.63	46.09
868	1456.97	45.56
869	1458.97	45.68
870	1460.98	45.73
871	1462.98	45.73
872	1464.98	45.89
873	1466.98	46.01
874	1468.98	46.07
875	1470.99	46.10
876	1472.99	46.09
877	1474.99	46.07
878	1476.99	45.94
879	1478.99	45.85
880	1480.99	45.86
881	1483.00	45.84
882	1485.00	45.79
883	1487.00	45.78
884	1489.00	45.71
885	1491.00	45.59
886	1493.00	45.65
887	1495.01	45.61
888	1497.01	45.64
889	1499.01	45.72
890	1501.01	45.79
891	1503.01	45.73
892	1505.01	45.79
893	1507.02	45.92
894	1509.02	46.11
895	1511.02	46.29
896	1513.02	46.39
897	1515.02	46.51
898	1517.02	46.60
899	1519.03	46.67
900	1521.03	46.74
901	1523.02	46.89
902	1525.02	47.19
903	1527.01	47.48
904	1529.00	47.61
905	1531.00	47.60
906	1532.99	47.38
907	1534.99	47.31

Order	Station [ft]	Elevation [ft]
908	1536.98	47.35
909	1538.83	47.35
910	1540.68	47.35
911	1542.53	47.37
912	1544.38	47.43
913	1546.22	47.48
914	1548.07	47.51
915	1549.92	47.52
916	1551.77	47.54

Comment:

Weir Cross Section: X-0160W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	47.54
1	1.45	47.49
2	2.90	47.42
3	4.36	47.40
4	5.81	47.39
5	7.26	47.42
6	8.71	47.43
7	10.17	47.41
8	11.62	47.37
9	13.07	47.33
10	14.52	47.27
11	15.97	47.22
12	17.43	47.18
13	18.88	47.14
14	20.33	47.09
15	21.78	47.13
16	23.23	47.20
17	24.69	47.19
18	26.14	47.18
19	27.59	47.14
20	29.04	47.12
21	30.50	47.12
22	31.95	47.07
23	33.40	47.02
24	34.85	47.01
25	36.30	46.98
26	37.76	46.94
27	39.21	46.92

Order	Station [ft]	Elevation [ft]
28	40.66	46.89
29	42.11	46.94
30	43.57	46.98
31	45.02	46.95
32	46.47	46.95
33	47.92	46.97
34	49.37	46.97
35	50.83	46.96
36	52.28	46.95
37	53.73	46.93
38	55.18	46.92
39	56.63	46.91
40	58.09	46.91
41	59.54	46.92
42	60.99	46.93
43	62.44	46.98
44	63.90	47.00
45	65.35	47.00
46	66.80	47.00
47	68.25	47.00
48	69.70	47.06
49	71.16	47.11
50	72.61	47.13
51	74.06	47.15
52	75.51	47.16
53	76.97	47.20
54	78.42	47.24
55	79.87	47.25
56	81.32	47.24
57	82.77	47.21
58	84.23	47.24
59	85.68	47.30
60	87.13	47.29
61	88.58	47.28
62	90.03	47.29
63	91.49	47.30
64	92.94	47.30
65	94.75	47.25
66	96.57	47.21
67	98.38	47.20
68	100.20	47.16
69	102.01	47.08
70	103.83	47.01
71	105.64	47.01
72	107.46	47.02
73	109.27	47.02
74	111.09	47.00
75	112.90	47.00
76	114.72	47.01

Order	Station [ft]	Elevation [ft]
77	116.53	47.05
78	118.35	47.14
79	120.16	47.17
80	121.98	47.16
81	123.79	47.13
82	125.61	47.08
83	127.42	47.23
84	129.24	47.28
85	131.05	47.26
86	132.86	47.24
87	134.68	47.24
88	136.49	47.24
89	138.31	47.25
90	140.12	47.23
91	141.94	47.25
92	143.75	47.27
93	145.57	47.27
94	147.38	47.27
95	149.20	47.27
96	151.01	47.26
97	152.63	47.25
98	154.25	47.20
99	155.88	47.14
100	157.50	47.18
101	159.12	47.13
102	160.74	47.01
103	162.36	47.13
104	163.98	47.22
105	165.60	47.24
106	167.22	47.20
107	168.84	47.15
108	170.46	47.10
109	172.08	47.10
110	173.71	47.11
111	175.33	47.12
112	176.95	47.14
113	178.57	47.16
114	180.19	47.10
115	181.81	46.99
116	183.43	46.86
117	185.05	46.86
118	186.67	46.86
119	188.29	46.85
120	189.91	46.80
121	191.54	46.78
122	193.16	46.77
123	194.78	46.78
124	196.40	46.78
125	198.02	46.76

Order	Station [ft]	Elevation [ft]
126	199.64	46.75
127	201.26	46.74
128	202.88	46.75
129	204.50	46.75
130	206.12	46.77
131	207.74	46.78
132	209.37	46.80
133	210.99	46.82
134	212.61	46.83
135	214.23	46.84
136	215.85	46.86
137	217.47	46.88
138	219.09	46.88
139	220.71	46.86
140	222.33	46.85
141	223.95	46.86
142	225.58	46.87
143	227.20	46.86
144	228.82	46.85
145	230.44	46.83
146	232.06	46.84
147	233.68	46.85
148	235.30	46.85
149	236.92	46.86
150	238.54	46.88
151	240.16	46.87
152	241.78	46.89
153	243.41	46.91
154	245.03	46.91
155	246.65	46.92
156	248.27	46.95
157	249.89	46.97
158	251.51	46.98
159	253.13	46.99
160	254.75	47.00
161	256.37	47.02
162	257.99	47.05
163	259.61	47.07
164	261.24	47.08
165	262.86	47.10
166	264.48	47.09
167	266.10	47.07
168	267.72	47.06
169	269.34	47.06
170	270.96	47.07
171	272.58	47.01
172	274.20	47.02
173	275.82	47.07
174	277.44	47.04

Order	Station [ft]	Elevation [ft]
175	279.07	47.00
176	280.69	46.95
177	282.31	46.92
178	283.93	46.91
179	285.55	46.93
180	287.17	46.91
181	288.79	46.89
182	290.41	46.90
183	292.03	46.90
184	293.65	46.91
185	295.27	46.92
186	296.90	46.94
187	298.52	46.95
188	300.14	46.95
189	301.76	46.94
190	303.38	46.95
191	305.00	46.94
192	306.62	46.92
193	308.24	46.91
194	309.86	46.94
195	311.48	46.94
196	313.10	46.90
197	314.73	46.92
198	316.35	46.93
199	317.97	46.90
200	319.59	46.89
201	321.21	46.88
202	322.83	46.90
203	324.45	46.90
204	326.07	46.90
205	327.69	46.92
206	329.31	46.94
207	330.93	46.95
208	332.56	46.94
209	334.18	46.94
210	335.80	46.93
211	337.42	46.96
212	339.04	46.98
213	340.66	47.00
214	342.28	47.04
215	343.90	47.06
216	345.52	47.02
217	347.14	46.99
218	348.76	46.96
219	350.39	46.93
220	352.01	46.91
221	353.63	46.88
222	355.25	46.83
223	356.87	46.80

Order	Station [ft]	Elevation [ft]
224	358.49	46.78
225	360.11	46.76
226	361.73	46.75
227	363.35	46.75
228	364.97	46.75
229	366.59	46.76
230	368.22	46.79
231	369.84	46.82
232	371.46	46.86
233	373.08	46.91
234	374.70	46.90
235	376.32	46.88
236	377.94	46.90
237	379.56	46.91
238	381.18	46.92
239	382.80	46.89
240	384.42	46.92
241	386.05	46.96
242	387.67	46.94
243	389.29	46.95
244	390.91	46.97
245	392.53	46.97
246	394.15	46.97
247	395.77	46.97
248	397.39	47.00
249	399.01	47.01
250	400.63	47.00
251	402.25	47.02
252	403.88	47.04
253	405.50	47.05
254	407.12	47.06
255	408.74	47.07
256	410.36	47.06
257	411.98	47.07
258	413.60	47.08
259	415.22	47.07
260	416.84	47.07
261	418.46	47.07
262	420.09	47.09
263	421.71	47.08
264	423.33	47.05
265	424.95	47.01
266	426.57	46.98
267	428.19	46.96
268	429.81	46.98
269	431.43	47.02
270	433.05	47.06
271	434.67	47.05
272	436.29	47.03

Order	Station [ft]	Elevation [ft]
273	437.92	47.03
274	439.54	47.05
275	441.16	47.06
276	442.78	47.03
277	444.40	47.04
278	446.02	47.05
279	447.64	47.03
280	449.26	47.01
281	450.88	46.98
282	452.50	46.98
283	454.12	46.99
284	455.75	47.00
285	457.37	47.00
286	458.99	47.00
287	460.61	47.00
288	462.23	47.00
289	463.85	47.01
290	465.47	47.02
291	467.09	47.02
292	468.71	47.02
293	470.33	47.03
294	471.95	47.04
295	473.58	47.05
296	475.20	47.04
297	476.82	47.04
298	478.44	47.02
299	480.06	47.01
300	481.68	47.01
301	483.30	47.02
302	484.92	47.06
303	486.54	47.05
304	488.16	46.98
305	489.78	47.00
306	491.41	47.02
307	493.03	47.01
308	494.65	46.99
309	496.27	46.99
310	497.89	46.99
311	499.51	47.00
312	501.13	47.01
313	502.75	46.98
314	504.37	47.00
315	505.99	47.02
316	507.61	47.03
317	509.24	47.04
318	510.86	47.05
319	512.48	47.03
320	514.10	47.04
321	515.72	47.07

Order	Station [ft]	Elevation [ft]
322	517.34	47.11
323	518.96	47.14
324	520.58	47.16
325	522.20	47.19
326	523.82	47.21
327	525.44	47.23
328	527.07	47.27
329	528.69	47.30
330	530.31	47.34
331	531.93	47.40
332	533.55	47.46
333	535.17	47.48
334	536.79	47.49
335	538.41	47.51
336	540.03	47.54
337	541.65	47.55
338	543.27	47.56
339	544.90	47.60
340	546.52	47.63
341	548.14	47.65
342	549.76	47.67
343	551.38	47.68
344	553.00	47.66
345	554.62	47.68
346	556.24	47.71
347	557.86	47.70
348	559.48	47.74
349	561.10	47.79
350	562.73	47.84
351	564.35	47.86
352	565.97	47.87
353	567.78	47.88
354	569.58	47.91
355	571.39	47.93
356	573.20	47.92
357	575.01	47.88
358	576.82	47.88
359	578.63	47.89
360	580.43	47.84
361	582.24	47.72
362	584.05	47.62
363	585.86	47.58
364	587.67	47.57
365	589.48	47.55
366	591.28	47.56
367	593.09	47.64
368	594.90	47.75
369	596.57	47.76
370	598.24	47.74

Order	Station [ft]	Elevation [ft]
371	599.92	47.72
372	601.59	47.71
373	603.26	47.71
374	604.93	47.67
375	606.60	47.64
376	608.27	47.64
377	609.95	47.67
378	611.62	47.66
379	613.29	47.61
380	614.96	47.60
381	616.63	47.58
382	618.30	47.57
383	619.98	47.53
384	621.65	47.52
385	623.32	47.55
386	624.99	47.55
387	626.66	47.55
388	628.33	47.55
389	630.00	47.54
390	631.68	47.52
391	633.35	47.49
392	635.02	47.47
393	636.69	47.47
394	638.36	47.50
395	640.03	47.52
396	641.71	47.51
397	643.38	47.48
398	645.05	47.45
399	646.72	47.41
400	648.39	47.38
401	650.19	47.42
402	651.99	47.42
403	653.79	47.40
404	655.59	47.40
405	657.38	47.44
406	659.18	47.46
407	660.98	47.46
408	662.78	47.45
409	664.58	47.45
410	666.38	47.45
411	668.17	47.41
412	669.97	47.45
413	671.77	47.49
414	673.57	47.50
415	675.37	47.49
416	677.17	47.49
417	678.97	47.49
418	680.76	47.49
419	682.56	47.53

Order	Station [ft]	Elevation [ft]
420	684.36	47.55
421	686.16	47.54
422	687.96	47.51
423	689.76	47.50
424	691.55	47.50
425	693.35	47.52
426	695.15	47.54
427	696.95	47.51
428	698.75	47.48
429	700.55	47.50
430	702.35	47.54
431	704.14	47.55
432	705.94	47.53
433	707.74	47.55
434	709.54	47.58
435	711.34	47.60
436	713.14	47.58
437	714.93	47.60
438	716.73	47.63
439	718.53	47.67
440	720.33	47.65
441	722.13	47.63
442	723.93	47.62
443	725.73	47.64
444	727.52	47.61
445	729.32	47.59
446	731.12	47.56
447	732.92	47.56
448	734.72	47.56
449	736.52	47.57
450	738.31	47.59
451	740.11	47.65
452	741.91	47.69
453	743.71	47.72
454	745.51	47.75
455	747.31	47.75
456	749.11	47.75
457	750.90	47.77
458	752.70	47.74
459	754.50	47.75
460	756.30	47.79
461	758.10	47.89
462	759.90	47.98
463	761.69	48.09
464	763.49	48.24

Comment:

Weir Cross Section: X-0170W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	47.85
1	2.05	47.77
2	4.10	47.58
3	6.15	47.60
4	8.20	47.62
5	10.25	47.60
6	12.30	47.59
7	14.35	47.61
8	16.40	47.60
9	18.45	47.56
10	20.50	47.52
11	22.55	47.50
12	24.60	47.50
13	26.65	47.46
14	28.70	47.43
15	30.75	47.43
16	32.80	47.41
17	34.85	47.40
18	36.90	47.41
19	38.95	47.37
20	41.00	47.36
21	43.05	47.36
22	45.10	47.33
23	47.15	47.31
24	49.20	47.32
25	51.25	47.29
26	53.30	47.27
27	55.35	47.28
28	57.40	47.29
29	59.45	47.29
30	61.50	47.25
31	63.55	47.24
32	65.60	47.22
33	67.65	47.21
34	69.70	47.21
35	71.75	47.19
36	73.80	47.13
37	75.85	47.13
38	77.90	47.15
39	79.95	47.11
40	82.00	47.03
41	84.05	47.03
42	86.10	47.04
43	88.15	47.08

Order	Station [ft]	Elevation [ft]
44	90.20	47.08
45	92.25	47.04
46	94.30	47.05
47	96.35	47.05
48	98.40	47.03
49	100.45	47.00
50	102.50	46.99
51	104.55	46.95
52	106.60	46.91
53	108.65	46.88
54	110.70	46.90
55	112.75	46.91
56	114.80	46.90
57	116.85	46.90
58	118.90	46.84
59	120.95	46.84
60	123.00	46.82
61	125.05	46.79
62	127.10	46.76
63	129.15	46.75
64	131.20	46.70
65	132.51	46.70
66	133.81	46.72
67	135.11	46.73
68	136.42	46.73
69	137.72	46.74
70	139.02	46.74
71	140.33	46.70
72	141.63	46.66
73	142.93	46.68
74	144.24	46.72
75	145.54	46.73
76	146.85	46.75
77	148.15	46.75
78	149.45	46.74
79	150.76	46.73
80	152.06	46.73
81	153.36	46.74
82	154.67	46.73
83	155.97	46.71
84	157.28	46.70
85	158.58	46.69
86	159.88	46.70
87	161.19	46.71
88	162.49	46.70
89	163.79	46.69
90	165.10	46.70
91	166.40	46.72
92	167.70	46.72

Order	Station [ft]	Elevation [ft]
93	169.01	46.70
94	170.31	46.69
95	171.62	46.68
96	172.92	46.70
97	174.22	46.72
98	175.53	46.74
99	176.83	46.76
100	178.13	46.75
101	179.44	46.74
102	180.74	46.73
103	182.04	46.73
104	183.35	46.74
105	184.65	46.75
106	185.96	46.75
107	187.26	46.75
108	188.56	46.75
109	189.87	46.74
110	191.17	46.74
111	192.47	46.73
112	193.78	46.74
113	195.08	46.75
114	196.38	46.77
115	197.69	46.79
116	198.99	46.81
117	200.30	46.83
118	201.60	46.85
119	202.90	46.88
120	204.21	46.92
121	205.51	46.93
122	206.81	46.95
123	208.12	46.92
124	209.42	46.89
125	210.72	46.87
126	212.03	46.86
127	213.33	46.92
128	214.64	46.97
129	215.94	46.98
130	217.24	47.00
131	218.55	47.02
132	219.85	47.04
133	221.15	47.07
134	222.46	47.07
135	223.76	47.04
136	225.07	47.04
137	226.37	47.07
138	227.67	47.04
139	228.98	46.99
140	230.28	46.99
141	231.58	47.01

Order	Station [ft]	Elevation [ft]
142	232.89	47.03
143	234.19	47.04
144	235.49	47.05
145	236.80	47.06
146	238.10	47.11
147	239.41	47.15
148	240.71	47.13
149	242.01	47.12
150	243.32	47.14
151	244.62	47.15
152	245.92	47.15
153	247.23	47.15
154	248.53	47.16
155	249.83	47.17
156	251.14	47.17
157	252.44	47.19
158	253.75	47.23
159	255.05	47.24
160	256.35	47.23
161	257.66	47.23
162	258.96	47.24
163	260.26	47.25
164	261.57	47.27
165	262.87	47.27
166	264.17	47.28
167	265.48	47.29
168	266.78	47.30
169	268.09	47.30
170	269.39	47.30
171	270.69	47.30
172	272.00	47.31
173	273.30	47.34
174	274.60	47.37
175	275.91	47.36
176	277.21	47.35
177	278.51	47.34
178	279.82	47.34
179	281.12	47.36
180	282.43	47.38
181	283.73	47.40
182	285.03	47.42
183	286.34	47.42
184	287.64	47.42
185	288.94	47.43
186	290.25	47.43
187	291.55	47.43
188	292.86	47.43
189	294.16	47.44
190	295.46	47.44

Order	Station [ft]	Elevation [ft]
191	296.77	47.44
192	298.07	47.46
193	300.56	47.53
194	303.04	47.56
195	305.53	47.63
196	308.02	47.65
197	310.51	47.53
198	312.99	47.06
199	315.48	46.26
200	317.97	46.10
201	320.45	46.22
202	322.94	46.26
203	325.43	46.08
204	327.92	46.03
205	330.40	46.14
206	332.89	46.36
207	335.38	47.05
208	337.86	47.67
209	339.88	47.48
210	341.90	47.02
211	343.92	46.70
212	345.94	46.88
213	347.95	47.30
214	349.97	47.66
215	351.99	47.69
216	354.01	47.48
217	355.32	47.38
218	356.63	47.28
219	357.95	47.27
220	359.26	47.28
221	360.58	47.31
222	361.89	47.30
223	363.21	47.23
224	364.52	47.12
225	365.83	46.89
226	367.15	46.73
227	368.46	46.72
228	369.78	46.73
229	371.09	46.75
230	372.41	46.78
231	373.72	46.80
232	375.03	46.82
233	376.35	46.84
234	377.66	46.83
235	378.98	46.80
236	380.29	46.78
237	381.61	46.76
238	382.92	46.76
239	384.23	46.75

Order	Station [ft]	Elevation [ft]
240	385.55	46.80
241	386.86	46.83
242	388.18	46.86
243	389.49	46.92
244	390.81	46.97
245	392.12	47.04
246	393.43	47.11
247	394.75	47.17
248	396.06	47.12
249	398.51	46.98
250	400.95	46.57
251	403.39	46.14
252	405.84	45.94
253	408.28	45.91
254	410.72	45.88
255	413.17	45.84
256	415.61	45.92
257	418.05	46.02
258	420.50	46.07
259	422.94	46.14
260	425.38	46.25
261	427.83	46.37
262	430.27	46.68
263	432.71	46.91
264	435.16	46.65
265	437.22	46.44
266	439.29	46.39
267	441.35	46.51
268	443.42	46.71
269	445.48	46.90
270	447.55	46.99
271	449.61	46.72
272	451.68	46.35
273	453.74	46.04
274	455.81	45.87
275	457.87	45.91
276	459.94	45.98
277	462.01	46.08
278	464.07	46.20
279	466.14	46.32
280	468.20	46.38
281	470.31	46.42
282	472.41	46.45
283	474.52	46.50
284	476.63	46.40
285	478.73	46.31
286	480.84	46.27
287	482.95	46.24
288	485.05	46.28

Order	Station [ft]	Elevation [ft]
289	487.16	46.35
290	489.26	46.52
291	491.37	46.96
292	493.48	47.36
293	495.58	47.43
294	497.69	47.35
295	499.79	47.21
296	501.90	47.14
297	503.52	47.15
298	505.14	47.19
299	506.77	47.24
300	508.39	47.18
301	510.01	47.12
302	511.63	47.05
303	513.25	47.04
304	514.87	47.08
305	516.49	47.20
306	518.12	47.34
307	519.74	47.39
308	521.36	47.43
309	522.98	47.24
310	524.60	47.12
311	526.22	47.04
312	527.84	46.95
313	529.84	46.88
314	531.84	47.06
315	533.84	47.35
316	535.83	47.41
317	537.83	47.23
318	539.83	47.11
319	541.83	46.97
320	543.82	46.76
321	545.82	46.59
322	547.82	46.69
323	549.81	46.83
324	551.81	47.09
325	553.81	47.51
326	555.81	47.30
327	557.80	47.45
328	559.80	47.67
329	561.40	47.76
330	563.00	47.59
331	564.60	47.31
332	566.20	46.86
333	567.80	46.82
334	569.40	46.85
335	570.99	46.63
336	572.59	46.49
337	574.19	46.40

Order	Station [ft]	Elevation [ft]
338	575.79	46.48
339	577.39	46.55
340	578.99	46.61
341	580.59	46.65
342	582.19	46.64
343	583.79	46.54
344	585.39	46.45
345	586.99	46.44
346	588.58	46.66
347	590.18	46.72
348	591.78	46.70
349	593.38	46.65
350	594.98	46.56
351	596.58	46.43
352	598.18	46.37
353	599.78	46.27
354	601.38	46.13
355	602.98	46.21
356	604.57	46.37
357	606.17	46.64
358	607.77	46.79
359	609.37	46.92
360	610.97	47.08
361	613.30	47.05
362	615.62	46.78
363	617.94	46.55
364	620.27	46.32
365	622.59	46.23
366	624.92	46.15
367	627.24	46.28
368	629.56	46.57
369	631.89	46.70
370	634.21	46.98
371	636.53	47.15
372	638.86	47.36
373	641.18	47.63
374	643.51	47.79
375	645.83	48.01
376	648.15	48.22
377	650.35	47.95
378	652.54	47.68
379	654.73	47.41
380	656.92	47.14
381	659.11	46.87
382	661.30	46.71
383	663.49	46.65
384	665.68	46.63
385	667.87	46.61
386	670.06	46.59

Order	Station [ft]	Elevation [ft]
387	672.25	46.58
388	674.44	46.60
389	676.63	46.62
390	678.82	46.55
391	681.01	46.49
392	683.21	46.48
393	685.40	46.50
394	687.59	46.48
395	689.78	46.31
396	691.97	46.34
397	694.16	46.36
398	696.35	46.45
399	698.54	46.51
400	700.73	46.53
401	702.92	46.46
402	705.11	46.14
403	707.30	45.79
404	709.49	45.92
405	711.68	46.25
406	713.87	46.46
407	716.07	46.15
408	718.26	45.54
409	719.54	45.24
410	720.82	45.22
411	722.11	45.27
412	723.39	45.29
413	724.67	45.31
414	725.96	45.43
415	727.24	45.57
416	728.52	45.78
417	729.80	46.00
418	731.09	46.29
419	732.37	46.56
420	733.65	46.68
421	734.94	46.80
422	736.22	46.90
423	737.50	47.00
424	738.79	47.05
425	740.07	47.07
426	741.35	46.94
427	742.64	46.80
428	743.92	46.62
429	745.20	46.43
430	746.49	46.23
431	747.77	46.04
432	749.05	45.88
433	750.34	45.87
434	751.62	46.06
435	752.90	46.20

Order	Station [ft]	Elevation [ft]
436	754.18	46.27
437	755.47	46.35
438	756.75	46.42
439	758.03	46.53
440	759.32	46.68
441	760.76	46.70
442	762.20	46.64
443	763.65	46.58
444	765.09	46.52
445	766.53	46.53
446	767.97	46.55
447	769.42	46.57
448	770.86	46.64
449	772.30	46.72
450	773.75	46.82
451	775.19	46.89
452	776.63	46.85
453	778.07	46.80
454	779.52	46.75
455	780.96	46.78
456	782.40	46.83
457	783.85	46.90
458	785.29	47.00
459	786.73	47.17
460	788.17	47.34
461	789.62	47.51
462	791.06	47.58
463	792.50	47.62
464	793.94	47.64
465	795.39	47.71
466	796.83	47.86
467	798.27	47.84
468	799.72	47.70
469	801.16	47.55
470	802.60	47.40
471	804.04	47.32
472	805.49	47.27
473	806.96	47.24
474	808.43	47.22
475	809.89	47.19
476	811.36	47.08
477	812.83	46.97
478	814.30	46.89
479	815.77	46.82
480	817.24	46.77
481	818.71	46.72
482	820.18	46.68
483	821.65	46.67
484	823.12	46.67

Order	Station [ft]	Elevation [ft]
485	824.59	46.66
486	826.05	46.62
487	827.52	46.57
488	828.99	46.51
489	830.46	46.45
490	831.93	46.38
491	833.40	46.31
492	834.87	46.24
493	836.34	46.18
494	837.81	46.12
495	839.28	46.08
496	840.74	46.06
497	842.21	46.07
498	843.68	46.07
499	845.15	46.09
500	846.62	46.33
501	848.09	46.52
502	849.56	46.62
503	851.03	46.76
504	852.50	46.91
505	853.78	46.85
506	855.05	46.75
507	856.33	46.60
508	857.61	46.46
509	858.89	46.37
510	860.17	46.30
511	861.45	46.36
512	862.73	46.43
513	864.00	46.56
514	865.28	46.67
515	866.56	46.52
516	867.84	46.37
517	869.12	46.33
518	870.40	46.31
519	871.67	46.37
520	872.95	46.40
521	874.23	46.34
522	875.51	46.31
523	876.79	46.33
524	878.07	46.35
525	879.35	46.37
526	880.62	46.35
527	881.90	46.25
528	883.18	46.18
529	884.46	46.16
530	885.74	46.13
531	887.02	46.11
532	888.30	46.09
533	889.57	46.05

Order	Station [ft]	Elevation [ft]
534	890.85	46.01
535	892.13	45.97
536	893.41	45.98
537	894.69	46.02
538	895.97	46.04
539	897.25	46.03
540	898.52	46.04
541	899.80	46.06
542	901.08	46.10
543	902.36	46.14
544	903.64	46.15
545	904.92	46.15
546	906.19	46.15
547	907.47	46.15
548	908.75	46.11
549	910.03	46.06
550	911.31	46.05
551	912.59	46.05
552	913.87	45.99
553	915.14	45.92
554	916.42	45.96
555	917.70	46.01
556	918.98	45.96
557	920.26	45.92
558	921.54	45.94
559	922.82	45.95
560	924.09	45.97
561	925.37	45.99
562	926.65	46.01
563	927.93	46.03
564	929.21	45.98
565	930.49	45.94
566	931.77	45.96
567	933.04	45.99
568	934.32	46.04
569	935.84	45.99
570	937.35	45.86
571	938.86	45.79
572	940.38	45.70
573	941.89	45.72
574	943.40	45.69
575	944.92	45.70
576	946.43	45.84
577	947.94	46.18
578	949.46	46.53
579	950.97	46.89
580	952.48	47.25
581	954.00	47.60
582	955.51	47.98

Order	Station [ft]	Elevation [ft]
583	957.02	48.32
584	958.54	48.54
585	959.85	48.55
586	961.17	48.42
587	962.48	48.21
588	963.80	47.95
589	965.11	47.68
590	966.43	47.35
591	967.74	47.00
592	969.06	46.65
593	970.37	46.30
594	971.69	46.02
595	973.00	45.75
596	974.32	45.64
597	975.64	45.52
598	976.95	45.37
599	978.27	45.19
600	979.58	44.96
601	980.90	44.74
602	982.21	44.55
603	983.53	44.43
604	984.84	44.40
605	986.16	44.47
606	987.47	44.60
607	988.79	44.74
608	990.10	44.88
609	991.42	45.04
610	992.73	45.21
611	994.05	45.47
612	995.36	45.75
613	996.68	46.23
614	997.99	46.72
615	999.31	47.33
616	1000.62	47.93
617	1002.70	47.50
618	1004.78	47.12
619	1006.85	46.87
620	1008.93	46.84
621	1011.01	46.90
622	1013.08	47.03
623	1015.16	47.26
624	1017.24	47.50
625	1019.31	47.65
626	1021.39	47.87
627	1023.46	47.96
628	1025.54	48.03
629	1027.62	47.91
630	1029.69	47.90
631	1031.77	47.94

Order	Station [ft]	Elevation [ft]
632	1033.85	47.94
633	1035.97	47.97
634	1038.09	47.98
635	1040.21	48.02
636	1042.34	48.05

Comment:

Weir Cross Section: X-0180W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	116.16
1	2.34	116.12
2	4.68	116.06
3	7.03	115.98
4	9.37	115.89
5	11.71	115.83
6	14.05	115.78
7	16.39	115.75
8	18.74	115.74
9	21.08	115.69
10	23.42	115.62
11	25.76	115.77
12	28.10	116.17
13	30.44	116.64
14	32.79	117.46
15	35.13	118.13
16	37.47	118.16
17	39.81	117.95
18	42.15	117.73
19	44.50	117.46
20	46.84	117.19
21	49.18	117.00
22	51.52	116.78
23	53.86	116.50
24	56.21	116.27
25	58.55	116.03
26	60.89	115.94
27	63.23	115.73
28	65.57	115.54
29	67.92	115.39
30	70.26	115.33
31	72.60	115.35

Order	Station [ft]	Elevation [ft]
32	74.94	115.15
33	77.28	114.70
34	79.62	114.54
35	81.97	114.69
36	84.31	114.82
37	86.65	114.74
38	88.99	114.51
39	91.33	114.29
40	93.68	113.95
41	96.02	113.47
42	98.36	113.41
43	100.70	113.39
44	103.04	113.28
45	105.39	113.19
46	107.73	113.30
47	110.07	113.33
48	112.41	113.36
49	114.75	113.12
50	117.09	112.84
51	119.44	112.62
52	121.78	112.49
53	124.12	112.48
54	126.46	112.52
55	128.80	112.53
56	131.15	112.64
57	133.49	112.78
58	135.83	112.72
59	138.17	112.73
60	140.51	112.58
61	142.86	112.89
62	145.20	112.92
63	147.54	112.85
64	149.88	112.61
65	151.40	112.47
66	152.91	112.32
67	154.42	112.19
68	155.94	112.11
69	157.45	112.07
70	158.97	112.00
71	160.48	112.01
72	162.00	112.09
73	163.51	112.21
74	165.03	112.27
75	166.54	112.35
76	168.06	112.35
77	169.57	112.35
78	171.08	112.33
79	172.60	112.32
80	174.11	112.36

Order	Station [ft]	Elevation [ft]
81	175.63	112.41
82	177.14	112.47
83	178.66	112.48
84	180.17	112.51
85	181.69	112.48
86	183.20	112.48
87	184.71	112.51
88	186.23	112.53
89	187.74	112.54
90	189.26	112.55
91	190.77	112.52
92	192.29	112.50
93	193.80	112.58
94	195.32	112.56
95	196.83	112.54
96	198.34	112.51
97	200.39	112.47
98	202.44	112.46
99	204.49	112.60
100	206.54	112.72
101	208.59	112.84
102	210.64	112.95
103	212.69	113.05
104	214.73	113.14
105	216.78	112.96
106	218.83	112.50
107	220.88	112.19
108	222.93	112.11
109	224.98	112.01
110	227.03	112.06
111	229.08	112.39
112	231.13	112.71
113	233.17	112.96
114	235.22	113.14
115	237.27	113.29
116	239.32	113.35
117	241.37	113.41
118	243.42	113.52
119	245.47	113.68
120	247.52	113.86
121	249.56	113.94
122	251.61	114.06
123	253.66	114.04
124	255.71	114.06
125	257.76	114.18
126	259.81	114.11
127	261.86	114.22
128	263.91	114.30
129	266.29	114.34

Order	Station [ft]	Elevation [ft]
130	268.67	114.37
131	271.05	114.39
132	273.43	114.54
133	275.81	114.72
134	278.19	114.95
135	280.57	115.11
136	282.95	115.06
137	285.33	115.04
138	287.71	115.04
139	290.09	115.10
140	292.47	115.35
141	294.85	115.56
142	297.23	115.64
143	299.62	115.92
144	302.00	116.20
145	304.38	116.26
146	306.76	116.14
147	309.14	116.04
148	311.52	116.05
149	313.90	116.20
150	316.28	116.34
151	318.66	116.57
152	321.04	116.88
153	323.42	117.32
154	325.80	117.74
155	328.18	117.85
156	330.56	117.89
157	332.94	117.99
158	335.32	118.01
159	337.71	117.99
160	340.09	118.06
161	342.00	118.25
162	343.91	118.33
163	345.82	118.54
164	347.74	118.68
165	349.65	118.79
166	351.56	118.83
167	353.47	118.83
168	355.38	118.75
169	357.30	118.72
170	359.21	118.92
171	361.12	119.31
172	363.03	119.41
173	364.95	119.33
174	366.86	119.26
175	368.77	119.19
176	370.68	119.22
177	372.60	119.25
178	374.51	119.22

Order	Station [ft]	Elevation [ft]
179	376.42	119.31
180	378.33	119.40
181	380.25	119.46
182	382.16	119.57
183	384.07	119.68
184	385.98	119.77
185	387.89	119.74
186	389.81	119.63
187	391.72	119.54
188	393.63	119.50
189	395.54	119.55
190	397.46	119.60
191	399.37	119.59
192	401.28	119.53
193	403.32	119.56
194	405.36	119.69
195	407.40	119.65
196	409.43	119.60
197	411.47	119.56
198	413.51	119.68
199	415.55	119.75
200	417.59	119.64
201	419.63	119.53
202	421.66	119.25
203	423.70	118.97
204	425.74	118.87
205	427.78	118.84
206	429.82	118.85
207	431.86	118.79
208	433.89	118.79
209	435.16	118.82
210	436.43	118.81
211	437.70	118.75
212	438.97	118.69
213	440.24	118.62
214	441.51	118.53
215	442.78	118.30
216	444.05	118.11
217	445.32	117.95
218	446.59	117.79
219	447.86	117.65
220	449.13	117.54
221	450.40	117.45
222	451.66	117.46
223	452.93	117.47
224	454.20	117.52
225	455.79	117.60
226	457.37	117.57
227	458.96	117.53

Order	Station [ft]	Elevation [ft]
228	460.54	117.50
229	462.12	117.51
230	463.71	117.43
231	465.29	117.34
232	466.88	117.20
233	468.46	117.06
234	470.04	116.86
235	471.63	116.65
236	473.21	116.45
237	474.80	116.28
238	476.38	116.15
239	477.97	116.10
240	479.55	115.99
241	481.13	116.06
242	482.72	116.07
243	484.30	115.97
244	485.89	115.90
245	487.47	115.84
246	489.05	115.75
247	490.64	115.65
248	492.22	115.55
249	493.81	115.47
250	495.39	115.39
251	496.97	115.30
252	498.56	115.13
253	500.14	114.94
254	501.73	114.84
255	503.31	114.80
256	504.90	114.88
257	506.48	114.90
258	508.06	114.86
259	509.65	114.74
260	511.23	114.58
261	512.82	114.47
262	514.40	114.43
263	515.98	114.35
264	517.57	114.36
265	519.15	114.35
266	520.74	114.31
267	522.32	114.23
268	523.91	114.27
269	525.49	114.30
270	527.07	114.28
271	528.66	114.26
272	530.24	114.31
273	531.83	114.44
274	533.41	114.46
275	534.99	114.44
276	536.58	114.41

Order	Station [ft]	Elevation [ft]
277	538.16	114.42
278	539.75	114.43
279	541.33	114.45
280	542.91	114.46
281	544.50	114.44
282	546.08	114.35
283	547.67	114.36
284	549.25	114.53
285	550.84	114.67
286	552.42	114.74
287	554.00	114.81
288	555.59	114.97
289	557.17	114.76
290	558.76	114.53
291	560.34	114.55
292	561.92	114.68
293	563.51	114.59
294	565.09	114.55
295	566.68	114.50
296	568.26	114.45
297	569.85	114.35
298	571.43	114.43
299	573.01	114.63
300	574.60	114.78
301	576.18	114.83
302	577.77	114.98
303	579.35	115.16
304	580.93	115.19
305	582.52	115.34
306	584.10	115.42
307	585.69	115.40
308	587.27	115.41
309	588.86	115.43
310	590.44	115.45
311	592.02	115.50
312	593.61	115.58
313	595.19	115.67
314	596.78	115.74
315	598.36	115.90
316	599.94	116.08
317	601.53	116.25
318	603.11	116.36
319	604.70	116.47
320	606.28	116.68
321	607.86	116.78
322	609.45	116.68
323	611.03	116.66
324	612.62	116.65
325	614.20	116.52

Order	Station [ft]	Elevation [ft]
326	615.79	116.47
327	617.37	116.48
328	618.95	116.53
329	620.54	116.58
330	622.12	116.59
331	623.71	116.61
332	625.29	116.66
333	626.87	116.70
334	628.46	116.79
335	630.04	116.85
336	631.63	116.86
337	633.21	116.90
338	634.80	116.93
339	636.38	116.95
340	637.96	117.01
341	639.55	117.07
342	641.13	117.14
343	642.72	117.25
344	644.30	117.38
345	645.88	117.49
346	647.47	117.59
347	649.05	117.73
348	650.64	117.98
349	652.22	118.39
350	653.81	118.74
351	655.39	118.97
352	656.97	118.89
353	659.34	118.78
354	661.72	118.81
355	664.09	118.73
356	666.46	118.63
357	668.83	118.58
358	671.20	118.50
359	673.57	118.42
360	675.94	118.36
361	678.32	118.47
362	680.69	118.74
363	683.06	119.03
364	685.43	119.15
365	687.80	119.04
366	690.17	118.81
367	692.54	118.59
368	694.91	118.67
369	697.29	118.51
370	699.66	118.43
371	702.03	118.52
372	704.40	118.65
373	706.77	118.79
374	709.14	118.77

Order	Station [ft]	Elevation [ft]
375	711.51	118.65
376	713.89	118.46
377	716.26	118.22
378	718.63	117.95
379	721.00	117.99
380	723.37	118.01
381	725.74	117.81
382	728.11	117.77
383	730.48	117.77
384	732.86	117.86
385	734.69	117.91
386	736.52	117.94
387	738.35	117.92
388	740.18	117.86
389	742.02	117.72
390	743.85	117.71
391	745.68	117.61
392	747.51	117.50
393	749.35	117.41
394	751.18	117.45
395	753.01	117.56
396	754.84	117.45
397	756.67	117.36
398	758.51	117.32
399	760.34	117.34
400	762.17	117.32
401	764.00	117.29
402	765.83	117.23
403	767.67	117.36
404	769.50	117.60
405	771.33	117.84
406	773.16	117.92
407	775.00	117.96
408	776.83	117.83
409	778.66	117.64
410	780.49	117.40
411	782.32	117.45
412	784.16	117.50
413	785.99	117.52
414	787.82	117.51
415	789.65	117.55
416	791.48	117.56
417	793.32	117.62
418	795.15	117.68
419	796.98	117.58
420	798.81	117.54
421	800.65	117.54
422	802.48	117.61
423	804.31	117.65

Order	Station [ft]	Elevation [ft]
424	806.14	117.68
425	807.97	117.69
426	809.81	117.66
427	811.64	117.59
428	813.47	117.55
429	815.30	117.58
430	817.14	117.63
431	818.97	117.87
432	820.80	118.14
433	822.63	118.28
434	824.46	118.28
435	826.30	118.22
436	828.13	118.19
437	829.96	118.14
438	831.79	118.07
439	833.62	118.08
440	835.46	118.21
441	837.29	118.35
442	839.12	118.46
443	840.95	118.51
444	842.79	118.50
445	844.62	118.50
446	846.45	118.70
447	848.28	118.80
448	850.11	118.90
449	852.04	119.25
450	853.97	119.45
451	855.89	119.51
452	857.82	119.52
453	859.74	119.60
454	861.67	119.66
455	863.60	119.61
456	865.52	119.52
457	867.45	119.44
458	869.38	119.36
459	871.30	119.24
460	873.23	119.12
461	875.15	119.06
462	877.08	119.04
463	879.01	119.07
464	880.93	119.06
465	882.86	119.03
466	884.78	119.00
467	886.71	118.98
468	888.64	119.22
469	890.56	119.57
470	892.49	119.86
471	894.42	119.72
472	896.34	119.39

Order	Station [ft]	Elevation [ft]
473	898.27	119.28
474	900.19	119.35
475	902.12	119.46
476	904.05	119.53
477	905.97	119.57
478	907.90	119.65
479	909.82	119.82
480	911.75	119.98
481	913.68	120.01
482	915.60	119.93
483	917.53	119.75
484	919.46	119.58
485	921.38	119.51
486	923.31	119.47
487	925.23	119.42
488	927.16	119.33
489	929.09	119.26
490	931.01	119.19
491	932.94	119.20
492	934.86	119.33
493	936.79	119.52
494	938.72	119.50
495	940.64	119.52
496	942.57	119.63
497	944.50	119.63
498	946.42	119.47
499	948.35	119.42
500	950.27	119.46
501	952.20	119.39
502	954.13	119.33
503	956.05	119.19
504	957.98	119.00
505	959.90	118.80
506	961.83	118.78
507	963.76	118.81
508	965.68	118.84
509	967.61	118.86
510	969.54	118.94
511	971.46	118.95
512	973.39	118.87
513	975.71	118.74
514	978.04	118.77
515	980.37	118.62
516	982.70	118.41
517	985.02	118.15
518	987.35	117.99
519	989.68	118.21
520	992.00	118.35
521	994.33	118.37

Order	Station [ft]	Elevation [ft]
522	996.66	118.31
523	998.99	118.16
524	1001.31	117.97
525	1003.64	117.77
526	1005.97	117.63
527	1008.29	117.61
528	1010.62	117.38
529	1012.95	117.25
530	1015.27	117.21
531	1017.60	117.07
532	1019.93	117.01
533	1022.26	116.85
534	1024.58	116.65
535	1026.91	116.42
536	1029.24	116.26
537	1031.56	116.22
538	1033.89	116.30
539	1036.22	116.28
540	1038.54	116.22
541	1040.87	116.15
542	1043.20	116.04
543	1045.53	116.04
544	1047.85	116.06
545	1050.18	116.00
546	1052.51	115.93
547	1054.83	115.86
548	1057.16	115.71
549	1059.49	115.51
550	1061.82	115.36
551	1064.14	115.19
552	1066.47	115.02
553	1068.80	114.93
554	1071.12	114.93
555	1073.45	114.97
556	1075.78	114.73
557	1078.10	114.56
558	1080.43	114.58
559	1082.76	114.56
560	1085.09	114.49
561	1087.41	114.31
562	1089.74	114.02
563	1092.07	113.72
564	1094.39	113.74
565	1096.72	113.66
566	1099.05	113.28
567	1101.37	112.93
568	1103.70	112.96
569	1106.03	112.96
570	1108.36	113.07

Order	Station [ft]	Elevation [ft]
571	1110.68	113.19
572	1113.01	113.22
573	1115.34	113.28
574	1117.66	113.43
575	1119.99	113.74
576	1122.32	113.60
577	1124.37	113.38
578	1126.43	113.14
579	1128.48	113.03
580	1130.53	112.87
581	1132.59	112.94
582	1134.64	112.99
583	1136.70	112.96
584	1138.75	112.93
585	1140.80	112.97
586	1142.86	113.02
587	1144.91	113.07
588	1146.97	113.09
589	1149.02	113.11
590	1151.07	112.93
591	1153.13	112.83
592	1155.18	112.85
593	1157.24	112.88
594	1159.29	112.94
595	1161.34	113.06
596	1163.40	113.11
597	1165.45	113.18
598	1167.51	113.53
599	1169.56	113.68
600	1171.61	113.73
601	1173.67	113.72
602	1175.72	113.69
603	1177.78	113.68
604	1179.83	113.79
605	1181.88	113.89
606	1183.94	113.99
607	1185.99	114.13
608	1188.05	114.25
609	1190.42	114.59
610	1192.79	114.89
611	1195.17	114.95
612	1197.54	114.81
613	1199.92	114.75
614	1202.29	114.64
615	1204.67	114.92
616	1207.04	114.96
617	1209.41	114.94
618	1211.79	114.98
619	1214.16	114.87

Order	Station [ft]	Elevation [ft]
620	1216.54	114.78
621	1218.91	114.82
622	1221.28	115.03
623	1223.66	115.38
624	1226.03	115.63
625	1228.41	115.67
626	1230.78	115.70
627	1233.15	115.76
628	1235.53	115.91
629	1237.90	116.13
630	1240.28	116.24
631	1242.65	116.33
632	1245.02	116.57
633	1247.40	116.54
634	1249.77	116.27
635	1252.15	116.05
636	1254.52	115.90
637	1256.90	115.73
638	1259.27	115.66
639	1261.64	115.67
640	1264.02	115.58
641	1266.46	115.48
642	1268.90	115.42
643	1271.35	115.38
644	1273.79	115.39
645	1276.23	115.52
646	1278.68	115.83
647	1281.12	115.97
648	1283.56	116.05
649	1286.01	115.85
650	1288.45	115.69
651	1290.89	115.61
652	1293.34	115.57
653	1295.78	115.37
654	1298.22	115.15
655	1300.66	115.16
656	1303.11	115.17
657	1305.55	115.16
658	1307.99	115.17
659	1310.44	115.10
660	1312.88	115.03
661	1315.32	114.97
662	1317.77	114.83
663	1320.21	114.83
664	1322.65	114.77
665	1325.10	114.70
666	1327.54	114.68
667	1329.98	114.63
668	1332.43	114.53

Order	Station [ft]	Elevation [ft]
669	1334.87	114.41
670	1337.31	114.27
671	1339.75	114.16
672	1342.20	114.20
673	1344.10	114.16
674	1346.00	113.95
675	1347.90	113.80
676	1349.80	113.83
677	1351.70	113.77
678	1353.60	113.74
679	1355.50	113.71
680	1357.40	113.66
681	1359.30	113.59
682	1361.20	113.70
683	1363.11	113.82
684	1365.01	113.87
685	1366.91	113.88
686	1368.81	114.05
687	1370.71	114.25
688	1372.61	114.34
689	1374.51	114.07
690	1376.41	113.85
691	1378.31	113.77
692	1380.21	113.80
693	1382.11	113.86
694	1384.01	113.69
695	1385.91	113.55
696	1387.81	113.44
697	1389.71	113.35
698	1391.62	113.34
699	1393.52	113.37
700	1395.42	113.43
701	1397.32	113.52
702	1399.22	113.61
703	1401.12	113.64
704	1403.02	113.59
705	1404.92	113.47
706	1406.82	113.40
707	1408.72	113.37
708	1410.62	113.44
709	1412.52	113.57
710	1414.42	113.68
711	1416.32	113.69
712	1418.23	113.81
713	1420.13	113.99
714	1422.03	113.99
715	1423.93	113.81
716	1425.83	113.66
717	1427.73	113.56

Order	Station [ft]	Elevation [ft]
718	1429.63	113.52
719	1431.53	113.23
720	1433.43	112.95
721	1435.33	112.70
722	1437.23	112.46
723	1439.13	112.25
724	1441.03	111.97
725	1442.93	111.69
726	1444.83	111.46
727	1446.74	111.37
728	1448.64	111.37
729	1450.54	111.43
730	1452.44	111.53
731	1454.34	111.65
732	1456.24	111.74
733	1458.14	111.81
734	1460.04	111.87
735	1461.94	111.93
736	1463.84	111.95

Comment:

Weir Cross Section: X-0220W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	125.09
1	1.32	125.12
2	2.63	125.07
3	3.95	124.92
4	5.26	124.87
5	6.58	124.89
6	7.89	124.81
7	9.21	124.70
8	10.52	124.62
9	11.84	124.53
10	13.15	124.51
11	14.47	124.51
12	15.78	124.50
13	17.10	124.47
14	18.41	124.44
15	19.73	124.40
16	21.04	124.36
17	22.36	124.33

Order	Station [ft]	Elevation [ft]
18	23.67	124.28
19	24.99	124.24
20	26.30	124.23
21	27.62	124.18
22	28.93	124.07
23	30.25	124.02
24	31.56	124.01
25	32.88	124.01
26	34.19	124.00
27	35.51	124.01
28	36.82	124.01
29	38.14	124.00
30	39.45	123.98
31	40.77	123.97
32	42.08	123.96
33	43.40	123.92
34	44.71	123.87
35	46.03	123.83
36	47.35	123.80
37	48.66	123.76
38	49.98	123.71
39	51.29	123.69
40	52.61	123.67
41	53.92	123.67
42	55.24	123.66
43	56.55	123.63
44	57.87	123.59
45	59.18	123.55
46	60.50	123.55
47	61.81	123.57
48	63.13	123.57
49	64.44	123.56
50	65.76	123.54
51	67.07	123.51
52	68.39	123.45
53	69.70	123.38
54	71.02	123.30
55	72.33	123.23
56	73.65	123.16
57	74.96	123.09
58	76.28	123.09
59	77.59	123.10
60	78.91	123.06
61	80.22	123.02
62	81.54	122.94
63	82.85	122.85
64	84.17	122.71
65	86.57	122.60
66	88.98	122.61

Order	Station [ft]	Elevation [ft]
67	91.39	122.73
68	93.79	122.64
69	96.20	122.57
70	98.60	122.52
71	101.01	122.23
72	103.41	121.93
73	105.82	121.76
74	108.23	121.65
75	110.63	121.50
76	113.04	121.42
77	115.44	121.30
78	117.85	121.00
79	120.25	120.94
80	122.66	120.85
81	124.46	120.64
82	126.26	120.16
83	128.06	119.65
84	129.86	119.07
85	131.66	118.38
86	133.46	117.73
87	135.26	117.18
88	137.06	116.71
89	138.86	116.33
90	140.67	116.26
91	142.47	116.33
92	144.27	116.51
93	146.07	116.81
94	147.87	117.18
95	149.67	117.60
96	151.47	118.06
97	153.27	118.50
98	155.07	118.86
99	156.87	119.13
100	158.67	119.28
101	160.47	119.40
102	162.27	119.49
103	164.07	119.55
104	165.87	119.60
105	167.67	119.64
106	169.48	119.66
107	171.28	119.71
108	173.08	119.75
109	174.88	119.77
110	176.68	119.79
111	178.48	119.76
112	180.28	119.73

Comment:

Weir Cross Section: X-0230W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	119.26
1	1.88	119.12
2	3.76	118.98
3	5.63	118.98
4	7.51	119.05
5	9.39	119.16
6	11.27	118.98
7	13.15	118.84
8	15.02	118.69
9	16.81	118.56
10	18.60	118.50
11	20.39	118.36
12	22.17	118.22
13	23.96	118.19
14	25.75	118.23
15	27.54	118.26
16	29.32	118.26
17	31.11	118.14
18	32.90	118.11
19	34.69	118.11
20	36.47	118.11
21	38.26	118.10
22	40.05	118.11
23	41.84	118.14
24	43.63	118.15
25	45.41	118.13
26	47.20	118.11
27	48.99	118.11
28	50.78	118.07
29	52.56	118.03
30	54.35	117.99
31	56.14	117.96
32	57.93	117.97
33	59.71	117.99
34	61.50	117.99
35	63.29	117.96
36	65.08	117.95
37	66.86	117.96
38	68.65	117.98
39	70.44	117.97
40	72.23	117.96
41	74.64	117.91
42	77.06	117.88
43	79.47	117.83

Order	Station [ft]	Elevation [ft]
44	81.89	117.78
45	84.30	117.80
46	86.72	117.78
47	89.13	117.79
48	91.55	117.78
49	93.96	117.79
50	96.38	117.84
51	98.79	117.88
52	101.21	117.89
53	103.62	117.88
54	106.04	117.90
55	108.45	117.93
56	110.87	117.92
57	112.37	117.90
58	113.87	117.87
59	115.37	117.84
60	116.87	117.80
61	118.37	117.76
62	119.87	117.72
63	121.38	117.70
64	122.88	117.69
65	124.38	117.69
66	125.88	117.69
67	127.38	117.69
68	128.88	117.68
69	130.38	117.68
70	131.89	117.69
71	133.39	117.68
72	134.89	117.67
73	136.39	117.68
74	137.89	117.69
75	139.39	117.71
76	140.90	117.72
77	142.40	117.72
78	143.90	117.69
79	145.40	117.69
80	146.90	117.69
81	148.40	117.69
82	149.90	117.69
83	151.41	117.71
84	152.91	117.72
85	154.41	117.73
86	155.91	117.77
87	157.41	117.82
88	158.91	117.86
89	160.41	117.89
90	161.92	117.93
91	163.42	117.96
92	164.92	118.01

Order	Station [ft]	Elevation [ft]
93	166.42	118.03
94	167.92	118.06
95	169.42	118.09
96	170.92	118.11
97	172.43	118.12
98	173.93	118.16
99	175.43	118.18
100	176.93	118.19
101	178.43	118.23
102	179.93	118.26
103	181.43	118.32
104	182.94	118.36
105	184.44	118.37
106	185.94	118.41
107	187.44	118.45
108	188.94	118.53
109	190.44	118.61
110	191.94	118.71
111	193.45	118.78
112	194.95	118.85
113	196.45	118.90
114	197.95	118.95
115	199.45	118.99
116	200.95	118.98
117	202.46	118.96
118	203.96	118.94
119	205.46	118.97
120	206.96	119.03
121	209.22	119.10
122	211.47	119.14
123	213.73	119.20
124	215.99	119.27
125	218.24	119.36
126	220.50	119.42
127	222.76	119.45
128	225.01	119.46
129	227.27	119.49
130	229.53	119.52
131	231.78	119.57
132	234.04	119.63
133	236.30	119.67
134	238.56	119.71
135	240.81	119.75
136	243.07	119.78
137	245.33	119.89
138	247.58	120.09
139	249.84	120.18
140	252.10	120.29
141	254.35	120.38

Order	Station [ft]	Elevation [ft]
142	256.61	120.30
143	258.87	120.22
144	261.12	120.21
145	263.38	120.25
146	265.64	120.33
147	267.89	120.44
148	270.15	120.52
149	272.41	120.53
150	274.66	120.61
151	276.92	120.73
152	279.18	120.85
153	281.44	120.96
154	283.69	121.09
155	285.95	121.16
156	288.21	121.18
157	290.46	121.20
158	292.72	121.26
159	294.98	121.35
160	297.23	121.47
161	299.49	121.47
162	301.75	121.53
163	304.00	121.59
164	306.26	121.62
165	308.52	121.64
166	310.77	121.70
167	313.03	121.79
168	315.29	121.90
169	317.54	122.02
170	319.80	122.14
171	322.06	122.18
172	324.31	122.18
173	326.57	122.29
174	328.83	122.42
175	331.09	122.58
176	333.34	122.75
177	335.60	122.87
178	337.86	122.93
179	340.11	123.07
180	342.37	123.42
181	344.63	123.67
182	346.88	123.74
183	349.14	123.79
184	351.40	123.93

Comment:

Weir Cross Section: X-0240W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	120.93
1	1.30	120.98
2	2.60	121.01
3	3.90	121.02
4	5.20	121.01
5	6.50	121.01
6	7.80	121.02
7	9.10	121.05
8	10.40	121.10
9	11.70	121.10
10	13.00	121.07
11	14.30	121.10
12	15.60	121.15
13	16.90	121.17
14	18.20	121.19
15	19.50	121.19
16	20.80	121.13
17	22.10	121.08
18	23.40	121.10
19	24.70	121.16
20	26.00	121.12
21	27.31	121.06
22	28.61	121.04
23	29.91	121.01
24	31.21	121.05
25	32.51	121.12
26	33.81	121.11
27	35.11	121.07
28	36.41	121.04
29	37.71	120.96
30	39.01	120.85
31	40.31	120.79
32	41.61	120.77
33	43.40	120.59
34	45.18	120.48
35	46.97	120.39
36	48.76	120.28
37	50.55	120.18
38	52.34	120.10
39	54.13	120.07
40	55.92	120.04
41	57.70	119.99
42	59.49	119.99
43	61.28	119.96

Order	Station [ft]	Elevation [ft]
44	63.07	119.92
45	64.86	119.85
46	66.65	119.98
47	68.43	119.97
48	70.22	119.97
49	71.84	119.97
50	73.45	119.94
51	75.07	119.80
52	76.68	119.54
53	78.29	119.37
54	79.91	119.25
55	81.52	119.21
56	83.14	119.15
57	84.75	119.12
58	86.37	119.10
59	87.98	119.02
60	89.60	118.95
61	91.21	118.90
62	92.82	118.99
63	94.44	119.09
64	96.05	119.24
65	97.67	119.26
66	99.28	119.20
67	100.90	119.05
68	102.51	118.95
69	104.13	118.79
70	105.74	118.64
71	107.35	118.57
72	108.97	118.50
73	110.58	118.44
74	112.20	118.39
75	113.81	118.36
76	115.43	118.31
77	117.04	118.24
78	118.66	118.17
79	120.27	118.13
80	121.89	118.05
81	123.34	118.05
82	124.79	118.05
83	126.24	118.02
84	127.70	118.01
85	129.15	118.03
86	130.60	118.06
87	132.06	118.08
88	133.51	118.09
89	134.96	118.07
90	136.41	118.00
91	137.87	117.92
92	139.32	117.88

Order	Station [ft]	Elevation [ft]
93	140.77	117.89
94	142.23	117.84
95	143.68	117.77
96	145.13	117.74
97	146.59	117.72
98	148.04	117.68
99	149.49	117.66
100	150.94	117.63
101	152.40	117.60
102	153.85	117.58
103	155.30	117.56
104	156.76	117.54
105	158.21	117.53
106	159.66	117.50
107	161.11	117.47
108	162.57	117.50
109	164.02	117.54
110	165.47	117.60
111	166.93	117.55
112	168.38	117.45
113	170.66	117.28
114	172.93	117.08
115	175.21	116.96
116	177.49	116.86
117	179.76	116.67
118	182.04	116.86
119	184.32	117.55
120	186.59	117.95
121	189.04	118.02
122	191.48	118.09
123	193.92	118.18
124	196.36	118.27
125	198.80	118.34
126	201.24	118.36
127	203.68	118.35
128	206.12	118.36
129	208.56	118.39
130	211.00	118.42
131	213.44	118.43
132	215.88	118.48
133	218.33	118.55
134	220.77	118.63
135	223.21	118.72
136	225.65	118.77
137	227.93	118.85
138	230.20	118.89
139	232.48	118.90
140	234.76	118.87
141	237.04	118.87

Order	Station [ft]	Elevation [ft]
142	239.32	118.90
143	241.60	118.92
144	243.88	118.94
145	246.15	118.96
146	248.43	119.00
147	250.71	119.06
148	252.99	119.14
149	255.27	119.23
150	257.55	119.29
151	259.83	119.26
152	262.10	119.28
153	264.44	119.32
154	266.78	119.38
155	269.12	119.42
156	271.46	119.43
157	273.80	119.46
158	276.14	119.49
159	278.48	119.54
160	280.82	119.63
161	283.16	119.66
162	285.50	119.68
163	287.84	119.78
164	290.18	119.84
165	292.52	119.95
166	294.86	120.07
167	297.20	120.16
168	299.54	120.27
169	301.93	120.43
170	304.33	120.50
171	306.72	120.33
172	309.11	120.11
173	311.51	120.06
174	313.90	120.09
175	316.29	120.08
176	318.68	120.14
177	321.08	120.34
178	323.47	120.61
179	325.86	120.86
180	328.26	121.11
181	330.65	121.35
182	333.04	121.44
183	335.44	121.50
184	337.83	121.58
185	340.22	121.69
186	342.62	121.75
187	345.01	121.79
188	347.40	121.82
189	349.79	121.87
190	352.19	121.93

Order	Station [ft]	Elevation [ft]
191	354.58	122.01
192	356.97	122.18
193	359.37	122.34
194	361.76	122.42
195	364.15	122.48
196	366.55	122.55
197	368.94	122.66
198	371.33	122.75
199	373.73	122.87
200	376.12	122.94
201	377.92	122.97
202	379.71	122.95
203	381.51	122.92
204	383.30	122.87
205	385.10	122.84
206	386.90	122.90
207	388.69	122.93
208	390.49	122.88
209	392.28	122.84
210	394.08	122.86
211	395.88	122.89
212	397.67	123.01
213	399.47	123.17
214	401.27	123.33
215	403.06	123.44
216	404.86	123.48
217	406.65	123.48
218	408.45	123.46
219	410.25	123.48
220	412.04	123.56
221	413.84	123.64
222	415.63	123.63
223	417.43	123.62
224	419.23	123.68
225	421.02	123.67
226	422.82	123.84
227	424.62	124.06
228	426.41	124.16
229	428.21	124.22
230	430.00	124.14
231	431.80	124.02
232	433.60	123.93

Comment:

Weir Cross Section: X-0250W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	121.60
1	2.44	121.53
2	4.88	121.47
3	7.32	121.39
4	9.76	121.31
5	12.20	121.30
6	14.64	121.29
7	17.08	121.27
8	19.52	121.35
9	21.96	121.36
10	24.40	121.60
11	26.84	121.88
12	29.28	122.16
13	31.72	122.27
14	34.16	122.59
15	36.60	122.61
16	39.04	122.42
17	41.48	122.50
18	43.92	122.46
19	46.36	122.40
20	48.80	122.57
21	51.24	122.75
22	53.68	122.76
23	56.12	122.76
24	58.56	123.16
25	61.00	123.67
26	63.44	123.87
27	65.88	123.94
28	68.32	123.89
29	70.76	123.96
30	73.20	124.05
31	75.64	123.63
32	78.08	123.00
33	80.52	122.57
34	82.96	122.39
35	85.40	122.16
36	87.84	121.59
37	90.28	121.35
38	92.72	121.49
39	95.16	121.74
40	97.60	121.74
41	100.04	121.68
42	102.48	121.52
43	104.92	121.39
44	107.36	121.34

Order	Station [ft]	Elevation [ft]
45	109.80	121.34
46	112.24	121.32
47	114.68	121.41
48	117.12	121.54
49	119.56	121.70
50	122.00	121.86
51	124.44	121.95
52	126.88	121.92
53	129.32	121.94
54	131.76	121.87
55	134.20	121.78
56	136.64	121.76
57	139.08	122.03
58	141.52	122.11
59	143.96	122.07
60	146.40	122.13
61	148.84	122.26
62	151.28	122.69
63	153.72	123.35
64	156.16	123.53
65	157.98	123.50
66	159.81	122.99
67	161.64	122.80
68	163.46	122.79
69	165.29	122.95
70	167.12	123.15
71	168.95	123.37
72	170.77	123.61
73	172.60	123.86
74	174.43	124.06
75	176.26	124.21
76	178.08	124.31
77	179.91	124.42
78	181.74	124.50
79	183.57	124.50
80	185.39	124.45
81	187.12	124.35
82	188.84	124.18
83	190.56	123.98
84	192.29	123.77
85	194.01	123.56
86	195.73	123.42
87	197.46	123.31
88	199.18	123.27
89	200.90	123.26
90	202.62	123.27
91	204.35	123.29
92	206.07	123.30
93	207.79	123.32

Order	Station [ft]	Elevation [ft]
94	209.52	123.33
95	211.24	123.35
96	212.96	123.38
97	214.68	123.42
98	216.41	123.44
99	218.13	123.48
100	219.85	123.52
101	221.58	123.53
102	223.30	123.55
103	225.02	123.58
104	226.75	123.60
105	228.47	123.61
106	230.19	123.62
107	231.91	123.63
108	233.64	123.62
109	235.36	123.61
110	237.08	123.61
111	238.81	123.60
112	240.53	123.58
113	242.25	123.57
114	243.98	123.58
115	245.70	123.59
116	247.42	123.58
117	249.14	123.60
118	250.87	123.62
119	252.59	123.63
120	254.31	123.64
121	256.04	123.65
122	257.76	123.65
123	259.48	123.64
124	261.21	123.65
125	262.93	123.65
126	264.65	123.65
127	266.37	123.65
128	268.10	123.66
129	269.82	123.64
130	271.54	123.65
131	273.27	123.64
132	274.99	123.62
133	276.71	123.62
134	278.43	123.61
135	280.16	123.62
136	281.88	123.62
137	283.60	123.62
138	285.33	123.61
139	287.05	123.62
140	288.77	123.62
141	290.50	123.63
142	292.22	123.62

Order	Station [ft]	Elevation [ft]
143	293.94	123.61
144	295.66	123.61
145	298.04	123.64
146	300.42	123.65
147	302.80	123.67
148	305.17	123.65
149	307.55	123.62
150	309.93	123.62
151	312.31	123.60
152	314.68	123.57
153	317.06	123.56
154	319.44	123.56
155	321.82	123.60
156	324.19	123.66
157	326.57	123.71
158	328.95	123.72
159	331.32	123.74
160	333.70	123.76
161	336.08	123.85
162	338.46	124.00
163	340.83	124.04
164	343.21	124.26
165	345.59	124.36
166	347.97	124.47
167	350.34	124.26
168	352.72	124.09
169	355.10	124.01
170	357.48	123.90
171	359.85	123.84
172	362.23	123.86
173	364.61	123.88
174	366.98	123.90
175	369.36	123.94
176	371.74	124.06
177	373.64	123.94
178	375.55	123.89
179	377.45	123.87
180	379.35	123.78
181	381.26	123.61
182	383.16	123.47
183	385.06	123.38
184	386.97	123.34
185	388.87	123.34
186	390.77	123.36
187	392.68	123.44
188	394.58	123.59
189	396.48	123.70
190	398.39	123.60
191	400.29	123.44

Order	Station [ft]	Elevation [ft]
192	402.19	123.37
193	404.10	123.49
194	406.00	123.49
195	407.90	123.47
196	409.81	123.50
197	411.71	123.67
198	413.61	123.85
199	415.52	123.96
200	417.42	123.96
201	419.32	123.83
202	421.23	123.84
203	423.13	123.84
204	425.03	123.85
205	426.94	123.79
206	428.84	123.72
207	430.74	123.64
208	432.65	123.56
209	435.11	123.52
210	437.57	123.70
211	440.03	123.76
212	442.50	123.84
213	444.96	123.98
214	447.42	123.75
215	449.88	123.52
216	452.34	123.29
217	454.81	123.06
218	457.27	122.87
219	459.73	122.71
220	462.19	122.63
221	464.66	122.72
222	467.12	122.83
223	469.58	122.96
224	472.04	123.11
225	474.50	123.13
226	476.97	122.79
227	479.43	122.42
228	481.89	122.62
229	484.35	123.50
230	486.81	124.43
231	489.28	124.90
232	491.74	124.51
233	494.20	124.13
234	496.66	124.31
235	499.13	124.60
236	501.59	124.86
237	504.05	125.06
238	506.51	125.15
239	508.97	125.22
240	511.44	125.38

Order	Station [ft]	Elevation [ft]
241	511.54	125.38

Comment:

Weir Cross Section: X-0260W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	125.38
1	1.45	125.34
2	2.91	125.22
3	4.36	124.82
4	5.81	124.23
5	7.26	123.61
6	8.72	123.08
7	10.17	123.08
8	11.62	123.11
9	13.08	123.19
10	14.53	123.24
11	15.98	123.26
12	17.43	123.30
13	18.89	123.36
14	20.34	123.43
15	21.79	123.65
16	23.25	124.02
17	24.98	124.39
18	26.72	124.63
19	28.45	124.70
20	30.19	124.67
21	31.92	124.76
22	33.66	124.97
23	35.39	125.14
24	37.13	125.21
25	38.86	125.19
26	40.60	125.08
27	42.33	124.97
28	44.07	124.91
29	45.80	125.06
30	47.54	125.20
31	49.27	125.37
32	51.01	125.60
33	52.74	125.83
34	54.48	125.99
35	56.21	126.06

Order	Station [ft]	Elevation [ft]
36	57.95	126.00
37	59.68	125.94
38	61.42	125.88
39	63.15	125.85
40	64.89	125.77
41	66.62	125.73
42	68.36	125.85
43	70.09	126.13
44	71.83	126.39
45	73.56	126.58
46	75.30	126.65
47	77.03	126.57
48	78.77	126.36
49	80.96	126.33
50	83.14	126.12
51	85.33	125.78
52	87.52	125.25
53	89.71	124.65
54	91.90	124.25
55	94.09	124.18
56	96.28	124.03
57	98.47	124.03
58	100.66	124.32
59	102.85	124.61
60	105.04	124.85
61	107.23	125.01
62	109.42	125.03
63	111.61	125.00
64	113.80	124.92
65	116.24	124.80
66	118.68	124.67
67	121.12	124.59
68	123.55	124.63
69	125.99	124.87
70	128.43	124.59
71	130.87	124.49
72	133.31	124.39
73	135.75	124.01
74	138.19	123.67
75	140.63	123.62
76	143.07	123.64
77	145.51	123.65
78	147.95	123.65
79	150.39	123.91
80	152.83	124.20
81	154.91	123.72
82	156.98	123.35
83	159.06	122.95
84	161.14	122.64

Order	Station [ft]	Elevation [ft]
85	163.21	122.48
86	165.29	122.41
87	167.37	122.04
88	169.44	121.67
89	171.52	121.28
90	173.60	121.03
91	175.67	121.00
92	177.75	121.01
93	179.83	121.04
94	181.91	121.16
95	183.98	121.32
96	186.06	121.39
97	188.14	121.26
98	190.21	121.13
99	192.29	121.00
100	194.37	120.88
101	196.44	120.79
102	198.52	120.76
103	200.60	120.54
104	202.67	120.30
105	204.75	120.00
106	206.83	119.97
107	208.90	120.48
108	210.98	120.98
109	213.06	121.29
110	215.13	121.57
111	217.21	121.92
112	219.29	121.98
113	220.73	121.76
114	222.17	121.57
115	223.61	121.26
116	225.05	120.99
117	226.48	120.85
118	227.92	120.76
119	229.36	120.75
120	230.80	120.73
121	232.24	120.69
122	233.68	120.77
123	235.12	120.91
124	236.56	121.35
125	238.00	121.80
126	239.44	122.04
127	240.88	121.91
128	242.32	121.74
129	244.72	121.37
130	247.12	121.10
131	249.52	120.97
132	251.92	120.67
133	254.32	120.38

Order	Station [ft]	Elevation [ft]
134	256.72	120.08
135	259.12	119.82
136	261.53	119.61
137	263.93	119.29
138	266.33	118.95
139	268.73	118.57
140	271.13	118.30
141	273.53	118.19
142	275.93	118.86
143	278.33	119.33
144	280.73	119.22
145	282.41	119.12
146	284.09	119.12
147	285.76	119.23
148	287.44	119.30
149	289.11	119.34
150	290.79	119.43
151	292.47	119.51
152	294.14	119.61
153	295.82	119.85
154	297.49	120.01
155	299.17	120.09
156	300.85	120.21
157	302.52	120.35
158	304.20	120.52
159	305.87	120.52
160	307.55	120.51
161	309.58	120.72
162	311.62	121.03
163	313.65	121.21
164	315.69	121.14
165	317.72	120.99
166	319.75	120.99
167	321.79	121.05
168	323.82	121.23
169	326.08	121.05
170	328.33	120.80
171	330.59	120.48
172	332.85	120.20
173	335.10	119.99
174	337.36	119.86
175	339.61	119.86
176	341.87	120.02
177	344.13	120.20
178	346.38	120.38
179	348.64	120.60
180	350.89	120.77
181	353.15	120.79
182	355.41	120.80

Order	Station [ft]	Elevation [ft]
183	357.66	120.82
184	359.92	120.99
185	362.18	121.29
186	364.43	121.53
187	366.69	121.65
188	368.94	121.77
189	371.20	122.00
190	373.46	122.26
191	375.71	122.43
192	377.97	122.43
193	380.22	122.44
194	382.48	122.50
195	384.74	122.68
196	386.99	122.94
197	389.25	123.09
198	391.51	123.05
199	393.76	122.91
200	396.02	122.86
201	398.50	122.86
202	400.99	122.81
203	403.47	123.12
204	405.96	123.52
205	408.44	123.77
206	410.93	123.92
207	413.41	124.06
208	415.90	124.22
209	418.33	124.21
210	420.77	124.10
211	423.21	123.95
212	425.64	123.75
213	428.08	123.61
214	430.52	123.57
215	432.95	123.54
216	435.39	123.88
217	437.82	124.08
218	440.26	124.02
219	442.70	124.07
220	445.13	124.20
221	447.57	124.22
222	450.00	124.08
223	452.44	123.93
224	454.88	123.95

Comment:

Weir Cross Section: X-0270W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	123.95
1	1.30	123.96
2	2.61	123.94
3	3.91	123.94
4	5.21	123.99
5	6.52	124.07
6	7.82	124.19
7	9.12	124.30
8	10.42	124.39
9	11.73	124.46
10	13.03	124.48
11	14.33	124.42
12	15.64	124.26
13	16.94	124.11
14	18.24	123.97
15	19.55	123.86
16	20.85	123.78
17	22.15	123.76
18	23.45	123.77
19	24.76	123.80
20	26.06	123.83
21	27.36	123.88
22	28.67	123.92
23	29.97	123.88
24	31.27	123.83
25	32.58	123.65
26	33.88	123.49
27	35.18	123.45
28	36.48	123.43
29	37.79	123.46
30	39.09	123.47
31	40.39	123.46
32	41.70	123.44
33	43.00	123.42
34	44.30	123.45
35	45.61	123.55
36	46.91	123.57
37	48.21	123.54
38	49.51	123.45
39	50.82	123.32
40	52.12	123.29
41	53.42	123.29
42	54.73	123.20
43	56.03	123.10
44	57.33	123.03

Order	Station [ft]	Elevation [ft]
45	58.64	122.97
46	59.94	123.01
47	61.24	123.05
48	62.54	123.14
49	63.85	123.22
50	65.15	123.21
51	66.45	123.18
52	67.76	123.11
53	69.06	123.00
54	70.36	122.83
55	71.67	122.73
56	72.97	122.77
57	74.27	122.83
58	75.57	122.91
59	76.88	122.97
60	78.18	122.99
61	79.48	123.01
62	80.79	123.03
63	82.09	123.05
64	83.39	123.07
65	84.70	123.09
66	86.00	123.11
67	87.30	123.10
68	88.60	123.09
69	89.91	123.07
70	91.21	123.04
71	92.51	122.98
72	93.82	122.93
73	95.12	122.92
74	96.42	122.90
75	97.73	122.89
76	99.03	122.85
77	100.33	122.74
78	101.64	122.66
79	102.94	122.64
80	104.24	122.62
81	105.54	122.58
82	106.85	122.56
83	108.15	122.56
84	109.45	122.60
85	110.76	122.69
86	112.06	122.77
87	113.36	122.86
88	114.67	122.80
89	115.97	122.69
90	117.27	122.64
91	118.57	122.62
92	119.88	122.60
93	121.18	122.57

Order	Station [ft]	Elevation [ft]
94	122.48	122.53
95	123.79	122.49
96	125.09	122.44
97	126.39	122.40
98	127.70	122.47
99	129.00	122.55
100	130.30	122.62
101	131.60	122.70
102	132.91	122.78
103	134.21	122.82
104	135.51	122.79
105	136.82	122.73
106	138.12	122.62
107	139.42	122.66
108	140.73	122.83
109	142.03	122.98
110	143.33	123.10
111	144.63	123.18
112	145.94	123.25
113	147.24	123.16
114	148.54	123.04
115	149.85	122.95
116	151.15	122.87
117	152.45	122.88
118	153.76	122.88
119	155.06	122.88
120	156.36	122.86
121	157.66	122.71
122	158.97	122.57
123	160.27	122.47
124	161.57	122.38
125	162.88	122.32
126	164.18	122.28
127	165.48	122.28
128	166.79	122.28
129	168.73	122.31
130	170.67	122.48
131	172.61	122.59
132	174.55	122.64
133	176.50	122.57
134	178.44	122.40
135	180.38	122.29
136	182.32	122.29
137	184.26	122.28
138	186.21	122.16
139	188.15	121.98
140	190.09	121.98
141	192.03	121.88
142	193.97	121.83

Order	Station [ft]	Elevation [ft]
143	195.92	121.76
144	197.86	121.73
145	199.80	121.70
146	201.74	121.72
147	203.68	121.78
148	205.63	121.93
149	207.57	121.95
150	209.51	121.81
151	211.45	121.57
152	213.39	121.48
153	215.34	121.55
154	217.28	121.72
155	219.22	121.81
156	221.16	121.78
157	223.10	121.64
158	225.05	121.49
159	226.99	121.39
160	228.93	121.23
161	231.41	121.13
162	233.89	121.00
163	236.37	120.97
164	238.85	121.12
165	241.33	121.04
166	243.81	120.78
167	246.29	120.52
168	248.77	120.18
169	251.25	119.94
170	253.73	119.94
171	256.21	120.14
172	258.68	120.22
173	261.16	119.99
174	263.64	119.91
175	266.12	119.86
176	268.60	119.90
177	271.08	119.99
178	273.56	120.19
179	276.04	120.25
180	278.52	119.78
181	281.00	119.55
182	283.48	119.40
183	285.96	119.32
184	288.44	119.30
185	290.92	119.25
186	293.40	119.22
187	295.88	119.20
188	298.36	119.25
189	300.84	119.26
190	303.32	119.39
191	305.80	119.41

Order	Station [ft]	Elevation [ft]
192	308.28	119.46
193	310.75	119.60
194	313.23	119.80
195	315.71	119.96
196	318.19	120.03
197	320.67	119.98
198	323.15	119.91
199	325.63	119.76
200	328.11	119.85
201	330.59	119.87
202	333.07	119.77
203	335.55	119.68
204	338.03	119.88
205	340.51	120.22
206	342.99	120.40
207	345.47	120.22
208	347.95	120.16
209	350.43	120.14
210	352.91	119.90
211	355.39	119.85
212	357.87	119.84
213	360.35	119.86
214	362.83	120.00
215	365.30	120.10
216	367.78	120.09
217	370.26	120.06
218	372.74	120.16
219	375.22	120.31
220	377.70	120.44
221	380.18	120.64
222	382.66	120.82
223	385.14	120.95
224	387.62	121.01
225	389.09	120.86
226	390.56	120.64
227	392.03	120.39
228	393.51	120.28
229	394.98	120.28
230	396.45	120.33
231	397.92	120.37
232	399.39	120.48
233	400.86	120.54
234	402.33	120.55
235	403.81	120.59
236	405.28	120.61
237	406.75	120.59
238	408.22	120.53
239	409.69	120.48
240	411.16	120.45

Order	Station [ft]	Elevation [ft]
241	412.63	120.42
242	414.10	120.43
243	415.58	120.44
244	417.05	120.36
245	418.52	120.26
246	419.99	120.22
247	421.46	120.18
248	422.93	120.15
249	424.40	120.15
250	425.88	120.18
251	427.35	120.21
252	428.82	120.22
253	430.29	120.24
254	431.76	120.26
255	433.23	120.28
256	434.70	120.30
257	436.17	120.32
258	437.65	120.35
259	439.12	120.37
260	440.59	120.33
261	442.06	120.32
262	443.53	120.35
263	445.00	120.39
264	446.47	120.43
265	447.94	120.51
266	449.42	120.59
267	450.89	120.69
268	452.36	120.78
269	453.83	120.89
270	455.30	121.05
271	456.77	121.26
272	458.24	121.41
273	459.72	121.58
274	461.19	121.81
275	462.66	121.98
276	464.13	122.03
277	465.60	122.10
278	467.07	122.23
279	468.54	122.46
280	470.01	122.69
281	471.49	122.95
282	472.96	123.16
283	474.43	123.28
284	475.90	123.39
285	477.37	123.51
286	478.84	123.51
287	480.31	123.47
288	481.79	123.45
289	483.44	123.33

Order	Station [ft]	Elevation [ft]
290	485.10	123.00
291	486.75	122.76
292	488.41	122.70
293	490.07	122.67
294	491.72	122.66
295	493.38	122.54
296	495.03	122.42
297	496.69	122.43
298	498.35	122.53
299	500.00	122.72
300	501.66	123.03
301	503.31	123.22
302	504.97	123.29
303	506.63	123.44
304	508.28	123.38
305	509.68	123.01
306	511.07	122.65
307	512.46	122.38
308	513.86	122.21
309	515.25	122.17
310	516.65	122.20
311	518.04	122.28
312	519.43	122.35
313	520.83	122.42
314	522.22	122.48
315	523.62	122.54
316	525.01	122.60
317	526.40	122.63
318	527.80	122.62
319	529.19	122.69
320	530.59	122.81
321	533.07	122.96
322	535.55	122.68
323	538.03	122.02
324	540.51	121.46
325	543.00	121.29
326	545.48	121.27
327	547.96	121.32
328	550.44	121.34
329	552.92	121.33
330	555.41	121.42
331	557.89	121.63
332	560.37	122.08
333	562.85	122.16
334	565.33	122.16
335	567.82	122.19
336	570.30	122.20
337	572.78	122.06
338	575.26	121.80

Order	Station [ft]	Elevation [ft]
339	577.74	121.68
340	580.22	121.61
341	582.71	121.62
342	585.19	121.62
343	587.67	121.80
344	590.15	121.72
345	592.63	121.71
346	595.12	121.86
347	597.60	121.85
348	600.08	121.67
349	602.56	121.64
350	605.04	121.83
351	607.53	122.04
352	610.01	122.06
353	612.49	122.10
354	614.97	122.12
355	617.45	122.02
356	619.94	121.94
357	622.42	122.04
358	624.90	122.14
359	627.38	122.20
360	629.86	122.34
361	632.35	122.47
362	634.83	122.51
363	637.31	122.39
364	639.79	122.12
365	642.27	121.77
366	644.76	121.68
367	647.24	121.64
368	649.72	121.67
369	652.20	121.78
370	654.68	121.80
371	657.16	121.77
372	659.65	121.79
373	662.13	121.91
374	664.61	122.12
375	667.09	122.28
376	669.57	122.28
377	672.06	122.31
378	674.54	122.26
379	677.02	122.27
380	679.50	122.40
381	681.98	122.46
382	684.47	122.48
383	686.95	122.63
384	689.43	122.70
385	690.93	122.54
386	692.42	122.47
387	693.92	122.54

Order	Station [ft]	Elevation [ft]
388	695.42	122.49
389	696.91	122.45
390	698.41	122.33
391	699.90	122.26
392	701.40	122.33
393	702.90	122.46
394	704.39	122.53
395	705.89	122.62
396	707.39	122.56
397	708.88	122.47
398	710.38	122.49
399	711.87	122.49
400	713.37	122.49
401	714.87	122.48
402	716.36	122.52
403	717.86	122.56
404	719.36	122.70
405	720.85	122.86
406	722.35	122.92
407	723.84	122.96
408	725.34	122.92
409	726.84	122.87
410	728.33	122.88
411	729.83	122.92
412	731.33	123.09
413	732.82	123.28
414	734.32	123.46
415	735.81	123.59
416	737.31	123.70
417	739.09	123.79
418	740.87	123.83
419	742.66	123.91
420	744.44	123.98
421	746.22	124.04
422	748.00	124.05
423	749.79	124.05
424	751.57	124.08
425	753.35	124.19
426	755.13	124.23
427	756.91	124.19
428	758.70	124.05
429	760.48	124.15
430	762.26	124.15
431	764.04	124.09
432	765.83	124.00
433	767.61	123.99
434	769.39	124.06
435	771.17	124.20
436	772.95	124.44

Order	Station [ft]	Elevation [ft]
437	774.74	124.60
438	776.52	124.68
439	778.30	124.66
440	780.08	124.58
441	781.87	124.45
442	783.65	124.28
443	785.43	124.24
444	787.21	124.23
445	788.99	124.26
446	790.78	124.33
447	792.56	124.42
448	794.34	124.51

Comment:

Weir Cross Section: X-0280W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	85.03
1	2.07	84.84
2	4.13	84.60
3	6.20	84.33
4	8.27	84.14
5	10.34	84.07
6	12.40	83.98
7	14.47	83.65
8	16.54	83.31
9	18.60	82.97
10	20.67	82.63
11	22.74	82.39
12	24.81	82.21
13	26.87	81.99
14	28.94	81.70
15	31.01	81.20
16	33.08	80.76
17	35.14	80.50
18	37.21	80.16
19	39.28	79.89
20	41.34	79.59
21	43.41	79.16
22	45.48	78.68
23	47.55	78.19
24	49.61	77.70

Order	Station [ft]	Elevation [ft]
25	51.68	77.16
26	53.75	76.72
27	55.81	76.46
28	57.88	76.21
29	59.95	75.98
30	62.02	75.83
31	64.08	75.72
32	66.15	75.61
33	68.22	75.55
34	70.29	75.44
35	72.35	75.37
36	74.42	75.38
37	76.49	75.49
38	78.55	75.60
39	80.62	75.48
40	82.69	75.30
41	84.76	75.15
42	86.82	74.95
43	88.89	74.83
44	90.96	74.69
45	93.02	74.47
46	95.09	74.21
47	97.16	74.01
48	99.23	73.99
49	101.29	73.98
50	103.36	73.87
51	105.43	73.64
52	107.50	73.40
53	109.56	73.37
54	111.63	73.32
55	113.70	72.97
56	115.76	73.11
57	117.83	73.37
58	119.90	73.55
59	121.97	73.50
60	124.03	73.43
61	126.10	73.38
62	128.17	73.45
63	130.23	73.56
64	132.30	73.54
65	133.64	73.50
66	134.99	73.44
67	136.33	73.52
68	137.67	73.61
69	139.01	73.66
70	140.35	73.65
71	141.70	73.56
72	143.04	73.46
73	144.38	73.36

Order	Station [ft]	Elevation [ft]
74	145.72	73.24
75	147.07	73.22
76	148.41	73.18
77	149.75	73.23
78	151.09	73.31
79	152.43	73.38
80	153.78	73.44
81	155.12	73.56
82	156.46	73.69
83	157.80	73.84
84	159.14	73.98
85	160.49	74.09
86	161.83	74.25
87	163.17	74.23
88	164.51	74.19
89	165.85	74.24
90	167.20	74.32
91	168.54	74.41
92	169.88	74.41
93	171.22	74.23
94	172.57	73.90
95	173.91	73.62
96	175.25	73.45
97	176.59	73.38
98	177.93	73.36
99	179.28	73.43
100	180.62	73.53
101	181.96	73.62
102	183.30	73.71
103	184.64	73.86
104	185.99	74.06
105	187.33	74.22
106	188.67	74.34
107	190.01	74.43
108	191.35	74.46
109	192.70	74.36
110	194.04	74.12
111	195.38	73.96
112	196.72	74.03
113	198.07	73.93
114	199.41	73.77
115	200.75	73.73
116	202.09	73.84
117	203.43	74.04
118	204.78	74.17
119	206.12	74.19
120	207.46	74.04
121	208.80	73.89
122	210.14	73.83

Order	Station [ft]	Elevation [ft]
123	211.49	73.87
124	212.83	73.90
125	214.17	73.90
126	215.51	73.86
127	216.85	73.83
128	218.20	73.92
129	219.72	74.13
130	221.24	74.42
131	222.75	74.73
132	224.27	75.02
133	225.79	75.28
134	227.31	75.55
135	228.83	75.75
136	230.35	75.88
137	231.87	75.91
138	233.39	75.81
139	234.91	75.61
140	236.43	74.97
141	237.95	74.23
142	239.47	73.73
143	240.99	72.99
144	242.51	72.10
145	244.00	71.52
146	245.49	71.01
147	246.98	70.53
148	248.47	69.93
149	249.96	69.35
150	251.45	68.63
151	252.94	67.77
152	254.42	66.93
153	255.91	66.13
154	257.40	65.47
155	258.89	64.95
156	260.38	64.38
157	261.87	64.48
158	263.36	64.89
159	264.85	65.46
160	266.34	65.92
161	267.83	66.14
162	269.32	66.46
163	270.81	66.86
164	272.30	67.00
165	273.79	66.97
166	275.28	66.46
167	276.77	65.87
168	278.26	64.46
169	279.75	63.29
170	281.24	62.28
171	282.73	61.90

Order	Station [ft]	Elevation [ft]
172	284.22	61.74
173	285.71	61.43
174	287.20	61.14
175	288.69	60.70
176	290.18	60.24
177	291.67	59.79
178	293.16	59.52
179	294.65	59.25
180	296.14	59.33
181	297.63	59.34
182	299.12	59.06
183	300.61	58.79
184	302.10	58.52
185	303.59	58.33
186	305.08	58.07
187	306.57	58.01
188	308.06	58.02
189	309.55	58.10
190	311.04	58.14
191	312.53	58.13
192	314.02	58.21
193	315.51	58.26
194	317.00	58.23
195	318.49	58.21
196	319.98	58.22
197	321.47	58.16
198	322.96	58.04
199	324.45	57.90
200	325.94	57.76
201	327.43	57.60
202	328.92	57.46
203	330.41	57.33
204	331.90	57.30
205	333.39	57.31
206	334.88	57.28
207	336.37	57.25
208	337.86	57.22
209	339.81	57.12
210	341.76	57.00
211	343.72	56.81
212	345.67	56.62
213	347.62	56.43
214	349.57	56.24
215	351.53	56.05
216	353.48	55.85
217	355.43	55.66
218	357.39	55.47
219	359.34	55.27
220	361.29	55.08

Order	Station [ft]	Elevation [ft]
221	363.25	54.89
222	365.20	54.74
223	367.15	54.63
224	369.10	54.45
225	371.06	54.51
226	373.01	54.56
227	374.96	54.55
228	376.92	54.55
229	378.87	54.55
230	380.82	54.56
231	382.77	54.53
232	384.73	54.38
233	386.68	54.24
234	388.63	54.16
235	390.59	54.11
236	392.54	54.07
237	394.49	54.02
238	396.45	53.95
239	398.40	53.99
240	400.35	54.13
241	402.30	54.12
242	404.26	53.97
243	406.21	53.81
244	408.16	53.69
245	410.12	53.57
246	412.07	53.42
247	414.02	53.23
248	415.97	53.02
249	417.93	53.08
250	419.88	52.98
251	421.83	52.92
252	423.79	52.85
253	425.74	52.71
254	427.69	52.80
255	429.64	52.70
256	431.60	52.52
257	433.55	52.50
258	435.50	52.62
259	437.46	53.21
260	439.41	54.06
261	441.36	54.95
262	443.32	54.85
263	445.27	55.07
264	447.22	55.50
265	449.17	56.00
266	451.13	56.22
267	453.08	56.17
268	455.03	56.17
269	456.99	56.24

Order	Station [ft]	Elevation [ft]
270	458.94	56.00
271	460.89	56.22
272	462.84	56.59
273	464.20	56.88
274	465.55	57.40
275	466.90	58.00
276	468.26	58.12
277	469.61	58.32
278	470.96	58.45
279	472.31	58.47
280	473.67	58.29
281	475.02	57.96
282	476.37	57.36
283	477.73	56.63
284	479.08	55.76
285	480.43	55.25
286	481.78	54.98
287	483.14	54.99
288	484.49	55.14
289	485.84	55.29
290	487.20	55.45
291	488.55	55.66
292	489.90	55.89
293	491.25	56.19
294	492.61	56.43
295	493.96	56.47
296	495.31	56.69
297	496.67	57.19
298	498.02	57.64
299	499.37	58.06
300	500.72	58.20
301	502.08	58.16
302	503.43	58.01
303	504.78	57.82
304	506.14	57.59
305	508.23	57.19
306	510.32	56.98
307	512.41	56.72
308	514.51	56.50
309	516.60	56.32
310	518.69	56.03
311	520.79	55.57
312	522.88	55.05
313	524.97	55.02
314	527.06	55.09
315	529.16	54.86
316	531.25	54.60
317	533.34	54.53
318	535.44	54.68

Order	Station [ft]	Elevation [ft]
319	537.53	54.79
320	539.62	54.85
321	541.57	54.94
322	543.52	55.01
323	545.46	55.11
324	547.41	54.99
325	549.36	54.46
326	551.30	54.35
327	553.25	54.24
328	555.20	54.12
329	557.14	54.06
330	559.09	54.14
331	561.04	54.48
332	562.99	54.87
333	564.93	55.27
334	566.88	55.66
335	568.83	56.00
336	570.77	56.27
337	572.15	56.12
338	573.53	55.74
339	574.92	55.26
340	576.30	54.82
341	577.68	54.38
342	579.06	53.94
343	580.44	53.48
344	581.82	53.05
345	583.20	52.62
346	584.58	52.18
347	585.96	51.90
348	587.34	51.93
349	588.72	51.98
350	590.10	52.22
351	591.48	52.47
352	592.86	52.77
353	594.24	53.11
354	595.62	53.43
355	597.00	53.76
356	598.39	54.11
357	599.77	54.40
358	601.15	54.74
359	602.53	55.05
360	603.91	55.36
361	605.29	55.71
362	606.67	55.96
363	608.05	56.29
364	609.43	56.53
365	610.81	56.76
366	612.19	57.00
367	613.57	57.18

Order	Station [ft]	Elevation [ft]
368	614.95	57.15
369	617.34	56.60
370	619.73	55.46
371	622.12	54.50
372	624.51	53.85
373	626.89	53.42
374	629.28	53.06
375	631.67	52.01
376	634.06	50.88
377	636.45	49.76
378	638.84	48.93
379	641.22	49.02
380	643.61	49.20
381	646.00	49.33
382	648.39	49.57
383	650.78	49.89
384	653.17	50.20
385	655.41	50.49
386	657.66	50.69
387	659.91	50.63
388	662.15	50.37
389	664.40	49.97
390	666.65	49.73
391	668.89	49.71
392	671.14	49.61
393	673.39	49.59
394	675.64	49.48
395	677.88	49.37
396	680.13	49.26
397	682.38	49.15
398	684.62	49.03
399	686.87	48.92
400	689.12	48.81
401	691.36	48.64
402	693.60	48.58
403	695.84	49.03
404	698.08	49.42
405	700.32	49.60
406	702.56	49.63
407	704.81	49.63
408	707.05	49.63
409	709.29	49.59
410	711.53	49.46
411	713.77	49.47
412	716.01	49.70
413	718.25	49.82
414	720.49	49.87
415	722.74	50.17
416	724.98	50.50

Order	Station [ft]	Elevation [ft]
417	726.43	50.49
418	727.88	50.45
419	729.34	50.39
420	730.79	50.34
421	732.25	50.34
422	733.70	50.43
423	735.15	50.41
424	736.61	50.33
425	738.06	50.17
426	739.51	50.01
427	740.97	49.90
428	742.42	49.85
429	743.88	49.87
430	745.33	49.87
431	746.78	49.85
432	748.24	49.93
433	749.69	49.97
434	751.14	49.89
435	752.60	49.85
436	754.05	49.82
437	755.51	49.78
438	756.96	49.75
439	758.41	49.75
440	759.87	49.75
441	761.32	49.78
442	762.77	49.91
443	764.23	50.10
444	765.68	50.65
445	767.14	51.15
446	768.59	51.43
447	770.04	51.92
448	771.50	52.62
449	772.91	51.67
450	774.32	50.93
451	775.73	50.49
452	777.15	50.21
453	778.56	50.06
454	779.97	49.97
455	781.39	49.96
456	782.80	49.98
457	784.21	50.02
458	785.62	50.04
459	787.04	50.06
460	788.45	50.06
461	789.86	50.08
462	791.27	50.12
463	792.69	50.12
464	794.10	50.13
465	795.51	50.12

Order	Station [ft]	Elevation [ft]
466	796.92	50.07
467	798.34	50.00
468	799.75	49.93
469	801.16	49.86
470	802.57	49.81
471	803.99	49.80
472	805.40	49.78
473	806.81	49.74
474	808.23	49.69
475	809.64	49.67
476	811.05	49.67
477	812.46	49.67
478	813.88	49.63
479	815.29	49.62
480	816.70	49.61
481	818.11	49.55
482	819.53	49.49
483	820.94	49.45
484	822.35	49.44
485	823.76	49.46
486	825.18	49.46
487	826.59	49.46
488	828.00	49.43
489	829.41	49.34
490	830.83	49.30
491	832.24	49.32
492	833.65	49.37
493	835.07	49.43
494	836.48	49.43
495	837.89	49.42
496	839.30	49.54
497	840.72	49.69
498	842.13	49.75
499	843.54	49.77
500	844.95	49.78
501	846.37	49.89
502	847.78	50.08
503	849.19	50.29
504	850.60	50.44
505	852.02	50.48
506	853.43	50.49
507	854.84	50.46
508	856.26	50.42
509	857.67	50.36
510	859.08	50.28
511	860.49	50.22
512	861.91	50.04

Comment:

Weir Cross Section: X-0290W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	50.04
1	2.20	49.92
2	4.41	49.71
3	6.61	49.57
4	8.81	49.44
5	11.02	49.35
6	13.22	49.32
7	15.43	49.41
8	17.63	49.51
9	19.83	49.53
10	22.04	49.41
11	24.24	49.43
12	26.44	49.56
13	28.65	49.67
14	30.85	49.69
15	33.06	49.63
16	35.26	49.57
17	37.20	49.47
18	39.14	49.37
19	41.08	49.26
20	43.02	49.17
21	44.96	49.10
22	46.91	48.94
23	48.85	48.72
24	50.79	48.66
25	52.73	48.66
26	54.67	48.72
27	56.61	48.75
28	58.55	48.63
29	60.49	48.67
30	62.43	48.81
31	64.37	48.78
32	66.32	48.80
33	67.79	48.84
34	69.26	48.81
35	70.73	48.78
36	72.21	48.76
37	73.68	48.74
38	75.15	48.71
39	76.62	48.68
40	78.10	48.65
41	79.57	48.56
42	81.04	48.45
43	82.52	48.36

Order	Station [ft]	Elevation [ft]
44	83.99	48.31
45	85.46	48.34
46	86.93	48.51
47	88.41	48.78
48	89.88	48.85
49	91.20	48.84
50	92.51	48.80
51	93.83	48.75
52	95.15	48.68
53	96.46	48.60
54	97.78	48.47
55	99.10	48.35
56	100.42	48.29
57	101.73	48.26
58	103.05	48.29
59	104.37	48.31
60	105.68	48.31
61	107.00	48.33
62	108.32	48.36
63	109.63	48.38
64	110.95	48.39
65	112.27	48.47
66	113.59	48.56
67	114.90	48.48
68	116.22	48.38
69	117.54	48.35
70	118.85	48.32
71	120.17	48.36
72	121.49	48.41
73	122.81	48.43
74	124.12	48.45
75	125.44	48.44
76	126.76	48.44
77	128.07	48.43
78	129.39	48.39
79	130.71	48.31
80	132.03	48.28
81	134.24	48.29
82	136.45	48.33
83	138.67	48.26
84	140.88	48.17
85	143.09	48.29
86	145.31	48.32
87	147.52	48.31
88	149.73	48.28
89	151.95	48.22
90	154.16	48.20
91	156.37	48.15
92	158.59	48.02

Order	Station [ft]	Elevation [ft]
93	160.80	48.39
94	163.01	48.89
95	165.23	49.10
96	167.44	49.06
97	169.19	48.92
98	170.93	48.50
99	172.68	47.99
100	174.42	47.76
101	176.17	48.27
102	177.91	48.86
103	179.66	49.44
104	181.40	49.89
105	183.15	50.20
106	184.90	50.50
107	186.64	50.74
108	188.39	51.00
109	190.13	51.23
110	191.88	51.41
111	193.62	51.61
112	195.37	51.88
113	197.76	51.95
114	200.15	51.59
115	202.53	51.06
116	204.92	50.66
117	207.31	51.46
118	209.70	53.12
119	212.09	54.21
120	214.48	54.81
121	216.86	53.95
122	219.25	52.84
123	221.64	52.96
124	224.03	52.75
125	226.42	52.73
126	228.81	52.89
127	231.19	52.97
128	233.58	53.05
129	235.45	53.21
130	237.32	53.09
131	239.18	53.07
132	241.05	53.08
133	242.92	52.63
134	244.79	51.91
135	246.65	51.18
136	248.52	50.49
137	250.39	49.91
138	252.26	49.19
139	254.12	48.75
140	255.99	48.67
141	257.86	48.60

Order	Station [ft]	Elevation [ft]
142	259.73	48.47
143	261.59	48.34
144	263.46	48.36

Comment:

Weir Cross Section: X-0300W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	50.04
1	1.76	49.80
2	3.53	49.50
3	5.29	49.34
4	7.06	49.27
5	8.82	49.32
6	10.59	49.35
7	12.35	49.36
8	14.11	49.30
9	15.88	49.25
10	17.64	49.20
11	19.41	49.18
12	21.17	49.11
13	22.94	49.03
14	24.70	48.92
15	26.46	48.81
16	28.23	48.77
17	29.99	48.77
18	31.76	48.90
19	33.52	48.97
20	35.29	48.97
21	37.05	48.82
22	38.81	48.61
23	40.58	48.44
24	42.34	48.32
25	44.11	48.26
26	45.87	48.19
27	47.64	48.12
28	49.40	48.03
29	51.16	47.93
30	52.93	47.84
31	54.69	47.75
32	56.46	47.71
33	58.61	47.72

Order	Station [ft]	Elevation [ft]
34	60.76	47.68
35	62.91	47.60
36	65.06	47.52
37	67.21	47.44
38	69.36	47.39
39	71.51	47.35
40	73.66	47.32
41	75.81	47.36
42	77.96	47.43
43	80.11	47.56
44	82.26	47.73
45	84.41	47.93
46	86.56	48.14
47	88.71	48.34
48	90.86	48.54
49	93.01	48.74
50	95.16	48.95
51	97.31	49.15
52	99.47	49.36
53	101.62	49.56
54	103.77	49.76
55	105.92	50.00
56	108.07	50.49
57	110.22	51.02
58	112.37	51.54
59	114.52	51.88
60	116.67	52.10
61	118.82	52.26
62	120.97	52.33
63	123.12	52.51
64	125.27	52.55
65	127.17	52.60
66	129.07	52.56
67	130.97	52.39
68	132.87	51.92
69	134.77	51.24
70	136.67	50.56
71	138.57	50.01
72	140.47	49.99
73	142.37	49.90
74	144.28	50.02
75	146.18	50.32
76	148.08	50.53
77	149.98	50.73
78	151.88	50.66
79	153.78	50.36
80	155.68	50.18
81	157.58	50.11
82	159.48	49.98

Order	Station [ft]	Elevation [ft]
83	161.38	49.75
84	163.28	49.76
85	165.18	49.72
86	167.08	49.66
87	168.98	49.65
88	170.88	49.82
89	172.78	50.02
90	174.68	50.31
91	176.58	50.68
92	178.48	50.88
93	180.38	50.94
94	182.29	51.02
95	184.19	51.15
96	186.09	50.78
97	187.99	50.60
98	189.89	50.47
99	191.79	50.39
100	193.69	50.34
101	195.59	50.35
102	197.49	50.54
103	199.39	51.07
104	201.29	51.56
105	203.19	51.53
106	205.09	51.36
107	206.99	51.14
108	208.89	50.88
109	210.79	50.76
110	212.69	50.63
111	214.59	50.44
112	216.49	50.48
113	218.40	50.84
114	220.30	51.42
115	222.20	51.98
116	224.10	51.92
117	226.00	51.87
118	227.90	51.93
119	229.80	52.14
120	231.70	52.48
121	233.60	52.76
122	235.50	52.99
123	237.40	53.15
124	239.30	53.10
125	241.20	53.07
126	243.10	53.05
127	245.00	53.05
128	246.90	53.07
129	248.62	53.29
130	250.35	53.42
131	252.07	53.77

Order	Station [ft]	Elevation [ft]
132	253.79	53.81
133	255.51	53.92
134	257.23	53.93
135	258.95	54.06
136	260.68	54.10
137	262.40	53.79
138	264.12	53.65
139	265.84	53.28
140	267.56	52.39
141	269.28	51.12
142	271.00	50.22
143	272.73	49.78
144	274.45	49.66
145	276.17	49.88
146	277.89	50.09
147	279.61	50.22
148	281.33	50.28
149	283.06	50.39
150	284.78	50.35
151	286.50	50.42
152	288.22	50.44
153	289.94	50.51
154	291.66	50.57
155	293.39	50.51
156	295.11	50.38
157	296.83	50.34
158	298.55	50.28
159	300.27	50.28
160	301.99	50.46
161	303.86	50.58
162	305.72	50.69
163	307.58	50.46
164	309.44	50.34
165	311.31	50.44
166	313.17	50.60
167	315.03	50.44
168	316.90	50.06
169	318.76	49.72
170	320.62	49.59
171	322.48	49.54
172	324.35	49.64
173	326.21	49.68
174	328.07	49.63
175	329.94	49.50
176	331.80	49.44
177	333.98	49.32
178	336.17	49.14
179	338.36	49.33
180	340.54	49.75

Order	Station [ft]	Elevation [ft]
181	342.73	49.98
182	344.92	50.18
183	347.10	50.13
184	349.29	50.08
185	350.65	50.06
186	352.01	50.23
187	353.37	50.38
188	354.74	50.23
189	356.10	50.13
190	357.46	49.96
191	358.82	49.81
192	360.18	50.23
193	362.13	50.71
194	364.07	50.96
195	366.02	50.97
196	367.96	50.92
197	369.37	50.83
198	370.79	50.64
199	372.20	50.45
200	373.61	50.43
201	375.03	50.41
202	376.44	50.33
203	377.85	50.18
204	379.27	49.69
205	381.13	48.94
206	382.99	48.14
207	384.85	47.85
208	386.72	47.98
209	388.58	48.36
210	390.44	48.93
211	392.31	49.20
212	394.17	49.10
213	395.46	48.98
214	396.75	48.86
215	398.04	48.74
216	399.33	48.71
217	400.63	48.74
218	401.92	48.82
219	403.21	48.92
220	404.50	48.93
221	405.79	48.84
222	407.08	48.75
223	408.37	48.54
224	409.66	48.36
225	410.95	48.22
226	412.24	48.07
227	413.54	48.00
228	414.83	47.91
229	416.12	48.04

Order	Station [ft]	Elevation [ft]
230	417.41	48.31
231	418.70	48.64
232	419.99	48.92
233	421.28	49.10
234	422.57	49.13
235	423.86	49.16
236	425.15	49.17
237	426.45	49.19
238	427.74	49.17
239	429.03	49.14
240	430.32	49.14
241	431.61	49.13
242	432.90	49.12
243	434.19	49.14
244	435.48	49.16

Comment:

Weir Cross Section: X-0320W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	49.16
1	2.06	49.12
2	4.12	49.04
3	6.18	48.93
4	8.24	48.79
5	10.30	48.70
6	12.36	48.64
7	14.42	48.58
8	16.49	48.58
9	18.55	48.58
10	20.61	48.79
11	22.67	49.35
12	24.73	50.04
13	26.79	50.64
14	28.85	50.80
15	30.91	50.63
16	32.97	50.27
17	34.34	49.87
18	35.70	49.51
19	37.07	49.20
20	38.43	48.92
21	39.80	48.56

Order	Station [ft]	Elevation [ft]
22	41.17	48.30
23	42.53	48.13
24	43.90	47.97
25	45.26	47.87
26	46.63	47.78
27	48.00	47.65
28	49.36	47.52
29	50.73	47.54
30	52.09	47.64
31	53.46	47.95
32	54.83	48.16
33	56.27	48.05
34	57.71	47.92
35	59.15	47.54
36	60.59	47.31
37	62.03	47.17
38	63.47	47.19
39	64.91	47.33
40	66.35	47.47
41	67.79	47.57
42	69.23	47.74
43	70.67	47.88
44	72.11	47.97
45	73.55	48.08
46	74.99	48.13
47	76.43	48.18
48	77.87	48.18
49	79.78	47.91
50	81.68	47.63
51	83.59	47.45
52	85.49	47.47
53	87.40	47.53
54	89.31	47.53
55	91.21	47.49
56	93.12	47.45
57	94.66	47.41
58	96.21	47.37
59	97.75	47.33
60	99.30	47.29
61	100.84	47.21
62	102.39	47.17
63	103.93	47.25
64	105.48	47.27
65	107.02	47.28
66	108.56	47.29
67	110.11	47.30
68	111.65	47.31
69	113.20	47.31
70	114.74	47.31

Order	Station [ft]	Elevation [ft]
71	116.29	47.28
72	117.83	47.24
73	119.38	47.21
74	120.92	47.17
75	122.46	47.14
76	124.01	47.05
77	125.55	46.90
78	127.10	46.76
79	128.64	46.63
80	130.19	47.78
81	131.73	49.00
82	133.28	50.69
83	134.82	51.60
84	136.36	51.72
85	137.91	51.72
86	139.45	51.65
87	141.00	51.64
88	142.54	51.57
89	144.72	51.64
90	146.90	51.51
91	149.07	51.06
92	151.25	51.06
93	153.43	51.32
94	155.61	51.55
95	157.78	51.47
96	159.96	51.09
97	162.14	50.86
98	164.31	50.57
99	166.49	50.67
100	168.67	50.76
101	170.85	50.94
102	173.02	51.17
103	175.20	51.33
104	177.38	51.22
105	179.56	50.73
106	181.73	50.56
107	183.91	50.50
108	186.09	50.44
109	188.26	50.37
110	190.44	50.15
111	192.62	49.73
112	194.80	49.46
113	196.97	49.62
114	199.15	49.59
115	201.33	49.65
116	203.51	49.80
117	205.68	50.14
118	207.86	50.39
119	210.04	50.29

Order	Station [ft]	Elevation [ft]
120	212.21	50.36
121	214.39	50.34
122	216.56	50.28
123	218.73	50.16
124	220.90	49.75
125	223.07	49.11
126	225.24	49.06
127	227.41	49.63
128	229.58	50.27
129	231.75	50.39
130	233.92	50.58
131	236.09	50.75
132	238.26	50.94
133	240.43	51.05
134	242.60	51.01
135	244.77	51.04
136	246.94	51.38
137	248.43	51.71
138	249.92	51.62
139	251.41	51.60
140	252.89	51.72
141	254.38	51.88
142	255.87	52.07
143	257.36	52.13
144	258.84	52.08
145	260.33	51.37
146	261.82	50.62
147	263.31	49.95
148	264.80	49.64
149	266.28	49.43
150	267.77	49.20
151	269.26	48.95
152	270.75	48.68
153	272.23	48.74
154	273.72	48.92
155	275.21	48.79
156	276.70	48.80
157	278.18	49.26
158	279.67	49.55
159	281.16	49.62
160	282.65	49.02
161	284.13	48.52
162	285.62	48.41
163	287.11	48.54
164	288.60	49.01
165	290.08	49.85
166	291.57	50.69
167	293.06	50.75
168	294.55	50.75

Order	Station [ft]	Elevation [ft]
169	296.58	50.72
170	298.61	50.28
171	300.65	49.64
172	302.68	48.34
173	304.71	47.78
174	306.75	47.41
175	308.78	47.21
176	310.82	47.34
177	312.85	48.11
178	314.88	48.84
179	316.92	49.04
180	318.95	49.09
181	320.98	49.08
182	323.02	49.07
183	325.05	49.18
184	327.09	49.48
185	329.34	49.49
186	331.59	49.27
187	333.84	49.34
188	336.09	49.48
189	338.34	49.33
190	340.59	48.66
191	342.84	48.05
192	345.10	47.70
193	347.35	47.63
194	349.60	47.75
195	351.85	47.70
196	354.10	47.45
197	356.35	47.58
198	358.60	47.89
199	360.85	48.18
200	363.10	48.48
201	365.36	48.78
202	367.61	49.05
203	369.86	49.37
204	372.11	49.67
205	374.36	49.46
206	376.61	49.22
207	378.86	49.30
208	381.11	49.47
209	383.36	49.39
210	385.62	49.12
211	387.87	49.04
212	390.12	49.36
213	392.37	49.76
214	394.62	50.34
215	396.87	50.63
216	399.12	50.54
217	400.68	50.29

Order	Station [ft]	Elevation [ft]
218	402.24	50.23
219	403.80	49.70
220	405.35	49.52
221	406.91	48.97
222	408.47	48.42
223	410.03	48.24
224	411.58	48.08
225	413.14	48.19
226	414.70	48.45
227	416.26	48.57
228	417.81	48.85
229	419.37	48.86
230	420.93	48.82
231	422.49	48.84
232	424.04	49.00
233	425.51	49.09
234	426.98	49.05
235	428.45	48.93
236	429.91	48.67
237	431.38	48.41
238	432.85	48.22
239	434.31	48.17
240	435.78	48.22
241	437.25	48.26
242	438.71	48.27
243	440.18	48.11
244	441.65	47.99
245	443.11	47.93
246	444.58	47.91
247	446.05	47.91
248	447.52	47.94
249	449.35	47.92
250	451.19	47.93
251	453.03	47.97
252	454.87	48.03
253	456.71	48.09
254	458.55	48.16
255	460.38	48.25
256	462.22	48.24
257	464.06	48.22
258	465.90	48.19
259	467.74	48.05
260	469.57	47.91
261	471.41	47.80
262	473.25	47.87
263	475.09	48.03
264	476.93	48.20
265	478.77	48.37
266	480.60	48.55

Order	Station [ft]	Elevation [ft]
267	482.44	48.71
268	484.28	48.89
269	486.12	49.08
270	487.96	49.22
271	489.80	49.37
272	491.63	49.53
273	493.47	49.78
274	495.31	49.91
275	497.15	49.86
276	498.99	49.42
277	500.83	49.33
278	502.66	49.55
279	504.50	50.10
280	506.34	50.46
281	508.70	50.66
282	511.07	50.17
283	513.43	50.00
284	515.79	49.92
285	518.16	49.96
286	520.52	49.70
287	522.88	49.47
288	525.25	49.50

Comment:

Weir Cross Section: X-0330W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	47.98
1	2.33	48.38
2	4.66	48.47
3	7.16	48.28
4	9.66	48.22
5	12.16	48.32
6	14.66	48.49
7	17.16	48.45
8	19.66	48.77
9	22.15	49.68
10	24.65	50.32
11	27.15	50.68
12	29.65	51.26
13	32.15	51.77
14	34.65	51.91

Order	Station [ft]	Elevation [ft]
15	37.15	52.00
16	39.65	52.48
17	42.15	53.20
18	44.65	53.94
19	46.30	54.39
20	47.95	54.58
21	49.60	54.47
22	51.25	54.27
23	52.90	54.03
24	54.54	53.76
25	56.19	53.53
26	57.84	53.32
27	59.49	52.88
28	61.14	52.34
29	62.79	52.05
30	64.44	51.85
31	66.09	51.60
32	67.74	51.29
33	69.39	51.09
34	71.04	51.15
35	72.94	51.30
36	74.84	51.75
37	76.74	51.30
38	78.64	50.55
39	80.55	49.89
40	82.45	49.68
41	84.35	49.57
42	86.25	49.51
43	88.16	49.58
44	90.06	49.65
45	91.96	49.76
46	93.86	50.04
47	95.77	50.81
48	97.67	51.30
49	99.57	51.52
50	101.47	51.39
51	103.21	51.08
52	104.96	50.75
53	106.70	50.39
54	108.44	50.00
55	110.18	50.04
56	111.92	50.22
57	113.66	50.37
58	115.40	50.18
59	117.14	49.92
60	118.88	49.65
61	120.62	49.54
62	122.36	49.45
63	124.10	49.38

Order	Station [ft]	Elevation [ft]
64	125.84	49.39
65	127.58	49.45
66	129.32	49.50

Comment:

Weir Cross Section: X-0340W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	48.47
1	1.83	48.48
2	3.67	48.24
3	5.50	47.69
4	7.33	47.19
5	9.17	46.81
6	11.00	46.62
7	12.84	46.55
8	14.67	46.54
9	16.50	46.52
10	18.34	46.36
11	20.17	46.27
12	22.00	46.28
13	23.84	46.35
14	25.67	46.41
15	27.50	46.47
16	29.34	46.49
17	31.12	46.47
18	32.91	46.40
19	34.69	46.33
20	36.48	46.18
21	38.26	45.96
22	40.05	45.84
23	41.84	45.88
24	43.62	45.88
25	45.41	45.86
26	47.19	45.74
27	48.98	45.68
28	50.76	45.71
29	52.55	45.82
30	54.33	45.97
31	56.12	45.96
32	57.90	45.84
33	59.27	45.80

Order	Station [ft]	Elevation [ft]
34	60.64	45.76
35	62.01	45.70
36	63.38	45.60
37	64.75	45.50
38	66.12	45.48
39	67.49	45.47
40	68.86	45.45
41	70.23	45.44
42	71.60	45.44
43	72.97	45.45
44	74.34	45.46
45	75.71	45.47
46	77.08	45.51
47	78.45	45.55
48	79.82	45.60
49	81.51	45.63
50	83.21	45.62
51	84.90	45.67
52	86.60	45.71
53	88.29	45.77
54	89.98	45.80
55	91.68	45.84
56	93.37	45.82
57	95.17	45.73
58	96.96	45.58
59	98.76	45.34
60	100.55	45.11
61	102.35	44.93
62	104.14	44.87
63	105.94	44.86
64	107.73	44.86
65	109.53	44.87
66	111.32	44.92
67	113.12	45.16
68	114.91	45.44
69	116.71	45.64
70	118.50	45.79
71	120.30	45.86
72	122.09	45.84
73	123.81	45.81
74	125.53	45.73
75	127.25	45.60
76	128.97	45.44
77	130.68	45.20
78	132.40	45.12
79	134.12	45.11
80	135.84	45.15
81	137.56	45.28
82	139.27	45.46

Order	Station [ft]	Elevation [ft]
83	140.99	45.69
84	142.71	45.92
85	144.43	46.10
86	146.14	46.22
87	147.86	46.33
88	149.58	46.45
89	151.52	46.51
90	153.46	46.58
91	155.40	46.62
92	157.34	46.65
93	159.28	46.67
94	161.23	46.67
95	163.17	46.69
96	165.11	46.73
97	167.05	46.88
98	168.99	46.98
99	170.93	47.05
100	172.87	46.96
101	174.81	46.64
102	176.75	46.69
103	178.70	46.72
104	180.64	46.73
105	182.58	46.71
106	184.52	46.60
107	186.46	46.50
108	188.40	46.65
109	190.34	46.81
110	192.28	46.73
111	194.22	46.63
112	196.16	46.59
113	198.11	46.55
114	200.05	46.51
115	201.99	46.48
116	203.93	46.45
117	205.87	46.41
118	207.81	46.38
119	209.75	46.35
120	211.69	46.32
121	213.12	46.30
122	214.54	46.28
123	215.96	46.26
124	217.38	46.25
125	218.81	46.23
126	220.23	46.21
127	221.65	46.19
128	223.07	46.17
129	224.50	46.12
130	225.92	46.10
131	227.34	46.09

Order	Station [ft]	Elevation [ft]
132	228.77	46.11
133	230.19	46.16
134	231.61	46.23
135	233.03	46.30
136	234.46	46.30
137	235.88	46.28
138	237.30	46.26
139	238.73	46.26
140	240.15	46.34
141	241.57	46.39
142	242.99	46.40
143	244.42	46.46
144	245.84	46.53
145	247.26	46.59
146	248.69	46.62
147	250.11	46.62
148	251.53	46.62
149	252.95	46.62
150	254.38	46.60
151	255.80	46.57
152	257.22	46.54
153	259.46	46.54
154	261.70	46.58
155	263.93	46.55
156	266.17	46.54
157	268.41	46.61
158	270.64	46.71
159	272.88	46.87
160	275.12	47.04
161	277.35	47.19
162	279.59	47.31
163	281.83	47.39
164	284.07	47.45
165	286.30	47.48
166	288.54	47.51
167	290.78	47.49
168	293.01	47.47

Comment:

Weir Cross Section: X-0350W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	48.36
1	1.72	48.45
2	3.45	48.51
3	5.17	48.65
4	6.89	48.91
5	8.61	49.05
6	10.34	49.27
7	12.06	49.66
8	13.78	50.09
9	15.50	50.42
10	17.23	50.77
11	18.95	51.17
12	20.67	51.28
13	22.39	50.86
14	24.12	50.79
15	25.84	50.81
16	27.56	50.77
17	29.18	50.54
18	30.80	50.43
19	32.42	50.42
20	34.04	50.45
21	35.67	50.55
22	37.29	50.73
23	38.91	50.91
24	40.53	51.01
25	42.15	51.01
26	43.77	51.05
27	45.39	51.05
28	47.01	51.12
29	48.63	51.10
30	50.25	51.12
31	51.87	51.22
32	53.49	51.27
33	55.11	51.41
34	56.73	51.10
35	58.35	50.90
36	59.97	50.97
37	61.59	51.15
38	63.22	51.41
39	64.84	51.56
40	66.46	51.89
41	68.08	52.38
42	69.70	52.28
43	71.32	52.40
44	72.94	52.90
45	74.56	53.07
46	76.18	53.20
47	77.80	53.28
48	79.42	53.27

Order	Station [ft]	Elevation [ft]
49	80.77	53.22
50	82.13	53.01
51	83.48	52.66
52	84.83	52.30
53	86.18	52.16
54	87.54	52.10
55	88.89	52.08
56	90.24	52.05
57	91.59	51.98
58	92.95	51.20
59	94.30	50.33
60	95.65	49.66
61	97.00	49.75
62	98.36	49.81
63	99.71	50.06
64	101.06	50.28
65	102.41	50.35
66	103.77	50.43
67	105.12	50.58
68	106.47	50.79
69	107.82	51.26
70	109.18	52.05
71	110.53	52.72
72	111.88	53.12
73	113.23	53.37
74	114.59	53.58
75	115.94	53.68
76	117.29	53.85
77	118.64	54.03
78	120.00	53.94
79	121.35	54.04
80	122.70	54.40
81	125.00	54.71
82	127.30	54.53
83	129.60	53.76
84	131.90	52.92
85	134.20	52.49
86	136.49	52.43
87	138.79	52.28
88	141.09	52.27
89	143.39	52.21
90	145.69	52.08
91	147.99	52.05
92	150.29	52.03
93	152.59	52.05
94	154.89	52.17
95	157.19	52.44
96	159.48	52.93
97	160.92	53.12

Order	Station [ft]	Elevation [ft]
98	162.36	53.24
99	163.80	53.33
100	165.24	53.04
101	166.67	52.82
102	168.11	52.59
103	169.55	52.36
104	170.99	52.14
105	172.42	52.13
106	173.86	52.28
107	175.30	52.48
108	176.74	52.77
109	178.17	53.15
110	179.61	53.32
111	181.05	53.09
112	182.49	52.91
113	184.01	52.73
114	185.54	52.66
115	187.06	52.66
116	188.59	52.76
117	190.11	53.02
118	191.64	53.32
119	193.16	53.28
120	194.69	53.18
121	196.22	53.26
122	197.74	53.26
123	199.27	53.21
124	200.79	53.08
125	202.32	52.92
126	203.84	52.70
127	205.37	52.50
128	206.89	52.30
129	208.42	52.53
130	209.95	52.77
131	211.47	52.92
132	213.00	52.82
133	214.52	52.59
134	216.05	52.96
135	217.57	53.26
136	219.10	53.34
137	220.62	53.28
138	222.15	53.18
139	223.67	52.94
140	225.20	52.78
141	226.73	52.74
142	228.25	52.64
143	229.78	52.46
144	231.30	52.23
145	233.48	52.04
146	235.65	52.07

Order	Station [ft]	Elevation [ft]
147	237.82	51.87
148	239.99	51.59
149	242.17	50.90
150	244.34	50.84
151	246.51	51.25
152	248.69	51.51
153	250.86	51.48
154	253.03	51.54
155	255.21	51.62
156	257.38	51.64
157	259.55	51.93
158	261.73	52.08
159	263.90	52.39
160	266.07	53.20
161	267.44	53.58
162	268.80	53.74
163	270.17	53.52
164	271.53	53.17
165	272.90	52.71
166	274.26	52.32
167	275.62	51.97
168	276.99	51.62
169	278.35	51.28
170	279.72	51.08
171	281.08	50.88
172	282.45	50.71
173	283.81	50.67
174	285.18	50.87
175	286.54	51.10
176	287.90	51.37
177	289.27	51.58
178	290.63	51.77
179	292.00	52.04
180	293.36	52.32
181	294.73	52.67
182	296.09	52.97
183	297.46	53.16
184	298.82	53.36
185	300.18	53.58
186	301.55	53.92
187	302.91	54.37
188	304.28	54.82
189	305.64	55.28
190	307.01	55.45
191	308.37	55.57
192	309.74	55.48
193	311.83	55.11
194	313.92	53.72
195	316.01	53.09

Order	Station [ft]	Elevation [ft]
196	318.10	52.98
197	320.20	53.01
198	322.29	53.10
199	324.38	53.17
200	326.47	53.20
201	328.56	53.34
202	330.66	53.07
203	332.75	52.94
204	334.84	52.69
205	336.93	52.61
206	339.03	52.37
207	341.12	52.13
208	343.21	52.13
209	345.30	52.36
210	347.39	52.81
211	349.49	53.03
212	351.58	52.85
213	353.67	52.77
214	355.76	52.71
215	357.86	52.67
216	359.95	52.78
217	362.04	53.07
218	364.13	53.34
219	366.22	53.58
220	368.32	53.89
221	370.41	54.58
222	372.50	55.20
223	374.59	55.61
224	376.69	55.83
225	378.48	55.60
226	380.27	55.29
227	382.07	54.96
228	383.86	54.95
229	385.65	55.24
230	387.45	55.76
231	389.24	55.69
232	391.03	54.86
233	392.83	53.81
234	394.62	53.04
235	396.41	52.79
236	398.21	52.60
237	400.00	52.38
238	401.79	52.45
239	403.59	52.38
240	405.38	52.44
241	407.59	52.77
242	409.81	52.94
243	412.02	52.87
244	414.24	52.66

Order	Station [ft]	Elevation [ft]
245	416.45	52.35
246	418.66	52.08
247	420.88	51.79
248	423.09	51.56
249	425.30	51.45
250	427.52	51.49
251	429.73	51.74
252	431.95	52.29
253	434.16	52.36
254	436.37	52.13
255	438.59	52.00
256	440.80	52.16
257	442.99	52.61
258	445.19	53.02
259	447.38	52.97
260	449.57	52.96
261	451.76	52.77
262	453.96	52.64
263	456.15	52.52
264	458.34	52.40
265	460.54	52.30
266	462.73	52.23
267	464.92	52.65
268	467.11	54.14
269	469.31	54.66
270	471.50	54.83
271	473.69	54.82
272	475.89	54.60
273	477.31	54.61
274	478.74	54.65
275	480.17	54.73
276	481.60	54.81
277	483.02	54.88
278	484.45	54.88
279	485.88	54.87
280	487.30	54.81
281	488.73	54.80
282	490.16	54.87
283	491.59	54.82
284	493.01	54.74
285	494.44	54.78
286	495.87	54.82
287	497.30	54.87
288	498.72	54.90
289	500.15	54.90
290	501.58	54.93
291	503.01	54.99
292	504.43	55.05
293	505.86	55.10

Order	Station [ft]	Elevation [ft]
294	507.29	55.16
295	508.72	55.20
296	510.14	55.23
297	511.57	55.16
298	513.00	55.05
299	514.42	55.23
300	515.85	55.40
301	517.28	55.48
302	518.71	55.52
303	520.13	55.54
304	521.56	55.59
305	523.56	55.36
306	525.56	54.69
307	527.57	54.37
308	529.57	54.39
309	531.57	54.25
310	533.57	53.89
311	535.57	53.45
312	537.57	53.03
313	539.58	53.01
314	541.58	53.12
315	543.58	53.17
316	545.58	53.26
317	547.58	53.37
318	549.58	53.45
319	551.59	53.54
320	553.59	53.61
321	555.59	53.68
322	557.59	53.56
323	559.59	53.23
324	561.59	52.88
325	563.60	52.70
326	565.60	52.83
327	567.60	53.04
328	569.60	53.29
329	571.60	53.42
330	573.60	53.44
331	575.61	53.66
332	577.61	53.73
333	579.61	53.49
334	581.61	53.41
335	583.61	53.42
336	585.61	53.48
337	587.65	53.57
338	589.68	53.50
339	591.71	53.35
340	593.75	53.34
341	595.78	53.00
342	597.81	52.98

Order	Station [ft]	Elevation [ft]
343	599.84	53.04
344	601.88	53.11
345	603.91	53.18
346	605.94	53.27
347	607.97	53.28
348	610.01	53.13
349	612.04	53.00
350	614.07	53.12
351	616.10	53.16
352	618.14	53.05
353	620.17	52.92
354	622.20	52.77
355	624.24	52.61
356	626.27	52.40
357	628.30	52.57
358	630.33	52.74
359	632.37	52.90
360	634.40	53.08
361	636.43	53.16
362	638.46	52.95
363	640.50	53.01
364	642.53	53.00
365	644.56	52.94
366	646.59	52.95
367	648.63	53.02
368	650.66	52.87
369	652.76	52.96
370	654.85	53.31
371	656.95	53.68
372	659.04	53.83
373	661.14	53.91
374	663.23	54.17
375	665.33	54.45
376	667.42	54.44
377	669.52	54.40
378	671.61	54.38
379	673.71	54.38
380	675.80	54.33
381	677.90	54.31
382	679.99	54.46
383	682.09	54.54
384	684.18	54.45
385	686.28	54.22
386	688.37	54.02
387	690.47	53.91
388	692.56	53.86
389	694.66	53.81
390	696.76	53.77
391	698.85	53.73

Order	Station [ft]	Elevation [ft]
392	700.95	53.80
393	703.04	53.90
394	705.14	53.89
395	707.23	53.91
396	709.33	53.93
397	711.42	53.95
398	713.52	53.98
399	715.61	54.01
400	717.71	54.04
401	720.06	54.09
402	722.41	54.27
403	724.76	54.51
404	727.12	54.71
405	729.47	54.91
406	731.82	55.10
407	734.17	55.15
408	736.53	55.13
409	738.88	55.06
410	741.23	55.30
411	743.58	55.40
412	745.93	55.46
413	748.29	55.65
414	750.64	55.78
415	752.99	55.53
416	755.34	55.29
417	757.70	55.22
418	760.05	55.53
419	762.40	56.13
420	764.75	56.98
421	767.11	57.85
422	769.46	57.99
423	771.81	57.27
424	774.16	56.64
425	776.51	56.43
426	778.87	56.51
427	781.22	56.77
428	783.57	56.93
429	785.92	57.06
430	788.28	57.24
431	790.63	57.49
432	792.98	57.67
433	795.33	57.77
434	797.69	57.81
435	800.04	57.83
436	802.39	57.85
437	804.74	57.86
438	807.09	57.86
439	809.45	57.85
440	811.80	57.84

Order	Station [ft]	Elevation [ft]
441	814.15	57.83
442	816.50	57.84
443	818.86	57.83
444	821.21	57.80
445	823.56	57.76
446	825.91	57.72
447	828.27	57.68
448	830.62	57.79
449	832.97	57.92
450	835.32	57.89
451	837.67	57.88
452	840.03	58.07
453	842.38	58.38
454	844.73	58.65
455	847.08	58.78
456	849.44	59.05
457	851.79	59.47
458	854.14	59.88
459	856.49	60.28
460	858.85	60.68
461	861.20	61.10
462	863.55	61.47
463	865.90	61.77
464	868.25	62.12
465	870.50	62.46
466	872.74	62.70
467	874.98	62.91
468	877.22	62.78
469	879.44	62.36
470	881.66	61.83
471	883.88	60.85
472	886.10	60.06
473	888.32	60.20
474	890.54	60.68
475	892.75	61.12
476	894.97	61.46
477	897.19	61.70
478	899.41	61.87
479	901.63	62.10
480	903.85	62.41
481	906.07	62.82
482	908.28	63.30
483	910.50	63.79
484	912.72	64.26
485	914.55	64.18
486	916.38	64.16
487	918.22	64.19
488	920.05	64.27
489	921.88	64.36

Order	Station [ft]	Elevation [ft]
490	923.71	64.55
491	925.54	65.16
492	927.38	65.91
493	929.21	66.67
494	931.04	67.43
495	932.87	68.19
496	934.71	68.61
497	936.54	68.97
498	938.37	69.33
499	940.20	69.51
500	942.03	69.41
501	943.76	69.50
502	945.49	69.64
503	947.22	69.81
504	948.94	70.17
505	950.67	70.60
506	952.40	70.98
507	954.12	71.14
508	955.85	71.19
509	957.58	71.16
510	959.31	71.25
511	961.03	71.35
512	962.76	71.37
513	964.49	71.35
514	966.22	71.35
515	967.94	71.42
516	969.67	71.30
517	971.03	71.21
518	972.39	71.26
519	973.75	71.31
520	975.12	71.36
521	976.48	71.41
522	977.84	71.45
523	979.20	71.51
524	980.56	71.58
525	981.92	71.77
526	983.28	71.96
527	984.64	71.59
528	986.01	71.22
529	987.37	71.02
530	988.73	70.85
531	990.09	70.72
532	991.45	70.59
533	992.81	70.48
534	994.17	70.34
535	995.53	70.20
536	996.89	70.23
537	998.26	70.34
538	999.62	70.46

Order	Station [ft]	Elevation [ft]
539	1000.98	70.59
540	1002.34	70.73
541	1003.70	70.87
542	1005.06	70.79
543	1006.42	70.74
544	1007.78	70.78
545	1009.15	70.86
546	1010.51	70.97
547	1011.87	71.14
548	1013.23	71.39
549	1014.59	71.69
550	1015.95	72.05
551	1017.31	72.15
552	1018.67	72.20
553	1020.04	72.19
554	1021.40	72.13
555	1022.76	71.78
556	1024.12	71.46
557	1025.48	71.51
558	1026.84	71.52
559	1028.20	71.51
560	1029.56	71.43
561	1030.93	71.27
562	1032.29	71.09
563	1033.65	70.87
564	1035.01	70.71
565	1036.37	70.57
566	1037.73	70.54
567	1039.09	70.52
568	1040.45	70.54
569	1041.81	70.51
570	1043.18	70.34
571	1044.54	70.16
572	1045.90	69.95
573	1047.26	69.74
574	1048.62	69.56
575	1049.98	69.39
576	1051.34	69.23
577	1052.70	69.08
578	1054.07	68.94
579	1055.43	68.92
580	1056.79	68.97
581	1058.74	68.87
582	1060.69	68.78
583	1062.64	68.70
584	1064.59	68.49
585	1066.54	68.11
586	1068.49	68.15
587	1070.45	67.98

Order	Station [ft]	Elevation [ft]
588	1072.40	67.86
589	1074.35	67.86
590	1076.30	68.01
591	1078.25	68.15
592	1080.20	68.40
593	1082.15	68.72
594	1084.10	69.05
595	1086.06	69.37
596	1088.01	69.74
597	1089.96	70.02
598	1091.91	70.28
599	1093.86	70.65
600	1095.81	71.11
601	1097.76	71.57
602	1099.71	71.99
603	1101.66	72.39
604	1103.62	72.78
605	1105.57	73.13
606	1107.52	73.60
607	1109.47	74.11
608	1111.42	74.52
609	1113.37	74.88
610	1115.32	75.29
611	1117.27	75.79
612	1119.22	76.40
613	1120.66	76.54
614	1122.10	76.75
615	1123.53	76.92
616	1124.97	77.04
617	1126.40	77.14
618	1127.84	77.22
619	1129.28	77.35
620	1130.71	77.52
621	1132.15	77.57
622	1133.58	77.59
623	1135.02	77.74
624	1136.46	77.96
625	1137.89	78.26
626	1139.33	78.57
627	1140.76	78.87
628	1142.20	79.16
629	1143.63	79.49
630	1145.07	79.79
631	1146.51	79.84
632	1147.94	79.89
633	1149.38	79.92
634	1150.81	79.95
635	1152.25	79.95
636	1153.69	79.90

Order	Station [ft]	Elevation [ft]
637	1155.12	79.85
638	1156.56	79.89
639	1157.99	80.00
640	1159.43	80.13
641	1160.87	80.34
642	1162.30	80.54
643	1163.74	80.67
644	1165.17	80.77
645	1166.61	80.86
646	1168.04	80.97
647	1169.48	81.09
648	1170.92	81.25
649	1172.35	81.41
650	1173.79	81.45
651	1175.22	81.46
652	1176.66	81.62
653	1178.10	81.82
654	1179.53	82.02
655	1180.97	82.24
656	1182.40	82.46
657	1183.84	82.69
658	1185.28	82.86
659	1186.71	82.97
660	1188.15	83.11
661	1189.58	83.24
662	1191.02	83.34
663	1192.45	83.46
664	1193.89	83.60
665	1195.33	83.77
666	1196.76	83.93
667	1198.20	84.05
668	1199.63	84.18
669	1201.07	84.31
670	1202.51	84.45
671	1203.94	84.60
672	1205.38	84.72
673	1206.81	84.82
674	1208.25	84.93
675	1209.69	84.99
676	1211.12	85.03

Comment:

Weir Cross Section: X-0360W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	47.94
1	1.70	47.99
2	3.40	47.98
3	5.11	47.97
4	6.81	47.96
5	8.51	47.92
6	10.21	47.85
7	11.92	47.81
8	13.62	47.85
9	15.60	47.95
10	17.58	48.05
11	19.55	48.15
12	21.53	48.26
13	23.51	48.42
14	25.49	48.60
15	27.47	48.80
16	29.45	48.99
17	31.43	49.17
18	33.41	49.36
19	35.39	49.53
20	37.36	49.67
21	39.34	49.85
22	41.32	50.14
23	43.30	50.07
24	45.28	49.81
25	47.69	49.64
26	50.11	49.29
27	52.52	48.70
28	54.93	48.01
29	57.35	47.77
30	59.76	47.92
31	62.17	48.09
32	64.59	48.29
33	67.00	48.51
34	69.41	48.78
35	71.83	48.86
36	74.24	48.90
37	76.65	49.28
38	79.07	50.00
39	81.48	50.50
40	83.90	50.02
41	86.33	49.84
42	88.77	49.80
43	91.20	49.64
44	93.64	49.37
45	94.91	49.22
46	96.19	49.06

Order	Station [ft]	Elevation [ft]
47	97.46	48.90
48	98.74	48.75
49	100.01	48.59
50	101.29	48.43
51	102.56	48.27
52	103.84	48.14
53	105.11	48.03
54	106.39	47.93
55	107.66	47.83
56	108.94	47.73
57	110.21	47.64
58	111.49	47.59
59	112.76	47.60
60	114.04	47.61
61	115.31	47.63
62	116.59	47.66
63	117.86	47.73
64	119.14	47.79
65	120.41	47.86
66	121.69	47.92
67	122.96	47.83
68	124.24	47.79
69	125.51	47.82
70	126.79	47.83
71	128.06	47.81
72	129.34	47.79
73	130.61	47.83
74	131.89	47.86
75	133.16	47.89
76	134.44	47.91
77	136.74	47.93
78	139.04	47.88
79	141.34	47.83
80	143.65	47.78
81	145.95	47.73
82	148.25	47.67
83	150.56	47.60
84	152.86	47.54
85	155.16	47.48
86	157.47	47.33
87	159.77	47.11
88	162.07	47.15
89	164.38	47.58
90	166.68	47.98
91	168.98	48.20
92	171.28	48.31
93	173.27	48.18
94	175.26	47.89
95	177.25	47.63

Order	Station [ft]	Elevation [ft]
96	179.23	47.52
97	181.22	47.63
98	183.21	48.04
99	185.19	48.05
100	187.18	48.04
101	189.17	48.07
102	191.15	48.10
103	193.14	48.05
104	195.13	47.86
105	197.11	47.64
106	199.10	47.56
107	201.09	47.70
108	203.08	48.05
109	204.89	47.84
110	206.70	47.59
111	208.51	47.68
112	210.32	47.87
113	212.13	48.17
114	213.94	48.68
115	215.75	48.96
116	217.56	48.84
117	219.53	49.18
118	221.51	49.49
119	223.48	49.88
120	225.46	49.94
121	227.17	49.47
122	228.89	49.04
123	230.61	48.73
124	232.32	48.34
125	234.04	48.09
126	235.76	47.94
127	237.47	47.75
128	239.19	47.54
129	240.90	47.25
130	242.62	47.17
131	244.34	47.55
132	246.05	48.05
133	247.77	48.50
134	249.49	48.74
135	251.20	48.60
136	252.92	48.59
137	254.20	48.43
138	255.47	48.26
139	256.75	47.96
140	258.03	47.76
141	259.30	48.05
142	260.58	48.36
143	261.86	48.72
144	263.14	49.03

Order	Station [ft]	Elevation [ft]
145	265.37	49.23
146	267.61	48.83
147	269.85	48.88
148	272.09	49.34
149	274.33	49.74
150	276.57	49.80
151	278.81	49.64
152	281.04	49.38
153	283.06	49.16
154	285.07	48.86
155	287.08	48.82
156	289.09	48.81
157	291.10	49.05
158	293.12	49.06
159	295.13	48.88
160	297.14	48.59
161	299.15	48.41
162	301.16	48.48
163	303.18	48.75
164	305.19	49.26
165	307.20	49.92
166	309.21	50.81
167	311.22	51.46
168	313.24	51.90
169	315.52	51.62
170	317.79	51.05
171	320.07	50.98
172	322.35	50.90
173	324.63	50.63
174	326.91	50.48
175	329.19	50.45
176	331.47	50.19
177	333.76	50.04
178	336.06	50.09
179	338.35	50.19
180	340.64	50.17
181	342.94	49.97
182	345.23	49.74
183	347.53	49.90
184	349.82	49.94
185	352.08	49.79
186	354.33	49.60
187	356.59	49.38
188	358.84	49.14
189	361.10	49.35
190	363.36	49.41
191	365.61	49.53
192	367.87	49.66
193	370.12	49.68

Order	Station [ft]	Elevation [ft]
194	372.38	49.45
195	374.64	48.85
196	376.89	48.39
197	379.15	48.53
198	381.40	49.30
199	383.66	50.22
200	385.92	50.90
201	388.31	50.77
202	390.70	50.38
203	393.10	49.73
204	395.49	49.52
205	397.88	49.59
206	400.28	49.63
207	402.67	49.69
208	405.06	49.75
209	406.56	49.74
210	408.05	49.67
211	409.54	49.60
212	411.04	49.45
213	412.53	49.25
214	414.02	49.10
215	415.52	48.89
216	417.01	48.69
217	418.50	48.52
218	420.00	48.43
219	421.49	48.47
220	422.98	48.53
221	424.48	48.63
222	425.97	48.78
223	427.46	48.88
224	428.96	48.88
225	430.56	48.91
226	432.17	48.96
227	433.78	49.04
228	435.39	49.11
229	436.99	49.15
230	438.60	49.19
231	440.21	49.17
232	441.82	49.04
233	443.77	49.30
234	445.72	49.29
235	447.67	49.01
236	449.62	48.71
237	451.58	48.41
238	453.53	48.05
239	455.48	48.16
240	457.43	48.33
241	459.38	48.43
242	461.34	48.44

Order	Station [ft]	Elevation [ft]
243	463.29	48.62
244	465.24	49.08
245	467.19	49.40
246	469.14	49.77
247	471.10	49.97
248	473.05	50.01
249	475.44	50.15
250	477.82	50.16
251	480.21	50.17
252	482.60	50.31
253	484.99	50.49
254	487.38	50.58
255	489.76	50.61
256	492.15	50.52
257	493.85	50.40
258	495.54	50.20
259	497.24	49.97
260	498.93	49.88
261	500.63	49.77
262	502.32	49.67
263	504.02	49.58
264	505.71	49.36
265	507.41	49.11
266	509.10	48.86
267	510.80	48.65
268	512.49	48.46
269	514.19	48.29
270	515.88	48.27
271	517.58	48.19
272	519.27	48.17
273	520.97	48.22
274	522.66	48.26
275	524.36	48.30
276	526.05	48.26
277	527.75	48.27
278	529.44	48.21
279	531.14	48.09
280	532.83	48.03
281	534.53	48.10
282	536.22	48.21
283	537.92	48.30
284	539.61	48.37
285	541.31	48.39
286	543.00	48.37
287	544.70	48.34
288	546.39	48.36
289	548.04	48.42
290	549.69	48.42
291	551.35	48.41

Order	Station [ft]	Elevation [ft]
292	553.00	48.41
293	554.65	48.41
294	556.30	48.41
295	557.95	48.40
296	559.60	48.40
297	561.25	48.38
298	562.91	48.33
299	564.56	48.30
300	566.21	48.28
301	567.86	48.30
302	569.51	48.32
303	571.16	48.33
304	572.81	48.32
305	574.47	48.30
306	576.12	48.25
307	577.77	48.15
308	579.42	48.10
309	581.07	48.07
310	582.72	48.40
311	584.38	48.92
312	586.03	49.54
313	587.68	49.89
314	589.33	49.95
315	590.98	49.83
316	592.63	49.92
317	594.28	50.09
318	595.94	50.14
319	597.59	50.17
320	599.24	50.14
321	600.58	50.08
322	601.91	50.01
323	603.25	49.96
324	604.59	49.90
325	605.93	49.82
326	607.26	49.76
327	608.60	49.72
328	609.94	49.69
329	611.27	49.66
330	612.61	49.67
331	613.95	49.70
332	615.29	49.74
333	616.62	49.79
334	617.96	49.87
335	619.30	49.94
336	620.64	49.77
337	621.97	49.63
338	623.31	49.55
339	624.65	49.47
340	625.98	49.39

Order	Station [ft]	Elevation [ft]
341	627.32	49.32
342	628.66	49.25
343	630.00	49.17
344	631.33	49.10
345	632.67	49.03
346	634.01	48.96
347	635.35	48.89
348	636.68	48.82
349	638.02	48.76
350	639.36	48.70
351	640.69	48.67
352	642.03	48.72
353	643.37	49.08
354	644.71	49.35
355	646.04	49.46
356	647.38	49.41
357	648.72	49.20
358	650.06	49.02
359	651.39	48.86
360	652.73	48.75
361	654.07	48.64
362	655.40	48.57
363	656.74	48.51
364	658.08	48.51
365	659.42	48.49
366	660.75	48.44
367	662.09	48.40
368	663.43	48.35
369	664.77	48.33
370	666.10	48.33
371	667.44	48.35
372	668.78	48.39
373	670.11	48.43
374	671.45	48.47
375	672.79	48.44
376	674.13	48.39
377	675.46	48.37
378	676.80	48.34
379	678.14	48.34
380	679.48	48.33
381	680.81	48.29
382	682.15	48.27
383	683.49	48.31
384	684.82	48.36

Comment:

Weir Cross Section: X-0370W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	46.86
1	1.55	46.69
2	3.11	46.56
3	4.66	46.49
4	6.22	46.40
5	7.77	46.29
6	9.33	46.21
7	10.88	46.06
8	12.44	46.04
9	13.99	46.15
10	15.54	46.32
11	17.10	46.54
12	18.65	46.90
13	20.21	47.31
14	21.76	47.29
15	23.32	47.30
16	24.87	47.29
17	26.36	47.25
18	27.85	46.96
19	29.34	46.68
20	30.83	46.42
21	32.32	46.30
22	33.81	46.27
23	35.30	46.45
24	36.79	46.65
25	38.28	46.77
26	39.77	46.85
27	41.26	46.78
28	42.75	46.64
29	44.24	46.52
30	45.73	46.47
31	47.22	46.43
32	48.71	46.47
33	50.20	46.53
34	51.69	46.60
35	53.18	46.69
36	54.67	46.79
37	56.16	46.85
38	57.65	46.91
39	59.14	46.69
40	60.63	46.47
41	62.12	46.25
42	63.61	46.25
43	65.10	46.44

Order	Station [ft]	Elevation [ft]
44	66.59	46.60
45	68.08	46.70
46	69.57	46.55
47	71.06	46.39
48	72.55	46.29
49	74.95	46.53
50	77.34	46.52
51	79.74	46.25
52	82.14	46.11
53	84.53	46.01
54	86.93	46.07
55	89.33	46.24
56	91.72	46.34
57	94.12	46.38
58	96.52	46.41
59	98.91	46.38
60	101.31	46.40
61	103.71	46.55
62	106.10	46.75
63	108.50	46.58
64	110.90	46.30
65	112.18	46.43
66	113.46	46.52
67	114.74	46.53
68	116.03	46.44
69	117.31	46.20
70	118.59	46.03
71	119.88	45.92
72	121.16	45.91
73	122.44	45.98
74	123.73	46.09
75	125.01	46.22
76	126.29	46.28
77	127.57	46.30
78	128.86	46.33
79	130.14	46.37
80	131.42	46.56
81	132.81	46.84
82	134.20	47.04
83	135.58	47.23
84	136.97	47.44
85	138.36	47.58
86	139.75	47.51
87	141.13	47.29
88	142.52	46.89
89	143.91	46.67
90	145.29	46.55
91	146.68	46.53
92	148.07	46.53

Order	Station [ft]	Elevation [ft]
93	149.45	46.49
94	150.84	46.43
95	152.23	46.29
96	153.62	46.21
97	155.00	46.24
98	156.39	46.25
99	157.78	46.26
100	159.16	46.30
101	160.55	46.33
102	161.94	46.36
103	163.32	46.37
104	164.71	46.37
105	166.10	46.49
106	167.49	46.78
107	168.87	47.08
108	170.26	47.40
109	171.65	47.64
110	173.03	47.87
111	174.42	47.66
112	175.81	47.45
113	177.26	47.16
114	178.72	47.00
115	180.18	46.97
116	181.63	47.16
117	183.09	47.45
118	184.54	47.56
119	186.00	47.68
120	187.46	47.78
121	188.91	47.89
122	190.37	48.00
123	191.82	48.12
124	193.28	48.21
125	194.74	47.98
126	196.19	47.75
127	197.65	47.49
128	199.10	47.48
129	200.56	47.56
130	202.02	48.02
131	203.47	48.42
132	204.93	48.32
133	206.38	48.24
134	207.84	48.15
135	209.30	48.15
136	210.75	48.20
137	212.21	48.34
138	213.66	48.46
139	215.12	48.57
140	216.58	48.59
141	218.03	48.57

Order	Station [ft]	Elevation [ft]
142	219.49	48.77
143	220.94	49.00
144	222.40	49.14
145	224.08	49.34
146	225.75	49.12
147	227.43	48.91
148	229.10	48.89
149	230.78	48.75
150	232.46	48.63
151	234.13	48.50
152	235.81	48.28
153	237.48	48.22
154	239.16	48.27
155	240.84	48.31
156	242.51	48.35
157	244.19	48.27
158	245.86	48.18
159	247.54	48.12
160	249.22	48.02
161	250.89	48.08
162	252.57	48.21
163	254.24	48.42
164	255.92	48.59
165	257.60	48.54
166	259.27	48.54
167	260.95	48.53
168	262.62	48.50
169	264.30	48.61
170	265.97	48.80
171	267.65	48.91
172	269.33	48.91
173	271.00	48.78
174	272.68	48.76
175	274.35	48.76
176	276.03	48.96
177	278.00	48.97
178	279.97	48.86
179	281.94	48.61
180	283.91	48.31
181	285.88	48.08
182	287.85	47.60
183	289.81	47.09
184	291.78	46.72
185	293.75	46.63
186	295.72	46.38
187	297.69	46.20
188	299.66	46.17
189	301.63	46.35
190	303.60	46.75

Order	Station [ft]	Elevation [ft]
191	305.57	47.10
192	307.54	47.25
193	309.51	47.32
194	311.48	47.48
195	313.44	47.32
196	315.41	47.13
197	317.38	46.93
198	319.35	46.74
199	321.32	46.58
200	323.29	46.44
201	325.26	46.55
202	327.23	46.73
203	329.20	46.85
204	331.17	46.91
205	333.14	46.97
206	335.10	47.02
207	337.07	47.08
208	339.04	47.14
209	340.52	47.14
210	342.00	47.19
211	343.48	47.30
212	344.96	47.47
213	346.44	47.82
214	347.92	48.25
215	349.40	48.49
216	350.88	48.74
217	352.36	48.98
218	353.84	49.35
219	355.32	49.70
220	356.80	49.96
221	358.28	50.31
222	359.76	50.54
223	361.24	50.62
224	362.72	50.58
225	364.19	50.77
226	365.66	50.97
227	367.14	51.02
228	368.61	50.90
229	370.09	50.28
230	371.56	49.63
231	373.04	49.10
232	374.51	48.77
233	375.99	48.73
234	377.46	48.80
235	378.93	48.68
236	380.41	48.37
237	381.88	48.12
238	383.36	47.81
239	384.83	47.55

Order	Station [ft]	Elevation [ft]
240	386.31	47.52
241	387.78	47.52
242	389.26	47.50
243	390.73	47.46
244	392.20	47.41
245	393.68	47.49
246	395.15	47.66
247	396.63	47.80
248	398.10	48.01
249	399.58	48.38
250	401.05	48.64
251	402.53	48.76
252	404.00	48.85
253	405.47	48.59
254	406.95	48.25
255	408.42	48.08
256	409.90	48.16
257	411.30	48.40
258	412.71	48.65
259	414.11	48.93
260	415.51	49.26
261	417.89	49.68
262	420.26	50.20
263	422.64	50.40
264	425.01	49.73
265	427.39	48.99
266	429.76	49.29
267	432.14	49.84
268	434.51	50.32
269	436.89	50.61
270	439.26	50.72
271	441.64	50.71
272	444.01	50.69
273	446.39	51.10
274	448.76	51.83
275	451.14	51.95
276	453.51	51.49
277	455.56	51.13
278	457.60	50.60
279	459.65	50.16
280	461.70	50.16
281	463.74	50.26
282	465.79	50.36
283	467.84	50.42
284	469.88	50.40
285	471.93	50.30
286	473.98	50.21
287	476.02	50.33
288	478.07	50.56

Order	Station [ft]	Elevation [ft]
289	480.11	50.66
290	482.16	50.49
291	484.21	50.25
292	486.25	50.14
293	487.77	50.27
294	489.29	50.43
295	490.80	50.59
296	492.32	50.70
297	493.84	50.78
298	495.35	50.81
299	496.87	50.90
300	498.38	51.00
301	499.90	51.02
302	501.42	50.93
303	502.93	50.57
304	504.45	50.18
305	505.97	49.98
306	507.48	49.88
307	509.00	49.88
308	510.52	50.15
309	511.80	50.22
310	513.08	50.08
311	514.37	49.83
312	515.65	49.35
313	516.93	48.74
314	518.21	47.95
315	519.50	47.38
316	520.78	47.11
317	522.06	47.00
318	523.35	47.05
319	524.63	47.08
320	525.91	47.11
321	527.19	47.13
322	528.48	47.16
323	529.76	47.17
324	531.04	47.17
325	533.16	47.30
326	535.27	47.44
327	537.39	47.61
328	539.51	47.89
329	541.62	48.66
330	543.74	49.35
331	545.85	49.09
332	547.97	48.09
333	550.08	47.23
334	552.20	47.20
335	554.32	46.92
336	556.43	47.10
337	558.55	47.45

Order	Station [ft]	Elevation [ft]
338	560.66	47.95
339	562.78	48.46
340	564.89	48.65
341	567.01	48.39
342	569.12	48.18
343	571.24	48.12
344	573.36	48.39
345	575.47	48.43
346	577.59	47.64
347	579.70	46.36
348	581.82	46.02
349	583.93	45.79
350	586.05	45.66
351	588.17	45.68
352	590.28	45.82
353	592.40	45.96
354	594.51	46.27
355	596.63	46.33
356	598.74	46.32
357	600.21	46.39
358	601.68	46.43
359	603.15	46.43
360	604.61	46.39
361	606.08	46.34
362	607.55	46.17
363	609.02	46.15
364	610.48	46.27
365	611.95	46.31
366	613.42	46.35
367	614.88	46.30
368	616.35	46.24
369	617.82	46.28
370	619.29	46.41
371	620.75	46.48
372	622.22	46.48
373	624.45	46.39
374	626.67	46.24
375	628.89	46.24
376	631.12	46.38
377	633.34	46.44
378	635.57	46.43
379	637.79	46.36
380	640.01	46.46
381	642.24	46.79
382	644.46	46.87
383	646.69	46.87
384	648.91	46.89
385	651.13	47.16
386	653.36	47.21

Order	Station [ft]	Elevation [ft]
387	655.58	47.14
388	657.81	47.01
389	660.01	46.93
390	662.21	46.45
391	664.41	46.31
392	666.61	46.23
393	668.81	46.11
394	671.01	45.97
395	673.21	45.95
396	675.41	45.97
397	677.61	45.93
398	679.81	45.84
399	682.01	45.90
400	684.21	46.11
401	686.41	46.17
402	688.62	46.13
403	690.82	46.26
404	693.02	46.48
405	695.47	46.53
406	697.91	46.39
407	700.36	46.13
408	702.81	45.95
409	705.26	45.89
410	707.71	45.83
411	710.16	45.86
412	712.61	45.96
413	715.06	46.03
414	717.51	46.09
415	719.95	46.28
416	722.40	45.95
417	724.85	45.68
418	727.30	45.77
419	729.75	46.11
420	732.20	46.30
421	734.49	46.37
422	736.78	46.42
423	739.08	46.43
424	741.37	46.34
425	743.66	46.12
426	745.96	45.82
427	748.25	45.64
428	750.54	45.62
429	752.84	45.85
430	755.13	46.46
431	757.42	46.61
432	759.72	46.31
433	762.01	46.07
434	764.30	46.31
435	766.60	46.70

Order	Station [ft]	Elevation [ft]
436	768.89	46.72
437	771.18	46.75
438	773.47	46.60
439	775.77	46.46
440	778.06	46.47
441	780.35	46.59
442	782.65	46.67
443	784.94	46.55
444	787.23	46.37
445	789.53	46.43
446	791.82	46.85
447	794.11	47.13
448	796.41	47.31
449	798.70	47.16
450	800.99	46.90
451	803.29	46.79
452	805.58	46.75
453	807.78	46.77
454	809.99	46.84
455	812.19	46.68
456	814.40	46.65
457	816.60	46.62
458	818.80	46.49
459	821.01	46.43
460	823.21	46.36
461	825.42	46.18
462	827.62	45.99
463	829.82	45.99
464	832.03	46.29
465	834.23	46.46
466	836.44	46.33
467	838.64	46.31
468	840.85	46.53
469	843.05	47.01
470	845.25	46.90
471	847.46	46.23
472	849.66	45.88
473	851.87	45.92
474	854.07	46.00
475	856.27	46.04
476	858.48	46.08
477	860.68	46.07
478	862.89	46.06
479	865.09	46.04
480	867.30	45.98
481	869.50	46.00
482	871.70	46.06
483	873.91	46.09
484	876.11	46.11

Order	Station [ft]	Elevation [ft]
485	878.32	46.21
486	880.52	46.27
487	882.72	46.35
488	884.93	46.29
489	887.13	46.20
490	889.34	46.19
491	891.54	46.31
492	893.75	46.43
493	895.95	46.39
494	898.15	46.42
495	900.36	46.48
496	902.56	46.26
497	904.77	45.97
498	906.97	45.81
499	909.17	45.67
500	911.38	45.55
501	913.58	45.59
502	915.79	45.60
503	917.99	45.59
504	920.20	45.60
505	922.40	45.73
506	924.60	45.87
507	926.81	45.96
508	929.01	45.95
509	931.22	45.81
510	933.42	45.81
511	935.63	45.83
512	937.83	45.82
513	940.03	45.80
514	942.24	46.20
515	944.44	46.72
516	946.65	47.24
517	947.96	47.27
518	949.27	47.07
519	950.58	46.63
520	951.89	46.29
521	953.20	46.00
522	954.51	45.71
523	955.82	45.80
524	957.13	45.92
525	958.44	46.13
526	959.75	46.26
527	961.06	46.38
528	962.37	46.51
529	963.68	46.50
530	964.99	46.47
531	966.30	46.46
532	967.61	46.45
533	969.21	46.49

Order	Station [ft]	Elevation [ft]
534	970.82	46.53
535	972.43	46.51
536	974.03	46.40
537	975.64	46.27
538	977.25	46.10
539	978.85	46.00
540	980.46	45.98
541	982.07	46.01
542	983.67	46.14
543	985.28	46.23
544	986.89	46.36
545	988.50	46.76
546	990.10	47.03
547	991.71	47.05
548	993.32	46.86
549	995.74	46.20
550	998.16	46.07
551	1000.58	45.92
552	1003.00	45.97
553	1005.42	46.15
554	1007.84	46.20
555	1010.26	46.34
556	1012.68	46.37
557	1015.10	46.22
558	1017.52	45.95
559	1019.94	46.16
560	1022.36	46.34
561	1024.78	46.33
562	1027.21	46.17
563	1029.63	46.10
564	1032.05	46.02
565	1034.47	46.01
566	1036.89	46.04
567	1039.31	46.00
568	1041.73	46.00
569	1044.15	46.02
570	1046.57	46.05
571	1048.99	45.94
572	1051.41	45.74
573	1053.83	45.64
574	1056.25	45.64
575	1058.67	45.71
576	1061.09	45.71
577	1063.52	45.76
578	1065.94	46.01
579	1068.36	46.26
580	1070.78	46.40
581	1073.20	46.22
582	1075.62	46.00

Order	Station [ft]	Elevation [ft]
583	1078.04	45.86
584	1080.46	45.86
585	1082.88	45.89
586	1085.30	45.93
587	1087.72	46.00
588	1090.14	46.04
589	1092.56	45.95
590	1094.98	45.85
591	1097.40	45.80
592	1099.83	45.81
593	1102.25	45.73
594	1104.67	45.66
595	1107.09	45.65
596	1109.51	45.64
597	1111.93	45.81
598	1114.35	45.98
599	1116.77	46.08
600	1119.19	46.01
601	1121.61	45.85
602	1124.03	45.63
603	1126.45	45.54
604	1128.87	45.76
605	1131.29	46.06
606	1133.71	46.41
607	1136.14	46.27
608	1138.56	46.21
609	1140.98	46.38
610	1143.40	46.52
611	1145.82	46.68
612	1148.24	46.62
613	1150.12	46.50
614	1152.00	46.37
615	1153.88	46.33
616	1155.77	46.47
617	1157.65	46.56
618	1159.53	46.43
619	1161.41	46.25
620	1163.29	46.04
621	1165.17	45.86
622	1167.06	45.70
623	1168.94	45.71
624	1170.82	45.79
625	1172.70	45.88
626	1174.58	45.75
627	1176.46	45.79
628	1178.35	45.85
629	1180.23	45.92
630	1182.11	46.05
631	1183.99	46.19

Order	Station [ft]	Elevation [ft]
632	1185.87	46.18
633	1187.75	46.12
634	1189.64	46.15
635	1191.52	46.14
636	1193.40	46.26
637	1195.28	46.50
638	1197.16	46.74
639	1199.05	46.75
640	1200.93	46.60
641	1202.81	46.47
642	1204.69	46.72
643	1206.57	47.15
644	1208.45	47.66
645	1210.71	47.82
646	1212.96	47.41
647	1215.22	46.94
648	1217.47	46.49
649	1219.73	46.20
650	1221.98	46.06
651	1224.24	46.00
652	1226.49	46.02
653	1228.74	46.05
654	1231.00	46.12
655	1233.25	46.18
656	1235.51	46.49
657	1237.76	47.04
658	1240.02	47.54
659	1242.27	47.83
660	1244.53	47.99
661	1246.37	48.04
662	1248.22	47.98
663	1250.06	48.12
664	1251.91	48.35
665	1253.76	48.41
666	1255.60	48.30
667	1257.45	48.12
668	1259.29	48.07
669	1261.14	48.04
670	1262.98	48.08
671	1264.83	47.97
672	1266.68	47.84
673	1268.52	47.68
674	1270.37	47.51
675	1272.21	47.23
676	1274.06	47.00
677	1276.14	46.98
678	1278.22	47.11
679	1280.29	47.26
680	1282.37	47.41

Order	Station [ft]	Elevation [ft]
681	1284.45	47.54
682	1286.53	47.54
683	1288.61	47.41
684	1290.69	47.36
685	1292.77	47.32
686	1294.84	47.19
687	1296.92	47.08
688	1299.00	47.14
689	1301.08	47.18
690	1303.16	47.41
691	1305.24	47.69
692	1307.31	47.93
693	1309.17	47.98
694	1311.03	47.61
695	1312.88	46.89
696	1314.74	46.61
697	1316.59	46.68
698	1318.45	46.88
699	1320.30	46.98
700	1322.16	47.10
701	1324.02	47.24
702	1325.87	47.32
703	1327.73	47.40
704	1329.58	47.48
705	1331.44	47.61
706	1333.30	47.74
707	1335.15	47.86
708	1337.01	47.94

Comment:

Weir Cross Section: X-0380W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	46.86
1	1.61	46.67
2	3.22	46.41
3	4.83	46.12
4	6.44	45.71
5	8.05	45.39
6	9.65	45.16
7	11.26	44.96
8	12.87	44.81

Order	Station [ft]	Elevation [ft]
9	14.48	44.76
10	16.09	44.79
11	17.70	44.92
12	19.31	45.02
13	20.92	45.12
14	22.53	45.18
15	24.14	45.26
16	25.74	45.31
17	27.36	45.29
18	28.98	45.27
19	30.60	45.31
20	32.22	45.33
21	33.84	45.28
22	35.45	45.18
23	37.07	45.12
24	38.69	45.10
25	40.31	45.39
26	41.93	45.63
27	43.54	45.79
28	45.16	45.90
29	46.78	46.05
30	48.40	46.21
31	50.02	46.35
32	51.64	46.50
33	53.83	46.43
34	56.02	46.37
35	58.20	46.26
36	60.39	46.15
37	62.58	46.03
38	64.77	46.13
39	66.96	46.28
40	69.15	46.47
41	71.34	46.61
42	73.53	46.64
43	75.72	46.61
44	77.91	46.54
45	80.10	46.22
46	82.29	46.18
47	84.48	46.35
48	86.67	46.51
49	87.92	46.54
50	89.17	46.59
51	90.42	46.57
52	91.67	46.53
53	92.93	46.54
54	94.18	46.62
55	95.43	46.84
56	96.68	47.15
57	97.93	47.35

Order	Station [ft]	Elevation [ft]
58	99.18	47.41
59	100.43	47.43
60	101.68	47.49
61	102.93	47.60
62	104.18	47.74
63	105.43	47.98
64	106.68	48.33
65	107.93	48.61
66	109.19	48.62
67	110.44	48.54
68	111.69	48.41
69	112.94	48.25
70	114.19	48.19
71	115.44	48.16
72	116.69	48.40
73	117.94	48.78
74	119.19	48.87
75	120.44	48.89
76	121.69	48.96
77	122.94	48.98
78	124.19	48.93
79	125.45	48.89
80	126.70	48.76
81	128.56	48.52
82	130.43	48.34
83	132.29	48.00
84	134.16	47.55
85	136.02	47.18
86	137.89	46.95
87	139.75	47.24
88	141.62	47.31
89	143.48	47.24
90	145.35	47.65
91	147.22	47.77
92	149.08	47.85
93	150.95	47.92
94	152.81	48.12
95	154.68	48.21
96	156.54	47.63
97	158.41	46.94
98	160.27	46.50
99	162.14	46.67
100	164.00	46.69
101	165.87	46.68
102	167.73	46.62
103	169.60	46.47
104	171.47	46.46
105	173.33	46.56
106	175.20	46.73

Order	Station [ft]	Elevation [ft]
107	177.06	47.12
108	178.93	47.88
109	180.79	48.07
110	182.66	47.74
111	184.52	47.39
112	186.39	47.30
113	188.62	47.22
114	190.86	47.16
115	193.09	47.34
116	195.33	47.62
117	197.56	47.66
118	199.79	47.77
119	202.03	47.67
120	204.26	47.49
121	206.50	47.33
122	208.73	47.41
123	210.96	47.26
124	213.20	47.01
125	215.43	46.91
126	217.67	46.87
127	219.90	46.99
128	222.13	46.95
129	224.09	47.00
130	226.05	47.08
131	228.00	47.14
132	229.96	46.99
133	231.91	46.71
134	233.87	46.50
135	235.82	46.76
136	237.78	46.60
137	239.74	46.39
138	241.69	46.55
139	243.65	46.79
140	245.60	47.01
141	247.56	47.24
142	249.52	47.58
143	251.47	47.62
144	253.43	47.60
145	255.63	47.51
146	257.83	47.43
147	260.03	46.71
148	262.23	45.89
149	264.43	45.76
150	266.63	46.22
151	268.84	47.09
152	271.04	47.76
153	272.80	47.77
154	274.57	47.71
155	276.33	47.58

Order	Station [ft]	Elevation [ft]
156	278.09	47.60
157	279.86	47.68
158	281.62	47.84
159	283.39	47.76
160	285.15	47.69

Comment:

Weir Cross Section: X-0390W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	47.69
1	2.12	47.67
2	4.24	47.72
3	6.36	47.89
4	8.48	48.03
5	10.59	47.78
6	12.71	46.10
7	14.83	45.31
8	16.95	44.71
9	19.07	43.97
10	21.19	43.21
11	23.31	43.86
12	25.43	44.76
13	27.55	45.56
14	29.67	46.01
15	31.78	45.81
16	33.90	45.81
17	36.02	45.69
18	38.14	45.49
19	40.26	45.53
20	42.38	45.65
21	44.50	45.63
22	46.62	45.62
23	48.74	45.56
24	50.86	45.48
25	52.97	45.45
26	55.09	45.52
27	57.21	45.50
28	59.33	45.47
29	61.45	45.42
30	63.57	45.43
31	65.69	45.69

Order	Station [ft]	Elevation [ft]
32	67.81	45.99
33	69.93	46.01
34	72.05	45.85
35	74.16	45.53
36	76.28	45.25
37	78.40	44.82
38	80.52	44.09
39	82.64	43.51
40	84.76	43.41
41	86.88	43.89
42	89.00	44.27
43	91.12	44.62
44	93.24	44.94
45	95.35	45.16
46	97.47	45.29
47	99.59	45.36
48	101.71	45.36
49	103.83	45.36
50	105.95	45.42
51	108.07	45.49
52	110.19	45.42
53	112.31	45.46
54	114.42	45.43
55	116.54	45.45
56	118.66	45.51
57	120.78	45.57
58	122.90	45.56
59	125.02	45.39
60	127.14	45.12
61	129.26	44.75
62	131.38	44.33
63	133.50	43.66
64	135.61	43.60
65	137.73	43.93
66	139.85	44.44
67	141.97	44.94
68	144.09	45.28
69	146.21	45.32
70	148.33	45.42
71	150.45	45.51
72	152.57	45.53
73	154.69	45.60
74	156.80	45.59
75	158.92	45.63
76	161.04	45.68
77	163.16	45.67
78	165.28	45.61
79	167.40	45.57
80	169.52	45.53

Order	Station [ft]	Elevation [ft]
81	171.64	45.44
82	173.76	45.36
83	175.88	45.41
84	177.99	44.92
85	180.11	44.75
86	182.23	44.27
87	184.35	43.56
88	186.47	43.05
89	188.59	43.45
90	190.71	43.91
91	192.83	44.25
92	194.95	44.54
93	197.07	44.96
94	199.18	45.16
95	201.30	45.20
96	203.42	45.20
97	205.54	45.23
98	207.66	45.33
99	209.78	45.45
100	211.90	45.57
101	214.02	45.65
102	216.14	45.64
103	218.26	45.58
104	220.37	45.53
105	222.49	45.48
106	224.61	45.42
107	226.73	45.36
108	228.85	45.25
109	230.97	44.87
110	233.09	44.55
111	235.21	44.12
112	237.33	43.70
113	239.44	43.52
114	241.56	43.90
115	243.68	44.24
116	245.80	44.46
117	247.92	44.75
118	250.04	45.03
119	252.16	45.22
120	254.28	45.33
121	256.40	45.35
122	258.52	45.41
123	260.63	45.50
124	262.75	45.59
125	264.87	45.62
126	266.99	45.57
127	269.11	45.49
128	271.23	45.42
129	272.78	45.40

Order	Station [ft]	Elevation [ft]
130	274.34	45.41
131	275.89	45.42
132	277.44	45.43
133	278.99	45.43
134	280.55	45.42
135	282.10	45.42
136	283.65	45.42
137	285.21	45.42
138	286.76	45.42
139	288.31	45.40
140	289.87	45.38
141	291.42	45.39
142	292.97	45.41
143	294.52	45.40
144	296.08	45.39
145	297.63	45.40
146	299.18	45.41
147	300.74	45.40
148	302.29	45.38
149	303.84	45.37
150	305.40	45.38
151	306.95	45.37
152	308.50	45.37
153	310.05	45.39
154	311.61	45.41
155	313.16	45.42
156	314.71	45.42
157	316.27	45.42
158	317.82	45.42
159	319.37	45.42
160	320.92	45.44
161	322.48	45.48
162	324.03	45.49
163	325.58	45.47
164	327.14	45.45
165	328.69	45.43
166	330.24	45.41
167	331.80	45.40
168	333.35	45.40
169	334.90	45.39
170	336.45	45.40
171	338.01	45.41
172	339.56	45.40
173	341.11	45.40
174	342.67	45.40
175	344.22	45.41
176	345.77	45.41
177	347.33	45.42
178	348.88	45.43

Order	Station [ft]	Elevation [ft]
179	350.43	45.43
180	351.98	45.43
181	353.54	45.43
182	355.09	45.43
183	356.64	45.45
184	358.20	45.47
185	359.75	45.47
186	361.30	45.46
187	362.86	45.46
188	364.41	45.46
189	365.96	45.45
190	367.51	45.44
191	369.07	45.44
192	370.62	45.44
193	372.17	45.42
194	373.73	45.42
195	375.28	45.43
196	376.83	45.43
197	378.38	45.42
198	379.94	45.42
199	381.49	45.42
200	383.04	45.42
201	384.60	45.41
202	386.15	45.42
203	387.70	45.43
204	389.26	45.43
205	390.81	45.43
206	392.36	45.43
207	393.91	45.43
208	395.47	45.43
209	397.02	45.44
210	398.57	45.45
211	400.13	45.47
212	401.68	45.47
213	403.23	45.46
214	404.79	45.46
215	406.34	45.46
216	407.89	45.47
217	409.44	45.46
218	411.00	45.46
219	412.55	45.49
220	414.10	45.49
221	415.66	45.50
222	417.21	45.50
223	418.76	45.51
224	420.32	45.53
225	421.87	45.54
226	423.42	45.54
227	424.97	45.54

Order	Station [ft]	Elevation [ft]
228	426.53	45.54
229	428.08	45.54
230	429.63	45.56
231	431.19	45.57
232	432.74	45.58
233	434.29	45.59
234	435.84	45.60
235	437.40	45.59
236	438.95	45.59
237	440.50	45.60
238	442.06	45.60
239	443.61	45.60
240	445.16	45.61
241	446.72	45.63
242	448.27	45.64
243	449.82	45.64
244	451.37	45.65
245	452.93	45.66
246	454.48	45.67
247	456.03	45.68
248	457.59	45.68
249	459.14	45.68
250	460.69	45.70
251	462.25	45.70
252	463.80	45.70
253	465.35	45.71
254	466.90	45.71
255	468.46	45.71
256	470.01	45.71
257	471.33	45.70
258	472.65	45.68
259	473.97	45.64
260	475.29	45.58
261	476.61	45.52
262	477.92	45.50
263	479.24	45.47
264	480.56	45.41
265	481.88	45.35
266	483.20	45.26
267	484.52	45.16
268	485.84	45.03
269	487.16	44.83
270	488.48	44.54
271	489.80	44.30
272	491.11	44.09
273	492.43	43.76
274	493.75	43.36
275	495.07	43.24
276	496.39	43.21

Order	Station [ft]	Elevation [ft]
277	497.71	43.54
278	499.03	43.95
279	500.35	44.14
280	501.67	44.33
281	502.98	44.50
282	504.30	44.66
283	505.62	44.74
284	506.94	44.84
285	508.26	44.99
286	509.58	45.11
287	510.90	45.20
288	512.22	45.26
289	513.54	45.31
290	514.86	45.35
291	516.17	45.40
292	517.49	45.47
293	518.81	45.54
294	520.13	45.53
295	521.45	45.51
296	522.77	45.45
297	524.09	45.38
298	525.41	45.35
299	526.73	45.31
300	528.05	45.31
301	529.36	45.31
302	530.68	45.30
303	532.00	45.28
304	533.32	45.20
305	534.64	45.09
306	535.96	44.95
307	537.28	44.77
308	538.60	44.56
309	539.92	44.38
310	541.24	44.22
311	542.55	43.90
312	543.87	43.52
313	545.19	43.53
314	546.51	43.63
315	547.83	43.91
316	549.15	44.19
317	550.47	44.38
318	551.79	44.58
319	553.11	44.85
320	554.43	45.10
321	555.74	45.33
322	557.06	45.52
323	558.38	45.62
324	559.70	45.65
325	561.02	45.59

Order	Station [ft]	Elevation [ft]
326	562.34	45.55
327	563.66	45.53
328	564.98	45.54
329	566.30	45.58
330	567.61	45.60
331	568.93	45.63
332	570.25	45.62
333	571.57	45.61
334	572.89	45.56
335	574.21	45.52
336	575.53	45.46
337	576.85	45.42
338	578.17	45.39
339	579.49	45.38
340	580.80	45.39
341	582.12	45.36
342	583.44	45.27
343	584.76	45.16
344	586.08	45.00
345	587.40	44.79
346	588.72	44.53
347	590.04	44.31
348	591.36	44.08
349	592.68	43.84
350	593.99	43.61
351	595.31	43.48
352	596.63	43.37
353	597.95	43.60
354	599.27	43.84
355	600.59	44.10
356	601.91	44.36
357	603.23	44.57
358	604.55	44.79
359	605.87	45.04
360	607.18	45.20
361	608.50	45.24
362	609.82	45.19
363	611.14	45.04
364	612.46	44.95
365	613.78	44.90
366	615.10	44.90
367	616.42	44.92
368	617.74	44.94
369	619.05	44.97
370	620.37	44.94
371	621.69	44.89
372	623.01	44.89
373	624.33	44.89
374	625.65	44.91

Order	Station [ft]	Elevation [ft]
375	626.97	44.92
376	628.29	44.92
377	629.61	44.93
378	630.93	44.94
379	632.24	44.93
380	633.56	44.90
381	634.88	44.86
382	636.20	44.80
383	637.52	44.73
384	638.84	44.67
385	640.16	44.58
386	641.48	44.48
387	642.80	44.16
388	644.12	43.78
389	645.43	43.41
390	646.75	43.05
391	648.07	42.72
392	649.39	42.46
393	650.71	42.50
394	652.03	42.63
395	653.35	43.01
396	654.67	43.41
397	655.99	43.83
398	657.31	44.15
399	658.62	44.38
400	659.94	44.56
401	661.26	44.72
402	662.58	44.78
403	663.90	44.82
404	665.22	44.92
405	666.54	45.04
406	667.86	45.05
407	669.18	45.05
408	670.50	45.06
409	671.81	45.09
410	673.13	45.17
411	674.45	45.26
412	675.77	45.38
413	677.09	45.45
414	678.41	45.41
415	679.73	45.38
416	681.05	45.38
417	682.37	45.39
418	683.68	45.41
419	685.00	45.41
420	686.32	45.39
421	687.64	45.31
422	688.96	45.20
423	690.28	45.12

Order	Station [ft]	Elevation [ft]
424	691.60	45.05
425	692.92	45.08
426	694.24	45.13
427	695.56	45.08
428	696.87	45.02
429	698.19	44.89
430	699.51	44.68
431	700.83	44.22
432	702.15	43.79
433	703.47	43.40
434	704.79	43.23
435	706.11	43.32
436	707.43	43.53
437	708.75	43.86
438	710.06	44.15
439	711.38	44.42
440	712.70	44.72
441	714.02	45.02
442	715.34	45.21
443	716.66	45.39
444	717.98	45.47
445	719.30	45.55
446	720.62	45.55
447	721.94	45.57
448	723.25	45.64
449	724.57	45.70
450	725.89	45.71
451	727.21	45.70
452	728.53	45.66
453	729.85	45.62
454	731.17	45.61
455	732.49	45.55
456	733.81	45.48
457	735.13	45.46
458	736.44	45.49
459	737.76	45.49
460	739.08	45.48
461	740.40	45.57
462	741.72	45.69
463	743.04	45.69
464	744.36	45.67
465	745.68	45.45
466	747.00	45.22
467	748.31	44.88
468	749.63	44.55
469	750.95	44.24
470	752.27	43.92
471	753.59	43.62
472	754.91	43.52

Order	Station [ft]	Elevation [ft]
473	756.23	43.65
474	757.55	43.87
475	758.87	44.16
476	760.19	44.49
477	761.50	44.83
478	762.82	45.06
479	764.14	45.27
480	765.46	45.43
481	766.78	45.58
482	768.10	45.65
483	769.42	45.71
484	770.74	45.66
485	772.06	45.62
486	773.38	45.62
487	774.69	45.63
488	776.01	45.64
489	777.33	45.63
490	778.65	45.60
491	779.97	45.58
492	781.29	45.59
493	782.61	45.60
494	783.93	45.62
495	785.25	45.62
496	786.57	45.61
497	787.88	45.59
498	789.20	45.58
499	790.52	45.89
500	791.84	46.22
501	793.16	46.52
502	794.48	46.69
503	795.80	46.27
504	797.12	45.78
505	798.44	45.10
506	799.76	44.52
507	801.07	44.10
508	802.39	43.74
509	803.71	43.46
510	805.03	43.41
511	806.35	43.55
512	807.67	43.87
513	809.71	44.49
514	811.75	45.07
515	813.79	45.53
516	815.83	45.72
517	817.87	45.72
518	819.91	45.62
519	821.95	45.55
520	823.99	45.60
521	826.02	45.62

Order	Station [ft]	Elevation [ft]
522	828.06	45.63
523	830.10	45.62
524	832.14	45.57
525	834.18	45.46
526	836.22	45.37
527	838.26	45.38
528	840.30	45.36
529	842.34	45.23
530	844.38	45.00
531	846.42	44.58
532	848.46	44.18
533	850.50	43.78
534	852.54	43.51
535	854.58	43.55
536	856.62	44.15
537	858.66	44.29
538	860.70	45.60
539	862.74	46.95
540	864.78	47.26
541	866.82	46.48
542	868.86	45.88
543	870.90	45.69
544	872.93	45.59
545	874.97	45.52
546	877.01	45.58
547	879.05	45.51
548	881.09	45.52
549	883.13	45.65
550	885.17	45.82
551	887.21	46.09
552	889.25	46.96
553	891.29	47.12
554	893.33	46.63
555	895.37	45.72
556	897.41	44.78
557	899.45	44.25
558	901.49	43.63
559	903.53	43.22
560	905.57	43.39
561	907.61	43.98
562	909.65	44.64
563	911.69	45.06
564	913.73	45.11
565	915.77	45.23
566	917.81	45.38
567	919.84	45.48
568	921.88	45.52
569	923.92	45.54
570	925.96	45.59

Order	Station [ft]	Elevation [ft]
571	928.00	45.64
572	930.04	45.64
573	932.08	45.59
574	934.12	45.60
575	936.16	45.87
576	938.20	46.53
577	939.84	46.96
578	941.48	46.72
579	943.11	46.26
580	944.75	45.67
581	946.39	44.85
582	948.02	44.03
583	949.66	43.29
584	951.30	42.88
585	952.94	42.90
586	954.57	43.18
587	956.21	43.57
588	957.85	43.97
589	959.49	44.35
590	961.12	44.41
591	962.76	44.62
592	964.40	44.94
593	966.03	45.49
594	967.67	45.80
595	969.31	45.85
596	970.95	45.69
597	972.58	45.51
598	974.22	45.31
599	975.86	45.17
600	977.50	45.09
601	979.13	45.09
602	980.77	45.10
603	982.41	45.13
604	984.04	45.24
605	985.68	45.25
606	987.32	45.20
607	988.96	45.14
608	990.59	45.12
609	992.23	45.13
610	993.87	45.17
611	995.51	45.11
612	997.14	45.03
613	998.78	44.97
614	1000.42	45.00
615	1002.05	45.08
616	1003.69	45.09
617	1005.33	45.05
618	1006.97	44.94
619	1008.60	44.84

Order	Station [ft]	Elevation [ft]
620	1010.24	44.74
621	1011.88	44.63
622	1013.52	44.47
623	1015.15	44.29
624	1016.79	44.11
625	1018.43	44.06
626	1020.06	44.01
627	1021.70	43.96
628	1023.34	43.86
629	1024.98	43.77
630	1026.61	43.72
631	1028.25	43.56
632	1029.89	43.41
633	1031.53	43.36
634	1033.16	43.38
635	1034.80	43.45
636	1036.44	43.58
637	1038.07	43.65
638	1039.71	43.72
639	1041.35	43.91
640	1042.99	43.99
641	1044.51	44.03
642	1046.03	44.29
643	1047.55	44.51
644	1049.07	44.64
645	1050.59	44.75
646	1052.11	44.83
647	1053.63	44.75
648	1055.15	44.71
649	1056.67	44.72
650	1058.19	45.05
651	1059.71	45.52
652	1061.23	46.38
653	1062.75	47.11
654	1064.27	47.68
655	1065.79	47.36
656	1067.31	47.02
657	1068.83	47.26
658	1070.35	47.31
659	1071.87	47.18
660	1073.39	47.17
661	1074.91	47.16
662	1076.43	47.01
663	1077.95	46.87
664	1079.47	46.73
665	1081.00	46.82
666	1082.52	46.91
667	1084.04	46.92
668	1085.56	46.87

Order	Station [ft]	Elevation [ft]
669	1087.08	46.78
670	1088.60	46.58
671	1090.12	46.25
672	1091.64	45.65
673	1093.16	44.85
674	1094.68	43.98
675	1096.20	43.50
676	1097.72	43.17
677	1099.24	43.00
678	1100.76	42.91
679	1102.28	42.85
680	1103.80	42.94
681	1105.32	43.15
682	1106.84	43.53
683	1108.36	43.94
684	1109.88	44.36
685	1111.40	44.79
686	1112.92	45.11
687	1114.44	45.28
688	1115.96	45.42
689	1117.48	45.53
690	1119.00	45.54
691	1120.52	45.54
692	1122.04	45.50
693	1123.57	45.93
694	1125.09	46.37
695	1126.61	46.59
696	1128.13	46.74
697	1129.65	46.81
698	1131.17	46.73
699	1132.69	46.72
700	1134.21	46.89
701	1135.73	46.84
702	1137.25	46.69
703	1138.77	46.53
704	1140.29	46.48

Comment:

Weir Cross Section: X-0400W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	49.16

Order	Station [ft]	Elevation [ft]
1	2.39	49.09
2	4.78	49.05
3	7.16	48.99
4	9.55	48.91
5	11.94	48.84
6	14.33	48.77
7	16.71	48.70
8	19.10	48.62
9	21.49	48.56
10	23.88	48.52
11	26.26	48.50
12	28.65	48.45
13	31.04	48.46
14	33.43	48.41
15	35.81	48.41
16	38.20	48.39
17	39.70	48.40
18	41.21	48.40
19	42.71	48.39
20	44.21	48.37
21	45.71	48.34
22	47.22	48.33
23	48.72	48.32
24	50.22	48.29
25	51.72	48.27
26	53.22	48.25
27	54.73	48.23
28	56.23	48.20
29	57.73	48.15
30	59.23	48.12
31	60.74	48.09
32	62.24	48.10
33	63.74	48.10
34	65.24	48.08
35	66.75	48.09
36	68.25	48.12
37	69.75	48.10
38	71.25	48.09
39	72.75	48.08
40	74.26	48.06
41	75.76	48.02
42	77.26	47.99
43	78.76	47.97
44	80.27	47.98
45	81.77	47.98
46	83.27	47.99
47	84.77	47.95
48	86.28	47.93
49	87.78	47.95

Order	Station [ft]	Elevation [ft]
50	89.28	47.93
51	90.78	47.90
52	92.28	47.93
53	93.79	47.94
54	95.29	47.92
55	96.79	47.91
56	98.29	47.92
57	99.80	47.93
58	101.30	47.93
59	102.80	47.91
60	104.30	47.90
61	105.81	47.89
62	107.31	47.91
63	108.81	47.93
64	110.31	47.93
65	111.81	47.95
66	113.32	47.98
67	114.82	47.96
68	116.32	47.95
69	117.82	47.95
70	119.33	47.93
71	120.83	47.90
72	122.33	47.91
73	123.83	47.91
74	125.34	47.89
75	126.84	47.87
76	128.34	47.85
77	129.84	47.83
78	131.34	47.83
79	132.85	47.85
80	134.35	47.86
81	135.84	47.86
82	137.32	47.84
83	138.81	47.84
84	140.30	47.87
85	141.78	47.89
86	143.27	47.91
87	144.76	47.90
88	146.24	47.89
89	147.73	47.90
90	149.22	47.92
91	150.70	47.93
92	152.19	47.92
93	153.67	47.91
94	155.16	47.91
95	156.65	47.92
96	158.13	47.91
97	159.62	47.91
98	161.11	47.92

Order	Station [ft]	Elevation [ft]
99	162.59	47.92
100	164.08	47.92
101	165.57	47.94
102	167.05	47.95
103	168.54	47.96
104	170.03	47.94
105	171.51	47.93
106	173.00	47.95
107	174.49	47.98
108	175.97	47.99
109	177.46	47.94
110	178.95	47.92
111	180.43	47.93
112	181.92	47.94

Comment:

Weir Cross Section: X-0410W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	47.69
1	1.91	47.63
2	3.82	47.63
3	5.73	47.70
4	7.65	47.68
5	9.56	47.61
6	11.47	47.64
7	13.38	47.69
8	15.29	47.68
9	17.20	47.66
10	19.11	47.70
11	21.03	47.69
12	22.94	47.67
13	24.85	47.65
14	26.76	47.66
15	28.67	47.71
16	30.58	47.70
17	32.49	47.71
18	34.41	47.74
19	36.32	47.78
20	38.23	47.83
21	40.14	47.87
22	42.05	47.88

Order	Station [ft]	Elevation [ft]
23	43.96	47.90
24	45.87	47.85
25	47.79	47.81
26	49.70	47.77
27	51.61	47.76
28	53.52	47.74
29	55.43	47.71
30	57.34	47.70
31	59.25	47.72
32	61.17	47.67
33	63.08	47.62
34	64.99	47.62
35	66.90	47.66
36	68.81	47.65
37	70.72	47.70
38	72.63	47.75
39	74.55	47.76
40	76.46	47.72
41	78.37	47.62
42	80.28	47.61
43	82.19	47.62
44	84.10	47.54
45	86.01	47.59
46	87.93	47.60
47	89.84	47.60
48	91.75	47.60
49	93.66	47.53
50	95.57	47.53
51	97.48	47.56
52	99.39	47.59
53	101.31	47.62
54	103.22	47.59
55	105.13	47.53
56	107.04	47.52
57	108.95	47.71
58	110.86	48.00
59	112.77	48.08
60	114.69	47.92
61	116.60	47.52
62	118.51	47.48
63	120.42	47.45
64	122.33	47.41
65	124.24	47.36
66	126.15	47.35
67	128.07	47.37
68	129.98	47.32
69	131.89	47.20
70	133.80	47.14
71	135.71	47.13

Order	Station [ft]	Elevation [ft]
72	137.62	47.12
73	139.53	47.13
74	141.45	47.24
75	143.36	47.30
76	145.27	47.33
77	147.18	47.32
78	149.09	47.23
79	151.00	47.23
80	152.91	47.22
81	154.83	47.24
82	156.74	47.35
83	158.65	47.34
84	160.56	47.38
85	162.47	47.46
86	164.38	47.57
87	166.29	47.57
88	168.21	47.61
89	170.12	47.66
90	172.03	47.66
91	173.94	47.50
92	175.85	47.40
93	177.76	47.45
94	179.67	47.58
95	181.59	47.64
96	183.50	47.64
97	185.41	47.62
98	187.32	47.65
99	189.23	47.78
100	191.14	47.56
101	193.05	47.48
102	194.96	47.55
103	196.88	47.71
104	198.79	47.69
105	200.70	47.70
106	202.61	47.62
107	204.52	47.43
108	206.43	47.28
109	208.34	47.30
110	210.26	47.35
111	212.17	47.40
112	214.08	47.44
113	215.99	47.47
114	217.90	47.32
115	219.81	47.23
116	221.72	47.45
117	223.64	47.55
118	225.55	47.55
119	227.46	47.49
120	229.37	47.41

Order	Station [ft]	Elevation [ft]
121	231.28	47.32
122	233.19	47.22
123	235.10	47.22
124	237.02	47.36
125	238.93	47.64
126	240.84	47.69
127	242.75	47.67
128	244.66	47.55
129	247.16	47.18
130	249.66	47.11
131	252.16	47.23
132	254.66	47.29
133	257.16	47.31
134	259.66	47.29
135	262.16	47.27
136	264.66	47.08
137	267.16	47.14
138	269.66	47.25
139	272.16	47.39
140	274.66	47.40
141	277.16	47.24
142	279.66	47.29
143	282.16	47.35
144	284.66	47.25
145	287.16	47.34
146	289.66	47.45
147	292.16	47.48
148	294.66	47.39
149	297.16	47.45
150	299.66	47.32
151	302.16	47.13
152	304.66	47.10
153	307.16	47.23
154	309.66	47.35
155	312.16	47.37
156	314.65	47.34
157	317.15	47.38
158	319.65	47.39
159	322.15	47.29
160	324.65	47.21
161	327.15	47.08
162	329.65	47.09
163	332.15	47.17
164	334.65	47.17
165	337.15	47.09
166	339.65	47.11
167	342.15	47.20
168	344.65	47.31
169	347.15	47.45

Order	Station [ft]	Elevation [ft]
170	349.65	47.41
171	352.15	47.38
172	354.65	47.29
173	357.15	47.41
174	359.65	47.45
175	362.15	47.36
176	364.65	47.21
177	367.15	47.25
178	369.65	47.23
179	372.15	47.18
180	374.65	47.12
181	377.15	46.93
182	379.65	46.93
183	382.15	46.96
184	384.65	46.97
185	387.15	47.05
186	389.65	47.00
187	392.15	47.09
188	394.65	47.18
189	397.15	47.17
190	399.65	47.14
191	402.15	47.18
192	404.65	47.24
193	407.15	47.23
194	409.65	47.22
195	412.15	47.26
196	414.64	47.22
197	417.14	47.22
198	419.64	47.29
199	422.14	47.24
200	424.64	47.29
201	427.14	47.37
202	429.64	47.49
203	432.14	47.49
204	434.64	47.43
205	437.14	47.42
206	439.64	47.50
207	442.14	47.51
208	444.64	47.47
209	447.14	47.41
210	449.64	47.47
211	452.14	47.47
212	454.64	47.44
213	457.14	47.47
214	459.64	47.55
215	462.14	47.64
216	464.64	47.64
217	467.14	47.64
218	469.64	47.62

Order	Station [ft]	Elevation [ft]
219	472.14	47.70
220	474.64	47.62
221	477.14	47.66
222	479.64	47.77
223	482.14	47.79
224	484.64	47.70
225	487.14	47.78
226	489.64	47.87
227	492.14	47.80
228	494.64	47.71
229	497.14	47.75
230	499.64	47.70
231	502.14	47.70
232	504.64	47.76
233	507.14	47.83
234	509.64	47.80
235	512.13	47.72
236	514.63	47.64
237	517.13	47.68
238	519.63	47.63
239	522.13	47.57
240	524.63	47.54
241	527.13	47.59
242	529.63	47.57
243	532.13	47.57
244	534.63	47.65
245	537.13	47.73
246	539.63	47.66
247	542.13	47.65
248	544.63	47.75
249	547.13	47.79
250	549.63	47.74
251	552.13	47.78
252	554.63	47.75
253	557.13	47.69
254	559.63	47.65
255	562.13	47.66
256	564.63	47.76
257	565.97	47.78
258	567.31	47.81
259	568.64	47.80
260	569.98	47.79
261	571.32	47.81
262	572.66	47.76
263	574.00	47.60
264	575.34	47.27
265	576.67	46.80
266	578.01	46.36
267	579.35	45.96

Order	Station [ft]	Elevation [ft]
268	580.69	45.58
269	582.03	45.21
270	583.37	44.86
271	584.70	44.61
272	586.04	44.29
273	587.38	43.88
274	588.72	43.53
275	590.06	43.23
276	591.40	43.01
277	592.73	43.33
278	594.07	43.73
279	595.41	44.12
280	596.75	44.50
281	598.09	44.92
282	599.43	45.39
283	600.76	45.64
284	602.10	45.86
285	603.44	46.11
286	604.78	46.14
287	606.12	46.00
288	607.46	45.83
289	608.79	45.75
290	610.13	45.89
291	611.47	46.12
292	612.81	46.23
293	614.15	46.22
294	615.49	46.15
295	616.82	46.02
296	618.16	45.81
297	619.50	45.76
298	620.84	45.77
299	622.18	45.81
300	623.52	45.89
301	624.85	45.92
302	626.19	45.87
303	627.53	45.79
304	628.87	45.70
305	630.21	45.65
306	631.55	45.64
307	632.88	45.63
308	634.22	45.60
309	635.56	45.56
310	636.90	45.56
311	638.24	45.62
312	639.58	45.68
313	640.91	45.68
314	642.25	45.61
315	643.59	45.55
316	644.93	45.57

Order	Station [ft]	Elevation [ft]
317	646.27	45.66
318	647.61	45.75
319	648.94	45.89
320	650.28	46.07
321	651.62	46.14
322	652.96	46.21
323	654.30	46.43
324	655.64	46.75
325	656.97	47.04
326	658.31	47.33
327	659.65	47.79
328	660.99	47.95
329	662.33	47.99
330	663.67	47.87
331	665.00	47.36
332	666.34	46.70
333	667.68	46.21
334	669.02	45.87
335	670.36	45.48
336	671.70	45.18
337	673.03	44.98
338	674.37	44.79
339	675.71	44.61
340	677.05	44.43
341	678.39	44.16
342	679.73	43.90
343	681.06	43.74
344	682.40	43.72
345	683.74	43.67
346	685.08	43.69
347	686.42	43.90
348	687.76	44.12
349	689.09	44.31
350	690.43	44.45
351	691.77	44.59
352	693.11	44.73
353	694.45	44.89
354	695.79	45.07
355	697.12	45.25
356	698.46	45.39
357	699.80	45.49
358	701.14	45.56
359	702.48	45.56
360	703.82	45.55
361	705.15	45.53
362	706.49	45.54
363	707.83	45.57
364	709.17	45.60
365	710.51	45.61

Order	Station [ft]	Elevation [ft]
366	711.85	45.62
367	713.18	45.65
368	714.52	45.67
369	715.86	45.71
370	717.20	45.74
371	718.54	45.75
372	719.88	45.78
373	721.21	45.79
374	722.55	45.75
375	723.89	45.71
376	725.23	45.69
377	726.57	45.67
378	727.91	45.64
379	729.24	45.60
380	730.58	45.59
381	731.92	45.58
382	733.26	45.57
383	734.60	45.57
384	735.94	45.56
385	737.61	45.50
386	739.29	45.31
387	740.97	45.15
388	742.65	45.14
389	744.32	45.08
390	746.00	45.00
391	747.68	44.91
392	749.36	44.69
393	751.04	44.40
394	752.71	44.09
395	754.39	43.77
396	756.07	43.94
397	757.75	44.20
398	759.43	44.56
399	761.10	44.89
400	762.78	45.17
401	764.46	45.39
402	766.14	45.61
403	767.81	45.63
404	769.49	45.57
405	771.17	45.72
406	772.85	45.82
407	774.53	45.83
408	776.20	45.83
409	777.88	45.80
410	779.56	45.85
411	781.24	45.92
412	782.92	45.94
413	784.59	45.95
414	786.27	45.87

Order	Station [ft]	Elevation [ft]
415	787.95	45.81
416	789.63	45.77
417	791.30	45.73
418	792.98	45.71
419	794.66	45.70
420	796.34	45.71
421	798.02	45.76
422	799.69	45.84
423	801.37	45.78
424	803.05	45.36
425	804.73	44.96
426	806.41	44.58
427	808.08	44.19
428	809.76	43.86
429	811.44	43.64
430	813.12	43.65
431	814.79	43.83
432	816.47	44.14
433	818.15	44.33
434	819.83	44.53
435	821.51	44.71
436	823.18	44.87
437	824.86	45.19
438	826.54	45.44
439	828.22	45.62
440	829.89	45.67
441	831.57	45.70
442	833.25	45.68
443	834.93	45.69
444	836.61	45.77
445	838.28	45.83
446	839.96	45.87
447	841.64	45.90
448	843.32	45.91
449	845.22	45.89
450	847.12	45.85
451	849.03	45.78
452	850.93	45.77
453	852.83	45.76
454	854.73	45.72
455	856.64	45.59
456	858.54	45.42
457	860.44	45.27
458	862.34	45.01
459	864.25	44.72
460	866.15	44.47
461	868.05	44.10
462	869.95	43.75
463	871.86	43.66

Order	Station [ft]	Elevation [ft]
464	873.76	43.97
465	875.66	44.33
466	877.56	44.56
467	879.47	44.74
468	881.37	44.94
469	883.27	45.17
470	885.17	45.36
471	887.08	45.50
472	888.98	45.73
473	890.88	45.81
474	892.78	45.83
475	894.69	45.88
476	896.59	45.97
477	898.49	46.05
478	900.39	46.04
479	902.30	46.02
480	904.20	45.97
481	905.78	45.89
482	907.36	45.83
483	908.94	45.80
484	910.52	45.79
485	912.11	45.78
486	913.69	45.63
487	915.27	45.45
488	916.85	45.29
489	918.43	45.08
490	920.01	44.82
491	921.59	44.57
492	923.18	44.30
493	924.76	43.97
494	926.34	43.71
495	927.92	43.55
496	929.50	43.75
497	931.08	44.06
498	932.66	44.35
499	934.25	44.58
500	935.83	44.75
501	937.41	44.93
502	938.99	45.10
503	940.57	45.28
504	942.15	45.41
505	943.73	45.47
506	945.32	45.49
507	946.90	45.50
508	948.48	45.54
509	950.06	45.61
510	951.64	45.68
511	953.22	45.70
512	954.80	45.71

Order	Station [ft]	Elevation [ft]
513	956.39	45.65
514	957.97	45.59
515	959.55	45.55
516	961.13	45.53
517	962.71	45.52
518	964.29	45.58
519	965.87	45.67
520	967.46	45.64
521	969.04	45.54
522	970.62	45.31
523	972.20	45.03
524	973.78	44.71
525	975.36	44.52
526	976.94	44.26
527	978.53	43.87
528	980.11	43.63
529	981.69	43.53
530	983.27	43.84
531	984.85	44.18
532	986.43	44.52
533	988.01	44.81
534	989.60	45.05
535	991.18	45.32
536	992.76	45.61
537	994.34	45.69
538	995.92	45.73
539	997.50	45.70
540	999.09	45.65
541	1000.67	45.61
542	1002.25	45.65
543	1003.83	45.69
544	1005.41	45.74
545	1007.18	45.74
546	1008.94	45.71
547	1010.71	45.65
548	1012.48	45.60
549	1014.24	45.57
550	1016.01	45.59
551	1017.78	45.66
552	1019.54	45.65
553	1021.31	45.56
554	1023.08	45.37
555	1024.84	45.03
556	1026.61	44.63
557	1028.37	44.32
558	1030.14	43.95
559	1031.91	43.65
560	1033.67	43.51
561	1035.44	43.74

Order	Station [ft]	Elevation [ft]
562	1037.21	44.03
563	1038.97	44.37
564	1040.74	44.68
565	1042.51	45.00
566	1044.27	45.25
567	1046.04	45.31
568	1047.81	45.21
569	1049.57	45.09
570	1051.34	45.02
571	1053.10	45.06
572	1054.87	45.09
573	1056.64	45.11
574	1058.40	45.07
575	1060.17	45.05
576	1061.94	45.03
577	1063.74	45.02
578	1065.55	44.97
579	1067.36	44.92
580	1069.16	44.89
581	1070.97	44.92
582	1072.77	44.94
583	1074.58	44.92
584	1076.39	44.87
585	1078.19	44.77
586	1080.00	44.62
587	1081.81	44.36
588	1083.61	44.06
589	1085.42	43.61
590	1087.22	43.21
591	1089.03	42.99
592	1090.84	43.00
593	1092.64	43.30
594	1094.45	43.70
595	1096.25	44.15
596	1098.06	44.51
597	1099.87	44.79
598	1101.67	44.98
599	1103.48	45.04
600	1105.29	45.13
601	1107.09	45.32
602	1108.90	45.38
603	1110.70	45.43
604	1112.51	45.48
605	1114.32	45.61
606	1116.12	45.70
607	1117.93	45.68
608	1119.74	45.66
609	1121.52	45.63
610	1123.31	45.59

Order	Station [ft]	Elevation [ft]
611	1125.09	45.66
612	1126.88	45.68
613	1128.67	45.65
614	1130.45	45.55
615	1132.24	45.52
616	1134.03	45.50
617	1135.81	45.44
618	1137.60	45.33
619	1139.39	45.25
620	1141.17	45.21
621	1142.96	44.79
622	1144.75	44.27
623	1146.53	43.80
624	1148.32	43.83
625	1150.11	44.16
626	1151.89	44.61
627	1153.68	45.12
628	1155.47	45.44
629	1157.25	45.63
630	1159.04	45.70
631	1160.83	45.76
632	1162.61	45.93
633	1164.40	46.12
634	1166.19	46.14
635	1167.97	46.12
636	1169.76	46.08
637	1171.55	46.04
638	1173.33	46.02
639	1175.12	46.05
640	1176.91	46.12
641	1179.26	46.16
642	1181.61	45.97
643	1183.96	45.82
644	1186.31	45.57
645	1188.67	45.33
646	1191.02	45.00
647	1193.37	44.54
648	1195.72	44.07
649	1198.07	43.84
650	1200.42	44.11
651	1202.78	44.69
652	1205.13	45.23
653	1207.48	45.40
654	1209.83	45.59
655	1212.18	45.79
656	1214.54	45.86
657	1216.89	45.89
658	1219.24	45.90
659	1221.59	45.98

Order	Station [ft]	Elevation [ft]
660	1223.94	46.07
661	1226.30	46.04
662	1228.65	45.94
663	1231.00	45.90
664	1233.35	45.88
665	1235.70	45.78
666	1238.05	45.69
667	1240.41	45.60
668	1242.76	45.58
669	1245.11	44.96
670	1247.46	44.03
671	1249.81	43.67
672	1252.17	43.97
673	1254.52	44.61
674	1256.87	45.22
675	1259.22	45.56
676	1261.57	45.69
677	1263.93	45.79
678	1266.28	45.86
679	1268.63	45.87
680	1270.98	45.89
681	1273.33	45.88
682	1275.68	45.81
683	1278.04	45.81
684	1280.39	45.73
685	1282.74	45.65
686	1285.09	45.57
687	1287.44	45.48
688	1289.80	45.33
689	1292.15	45.11
690	1294.50	44.72
691	1296.85	43.90
692	1299.20	43.40
693	1301.56	43.55
694	1303.91	44.14
695	1306.26	44.88
696	1308.61	45.32
697	1310.96	45.49
698	1313.31	45.60
699	1315.67	45.72
700	1318.02	45.76
701	1320.37	45.73
702	1322.72	45.76
703	1325.07	45.78
704	1327.43	45.82
705	1329.67	45.71
706	1331.92	45.63
707	1334.16	45.53
708	1336.41	45.49

Order	Station [ft]	Elevation [ft]
709	1338.65	45.49
710	1340.90	45.48
711	1343.14	45.37
712	1345.39	45.22
713	1347.63	45.05
714	1349.88	44.81
715	1352.12	44.37
716	1354.37	43.85
717	1356.61	43.52
718	1358.86	43.52
719	1361.10	43.78
720	1363.35	44.38
721	1365.59	44.87
722	1367.84	45.25
723	1370.08	45.55
724	1372.33	45.75
725	1374.57	45.82
726	1376.82	45.81
727	1379.06	45.82
728	1381.31	45.91
729	1383.55	45.94
730	1385.80	45.98
731	1388.04	45.98
732	1390.29	45.96
733	1392.53	45.95
734	1394.78	45.91
735	1397.02	45.83
736	1399.27	45.75
737	1401.51	45.70
738	1403.76	45.61
739	1406.00	45.54
740	1408.25	45.60
741	1410.49	45.49
742	1412.74	45.35
743	1414.98	45.15
744	1417.23	44.85
745	1419.47	44.40
746	1421.72	43.76
747	1423.96	43.24
748	1426.21	42.87
749	1428.45	43.17
750	1430.70	43.56
751	1432.94	43.97
752	1435.19	44.37
753	1437.43	44.78
754	1439.68	45.13
755	1441.92	45.11
756	1444.17	45.22
757	1446.41	45.37

Order	Station [ft]	Elevation [ft]
758	1448.66	45.48
759	1450.90	45.50
760	1453.15	45.51
761	1455.39	45.64
762	1457.64	45.70
763	1459.88	45.72
764	1462.13	45.80
765	1464.37	45.81
766	1466.62	45.75
767	1468.86	45.59
768	1471.11	45.52
769	1472.81	45.51
770	1474.51	45.49
771	1476.21	45.47
772	1477.91	45.46
773	1479.61	45.46
774	1481.31	45.49
775	1483.01	45.45
776	1484.71	45.43
777	1486.41	45.47
778	1488.11	45.48
779	1489.80	45.47
780	1491.50	45.47
781	1493.20	45.52
782	1494.90	45.54
783	1496.60	45.53
784	1498.30	45.51
785	1500.00	45.53
786	1501.70	45.59
787	1503.40	45.63
788	1505.10	45.66
789	1506.80	45.67
790	1508.50	45.65
791	1510.20	45.64
792	1511.90	45.63
793	1513.60	45.64
794	1515.30	45.68
795	1517.00	45.70
796	1518.70	45.66
797	1520.40	45.61
798	1522.10	45.57
799	1523.80	45.57
800	1525.50	45.53
801	1527.20	45.52
802	1528.90	45.56
803	1530.60	45.54
804	1532.30	45.52
805	1533.99	45.49
806	1535.69	45.64

Order	Station [ft]	Elevation [ft]
807	1537.39	45.81
808	1539.09	45.99
809	1540.79	46.04
810	1542.49	45.98
811	1544.19	45.84
812	1545.89	45.63
813	1547.59	45.52
814	1549.29	45.48
815	1550.99	45.46
816	1552.69	45.49
817	1554.39	45.56
818	1556.09	45.69
819	1557.79	45.71
820	1559.49	45.74
821	1561.19	45.88
822	1562.89	46.05
823	1564.59	46.28
824	1566.29	46.61
825	1567.99	46.87
826	1569.69	47.04
827	1571.39	47.10
828	1573.09	47.01
829	1574.79	46.75
830	1576.49	46.31
831	1578.19	46.09
832	1579.88	45.93
833	1581.58	45.82
834	1583.28	45.74
835	1584.98	45.62
836	1586.68	45.48
837	1588.38	45.61
838	1590.08	45.55
839	1591.78	45.40
840	1593.48	45.33
841	1595.18	45.38
842	1596.88	45.48
843	1598.58	45.58
844	1600.28	45.66
845	1601.98	45.69
846	1603.68	45.59
847	1605.38	45.59
848	1607.08	45.64
849	1608.78	45.74
850	1610.48	45.75
851	1612.18	45.74
852	1613.88	45.73
853	1615.58	45.64
854	1617.28	45.58
855	1618.98	45.57

Order	Station [ft]	Elevation [ft]
856	1620.68	45.66
857	1622.38	45.77
858	1624.07	45.88
859	1625.77	45.88
860	1627.47	45.82
861	1629.17	45.73
862	1630.87	45.70
863	1632.57	45.71
864	1634.27	45.75
865	1635.97	45.84
866	1637.67	45.98
867	1639.37	46.13
868	1641.07	46.26
869	1642.77	46.43
870	1644.47	46.62
871	1646.17	46.78
872	1647.87	46.62
873	1649.57	46.34
874	1651.27	46.01
875	1652.97	45.86
876	1654.67	45.81
877	1656.37	45.90
878	1658.07	45.97
879	1659.77	45.92
880	1661.47	45.70
881	1663.17	45.61
882	1664.87	45.61
883	1666.57	45.69
884	1668.27	45.74
885	1669.96	45.75
886	1671.66	45.71
887	1673.36	45.83
888	1675.06	46.12
889	1676.76	46.59
890	1678.46	47.26
891	1680.16	47.60
892	1681.86	47.69
893	1683.56	47.55
894	1685.26	47.30
895	1686.96	46.97
896	1688.66	46.48
897	1690.33	46.28
898	1692.00	45.93
899	1693.67	45.96
900	1695.34	46.02
901	1697.01	46.11
902	1698.68	46.04
903	1700.35	46.03
904	1702.02	46.13

Order	Station [ft]	Elevation [ft]
905	1703.69	45.89
906	1705.36	45.62
907	1707.03	45.39
908	1708.70	45.16
909	1710.37	44.99
910	1712.04	44.92
911	1713.72	45.03
912	1715.39	45.17
913	1717.06	45.26
914	1718.73	45.18
915	1720.40	45.01
916	1722.07	44.86
917	1723.74	44.78
918	1725.41	44.71
919	1727.08	44.57
920	1728.75	44.47
921	1730.42	44.39
922	1732.09	44.39
923	1733.76	44.42
924	1735.43	44.48
925	1737.10	44.50
926	1738.77	44.74
927	1740.44	45.11
928	1742.11	45.08
929	1744.00	44.97
930	1745.89	44.84
931	1747.78	44.69
932	1749.67	44.32
933	1751.55	44.27
934	1753.44	44.37
935	1755.33	44.67
936	1757.22	44.99
937	1759.11	45.18
938	1761.00	45.32
939	1762.89	45.40
940	1764.77	45.62
941	1766.66	45.72
942	1768.55	45.73
943	1770.44	45.73
944	1772.33	45.41
945	1774.22	45.22
946	1776.11	45.27
947	1777.99	45.43
948	1779.88	45.57
949	1781.77	45.59
950	1783.66	45.62
951	1785.55	45.87
952	1787.44	46.06
953	1789.33	46.01

Order	Station [ft]	Elevation [ft]
954	1791.22	45.94
955	1793.10	45.89
956	1794.99	46.35
957	1796.88	46.90
958	1798.77	47.25
959	1800.66	47.38
960	1802.55	47.52
961	1804.15	47.48
962	1805.74	47.38
963	1807.34	47.24
964	1808.94	46.84
965	1810.54	46.53
966	1812.14	46.32
967	1813.74	46.22
968	1815.34	46.19
969	1816.94	46.26
970	1818.54	46.37
971	1820.14	46.48
972	1821.74	46.60
973	1823.33	46.49
974	1824.93	46.28
975	1826.53	46.14
976	1828.13	46.05
977	1829.73	46.01
978	1831.33	45.94
979	1832.93	45.89
980	1834.53	45.89
981	1836.13	45.67
982	1837.73	45.54
983	1839.32	45.83
984	1840.92	45.95
985	1842.52	45.98
986	1844.12	45.92
987	1845.72	45.98
988	1847.32	46.13
989	1848.92	46.13
990	1850.52	46.13
991	1852.12	46.11
992	1853.72	45.87
993	1855.32	45.69
994	1856.91	45.74
995	1858.51	45.70
996	1860.11	45.64
997	1861.71	45.67
998	1863.31	45.63
999	1864.91	45.54
1000	1866.51	45.46
1001	1868.11	45.42
1002	1869.71	45.45

Order	Station [ft]	Elevation [ft]
1003	1871.31	45.50
1004	1872.90	45.54
1005	1874.50	45.54
1006	1876.10	45.63
1007	1877.70	45.76
1008	1879.30	45.94
1009	1880.90	46.01
1010	1882.50	46.00
1011	1884.10	45.81
1012	1885.70	45.80
1013	1887.30	45.97
1014	1888.90	46.00
1015	1890.49	45.98
1016	1892.09	45.86
1017	1893.69	45.81
1018	1895.29	45.81
1019	1896.89	45.91
1020	1898.49	46.02
1021	1900.09	46.10
1022	1901.69	46.03
1023	1903.29	45.90
1024	1904.89	45.74
1025	1906.48	45.63
1026	1908.08	45.60
1027	1909.68	45.65
1028	1911.28	45.71
1029	1912.88	45.76
1030	1914.48	45.80
1031	1916.08	45.98
1032	1917.68	46.19
1033	1919.28	46.33
1034	1920.88	46.38
1035	1922.48	46.38
1036	1924.07	46.53
1037	1925.67	46.37
1038	1927.27	45.89
1039	1928.87	45.77
1040	1930.47	45.73
1041	1932.07	45.82
1042	1933.67	45.83
1043	1935.27	45.81
1044	1936.87	45.70
1045	1938.47	45.69
1046	1940.07	45.73
1047	1941.66	45.74
1048	1943.26	45.72
1049	1944.86	45.68
1050	1946.46	45.76
1051	1948.06	45.82

Order	Station [ft]	Elevation [ft]
1052	1949.66	45.87
1053	1951.26	45.91
1054	1952.86	45.94
1055	1954.46	45.92
1056	1956.06	45.83
1057	1957.65	45.72
1058	1959.25	45.67
1059	1960.85	45.63
1060	1962.45	45.61
1061	1964.05	45.91
1062	1965.65	46.06
1063	1967.25	46.03
1064	1968.85	45.83
1065	1970.45	45.63
1066	1972.05	45.49
1067	1973.65	45.54
1068	1975.24	45.61
1069	1976.84	45.62
1070	1978.44	45.66
1071	1980.04	45.70
1072	1981.64	45.68
1073	1983.24	45.67
1074	1984.84	45.65
1075	1986.44	45.64
1076	1988.04	45.59
1077	1989.64	45.49
1078	1991.23	45.54
1079	1992.83	45.57
1080	1994.43	45.49
1081	1996.03	45.51
1082	1997.63	45.57
1083	1999.23	45.60
1084	2000.83	45.59
1085	2002.43	45.53
1086	2004.03	45.56
1087	2005.63	45.52
1088	2007.23	45.44
1089	2008.82	45.46
1090	2010.42	45.50
1091	2012.02	45.52
1092	2013.62	45.55
1093	2015.22	45.58
1094	2016.82	45.59
1095	2018.42	45.64
1096	2020.02	45.71
1097	2021.62	45.79
1098	2023.22	45.79
1099	2024.81	45.72
1100	2026.41	45.65

Order	Station [ft]	Elevation [ft]
1101	2028.01	45.65
1102	2029.61	45.79
1103	2031.21	45.78
1104	2032.81	45.74
1105	2034.41	45.67
1106	2036.01	45.70
1107	2037.61	45.77
1108	2039.21	45.85
1109	2040.81	45.84
1110	2042.40	45.78
1111	2044.00	45.78
1112	2045.60	45.74
1113	2047.20	45.65
1114	2048.80	45.69
1115	2050.40	45.72
1116	2052.00	45.72
1117	2053.60	45.91
1118	2055.20	46.13
1119	2056.80	46.15
1120	2058.39	45.99
1121	2059.99	45.74
1122	2061.59	45.82
1123	2063.19	45.89
1124	2064.79	45.97
1125	2066.39	46.10
1126	2067.99	46.18
1127	2069.59	46.14
1128	2071.19	45.94
1129	2072.79	45.74
1130	2074.39	45.62
1131	2075.98	45.66
1132	2077.58	45.76
1133	2079.18	45.72
1134	2080.78	45.72
1135	2082.38	45.77
1136	2083.98	45.73
1137	2085.58	45.73
1138	2087.18	45.80
1139	2088.78	45.83
1140	2090.38	45.84
1141	2091.97	45.75
1142	2093.57	45.67
1143	2095.17	45.60
1144	2096.77	45.56
1145	2098.37	45.51
1146	2099.97	45.45
1147	2101.57	45.46
1148	2103.17	45.45
1149	2104.77	45.41

Order	Station [ft]	Elevation [ft]
1150	2106.37	45.54
1151	2107.97	45.63
1152	2109.56	45.60
1153	2111.16	45.68
1154	2112.76	45.75
1155	2114.36	45.69
1156	2115.96	45.67
1157	2117.56	45.68
1158	2119.16	45.76
1159	2120.76	45.79
1160	2122.36	45.77
1161	2123.96	45.72
1162	2125.55	45.68
1163	2127.15	45.64
1164	2128.75	45.65
1165	2130.35	45.67
1166	2131.95	45.69
1167	2133.55	45.70
1168	2135.15	45.68
1169	2136.75	45.55
1170	2138.35	45.47
1171	2139.95	45.41
1172	2141.55	45.46
1173	2143.14	45.51
1174	2144.74	45.58
1175	2146.34	45.61
1176	2147.94	45.61
1177	2149.54	45.56
1178	2151.14	45.53
1179	2152.74	45.53
1180	2154.34	45.58
1181	2155.94	45.59
1182	2157.54	45.58
1183	2159.13	45.64
1184	2160.73	45.75
1185	2162.33	45.88
1186	2163.93	46.11
1187	2165.53	46.29
1188	2167.13	46.39
1189	2168.73	46.39
1190	2170.33	46.35
1191	2171.93	46.19
1192	2173.53	46.23
1193	2175.13	46.35
1194	2176.72	46.19
1195	2178.32	46.06
1196	2179.92	45.95
1197	2181.52	46.15
1198	2183.12	46.20

Order	Station [ft]	Elevation [ft]
1199	2184.72	46.01
1200	2186.32	45.93
1201	2187.92	45.88
1202	2189.52	45.85
1203	2191.12	45.80
1204	2192.71	45.77
1205	2194.31	45.79
1206	2195.91	45.82
1207	2197.51	45.84
1208	2199.11	45.74
1209	2200.71	45.67
1210	2202.31	45.66
1211	2203.91	45.78
1212	2205.51	45.90
1213	2207.11	46.00
1214	2208.71	46.02
1215	2210.30	46.02
1216	2211.90	46.06
1217	2214.28	46.22
1218	2216.66	46.28
1219	2219.04	46.26
1220	2221.42	46.06
1221	2223.80	45.85
1222	2226.18	45.71
1223	2228.56	45.58
1224	2230.94	45.48
1225	2233.32	45.43
1226	2235.70	45.67
1227	2238.08	45.63
1228	2240.46	45.60
1229	2242.84	45.52
1230	2245.22	45.47
1231	2247.60	45.34
1232	2249.99	45.29
1233	2252.37	45.35
1234	2254.75	45.39
1235	2257.13	45.37
1236	2259.51	45.31
1237	2261.89	45.27
1238	2264.27	45.27
1239	2266.65	45.27
1240	2269.03	45.28
1241	2271.41	45.27
1242	2273.79	45.30
1243	2276.17	45.35
1244	2278.55	45.37
1245	2280.93	45.36
1246	2283.31	45.34
1247	2285.69	45.35

Order	Station [ft]	Elevation [ft]
1248	2288.07	45.26
1249	2290.45	45.28
1250	2292.83	45.41
1251	2295.21	45.39
1252	2297.59	45.46
1253	2299.97	45.49
1254	2302.35	45.42
1255	2304.73	45.37
1256	2307.11	45.35
1257	2309.49	45.42
1258	2311.87	45.48
1259	2314.25	45.50
1260	2316.63	45.57
1261	2319.01	45.61
1262	2321.39	45.64
1263	2323.77	45.62
1264	2326.15	45.59
1265	2328.53	45.62
1266	2330.91	45.73
1267	2333.29	45.84
1268	2335.67	45.83
1269	2338.05	45.94
1270	2340.43	45.98
1271	2342.81	45.88
1272	2345.19	45.73
1273	2347.57	45.76
1274	2349.95	45.81
1275	2352.33	45.74
1276	2354.71	45.75
1277	2357.09	45.83
1278	2359.47	45.78
1279	2361.85	45.72
1280	2364.23	45.65
1281	2366.60	45.50
1282	2368.96	45.32
1283	2371.33	45.12
1284	2373.69	44.55
1285	2376.06	43.94
1286	2378.43	43.81
1287	2380.79	44.01
1288	2383.16	44.28
1289	2385.52	44.76
1290	2387.89	45.18
1291	2390.25	45.34
1292	2392.62	45.42
1293	2394.99	45.39
1294	2397.35	45.34
1295	2399.72	45.35
1296	2402.08	45.35

Order	Station [ft]	Elevation [ft]
1297	2403.35	45.31
1298	2404.62	45.30
1299	2405.89	45.29
1300	2407.16	45.30
1301	2408.43	45.31
1302	2409.70	45.32
1303	2410.97	45.32
1304	2412.25	45.33
1305	2413.52	45.33
1306	2414.79	45.35
1307	2416.06	45.35
1308	2417.33	45.34
1309	2418.60	45.32
1310	2419.87	45.32
1311	2421.14	45.32
1312	2422.41	45.32
1313	2423.68	45.33
1314	2424.95	45.35
1315	2426.22	45.36
1316	2427.49	45.34
1317	2428.76	45.31
1318	2430.03	45.29
1319	2431.30	45.27
1320	2432.57	45.27
1321	2433.84	45.28
1322	2435.11	45.30
1323	2436.38	45.30
1324	2437.65	45.29
1325	2438.92	45.27
1326	2440.19	45.24
1327	2441.46	45.23
1328	2442.73	45.24
1329	2444.00	45.27
1330	2445.27	45.32
1331	2446.54	45.35
1332	2447.81	45.35
1333	2449.08	45.33
1334	2450.35	45.31
1335	2451.62	45.29
1336	2452.89	45.28
1337	2454.16	45.29
1338	2455.43	45.30
1339	2456.70	45.30
1340	2457.97	45.30
1341	2459.24	45.29
1342	2460.51	45.27
1343	2461.78	45.25
1344	2463.05	45.24
1345	2464.32	45.28

Order	Station [ft]	Elevation [ft]
1346	2465.59	45.33
1347	2466.86	45.36
1348	2468.13	45.37
1349	2469.40	45.30
1350	2470.67	45.22
1351	2471.94	45.19
1352	2473.21	45.15
1353	2474.48	45.20
1354	2475.75	45.25
1355	2477.02	45.23
1356	2478.29	45.21
1357	2479.56	45.17
1358	2480.83	45.13
1359	2482.10	45.12
1360	2483.37	45.12
1361	2484.64	45.12
1362	2485.91	45.12
1363	2487.18	45.11
1364	2488.45	45.11
1365	2489.72	45.13
1366	2490.99	45.16
1367	2492.26	45.20
1368	2493.54	45.23
1369	2494.81	45.22
1370	2496.08	45.21
1371	2497.35	45.24
1372	2498.62	45.26
1373	2499.89	45.25
1374	2501.16	45.23
1375	2502.43	45.19
1376	2503.70	45.17
1377	2504.97	45.16
1378	2506.24	45.18
1379	2507.51	45.26
1380	2508.78	45.33
1381	2510.05	45.41
1382	2511.32	45.47
1383	2512.59	45.51
1384	2513.86	45.52
1385	2515.13	45.48
1386	2516.40	45.44
1387	2517.67	45.43
1388	2518.94	45.41
1389	2520.21	45.40
1390	2521.48	45.37
1391	2522.75	45.34
1392	2524.02	45.31
1393	2525.29	45.30
1394	2526.56	45.31

Order	Station [ft]	Elevation [ft]
1395	2527.83	45.35
1396	2529.10	45.39
1397	2530.37	45.41
1398	2531.64	45.39
1399	2532.91	45.31
1400	2534.18	45.26
1401	2535.45	45.24
1402	2536.72	45.24
1403	2537.99	45.25
1404	2539.26	45.27
1405	2540.53	45.30
1406	2541.80	45.32
1407	2543.07	45.34
1408	2544.34	45.35
1409	2545.61	45.38
1410	2546.88	45.44
1411	2548.15	45.51
1412	2549.42	45.63
1413	2550.69	45.76
1414	2551.96	45.83
1415	2553.23	45.88
1416	2554.50	45.88
1417	2555.77	45.87
1418	2557.04	45.84
1419	2558.31	45.81
1420	2559.58	45.79
1421	2560.85	45.78
1422	2562.12	45.73
1423	2563.39	45.68
1424	2564.66	45.66
1425	2565.93	45.65
1426	2567.20	45.67
1427	2568.47	45.69
1428	2569.74	45.73
1429	2571.01	45.78
1430	2572.28	45.89
1431	2573.55	46.01
1432	2574.82	46.11
1433	2576.10	46.21
1434	2577.37	46.17
1435	2578.64	46.13
1436	2579.91	46.14
1437	2581.18	46.14
1438	2582.45	46.09
1439	2583.72	46.04
1440	2584.99	46.00
1441	2586.26	45.96
1442	2587.53	45.95
1443	2588.80	45.95

Order	Station [ft]	Elevation [ft]
1444	2590.07	45.98
1445	2591.34	45.99
1446	2592.61	45.93
1447	2593.88	45.90
1448	2595.15	45.95
1449	2596.42	46.01
1450	2597.69	46.09
1451	2598.96	46.15
1452	2600.23	46.14
1453	2601.50	46.13
1454	2602.77	46.14
1455	2604.04	46.15
1456	2605.31	46.15
1457	2606.58	46.11
1458	2607.85	46.00
1459	2609.12	45.93
1460	2610.39	45.93
1461	2611.66	45.93
1462	2612.93	45.94
1463	2614.20	45.95
1464	2615.47	45.97
1465	2616.74	46.01
1466	2618.01	46.08
1467	2619.28	46.11
1468	2620.55	46.10
1469	2621.82	46.08
1470	2623.09	46.05
1471	2624.36	46.04
1472	2625.63	46.02
1473	2626.90	45.95
1474	2628.17	45.85
1475	2629.44	45.80
1476	2630.71	45.81
1477	2631.98	45.80
1478	2633.25	45.78
1479	2634.52	45.82
1480	2635.79	45.88
1481	2637.06	46.13
1482	2638.33	46.46
1483	2639.60	46.62
1484	2640.87	46.72
1485	2642.14	46.55
1486	2643.41	46.27
1487	2644.68	46.09
1488	2645.95	45.94
1489	2647.22	45.83
1490	2648.49	45.75
1491	2649.76	45.70
1492	2651.03	45.66

Order	Station [ft]	Elevation [ft]
1493	2652.30	45.59
1494	2653.57	45.50
1495	2654.84	45.49
1496	2656.11	45.51
1497	2657.39	45.58
1498	2658.66	45.66
1499	2659.93	45.69
1500	2661.20	45.71
1501	2662.47	45.72
1502	2663.74	45.73
1503	2665.01	45.76
1504	2666.28	45.79
1505	2667.55	45.90
1506	2668.82	45.99
1507	2670.09	46.09
1508	2671.36	46.18
1509	2672.63	46.11
1510	2673.90	46.05
1511	2675.17	45.99
1512	2676.44	45.93
1513	2677.71	45.97
1514	2678.98	45.99
1515	2680.25	45.99
1516	2681.52	45.99
1517	2682.79	46.05
1518	2684.06	46.13
1519	2685.33	46.38
1520	2686.60	46.57
1521	2687.87	46.56
1522	2689.14	46.47
1523	2690.41	46.18
1524	2691.68	45.93
1525	2692.95	45.77
1526	2694.22	45.67
1527	2695.49	45.67
1528	2696.76	45.66
1529	2698.03	45.64
1530	2699.30	45.58
1531	2700.57	45.44
1532	2701.84	45.31
1533	2703.11	45.22
1534	2704.38	45.24
1535	2705.65	45.42
1536	2706.92	45.61
1537	2708.19	45.75
1538	2709.46	46.18
1539	2710.73	46.93
1540	2712.00	47.30
1541	2713.27	47.29

Order	Station [ft]	Elevation [ft]
1542	2714.54	47.33
1543	2715.81	47.41
1544	2717.08	47.41
1545	2718.35	47.36
1546	2719.62	47.35
1547	2720.89	47.37
1548	2722.16	47.39
1549	2723.43	47.41
1550	2724.70	47.38
1551	2725.97	47.33
1552	2727.24	47.24

Comment:

Weir Cross Section: X-0420W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	48.08
1	1.96	47.92
2	3.93	47.67
3	5.89	47.31
4	7.86	46.84
5	9.82	46.55
6	11.79	46.42
7	13.75	46.36
8	15.72	46.26
9	17.30	46.20
10	18.88	46.18
11	20.46	46.21
12	22.04	46.24
13	23.62	46.25
14	25.20	46.24
15	26.78	46.25
16	28.36	46.29
17	29.94	46.14
18	31.52	46.00
19	33.10	45.86
20	34.69	45.77
21	36.27	45.71
22	37.85	45.64
23	39.43	45.58
24	41.01	45.52
25	42.59	45.36

Order	Station [ft]	Elevation [ft]
26	44.17	45.20
27	45.75	45.09
28	47.33	45.00
29	48.91	44.89
30	50.49	44.75
31	52.07	44.70
32	53.65	44.79
33	55.24	44.93
34	56.82	45.07
35	58.40	45.21
36	59.98	45.34
37	61.56	45.46
38	63.14	45.60
39	64.72	45.65
40	66.30	45.62
41	68.31	45.45
42	70.31	45.27
43	72.31	45.09
44	74.32	44.94
45	76.32	44.92
46	78.33	44.85
47	80.33	44.84
48	82.34	44.89
49	84.34	44.93
50	86.34	44.96
51	88.35	44.99
52	90.35	45.03
53	92.36	45.02
54	94.36	44.98
55	96.36	44.94
56	98.37	44.91
57	100.37	44.92
58	102.38	44.98
59	104.38	45.12
60	106.39	45.23
61	108.39	45.46
62	110.39	45.58
63	112.40	45.56
64	114.40	45.52
65	116.41	45.81
66	118.41	46.12
67	120.42	46.20
68	122.42	46.22
69	124.42	46.22
70	126.43	46.16
71	128.43	46.06
72	130.44	45.89
73	132.84	45.78
74	135.24	45.74

Order	Station [ft]	Elevation [ft]
75	137.64	45.68
76	140.04	45.73
77	142.43	45.75
78	144.83	45.72
79	147.23	45.25
80	149.63	45.10
81	152.03	45.13
82	154.43	45.26
83	156.83	45.29
84	159.23	45.36
85	161.63	45.47
86	164.03	45.48
87	166.43	45.44
88	168.83	45.39
89	171.23	45.43
90	173.63	45.48
91	176.03	45.31
92	178.43	45.32
93	180.83	45.40
94	183.23	45.41
95	185.63	45.30
96	188.03	45.07
97	190.42	44.99
98	192.82	45.08
99	195.22	45.28
100	197.62	45.45
101	200.02	45.38
102	202.42	45.44
103	204.82	45.50
104	207.22	45.46
105	209.62	45.30
106	212.02	45.22
107	214.42	45.37
108	216.82	45.49
109	219.22	45.57
110	221.62	45.60
111	224.02	45.59
112	226.42	45.64
113	228.82	45.52
114	231.22	45.51
115	233.62	45.47
116	236.02	45.45
117	238.42	45.52
118	240.81	45.62
119	243.21	45.60
120	245.61	45.51
121	248.01	45.47
122	250.41	45.40
123	252.81	45.28

Order	Station [ft]	Elevation [ft]
124	255.21	45.25
125	257.61	45.30
126	260.01	45.44
127	262.41	45.53
128	264.81	45.49
129	267.21	45.53
130	269.61	45.67
131	272.01	45.79
132	274.41	46.02
133	276.81	46.20
134	279.21	46.09
135	281.61	45.90
136	284.01	46.06
137	286.41	46.13
138	288.81	46.01
139	291.21	45.98
140	293.62	45.98
141	296.02	45.92
142	298.42	45.82
143	300.82	45.91
144	303.22	45.95
145	305.63	45.83
146	308.03	45.71
147	310.43	45.65
148	312.83	45.57
149	315.24	45.50
150	317.64	45.63
151	320.04	45.80
152	322.44	45.85
153	324.85	45.71
154	327.25	45.70
155	329.65	45.75
156	332.05	45.73
157	334.45	45.65
158	336.86	45.68
159	339.26	45.90
160	341.66	46.06
161	344.06	46.13
162	346.47	45.93
163	348.87	46.01
164	351.27	46.24
165	353.67	46.34
166	356.07	46.35
167	358.48	46.48
168	360.88	46.36
169	362.63	46.38
170	364.38	46.33
171	366.13	46.19
172	367.89	46.07

Order	Station [ft]	Elevation [ft]
173	369.64	45.97
174	371.39	45.96
175	373.14	46.11
176	374.89	46.20
177	376.65	46.23
178	378.40	46.21
179	380.15	46.13
180	381.90	46.17
181	383.65	46.26
182	385.40	46.24
183	387.16	46.18
184	388.91	46.18
185	390.66	46.11
186	392.41	46.10
187	394.16	46.26
188	395.92	46.38
189	397.67	46.28
190	399.42	46.31
191	401.17	46.20
192	402.92	46.10
193	404.67	46.21
194	406.43	46.26
195	408.18	46.25
196	409.93	46.00
197	411.68	45.89
198	413.43	45.88
199	415.19	45.81
200	416.94	45.77
201	418.69	45.87
202	420.44	45.93
203	422.19	45.97
204	423.94	46.01
205	425.70	46.00
206	427.45	45.97
207	429.20	45.86
208	430.95	45.84
209	432.70	45.92
210	434.45	45.98
211	436.21	46.15
212	437.96	46.35
213	439.71	46.45
214	441.46	46.46
215	443.21	46.37
216	444.97	46.22
217	446.72	45.99
218	448.47	45.89
219	450.22	45.97
220	451.97	46.01
221	453.72	46.13

Order	Station [ft]	Elevation [ft]
222	455.48	46.14
223	457.23	46.18
224	458.98	46.31
225	460.73	46.32
226	462.48	46.28
227	464.24	46.39
228	465.99	46.52
229	467.74	46.56
230	469.49	46.53
231	471.24	46.30
232	472.99	46.24

Comment:

Weir Cross Section: X-0430W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	46.24
1	2.30	46.29
2	4.61	46.31
3	6.91	46.27
4	9.22	46.17
5	11.52	46.20
6	13.83	45.99
7	16.13	45.79
8	18.44	45.79
9	20.74	45.78
10	23.05	45.74
11	25.35	45.99
12	27.66	45.95
13	29.96	45.72
14	32.27	45.50
15	34.57	45.55
16	36.87	45.92
17	39.18	45.94
18	41.48	45.81
19	43.79	45.86
20	46.09	45.96
21	48.40	45.91
22	50.70	45.73
23	53.01	45.87
24	55.31	45.95
25	57.62	45.85

Order	Station [ft]	Elevation [ft]
26	59.92	45.75
27	62.23	45.78
28	64.53	45.85
29	66.84	45.77
30	69.14	45.68
31	71.44	45.70
32	73.75	45.66
33	76.05	45.57
34	78.36	45.60
35	80.66	45.69
36	82.97	45.68
37	85.27	45.72
38	87.58	45.72
39	89.88	45.77
40	92.19	45.89
41	94.49	45.73
42	96.80	45.78
43	99.10	45.59
44	101.40	45.34
45	103.71	45.16
46	106.01	45.16
47	108.32	45.25
48	110.62	45.70
49	112.93	45.81
50	115.23	45.59
51	117.54	45.46
52	119.84	45.58
53	122.15	45.65
54	124.45	45.68
55	126.76	45.67
56	129.06	45.76
57	131.37	45.99
58	133.67	46.04
59	135.97	46.27
60	138.28	46.43
61	140.58	46.41
62	142.89	46.42
63	145.19	46.42
64	147.50	46.38
65	149.73	46.45
66	151.96	46.61
67	154.19	46.81
68	156.42	46.88
69	158.65	46.64
70	160.89	46.55
71	163.12	46.69
72	165.35	46.31
73	167.58	45.75
74	169.81	45.69

Order	Station [ft]	Elevation [ft]
75	172.04	45.80
76	174.27	45.94
77	176.50	45.99
78	178.73	45.84
79	180.97	45.65
80	183.20	45.67
81	185.43	45.78
82	187.66	45.96
83	189.89	45.83
84	192.12	45.68
85	194.35	45.84
86	196.58	45.90
87	198.82	45.87
88	201.05	45.88
89	203.28	45.98
90	205.51	46.28
91	207.74	46.20
92	209.97	46.00
93	212.20	45.99
94	214.43	46.10
95	216.66	46.13
96	218.90	46.12
97	221.13	46.11
98	223.36	46.02
99	225.59	45.79
100	227.82	45.81
101	230.05	45.68
102	232.28	45.60
103	234.51	45.54
104	236.75	45.55
105	238.98	45.58
106	241.21	45.57
107	243.44	45.57
108	245.67	45.71
109	247.90	45.58
110	250.13	45.52
111	252.36	45.40
112	254.59	45.34
113	256.83	45.43
114	259.06	45.58
115	261.29	45.65
116	263.52	45.75
117	265.75	45.78
118	267.98	45.85
119	270.21	45.88
120	272.44	45.77
121	274.68	45.71
122	276.91	45.72
123	279.14	45.75

Order	Station [ft]	Elevation [ft]
124	281.37	45.80
125	283.60	45.71
126	285.83	45.67
127	288.06	45.62
128	290.29	45.53
129	292.61	45.48
130	294.93	45.52
131	297.24	45.47
132	299.56	45.29
133	301.87	45.32
134	304.19	45.38
135	306.50	45.17
136	308.82	45.34
137	311.13	45.46
138	313.45	45.44
139	315.77	45.41
140	318.08	45.48
141	320.40	45.48
142	322.71	45.41
143	325.03	45.63
144	327.34	45.77
145	329.50	45.69
146	331.66	45.70
147	333.82	45.85
148	335.98	45.97
149	338.14	45.85
150	340.30	45.71
151	342.46	45.62
152	344.62	45.59
153	346.78	45.67
154	348.94	45.74
155	351.10	45.61
156	353.26	45.58
157	355.42	45.63
158	357.58	45.45
159	359.74	45.17
160	361.90	45.01
161	364.06	45.17
162	366.22	45.52
163	368.38	45.79
164	370.54	45.96
165	372.70	45.78
166	374.86	45.64
167	377.02	45.64
168	379.18	45.62
169	381.34	45.69
170	383.50	45.81
171	385.66	45.71
172	387.82	45.69

Order	Station [ft]	Elevation [ft]
173	389.98	45.73
174	392.14	45.72
175	394.30	45.82
176	396.46	45.96
177	398.18	45.81
178	399.90	45.68
179	401.62	45.57
180	403.33	45.58
181	405.05	45.63
182	406.77	45.70
183	408.49	45.61
184	410.20	45.49
185	411.92	45.41
186	413.64	45.41
187	415.36	45.35
188	417.07	45.26
189	418.79	45.23
190	420.51	45.16
191	422.23	45.12
192	423.95	45.21
193	425.66	45.25
194	427.38	45.24
195	429.10	45.20
196	430.82	45.13
197	432.53	45.15
198	434.25	45.27
199	435.97	45.24
200	437.69	45.15
201	439.40	45.02
202	441.12	45.08
203	442.84	45.14
204	444.56	45.19
205	446.27	45.28
206	447.99	45.33
207	449.71	45.33
208	451.43	45.38
209	453.62	45.27
210	455.81	45.20
211	458.01	45.18
212	460.20	45.09
213	462.39	45.05
214	464.58	45.21
215	466.78	45.27
216	468.97	45.16
217	471.16	45.17
218	473.35	45.31
219	475.55	45.44
220	477.74	45.54
221	479.93	45.74

Order	Station [ft]	Elevation [ft]
222	482.12	45.85
223	484.32	45.78
224	486.51	45.84
225	488.54	45.85
226	490.56	45.83
227	492.59	45.80
228	494.62	45.80
229	496.65	45.83
230	498.67	45.83
231	500.70	45.74
232	502.73	45.49
233	504.76	45.37
234	506.78	45.48
235	508.81	45.57
236	510.84	45.58
237	512.87	45.55
238	514.89	45.47
239	516.92	45.62
240	518.95	45.59
241	520.98	45.46
242	523.00	45.52
243	525.03	45.44
244	527.06	45.46
245	529.09	45.42
246	531.11	45.37
247	533.14	45.32
248	535.17	45.34
249	537.20	45.22
250	539.22	45.20
251	541.25	45.34
252	543.28	45.41
253	545.31	45.49
254	547.33	45.75
255	549.36	46.15
256	551.39	46.54
257	552.86	46.56
258	554.33	46.55
259	555.81	46.49
260	557.28	46.31
261	558.75	45.98
262	560.23	45.91
263	561.70	45.91
264	563.17	45.97
265	564.64	46.04
266	566.12	46.09
267	567.59	46.19
268	569.06	46.32
269	570.54	46.16
270	572.01	45.97

Order	Station [ft]	Elevation [ft]
271	573.48	45.73
272	574.95	45.60
273	576.43	45.54
274	577.90	45.56
275	579.37	45.61
276	580.84	45.69
277	582.32	45.76
278	583.79	45.81
279	585.26	45.79
280	586.74	45.75
281	588.21	45.62
282	589.68	45.55
283	591.15	45.56
284	592.63	45.56
285	594.10	45.58
286	595.57	45.61
287	597.05	45.64
288	598.52	45.65
289	599.99	45.70
290	601.46	45.76
291	602.94	45.81
292	604.41	45.82
293	605.88	45.72
294	607.35	45.70
295	608.83	45.75
296	610.30	45.87
297	611.77	46.00
298	613.25	46.00
299	614.72	45.94
300	616.19	45.79
301	617.66	45.68
302	619.14	45.59
303	620.61	45.51
304	622.08	45.48
305	623.56	45.54
306	625.03	45.56
307	626.50	45.55
308	627.97	45.54
309	629.45	45.49
310	630.92	45.32
311	632.39	45.20
312	633.86	45.13
313	635.34	45.01
314	636.81	44.93
315	638.28	45.10
316	639.76	45.21
317	641.23	45.27
318	642.70	45.34
319	644.17	45.42

Order	Station [ft]	Elevation [ft]
320	645.65	45.50
321	647.12	45.60
322	648.59	45.72
323	650.07	45.75
324	651.54	45.72
325	653.01	45.68
326	654.48	45.64
327	655.96	45.62
328	657.43	45.68
329	658.90	45.81
330	660.37	45.82
331	661.85	45.82
332	663.32	45.85
333	664.79	45.83
334	666.27	45.77
335	667.74	45.68
336	669.21	45.60
337	670.68	45.64
338	672.16	45.72
339	673.63	45.87
340	675.10	45.93
341	676.58	45.97
342	678.05	45.91
343	679.52	45.87
344	680.99	45.86
345	682.47	45.86
346	683.94	45.86
347	685.41	45.87
348	686.89	45.87
349	688.36	45.83
350	689.83	45.82
351	691.30	45.83
352	692.78	45.86
353	694.25	45.88
354	695.72	45.85
355	697.19	45.87
356	698.67	45.93
357	700.14	45.95
358	701.61	45.95
359	703.09	45.84
360	704.56	45.79
361	706.03	45.91
362	707.50	45.99
363	708.98	46.04
364	710.45	45.90
365	711.92	45.79
366	713.40	45.79
367	714.87	45.86
368	716.34	45.98

Order	Station [ft]	Elevation [ft]
369	717.81	45.87
370	719.29	45.71
371	720.76	45.58
372	722.23	45.53
373	723.70	45.60
374	725.18	45.80
375	726.65	46.03
376	728.12	46.13
377	729.60	46.15
378	731.07	46.01
379	732.54	45.90
380	734.01	45.81
381	735.49	45.90
382	736.96	46.01
383	738.43	46.13
384	739.91	46.18
385	742.26	46.13
386	744.61	45.93
387	746.96	45.82
388	749.32	45.67
389	751.67	45.53
390	754.02	45.39
391	756.38	45.33
392	758.73	45.34
393	761.08	45.45
394	763.44	45.50
395	765.79	45.45
396	768.14	45.47
397	770.49	45.51
398	772.85	45.54
399	775.20	45.46
400	777.55	45.51
401	779.91	45.55
402	782.26	45.46
403	784.61	45.43
404	786.97	45.48
405	789.32	45.57
406	791.67	45.59
407	794.02	45.56
408	796.38	45.51
409	798.73	45.60
410	801.08	45.58
411	803.44	45.45
412	805.79	45.54
413	808.14	45.55
414	810.50	45.52
415	812.85	45.60
416	815.20	45.54
417	817.55	45.37

Order	Station [ft]	Elevation [ft]
418	819.91	45.46
419	822.26	45.45
420	824.61	45.33
421	826.97	45.38
422	829.32	45.35
423	831.67	45.45
424	834.03	45.53
425	836.38	45.56
426	838.73	45.69
427	841.08	45.81
428	843.44	45.88
429	845.79	45.87
430	848.14	45.97
431	850.50	46.02
432	852.85	45.92
433	855.20	45.82
434	857.56	45.76
435	859.91	45.81
436	862.26	45.96
437	864.62	45.90
438	866.97	45.72
439	869.32	45.66
440	871.67	45.57
441	874.03	45.52
442	876.38	45.64
443	878.73	45.81
444	881.09	46.06
445	883.44	46.01
446	885.79	45.85
447	888.15	45.79
448	890.50	45.80
449	892.85	45.80
450	895.20	45.66
451	897.56	45.66
452	899.91	45.83
453	902.26	45.81
454	904.62	45.70
455	906.97	45.77
456	909.32	45.75
457	911.68	45.67
458	914.03	45.67
459	916.38	45.70
460	918.73	45.69
461	921.09	45.62
462	923.44	45.51
463	925.79	45.57
464	928.15	45.49
465	930.50	45.58
466	932.85	45.74

Order	Station [ft]	Elevation [ft]
467	935.21	45.80
468	937.56	45.72
469	939.91	45.56
470	942.26	45.48
471	944.62	45.54
472	946.97	45.67
473	949.32	45.60
474	951.68	45.36
475	954.03	45.29
476	956.38	45.26
477	958.74	45.19
478	961.09	45.23
479	963.44	45.24
480	965.79	45.17
481	968.15	45.05
482	970.50	44.95
483	972.85	44.87
484	975.21	45.06
485	977.56	45.56
486	979.91	45.75
487	982.27	45.50
488	984.62	45.46
489	986.97	45.59
490	989.33	45.66
491	991.68	45.53
492	994.03	45.48
493	996.38	45.57
494	998.74	45.77
495	1001.09	45.75
496	1003.44	45.80
497	1005.80	46.01
498	1008.15	45.94
499	1010.50	45.88
500	1012.86	45.97
501	1015.21	46.05
502	1017.56	45.99
503	1019.91	45.85
504	1022.27	45.69
505	1024.62	45.81
506	1026.97	45.86
507	1029.33	45.77
508	1031.68	45.76
509	1034.03	45.82
510	1036.39	45.97
511	1038.74	45.89
512	1041.09	45.59
513	1043.38	45.48
514	1045.67	45.70
515	1047.96	45.70

Order	Station [ft]	Elevation [ft]
516	1050.26	45.66
517	1052.55	45.72
518	1054.84	45.78
519	1057.13	45.87
520	1059.42	45.97
521	1061.71	45.98
522	1064.00	45.91
523	1066.29	45.90
524	1068.58	45.93
525	1070.87	45.93
526	1073.17	45.94
527	1075.46	46.01
528	1077.75	46.06

Comment:

Weir Cross Section: X-0440W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	45.59
1	1.40	45.81
2	2.80	46.34
3	4.20	46.82
4	5.59	46.98
5	6.99	47.13
6	8.39	47.19
7	9.79	47.23
8	11.19	47.13
9	12.59	47.04
10	13.99	47.00
11	15.38	46.97
12	16.78	46.95
13	18.18	46.86
14	19.58	46.72
15	20.98	46.56
16	22.38	46.49
17	23.78	46.48
18	25.17	46.50
19	26.57	46.50
20	27.97	46.51
21	29.37	46.51
22	30.77	46.49
23	32.17	46.64

Order	Station [ft]	Elevation [ft]
24	33.57	46.79
25	34.96	46.80
26	36.36	46.76
27	37.76	46.79
28	39.16	46.83
29	40.56	46.83
30	41.96	46.75
31	43.36	46.65
32	44.75	46.50
33	46.15	46.36
34	47.55	46.31
35	48.95	46.24
36	50.35	46.30
37	51.75	46.46
38	53.15	46.59
39	54.54	46.58
40	55.94	46.53
41	57.34	46.47
42	58.74	46.42
43	60.14	46.34
44	61.54	46.30
45	62.94	46.32
46	64.33	46.43
47	65.73	46.67
48	67.13	46.83
49	68.53	46.69
50	69.93	46.47
51	71.33	46.25
52	72.73	46.09
53	74.12	45.97
54	75.52	45.91
55	76.92	45.90
56	78.32	45.97
57	79.72	46.08
58	81.12	46.08
59	82.52	46.02
60	83.91	45.97
61	85.31	45.92
62	86.71	45.97
63	88.11	45.98
64	89.51	45.91
65	91.22	45.78
66	92.93	45.70
67	94.64	45.58
68	96.35	45.43
69	98.05	45.60
70	99.76	45.83
71	101.47	46.15
72	103.18	46.09

Order	Station [ft]	Elevation [ft]
73	104.89	45.82
74	106.60	45.73
75	108.31	45.67
76	110.02	45.67
77	111.73	45.77
78	113.43	45.82
79	115.14	45.80
80	116.85	45.87
81	118.56	45.83
82	120.27	45.65
83	121.98	45.48
84	123.69	45.42
85	125.40	45.51
86	127.11	45.61
87	128.82	45.77
88	130.52	45.86
89	132.23	45.82
90	133.94	45.70
91	135.65	45.57
92	137.36	45.45
93	139.07	45.29
94	140.78	45.27
95	142.49	45.33
96	144.20	45.31
97	145.90	45.30
98	147.61	45.37
99	149.32	45.52
100	151.03	45.62
101	152.74	45.52
102	154.45	45.39
103	156.16	45.26
104	157.87	45.13
105	159.58	44.93
106	161.28	44.68
107	162.99	44.67
108	164.70	44.75
109	166.41	44.84
110	168.12	44.85
111	169.83	44.87
112	171.54	44.92
113	173.25	44.87
114	174.96	44.80
115	176.67	44.56
116	178.37	44.46
117	180.08	44.52
118	181.79	44.50
119	183.50	44.52
120	185.21	44.57
121	186.92	44.54

Order	Station [ft]	Elevation [ft]
122	188.63	44.53
123	190.34	44.62
124	192.05	44.68
125	193.75	44.71
126	195.46	44.65
127	197.17	44.65
128	198.88	44.65
129	200.48	44.62
130	202.08	44.61
131	203.67	44.60
132	205.27	44.59
133	206.87	44.66
134	208.47	44.63
135	210.06	44.53
136	211.66	44.62
137	213.26	44.65
138	214.86	44.59
139	216.45	44.59
140	218.05	44.64
141	219.65	44.75
142	221.25	44.79
143	222.84	44.77
144	224.44	44.79
145	226.04	44.80
146	227.64	44.83
147	229.23	44.94
148	230.83	44.96
149	232.43	44.96
150	234.02	45.09
151	235.62	45.15
152	237.22	45.15
153	238.82	45.25
154	240.41	45.36
155	242.01	45.34
156	243.61	45.39
157	245.21	45.42
158	246.80	45.38
159	248.40	45.39
160	250.00	45.54
161	251.60	45.65
162	253.19	45.69
163	254.79	45.62
164	256.39	45.49
165	257.99	45.37
166	259.58	45.32
167	261.18	45.38
168	262.78	45.48
169	264.38	45.62
170	265.97	45.60

Order	Station [ft]	Elevation [ft]
171	267.57	45.61
172	269.17	45.64
173	270.77	45.68
174	272.36	45.73
175	273.96	45.68
176	275.56	45.68
177	277.16	45.80
178	278.75	45.83
179	280.35	45.81
180	281.95	45.61
181	283.54	45.32
182	285.14	45.26
183	286.74	45.25
184	288.34	45.23
185	289.93	45.36
186	291.53	45.57
187	293.13	45.62
188	294.73	45.63
189	296.32	45.60
190	297.92	45.53
191	299.52	45.43
192	301.12	45.16
193	302.78	44.89
194	304.43	44.59
195	306.09	44.33
196	307.75	44.22
197	309.41	44.17
198	311.07	44.12
199	312.73	44.01
200	314.39	44.01
201	316.05	44.04
202	317.70	44.10
203	319.36	44.24
204	321.02	44.33
205	322.68	44.36
206	324.34	44.60
207	326.00	44.89
208	327.66	45.15
209	329.32	45.33
210	330.97	45.42
211	332.63	45.53
212	334.29	45.82
213	335.95	46.07
214	337.61	46.39
215	339.27	46.59
216	340.93	46.69
217	342.59	46.95
218	344.25	47.19
219	345.90	47.39

Order	Station [ft]	Elevation [ft]
220	347.56	47.49
221	349.22	47.42
222	350.88	47.26
223	352.54	47.24
224	354.20	47.19
225	355.70	47.34
226	357.20	47.45
227	358.69	47.49
228	360.19	47.59
229	361.69	47.59
230	363.19	47.53
231	364.69	47.23
232	366.19	46.76
233	367.69	46.34
234	369.18	46.00
235	370.68	45.75
236	372.18	45.51
237	373.68	45.22
238	375.18	44.99
239	376.68	44.85
240	378.18	44.82
241	379.67	44.84
242	381.17	45.10
243	382.67	45.30
244	384.17	45.39
245	385.67	45.29
246	387.17	45.05
247	388.67	44.96
248	390.17	44.94
249	391.66	45.01
250	393.16	45.05
251	394.66	45.05
252	396.16	45.06
253	397.66	45.12
254	399.16	45.18
255	400.66	45.22
256	402.15	45.23
257	403.57	45.25
258	404.98	45.30
259	406.39	45.27
260	407.80	45.21
261	409.21	45.27
262	410.62	45.30
263	412.03	45.24
264	413.44	45.23
265	414.85	45.27
266	416.26	45.28
267	417.67	45.28
268	419.08	45.33

Order	Station [ft]	Elevation [ft]
269	420.49	45.37
270	421.91	45.35
271	423.32	45.35
272	424.73	45.37
273	426.14	45.43
274	427.55	45.51
275	428.96	45.49
276	430.37	45.43
277	431.78	45.40
278	433.19	45.37
279	434.60	45.36
280	436.01	45.34
281	437.42	45.32
282	438.83	45.30
283	440.25	45.29
284	441.66	45.30
285	443.07	45.30
286	444.48	45.31
287	445.89	45.31
288	447.30	45.31
289	448.71	45.30
290	450.12	45.27
291	451.53	45.33
292	452.94	45.40
293	454.35	45.56
294	455.76	45.65
295	457.18	45.63
296	458.59	45.54
297	460.00	45.40
298	461.41	45.31
299	462.82	45.23
300	464.23	45.27
301	465.64	45.33
302	467.05	45.45
303	468.46	45.55
304	469.87	45.62
305	471.28	45.63
306	472.69	45.60
307	474.10	45.51
308	475.52	45.44
309	476.93	45.45
310	478.34	45.44
311	479.75	45.42
312	481.16	45.43
313	482.57	45.45
314	483.98	45.38
315	485.39	45.30
316	486.80	45.27
317	488.21	45.26

Order	Station [ft]	Elevation [ft]
318	489.62	45.32
319	491.03	45.34
320	492.44	45.34
321	493.86	45.29
322	495.27	45.22
323	496.68	45.17
324	498.09	45.12
325	499.50	45.06
326	500.91	45.01
327	502.32	44.99
328	503.73	44.96
329	505.14	44.94
330	506.55	44.94
331	507.96	44.94
332	509.37	44.93
333	510.79	44.92
334	512.20	44.89
335	513.61	44.83
336	515.02	44.76
337	516.43	44.79
338	517.84	44.85
339	519.25	44.86
340	520.66	44.88
341	522.07	44.91
342	523.48	44.96
343	524.89	45.01
344	526.30	45.01
345	527.71	44.99
346	529.13	44.96
347	530.54	44.91
348	531.95	44.84
349	533.36	44.81
350	534.77	44.83
351	536.18	44.84
352	537.59	44.85
353	539.00	44.85
354	540.41	44.85
355	541.82	44.92
356	543.23	44.98
357	544.64	44.97
358	546.05	44.96
359	547.47	44.93
360	548.88	44.87
361	550.29	44.81
362	551.70	44.88
363	553.11	44.93
364	554.52	44.88
365	555.93	44.85
366	557.34	44.85

Order	Station [ft]	Elevation [ft]
367	558.75	44.83
368	560.16	44.80
369	561.57	44.81
370	562.98	44.82
371	564.40	44.81
372	565.81	44.81
373	567.22	44.83
374	568.63	44.83
375	570.04	44.83
376	571.45	44.84
377	572.86	44.84
378	574.27	44.86
379	575.68	44.87
380	577.09	44.86
381	578.50	44.85
382	579.91	44.84
383	581.32	44.85
384	582.74	44.86
385	584.46	44.89
386	586.19	44.89
387	587.92	44.89
388	589.65	44.84
389	591.38	44.83
390	593.10	44.84
391	594.83	44.86
392	596.56	44.88
393	598.29	44.89
394	600.02	44.84
395	601.75	44.85
396	603.47	44.84
397	605.20	44.82
398	606.93	44.76
399	608.66	44.74
400	610.39	44.74
401	612.11	44.81
402	613.84	44.84
403	615.57	44.86
404	617.30	44.84
405	619.03	44.81
406	620.76	44.79
407	622.48	44.81
408	624.21	44.84
409	625.94	44.89
410	627.67	44.96
411	629.40	45.01
412	631.13	45.03
413	632.85	45.03
414	634.58	45.02
415	636.31	45.00

Order	Station [ft]	Elevation [ft]
416	638.04	44.97
417	639.77	45.00
418	641.49	45.02
419	643.22	45.03
420	644.95	45.02
421	646.68	45.03
422	648.41	45.04
423	650.14	45.04
424	651.86	45.05
425	653.59	45.07
426	655.32	45.10
427	657.05	45.11
428	658.78	45.08
429	660.50	45.04
430	662.23	45.05
431	663.96	45.06
432	665.69	45.07
433	667.42	45.04
434	669.15	45.03
435	670.87	45.04
436	672.60	45.07
437	674.33	45.11
438	676.06	45.14
439	677.79	45.14
440	679.51	45.13
441	681.24	45.14
442	682.97	45.17
443	684.70	45.13
444	686.43	45.11
445	688.16	45.09
446	689.88	45.04
447	691.61	45.03
448	693.34	45.03
449	695.07	45.05
450	696.80	45.06
451	698.52	45.06
452	700.25	45.05
453	701.98	45.01
454	703.71	45.00
455	705.44	45.02
456	707.17	45.04
457	708.89	45.02
458	710.62	44.99
459	712.35	44.94
460	714.08	44.96
461	715.81	45.01
462	717.53	45.07
463	719.26	45.07
464	720.99	45.06

Order	Station [ft]	Elevation [ft]
465	722.72	45.06
466	724.45	45.03
467	726.18	45.01
468	727.90	44.98
469	729.63	44.99
470	731.36	44.96
471	733.09	44.92
472	734.82	44.93
473	736.54	44.94
474	738.27	44.93
475	740.00	44.92
476	741.73	44.90
477	743.46	44.90
478	745.19	44.92
479	746.91	44.97
480	748.64	44.98
481	750.37	44.94
482	752.10	44.89
483	753.83	44.85
484	755.56	44.83
485	757.28	44.86
486	759.01	44.90
487	760.74	44.93
488	762.47	44.92
489	764.20	44.92
490	765.92	44.94
491	767.65	44.97
492	769.38	44.92
493	771.11	44.90
494	772.84	44.93
495	774.57	44.93
496	776.29	44.94
497	778.02	44.96
498	779.75	45.00
499	781.48	45.02
500	783.21	45.03
501	784.93	45.09
502	786.66	45.09
503	788.39	45.05
504	790.12	44.99
505	791.85	44.95
506	793.58	44.91
507	795.30	44.88
508	797.03	44.88
509	798.76	44.87
510	800.49	44.87
511	802.22	44.85
512	803.94	44.85

Comment:

Weir Cross Section: X-0460W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	45.76
1	1.77	45.70
2	3.53	45.57
3	5.30	45.42
4	7.07	45.25
5	8.83	45.14
6	10.60	45.06
7	12.36	44.97
8	14.13	44.87
9	15.90	44.79
10	17.66	44.71
11	19.43	44.61
12	21.20	44.48
13	22.96	44.35
14	24.73	44.22
15	26.50	44.09
16	28.26	43.96
17	30.03	43.84
18	31.79	43.74
19	33.56	43.66
20	35.33	43.59
21	37.09	43.54
22	38.86	43.54
23	40.63	43.52
24	42.39	43.51
25	44.16	43.49
26	45.93	43.45
27	47.69	43.42
28	49.46	43.39
29	51.23	43.40
30	52.99	43.39
31	54.76	43.39
32	56.52	43.40
33	58.29	43.44
34	60.06	43.49
35	61.82	43.53
36	63.59	43.53
37	65.36	43.55
38	67.12	43.57

Order	Station [ft]	Elevation [ft]
39	68.89	43.59
40	70.66	43.59
41	72.42	43.60
42	74.19	43.62
43	75.95	43.64
44	77.72	43.67
45	79.49	43.70
46	81.25	43.82
47	83.02	43.90
48	84.79	43.97
49	86.55	44.08
50	88.32	44.13
51	90.09	44.13
52	91.85	44.11
53	93.62	44.13
54	95.38	44.19
55	97.15	44.28
56	98.92	44.36
57	100.68	44.40
58	102.45	44.42
59	104.22	44.48
60	105.98	44.58
61	107.75	44.66
62	109.52	44.71
63	111.28	44.63
64	113.05	44.65
65	114.82	44.72
66	116.58	44.66
67	118.35	44.67
68	120.11	44.74
69	121.88	44.84
70	123.65	45.03
71	125.41	45.24
72	127.18	45.42
73	128.95	45.45
74	130.71	45.49
75	132.48	45.53
76	134.25	45.54
77	136.01	45.41
78	137.78	45.24
79	139.54	45.06
80	141.31	45.22
81	143.08	45.34
82	144.84	45.41
83	146.61	45.45
84	148.38	45.48
85	150.14	45.50
86	151.91	45.50
87	153.68	45.58

Order	Station [ft]	Elevation [ft]
88	155.44	45.60
89	157.21	45.56
90	158.97	45.59
91	160.74	45.47
92	162.51	45.29
93	164.27	45.15
94	166.04	45.00
95	167.81	44.91
96	169.57	44.90
97	171.34	45.00
98	173.11	44.99
99	174.87	44.93
100	176.64	44.95
101	178.41	44.91
102	180.17	44.89
103	181.94	44.92
104	183.70	44.88
105	185.47	44.88
106	187.24	44.95
107	189.00	45.00
108	190.77	45.03
109	192.54	45.04
110	194.30	45.00
111	196.07	44.99
112	197.84	45.03
113	199.60	45.10
114	201.37	45.11
115	203.13	45.04
116	204.90	44.91
117	206.67	44.85
118	208.43	44.94
119	210.20	45.04
120	211.97	45.04
121	213.73	45.00
122	215.50	44.95
123	217.27	44.89
124	219.03	44.89
125	220.80	44.87
126	222.56	44.86
127	224.33	44.87
128	226.10	44.85

Comment:

Weir Cross Section: X-0730W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	136.02
1	1.63	136.04
2	3.26	136.04
3	4.89	136.05
4	6.53	136.06
5	8.16	136.06
6	9.79	136.06
7	11.42	136.06
8	13.05	136.08
9	14.68	136.08
10	16.31	136.08
11	17.94	136.09
12	19.58	136.10
13	21.21	136.10
14	22.84	136.11
15	24.47	136.12
16	26.10	136.13
17	27.73	136.12
18	29.36	136.11
19	30.99	136.13
20	32.63	136.14
21	34.26	136.14
22	35.89	136.13
23	37.52	136.13
24	39.15	136.12
25	40.78	136.11
26	42.41	136.10
27	44.05	136.09
28	45.68	136.06
29	47.31	136.07
30	48.94	136.09
31	50.57	136.26
32	52.20	136.39
33	53.83	136.48
34	55.46	136.52
35	57.10	136.55
36	58.73	136.57
37	60.36	136.65
38	61.99	136.70
39	63.62	136.67
40	65.25	136.68
41	66.88	136.70
42	68.52	136.70
43	70.15	136.64
44	71.78	136.56
45	73.41	136.46

Order	Station [ft]	Elevation [ft]
46	75.04	136.44
47	76.67	136.46
48	78.30	136.44
49	79.93	136.40
50	81.57	136.35
51	83.20	136.32
52	84.83	136.30
53	86.46	136.29
54	88.09	136.28
55	89.72	136.29
56	91.35	136.32
57	92.98	136.30
58	94.62	136.28
59	96.25	136.25
60	97.88	136.23
61	99.51	136.20
62	101.14	136.15
63	102.77	136.13
64	104.40	136.11
65	106.37	136.14
66	108.33	136.19
67	110.29	136.19
68	112.25	136.25
69	114.21	136.28
70	116.17	136.20
71	118.13	136.07
72	120.10	136.03
73	122.06	135.92
74	124.02	135.87
75	125.98	135.86
76	127.94	135.83
77	129.90	135.82
78	131.86	135.80
79	133.83	135.75
80	135.79	135.69
81	137.75	135.61
82	139.71	135.60
83	141.67	135.57
84	143.63	135.53
85	145.59	135.45
86	147.56	135.41
87	149.52	135.36
88	151.48	135.31
89	153.44	135.27
90	155.40	135.22
91	157.36	135.21
92	159.32	135.10
93	161.29	135.03
94	163.25	135.04

Order	Station [ft]	Elevation [ft]
95	165.21	135.02
96	167.17	134.91
97	169.00	134.90
98	170.84	134.90
99	172.67	134.90
100	174.51	134.89
101	176.34	134.89
102	178.18	134.86
103	180.01	134.81
104	181.85	134.79
105	183.68	134.78
106	185.51	134.78
107	187.35	134.73
108	189.18	134.67
109	191.02	134.61
110	192.85	134.55
111	194.69	134.49
112	196.52	134.44
113	198.35	134.40
114	200.19	134.37
115	202.02	134.32
116	203.86	134.23
117	205.69	134.17
118	207.53	134.12
119	209.36	134.05
120	211.20	133.98
121	213.03	133.90
122	214.86	133.82
123	216.70	133.74
124	218.53	133.67
125	220.37	133.60
126	222.20	133.52
127	224.04	133.45
128	225.87	133.38
129	227.70	133.31
130	229.54	133.21
131	231.37	133.17
132	233.21	133.18
133	235.04	133.20
134	236.88	133.19
135	238.71	133.17
136	240.54	133.19
137	242.38	133.20
138	244.21	133.21
139	246.05	133.20
140	247.88	133.16
141	249.72	133.14
142	251.55	133.14
143	253.39	133.14

Order	Station [ft]	Elevation [ft]
144	255.22	133.20
145	257.05	133.23
146	258.89	133.25
147	260.72	133.30
148	262.56	133.37
149	264.39	133.40
150	266.23	133.42
151	268.06	133.42
152	269.89	133.44
153	271.73	133.53
154	273.56	133.61
155	275.40	133.66
156	277.23	133.74
157	279.07	133.84
158	280.90	133.93
159	282.74	133.99
160	284.57	134.10
161	286.40	134.19
162	288.24	134.24
163	290.07	134.28
164	291.91	134.31
165	293.74	134.38
166	295.58	134.40
167	297.41	134.36
168	299.24	134.31
169	301.08	134.29
170	302.91	134.24
171	304.75	134.24
172	306.58	134.36
173	308.42	134.31
174	310.25	134.22
175	312.08	134.14
176	313.92	134.12
177	315.75	134.09
178	317.59	134.03
179	319.42	134.01
180	321.26	133.97
181	323.09	133.97
182	324.93	134.00
183	326.76	134.06
184	328.59	134.11
185	330.43	134.14
186	332.26	134.18
187	334.10	134.22
188	335.93	134.23
189	337.77	134.25
190	339.60	134.29
191	341.43	134.37
192	343.27	134.39

Order	Station [ft]	Elevation [ft]
193	345.10	134.43
194	346.94	134.55
195	348.77	134.60
196	350.61	134.66
197	352.44	134.76
198	354.28	134.86
199	356.11	134.86
200	357.94	134.87
201	359.78	134.96
202	361.61	135.00
203	363.45	135.00
204	365.28	135.00
205	367.12	135.05
206	368.95	135.17
207	370.78	135.29
208	372.62	135.22
209	374.45	135.12
210	376.29	134.98
211	378.12	134.87
212	379.96	134.94
213	381.79	135.03
214	383.62	135.07
215	385.46	135.03
216	387.29	134.99
217	389.13	134.91
218	390.96	134.87
219	392.80	134.81
220	394.63	134.76
221	396.47	134.81
222	398.30	134.79
223	400.13	134.78
224	401.97	134.77
225	404.33	134.76
226	406.70	134.69
227	409.07	134.64
228	411.43	134.66
229	413.80	134.74
230	416.16	134.93
231	418.53	135.06
232	420.90	135.09
233	423.26	135.06
234	425.63	135.04
235	428.00	135.07
236	430.36	135.06
237	432.73	135.04
238	435.09	135.02
239	437.46	134.93
240	439.83	134.83
241	442.19	134.69

Order	Station [ft]	Elevation [ft]
242	444.56	134.59
243	446.92	134.64
244	449.29	134.67
245	451.66	134.62
246	454.02	134.57
247	456.39	134.61
248	458.75	134.70
249	461.12	134.82
250	463.49	134.93
251	465.85	134.85
252	468.22	135.03
253	470.58	135.14
254	472.95	135.09
255	475.32	134.89
256	477.68	134.73
257	480.05	134.67
258	482.41	134.55
259	484.78	134.60
260	487.15	134.53
261	489.51	134.37
262	491.88	134.50
263	494.25	134.58
264	496.61	134.53
265	498.98	134.48
266	501.34	134.50
267	503.71	134.55
268	506.08	134.64
269	508.44	134.69
270	510.81	134.71
271	513.17	134.80
272	515.54	134.90
273	517.91	134.90
274	520.27	134.75
275	522.64	134.79
276	525.00	134.80
277	527.37	134.75
278	529.74	134.70
279	532.10	134.56
280	534.47	134.46
281	536.83	134.39
282	539.20	134.30
283	541.57	134.31
284	543.93	134.30
285	546.30	134.25
286	548.66	134.20
287	551.03	134.27
288	553.40	134.40
289	554.89	134.45
290	556.39	134.49

Order	Station [ft]	Elevation [ft]
291	557.89	134.52
292	559.39	134.54
293	560.89	134.58
294	562.38	134.67
295	563.88	134.72
296	565.38	134.66
297	566.88	134.53
298	568.37	134.40
299	569.87	134.29
300	571.37	134.16
301	572.87	134.08
302	574.37	134.11
303	575.86	134.13
304	577.36	134.10
305	578.86	134.10
306	580.36	134.20
307	581.85	134.32
308	583.35	134.46
309	584.85	134.57
310	586.35	134.51
311	587.84	134.50
312	589.34	134.50
313	590.84	134.47
314	592.34	134.50
315	593.84	134.52
316	595.33	134.55
317	596.83	134.50
318	598.33	134.37
319	599.83	134.30
320	601.32	134.27
321	602.82	134.26
322	604.32	134.28
323	605.82	134.32
324	607.31	134.35
325	608.81	134.37
326	610.31	134.45
327	611.81	134.49
328	613.31	134.56
329	614.80	134.70
330	616.30	134.81
331	617.80	134.82
332	619.30	134.78
333	620.79	134.74
334	622.29	134.68
335	623.79	134.63
336	625.29	134.62
337	626.79	134.62
338	628.28	134.58
339	629.78	134.47

Order	Station [ft]	Elevation [ft]
340	631.28	134.43
341	632.78	134.43
342	634.27	134.44
343	635.77	134.51
344	637.27	134.56
345	638.77	134.65
346	640.26	134.72
347	641.76	134.75
348	643.26	134.76
349	644.76	134.76
350	646.26	134.73
351	647.75	134.78
352	649.25	134.78
353	650.75	134.76
354	652.25	134.76
355	653.74	134.71
356	655.24	134.74
357	656.74	134.75
358	658.24	134.78
359	659.73	134.74
360	661.23	134.60
361	662.73	134.53
362	664.23	134.52
363	665.73	134.54
364	667.22	134.59
365	668.72	134.68
366	670.22	134.77
367	671.72	134.83
368	673.21	134.88
369	674.71	134.89
370	676.21	134.90
371	677.71	134.86
372	679.21	134.79
373	680.70	134.73
374	682.20	134.78
375	683.70	134.80
376	685.20	134.77
377	686.69	134.68
378	688.19	134.59
379	689.69	134.51
380	691.19	134.46
381	692.68	134.43
382	694.18	134.45
383	695.68	134.44
384	697.18	134.41
385	698.68	134.41
386	700.17	134.49
387	701.67	134.54
388	703.17	134.57

Order	Station [ft]	Elevation [ft]
389	704.67	134.64
390	706.16	134.73
391	707.66	134.79
392	709.16	134.76
393	710.66	134.70
394	712.16	134.76
395	713.65	134.82
396	715.15	134.84
397	716.65	134.81
398	718.15	134.71
399	719.64	134.60
400	721.14	134.54
401	722.64	134.51
402	724.14	134.47
403	725.63	134.39
404	727.13	134.36
405	728.63	134.37
406	730.13	134.31
407	731.63	134.22
408	733.12	134.21
409	734.62	134.30
410	736.12	134.39
411	737.62	134.48
412	739.11	134.48
413	740.61	134.40
414	742.11	134.32
415	743.61	134.24
416	745.10	134.13
417	746.88	133.99
418	748.66	133.94
419	750.44	133.83
420	752.22	133.78
421	754.00	133.80
422	755.78	133.78
423	757.56	133.80
424	759.34	133.91
425	761.12	133.95
426	762.90	133.95
427	764.68	134.01
428	766.46	134.07
429	768.24	134.05
430	770.02	133.99
431	771.80	133.88
432	773.58	133.87
433	775.36	133.92
434	777.14	133.79
435	778.92	133.70
436	780.70	133.77
437	782.48	133.81

Order	Station [ft]	Elevation [ft]
438	784.26	133.80
439	786.04	133.82
440	787.82	133.85
441	789.60	133.88
442	791.38	133.88
443	793.16	133.81
444	794.94	133.85
445	796.72	134.00
446	798.50	133.97
447	800.28	133.95
448	802.06	133.84
449	803.84	133.76
450	805.62	133.70
451	807.40	133.63
452	809.18	133.60
453	810.96	133.67
454	812.74	133.70
455	814.52	133.68
456	816.30	133.77
457	818.08	133.94
458	819.86	134.04
459	821.64	134.10
460	823.42	134.02
461	825.20	133.97
462	826.98	133.98
463	828.76	133.93
464	830.54	133.85
465	832.32	133.69
466	834.10	133.62
467	835.88	133.65
468	837.66	133.64
469	839.44	133.65
470	841.22	133.65
471	843.00	133.66
472	844.78	133.78
473	846.56	133.89
474	848.34	133.92
475	850.12	133.94
476	851.90	133.96
477	853.68	134.01
478	855.46	134.01
479	857.24	133.98
480	859.02	133.92
481	860.80	133.87
482	862.58	133.83
483	864.36	133.80
484	866.14	133.74
485	867.92	133.75
486	869.70	133.79

Order	Station [ft]	Elevation [ft]
487	871.48	133.83
488	873.26	133.91
489	875.04	133.90
490	876.82	133.85
491	878.60	133.78
492	880.38	133.77
493	882.16	133.81
494	883.94	133.80
495	885.72	133.84
496	887.50	133.85
497	889.28	133.79
498	891.06	133.67
499	892.84	133.59
500	894.62	133.50
501	896.40	133.48
502	898.18	133.47
503	899.96	133.47
504	901.74	133.50
505	903.52	133.57
506	905.30	133.57
507	907.08	133.56
508	908.86	133.52
509	910.64	133.47
510	912.42	133.50
511	914.20	133.51
512	915.98	133.46
513	917.76	133.34
514	919.54	133.24
515	921.32	133.34
516	923.10	133.42
517	924.88	133.31
518	926.66	133.22
519	928.44	133.18
520	930.22	133.12
521	932.00	133.10
522	933.78	133.14
523	935.56	133.15
524	937.34	133.18
525	939.12	133.22
526	940.90	133.23
527	942.68	133.24
528	944.46	133.25
529	946.24	133.25
530	948.02	133.21
531	949.80	133.12
532	951.58	132.94
533	953.36	132.74
534	955.14	132.74
535	956.92	132.69

Order	Station [ft]	Elevation [ft]
536	958.70	132.69
537	960.48	132.68
538	962.26	132.68
539	964.04	132.74
540	965.82	132.84
541	967.60	132.85
542	969.38	132.79
543	971.16	132.79
544	972.94	132.80
545	974.76	132.79
546	976.57	132.76
547	978.38	132.77
548	980.20	132.74
549	982.01	132.68
550	983.83	132.73
551	985.64	132.79
552	987.45	132.86
553	989.27	132.89
554	991.08	132.94
555	992.90	132.99
556	994.71	133.07
557	996.52	133.13
558	998.34	133.16
559	1000.15	133.18
560	1001.97	133.21
561	1003.78	133.14
562	1005.59	133.07
563	1007.41	133.04
564	1009.22	133.04
565	1011.04	133.02
566	1012.85	132.97
567	1014.66	132.99
568	1016.48	132.96
569	1018.29	132.92
570	1020.11	132.86
571	1021.92	132.82
572	1023.73	132.82
573	1025.55	132.81
574	1027.36	132.75
575	1029.18	132.63
576	1030.99	132.54
577	1032.80	132.59
578	1034.62	132.63
579	1036.43	132.66
580	1038.25	132.68
581	1040.06	132.67
582	1041.87	132.65
583	1043.69	132.64
584	1045.50	132.67

Order	Station [ft]	Elevation [ft]
585	1047.32	132.73
586	1049.13	132.70
587	1050.94	132.60
588	1052.76	132.57
589	1054.57	132.57
590	1056.39	132.53
591	1058.20	132.40
592	1060.01	132.41
593	1061.83	132.41
594	1063.64	132.41
595	1065.46	132.47
596	1067.27	132.54
597	1069.08	132.60
598	1070.90	132.63
599	1072.71	132.50
600	1074.53	132.38
601	1076.34	132.23
602	1078.15	132.09
603	1079.97	132.15
604	1081.78	132.23
605	1083.60	132.17
606	1085.41	132.27
607	1087.22	132.40
608	1089.04	132.52
609	1090.85	132.52
610	1092.67	132.50
611	1094.48	132.46
612	1096.29	132.47
613	1098.11	132.37
614	1099.92	132.25
615	1101.74	132.14
616	1103.55	132.00
617	1105.36	131.96
618	1107.18	131.94
619	1108.99	131.85
620	1110.81	131.91
621	1112.62	132.01
622	1114.43	132.12
623	1116.25	132.07
624	1118.06	132.07
625	1119.88	132.07
626	1121.69	132.06
627	1123.50	131.92
628	1125.32	131.74
629	1127.13	131.54
630	1128.95	131.76
631	1130.76	131.82
632	1132.57	131.80
633	1134.39	131.80

Order	Station [ft]	Elevation [ft]
634	1136.20	131.97
635	1138.02	132.15
636	1139.83	132.34
637	1141.64	132.36
638	1143.46	132.44
639	1145.27	132.50
640	1147.09	132.45
641	1148.90	132.35
642	1150.71	132.26
643	1152.53	132.17
644	1154.34	132.23
645	1156.16	132.23
646	1157.97	132.24
647	1159.78	132.35
648	1161.60	132.47
649	1163.41	132.58
650	1165.23	132.69
651	1167.04	132.70
652	1168.85	132.67
653	1170.67	132.60
654	1172.48	132.54
655	1174.30	132.35
656	1176.11	132.18
657	1177.92	132.07
658	1179.74	132.14
659	1181.55	132.13
660	1183.37	132.13
661	1185.18	132.30
662	1186.99	132.42
663	1188.81	132.46
664	1190.62	132.42
665	1192.44	132.40
666	1194.25	132.33
667	1196.06	132.26
668	1197.88	132.26
669	1199.69	132.10
670	1201.51	132.00
671	1203.32	132.00
672	1205.13	132.01
673	1206.58	131.99
674	1208.02	131.99
675	1209.47	132.00
676	1210.91	132.07
677	1212.36	132.15
678	1213.80	132.22
679	1215.25	132.29
680	1216.69	132.27
681	1218.14	132.25
682	1219.58	132.26

Order	Station [ft]	Elevation [ft]
683	1221.03	132.26
684	1222.47	132.16
685	1223.91	132.05
686	1225.36	131.93
687	1226.80	131.74
688	1228.25	131.59
689	1229.69	131.65
690	1231.14	131.74
691	1232.58	131.82
692	1234.03	131.90
693	1235.47	131.88
694	1236.92	131.82
695	1238.36	131.88
696	1239.80	131.92
697	1241.25	131.97
698	1242.69	132.07
699	1244.14	132.18
700	1245.58	132.28
701	1247.03	132.34
702	1248.47	132.35
703	1249.92	132.38
704	1251.36	132.45
705	1252.81	132.52
706	1254.25	132.52
707	1255.69	132.48
708	1257.14	132.34
709	1258.58	132.28
710	1260.03	132.29
711	1261.47	132.31
712	1262.92	132.32
713	1264.36	132.34
714	1265.81	132.36
715	1267.25	132.38
716	1268.70	132.50
717	1270.14	132.69
718	1271.59	132.79
719	1273.03	132.80
720	1274.47	132.82
721	1275.92	132.87
722	1277.36	132.90
723	1278.81	132.84
724	1280.25	132.80
725	1281.70	132.81
726	1283.14	132.81
727	1284.59	132.66
728	1286.03	132.48
729	1287.48	132.34
730	1288.92	132.21
731	1290.36	132.16

Order	Station [ft]	Elevation [ft]
732	1291.81	132.22
733	1293.25	132.25
734	1294.70	132.20
735	1296.14	132.17
736	1297.59	132.10
737	1299.03	132.08
738	1300.48	132.21
739	1301.92	132.27
740	1303.37	132.33
741	1304.81	132.43
742	1306.25	132.48
743	1307.70	132.50
744	1309.14	132.52
745	1310.59	132.54
746	1312.03	132.49
747	1313.48	132.41
748	1314.92	132.33
749	1316.37	132.23
750	1317.81	132.14
751	1319.26	132.08
752	1320.70	132.05
753	1322.15	132.05
754	1323.59	132.04
755	1325.03	131.98
756	1326.48	131.92
757	1327.92	132.02
758	1329.37	132.16
759	1330.81	132.22
760	1332.26	132.25
761	1333.70	132.29
762	1335.15	132.28
763	1336.59	132.27
764	1338.04	132.24
765	1339.48	132.22
766	1340.92	132.29
767	1342.37	132.36
768	1343.81	132.36
769	1345.26	132.34
770	1346.70	132.18
771	1348.15	132.01
772	1349.59	132.00
773	1351.04	132.04
774	1352.48	132.05
775	1353.93	132.04
776	1355.37	132.04
777	1356.81	132.06
778	1358.26	132.08
779	1359.70	132.14
780	1361.15	132.21

Order	Station [ft]	Elevation [ft]
781	1362.59	132.27
782	1364.04	132.35
783	1365.48	132.39
784	1366.93	132.45
785	1368.37	132.47
786	1369.82	132.41
787	1371.26	132.34
788	1372.70	132.26
789	1374.15	132.23
790	1375.59	132.19
791	1377.04	132.13
792	1378.48	132.05
793	1379.93	132.01
794	1381.37	132.03
795	1382.82	132.04
796	1384.26	132.07
797	1385.71	132.10
798	1387.15	132.08
799	1388.60	132.09
800	1390.04	132.21
801	1392.22	132.38
802	1394.40	132.41
803	1396.58	132.45
804	1398.76	132.51
805	1400.94	132.57
806	1403.12	132.67
807	1405.30	132.81
808	1407.47	132.95
809	1409.65	132.89
810	1411.83	132.88
811	1414.01	132.87
812	1416.19	132.85
813	1418.37	132.90
814	1420.55	133.02
815	1422.73	133.07
816	1424.91	133.14
817	1427.09	132.99
818	1429.27	132.96
819	1431.45	132.96
820	1433.63	132.98
821	1435.81	132.98
822	1437.99	132.92
823	1440.16	132.81
824	1442.34	132.80
825	1444.52	132.75
826	1446.70	132.75
827	1448.88	132.78
828	1451.06	132.86
829	1453.24	132.92

Order	Station [ft]	Elevation [ft]
830	1455.42	132.91
831	1457.60	132.87
832	1459.78	132.78
833	1461.96	132.95
834	1464.14	133.05
835	1466.32	133.13
836	1468.50	133.17
837	1470.68	133.10
838	1472.86	132.89
839	1475.03	132.87
840	1477.21	132.89
841	1479.39	132.89
842	1481.57	132.89
843	1483.75	132.89
844	1485.93	132.90
845	1488.11	132.87
846	1490.29	132.81
847	1492.47	132.89
848	1494.65	132.94
849	1496.83	133.00
850	1499.01	133.07
851	1501.19	133.20
852	1503.37	133.26
853	1505.55	133.13
854	1507.73	133.12
855	1509.90	133.18
856	1512.08	133.16
857	1514.26	133.22
858	1516.44	133.22
859	1518.62	133.12
860	1520.80	133.04
861	1522.98	133.11
862	1525.16	133.18
863	1527.34	133.29
864	1529.52	133.28
865	1530.86	133.28
866	1532.21	133.22
867	1533.55	133.12
868	1534.89	133.01
869	1536.24	132.92
870	1537.58	132.89
871	1538.92	132.81
872	1540.27	132.74
873	1541.61	132.67
874	1542.95	132.68
875	1544.29	132.68
876	1545.64	132.69
877	1546.98	132.69
878	1548.32	132.69

Order	Station [ft]	Elevation [ft]
879	1549.67	132.65
880	1551.01	132.60
881	1552.35	132.51
882	1553.70	132.39
883	1555.04	132.30
884	1556.38	132.45
885	1557.73	132.56
886	1559.07	132.61
887	1560.41	132.62
888	1561.76	132.60
889	1563.10	132.57
890	1564.44	132.57
891	1565.79	132.59
892	1567.13	132.61
893	1568.47	132.64
894	1569.82	132.61
895	1571.16	132.45
896	1572.50	132.32
897	1573.85	132.31
898	1575.19	132.31
899	1576.53	132.32
900	1577.88	132.33
901	1579.22	132.33
902	1580.56	132.33
903	1581.91	132.30
904	1583.25	132.19
905	1584.59	132.10
906	1585.94	132.01
907	1587.28	131.95
908	1588.62	131.92
909	1589.97	131.91
910	1591.31	131.90
911	1592.65	131.89
912	1594.00	131.89
913	1595.34	131.89
914	1596.68	131.90
915	1598.03	131.88
916	1599.37	131.87
917	1600.71	131.88
918	1602.06	131.88
919	1603.40	131.87
920	1604.74	131.88
921	1606.09	131.90
922	1607.43	131.90
923	1608.77	131.86
924	1610.12	131.93
925	1611.46	132.00
926	1612.80	132.02
927	1614.15	132.01

Order	Station [ft]	Elevation [ft]
928	1615.49	132.03
929	1617.00	132.03
930	1618.52	132.02
931	1620.03	132.00
932	1621.54	131.92
933	1623.06	131.90
934	1624.57	131.97
935	1626.08	132.00
936	1627.60	132.03
937	1629.11	132.07
938	1630.63	132.11
939	1632.14	132.13
940	1633.65	132.12
941	1635.17	132.09
942	1636.68	132.09
943	1638.19	132.13
944	1639.71	132.20
945	1641.22	132.23
946	1642.73	132.22
947	1644.25	132.14
948	1645.76	132.09
949	1647.27	132.05
950	1648.79	132.03
951	1650.30	131.99
952	1651.81	131.91
953	1653.33	131.79
954	1654.84	131.66
955	1656.35	131.69
956	1657.87	131.73
957	1659.38	131.79
958	1660.90	131.83
959	1662.41	131.86
960	1663.92	131.79
961	1665.80	131.69
962	1667.68	131.61
963	1669.56	131.61
964	1671.43	131.61
965	1673.31	131.65
966	1675.19	131.75
967	1677.07	131.69
968	1678.95	131.61
969	1680.82	131.51
970	1682.70	131.41
971	1684.58	131.25
972	1686.46	131.22
973	1688.34	131.26
974	1690.21	131.33
975	1692.09	131.35
976	1693.97	131.32

Order	Station [ft]	Elevation [ft]
977	1695.85	131.25
978	1697.72	131.12
979	1699.60	130.98
980	1701.48	130.91
981	1703.36	130.89
982	1705.24	130.88
983	1707.11	130.82
984	1708.99	130.74
985	1710.87	130.65
986	1712.75	130.59
987	1714.63	130.56
988	1716.50	130.54
989	1718.38	130.51
990	1720.26	130.51
991	1722.14	130.49
992	1724.02	130.45
993	1725.43	130.43
994	1726.85	130.38
995	1728.27	130.34
996	1729.69	130.30
997	1731.11	130.31
998	1732.53	130.34
999	1733.95	130.35
1000	1735.37	130.37
1001	1736.79	130.41
1002	1738.21	130.46
1003	1739.63	130.53
1004	1741.05	130.57
1005	1742.47	130.39
1006	1743.88	130.25
1007	1745.30	130.18
1008	1746.72	130.10
1009	1748.14	130.09
1010	1749.56	130.06
1011	1750.98	130.01
1012	1752.40	129.98
1013	1753.82	129.96
1014	1755.24	129.97
1015	1756.66	130.02
1016	1758.08	130.09
1017	1759.50	130.14
1018	1760.92	130.22
1019	1762.33	130.29
1020	1763.75	130.16
1021	1765.17	130.04
1022	1766.59	129.95
1023	1768.01	129.87
1024	1769.43	129.75
1025	1770.85	129.64

Order	Station [ft]	Elevation [ft]
1026	1772.27	129.48
1027	1773.69	129.38
1028	1775.11	129.41
1029	1776.53	129.43
1030	1777.95	129.41
1031	1779.36	129.35
1032	1780.78	129.26
1033	1782.20	129.31
1034	1783.62	129.49
1035	1785.04	129.63
1036	1786.46	129.71
1037	1787.88	129.68
1038	1789.30	129.64
1039	1790.72	129.63
1040	1792.14	129.61
1041	1793.56	129.60
1042	1794.98	129.58
1043	1796.40	129.51
1044	1797.81	129.40
1045	1799.23	129.14
1046	1800.65	128.96
1047	1802.07	128.96
1048	1803.49	128.95
1049	1804.91	128.91
1050	1806.33	128.90
1051	1807.75	128.91
1052	1809.17	128.96
1053	1810.59	129.03
1054	1812.01	129.06
1055	1813.43	129.10
1056	1814.85	129.14
1057	1816.34	129.17
1058	1817.83	129.12
1059	1819.32	129.10
1060	1820.82	129.08
1061	1822.31	129.01
1062	1823.80	128.82
1063	1825.29	128.61
1064	1826.79	128.45
1065	1828.28	128.34
1066	1829.77	128.33
1067	1831.26	128.34
1068	1832.76	128.22
1069	1834.25	128.10
1070	1835.74	128.11
1071	1837.24	128.14
1072	1838.73	128.22
1073	1840.22	128.35
1074	1841.71	128.39

Order	Station [ft]	Elevation [ft]
1075	1843.21	128.35
1076	1844.70	128.33
1077	1846.19	128.34
1078	1847.68	128.38
1079	1849.18	128.34
1080	1850.67	128.24
1081	1852.16	128.21
1082	1853.66	128.04
1083	1855.15	127.87
1084	1856.64	127.78
1085	1858.13	127.69
1086	1859.63	127.63
1087	1861.12	127.56
1088	1862.61	127.56
1089	1864.10	127.56
1090	1865.60	127.61
1091	1867.09	127.66
1092	1868.58	127.62
1093	1870.07	127.58
1094	1871.57	127.59
1095	1873.06	127.59
1096	1874.55	127.54
1097	1876.05	127.53
1098	1877.54	127.54
1099	1879.03	127.53
1100	1880.52	127.47
1101	1882.02	127.35
1102	1883.51	127.24
1103	1885.00	127.13
1104	1886.49	127.06
1105	1887.99	127.03
1106	1889.48	126.99
1107	1890.97	126.95
1108	1892.47	126.90
1109	1893.96	126.82
1110	1895.45	126.90
1111	1896.94	127.00
1112	1898.44	127.17
1113	1899.93	127.35
1114	1901.42	127.36
1115	1902.91	127.38
1116	1904.41	127.31
1117	1905.90	127.25
1118	1907.39	127.15
1119	1908.88	127.06
1120	1910.38	127.03
1121	1912.75	126.80
1122	1915.13	126.60
1123	1917.51	126.53

Order	Station [ft]	Elevation [ft]
1124	1919.89	126.51
1125	1922.27	126.74
1126	1924.64	126.91
1127	1927.02	126.96
1128	1929.40	126.86
1129	1931.84	126.66
1130	1934.28	126.37
1131	1936.72	125.90
1132	1939.16	125.84
1133	1941.60	125.86
1134	1944.04	125.73
1135	1946.48	125.80
1136	1948.92	125.82
1137	1951.36	125.75
1138	1953.80	125.63
1139	1956.24	125.53
1140	1958.68	125.34
1141	1961.12	125.17
1142	1963.56	125.10
1143	1966.00	125.03
1144	1968.44	125.02
1145	1970.88	125.14
1146	1973.32	125.29
1147	1975.76	125.39
1148	1978.20	125.41
1149	1980.64	125.22
1150	1983.08	125.03
1151	1985.53	124.93
1152	1987.97	124.85
1153	1990.41	124.83
1154	1992.85	124.78
1155	1995.29	124.86
1156	1997.73	124.95
1157	2000.17	125.02
1158	2002.61	124.92
1159	2005.05	124.98
1160	2007.49	124.88
1161	2009.01	124.75
1162	2010.54	124.63
1163	2012.06	124.61
1164	2013.58	124.59
1165	2015.11	124.55
1166	2016.63	124.56
1167	2018.16	124.59
1168	2019.68	124.63
1169	2021.20	124.67
1170	2022.73	124.71
1171	2024.25	124.87
1172	2025.77	125.01

Order	Station [ft]	Elevation [ft]
1173	2027.30	125.03
1174	2028.82	125.04
1175	2030.35	125.05
1176	2031.87	124.88
1177	2033.39	124.76
1178	2034.92	124.76
1179	2036.44	124.77
1180	2037.97	124.78
1181	2039.49	124.77
1182	2041.01	124.81
1183	2042.54	124.92
1184	2044.06	124.98
1185	2045.59	125.04
1186	2047.11	125.09
1187	2048.63	125.13
1188	2050.16	125.16
1189	2051.68	125.11
1190	2053.21	125.05
1191	2054.73	124.95
1192	2056.25	124.89
1193	2057.78	124.85
1194	2059.30	124.83
1195	2060.82	124.82
1196	2062.35	124.79
1197	2063.87	124.80
1198	2065.40	124.85
1199	2066.92	125.03
1200	2068.44	125.13
1201	2069.97	125.02
1202	2071.49	124.96
1203	2073.02	124.92
1204	2074.54	124.94
1205	2076.06	124.99
1206	2077.59	125.10
1207	2079.11	125.09
1208	2080.64	125.04
1209	2082.16	124.90
1210	2083.68	124.82
1211	2085.21	124.81
1212	2086.73	124.84
1213	2088.26	124.88
1214	2089.78	124.94
1215	2091.30	125.07
1216	2092.83	125.26
1217	2094.35	125.51
1218	2095.87	125.84
1219	2097.40	126.33
1220	2098.92	126.76
1221	2100.45	127.17

Order	Station [ft]	Elevation [ft]
1222	2101.97	127.40
1223	2103.49	127.48
1224	2105.02	127.16
1225	2107.24	127.48
1226	2109.47	126.88

Comment:

Weir Cross Section: X-0740W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	123.91
1	2.03	123.96
2	4.07	123.98
3	6.10	124.01
4	8.13	124.04
5	10.17	124.04
6	12.20	123.96
7	14.23	123.82
8	16.27	123.71
9	18.30	123.60
10	20.33	123.42
11	22.37	123.24
12	24.40	123.03
13	26.43	122.85
14	28.47	122.69
15	30.50	122.53
16	32.53	122.41
17	34.57	122.32
18	36.60	122.24
19	38.64	122.16
20	40.67	122.07
21	42.70	121.99
22	44.74	121.94
23	46.77	121.85
24	48.80	121.78
25	50.84	121.73
26	52.87	121.69
27	54.90	121.66
28	56.94	121.63
29	58.97	121.60
30	61.00	121.57
31	63.04	121.54

Order	Station [ft]	Elevation [ft]
32	65.07	121.52
33	67.10	121.49
34	69.14	121.45
35	71.17	121.41
36	73.20	121.40
37	75.24	121.41
38	77.27	121.40
39	79.30	121.42
40	81.34	121.42
41	83.37	121.41
42	85.40	121.39
43	87.44	121.40
44	89.47	121.39
45	91.50	121.39
46	93.54	121.40
47	95.57	121.41
48	97.60	121.42
49	99.64	121.47
50	101.67	121.48
51	103.70	121.47
52	105.74	121.49
53	107.77	121.51
54	109.80	121.53
55	111.84	121.55
56	113.87	121.55
57	115.91	121.55
58	117.94	121.54
59	119.97	121.52
60	122.01	121.57
61	124.04	121.61
62	126.07	121.61
63	128.11	121.60
64	130.14	121.60

Comment:

Weir Cross Section: X-0760W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	126.28
1	1.25	126.27
2	2.51	126.24
3	3.76	126.19

Order	Station [ft]	Elevation [ft]
4	5.01	126.13
5	6.27	126.02
6	7.52	125.92
7	8.77	125.76
8	10.03	125.55
9	11.28	125.45
10	12.53	125.38
11	13.79	125.36
12	15.04	125.38
13	16.29	125.35
14	17.55	125.30
15	18.80	125.24
16	20.05	125.17
17	21.31	125.11
18	22.56	125.05
19	23.81	124.99
20	25.07	124.93
21	26.32	124.87
22	27.57	124.83
23	28.83	124.78
24	30.08	124.71
25	31.33	124.67
26	32.59	124.65
27	33.84	124.58
28	35.09	124.47
29	36.34	124.42
30	37.60	124.40
31	38.85	124.42
32	40.10	124.44
33	41.36	124.45
34	42.61	124.44
35	43.86	124.40
36	45.12	124.34
37	46.37	124.32
38	47.62	124.32
39	48.88	124.23
40	50.13	124.05
41	51.38	123.90
42	52.64	123.79
43	53.89	123.72
44	55.14	123.67
45	56.40	123.63
46	57.65	123.60
47	58.90	123.58
48	60.16	123.56
49	61.41	123.59
50	62.66	123.66
51	63.92	123.69
52	65.17	123.67

Order	Station [ft]	Elevation [ft]
53	66.42	123.64
54	67.68	123.61
55	68.93	123.56
56	70.18	123.47
57	71.44	123.44
58	72.69	123.45
59	73.94	123.49
60	75.20	123.59
61	76.45	123.62
62	77.70	123.56
63	78.96	123.48
64	80.21	123.38
65	82.15	123.34
66	84.10	123.41
67	86.04	123.46
68	87.99	123.37
69	89.93	123.07
70	91.87	122.94
71	93.82	122.89
72	95.76	122.88
73	97.71	122.89
74	99.65	123.03
75	101.59	123.02
76	103.54	122.87
77	105.48	122.67
78	107.43	122.89
79	109.37	123.13
80	111.32	123.26
81	112.73	123.27
82	114.14	123.28
83	115.55	123.22
84	116.97	123.14
85	118.38	123.01
86	119.79	122.92
87	121.20	122.91
88	122.62	122.84
89	124.03	122.73
90	125.44	122.63
91	126.85	122.53
92	128.27	122.41
93	129.68	122.28
94	131.09	122.17
95	132.50	122.08
96	133.92	122.02
97	135.33	121.98
98	136.74	121.97
99	138.15	121.97
100	139.57	121.97
101	140.98	121.98

Order	Station [ft]	Elevation [ft]
102	142.39	121.99
103	143.80	122.00
104	145.22	122.01
105	146.63	122.04
106	148.04	122.05
107	149.45	122.05
108	150.87	122.04
109	152.28	122.04
110	153.69	122.03
111	155.11	122.02
112	156.52	122.03
113	157.93	122.04
114	159.34	122.05
115	160.76	122.08
116	162.17	122.12
117	163.58	122.15
118	164.99	122.18
119	166.41	122.21
120	167.82	122.27
121	169.23	122.35
122	170.64	122.42
123	172.06	122.45
124	173.47	122.50
125	174.88	122.54
126	176.29	122.60
127	177.71	122.63
128	179.12	122.59
129	180.53	122.59
130	181.94	122.66
131	183.36	122.70
132	184.77	122.73
133	186.18	122.77
134	187.59	122.80
135	189.01	122.83
136	190.42	122.86
137	191.83	122.89
138	193.24	122.92
139	194.66	122.96
140	196.07	122.99
141	197.48	123.00
142	198.90	123.04
143	200.31	123.07
144	201.72	123.09

Comment:

Weir Cross Section: X-0820W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	119.40
1	1.58	119.53
2	3.16	119.62
3	4.74	119.56
4	6.32	119.48
5	7.90	119.41
6	9.48	119.43
7	11.06	119.48
8	12.64	119.45
9	14.22	119.43
10	15.80	119.42
11	17.38	119.35
12	18.96	119.28
13	20.54	119.21
14	22.12	119.18
15	23.70	119.15
16	25.28	119.07
17	26.85	118.99
18	28.43	118.91
19	30.01	118.86
20	31.59	118.83
21	33.17	118.82
22	34.75	118.83
23	36.33	118.85
24	37.91	118.94
25	39.49	119.01
26	41.07	119.08
27	42.65	119.18
28	44.23	119.20
29	45.81	119.12
30	47.39	119.10
31	48.97	119.11
32	50.55	119.17
33	52.13	119.12
34	53.71	119.03
35	55.29	119.00
36	56.87	119.01
37	58.45	119.06
38	60.03	119.05
39	61.61	119.04
40	63.19	119.03
41	64.77	119.04
42	66.35	119.09
43	67.93	119.33

Order	Station [ft]	Elevation [ft]
44	69.51	119.58
45	71.09	119.79
46	72.67	119.79
47	74.25	119.76
48	75.83	119.71
49	77.41	119.66
50	78.99	119.61
51	80.56	119.59
52	82.14	119.68
53	83.72	119.85
54	85.30	119.99
55	86.88	120.10
56	88.46	120.18
57	90.04	120.16
58	91.62	120.15
59	93.20	120.25
60	94.78	120.42
61	96.36	120.65
62	97.94	120.54
63	99.52	120.43
64	101.10	120.31
65	102.37	120.25
66	103.63	120.21
67	104.90	120.25
68	106.16	120.29
69	107.43	120.27
70	108.70	120.24
71	109.96	120.16
72	111.23	120.07
73	112.50	120.06
74	113.76	120.06
75	115.03	120.07
76	116.29	120.07
77	117.56	119.93
78	118.83	119.78
79	120.09	119.68
80	121.36	119.58
81	122.62	119.58
82	123.89	119.59
83	125.16	119.65
84	126.42	119.70
85	127.69	119.63
86	128.95	119.58
87	130.22	119.63
88	131.49	119.68
89	132.75	119.72
90	134.02	119.75
91	135.28	119.78
92	136.55	119.79

Order	Station [ft]	Elevation [ft]
93	137.82	119.67
94	139.08	119.54
95	140.35	119.36
96	141.61	119.22
97	142.88	119.18
98	144.15	119.11
99	145.41	118.94
100	146.68	118.87
101	147.94	119.04
102	149.21	119.18
103	150.48	119.22
104	151.74	119.23
105	153.01	119.17
106	154.27	119.11
107	155.54	119.01
108	156.81	118.91
109	158.07	118.81
110	159.34	118.66
111	160.60	118.45
112	161.87	118.29
113	163.14	118.19
114	164.40	118.12
115	165.67	118.06
116	166.93	117.98
117	168.20	117.88
118	169.47	117.75
119	170.73	117.61
120	172.00	117.51
121	173.26	117.44
122	174.53	117.41
123	175.80	117.40
124	177.06	117.40
125	178.33	117.41
126	179.59	117.49
127	180.86	117.62
128	182.13	117.68
129	183.39	117.71
130	184.66	117.66
131	185.92	117.56
132	187.19	117.44
133	188.46	117.31
134	189.72	117.20
135	190.99	117.10
136	192.26	117.03
137	193.52	116.97
138	194.79	116.93
139	196.05	116.90
140	197.32	116.90
141	198.59	116.91

Order	Station [ft]	Elevation [ft]
142	199.85	116.82
143	201.12	116.69
144	202.38	116.52
145	203.65	116.35
146	204.92	116.18
147	206.18	116.01
148	207.45	115.83
149	208.71	115.64
150	209.98	115.45
151	211.25	115.25
152	212.51	115.11
153	213.78	114.97
154	215.04	114.94
155	216.31	114.92
156	217.58	115.03
157	218.84	115.15
158	220.11	115.34
159	221.37	115.54
160	222.64	115.79
161	223.91	116.04
162	225.17	116.24
163	226.44	116.44
164	227.70	116.61
165	228.97	116.78
166	230.24	116.93
167	231.50	117.08
168	232.77	117.18
169	234.03	117.28
170	235.30	117.42
171	236.57	117.55
172	237.83	117.64
173	239.10	117.72
174	240.36	117.74
175	241.63	117.76
176	242.90	117.78
177	244.16	117.81
178	245.43	117.86
179	246.69	117.91
180	247.96	117.94
181	249.23	117.96
182	250.49	117.99
183	251.76	118.01
184	253.02	118.01
185	254.29	118.03
186	255.56	118.05
187	256.82	118.09
188	258.09	118.15
189	259.35	118.18
190	260.62	118.19

Order	Station [ft]	Elevation [ft]
191	261.89	118.20
192	263.15	118.21

Comment:

Weir Cross Section: X-0850W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	115.79
1	2.37	115.83
2	4.74	115.83
3	7.11	115.81
4	9.47	115.77
5	11.84	115.72
6	14.21	115.64
7	16.58	115.57
8	18.95	115.49
9	21.32	115.38
10	23.69	115.26
11	26.06	115.10
12	28.42	114.93
13	30.79	114.67
14	33.16	114.49
15	35.53	114.44
16	37.90	114.45
17	40.27	114.42
18	42.64	114.32
19	45.00	114.22
20	47.37	114.10
21	49.74	114.00
22	52.11	114.01
23	54.48	114.12
24	56.85	114.24
25	59.22	114.27
26	61.58	114.35
27	63.95	114.42
28	66.32	114.57
29	68.69	114.73
30	71.06	114.84
31	73.43	114.93
32	75.80	115.07
33	78.17	115.19
34	80.53	115.25

Order	Station [ft]	Elevation [ft]
35	82.90	115.30
36	85.27	115.39
37	87.64	115.50
38	90.01	115.64
39	92.38	115.86
40	94.75	116.07
41	97.11	116.04
42	99.48	116.03
43	101.85	116.00
44	104.22	115.94
45	106.59	116.03
46	108.96	116.03
47	111.33	116.05
48	113.69	116.08
49	116.06	116.11
50	118.43	116.17
51	120.80	116.20
52	123.17	116.26
53	125.54	116.33
54	127.91	116.40
55	130.28	116.49
56	132.64	116.60
57	135.01	116.69
58	137.38	116.78
59	139.75	116.88
60	142.12	116.95
61	144.49	117.01
62	146.86	117.10
63	149.22	117.20
64	151.59	117.27

Comment:

Weir Cross Section: X-0930W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	100.75
1	1.94	100.79
2	3.89	100.84
3	5.83	100.86
4	7.77	100.88
5	9.72	100.88
6	11.66	100.83

Order	Station [ft]	Elevation [ft]
7	13.60	100.74
8	15.54	100.66
9	17.49	100.51
10	19.43	100.35
11	21.37	100.13
12	23.32	99.83
13	25.26	99.54
14	27.20	99.29
15	29.15	99.14
16	31.09	99.12
17	33.03	99.20
18	34.98	99.31
19	36.92	99.49
20	38.86	99.72
21	40.81	99.96
22	42.75	100.22
23	44.69	100.49
24	46.63	100.82
25	48.58	101.17
26	50.52	101.50
27	52.46	101.78
28	54.41	102.07
29	56.35	102.34
30	58.29	102.61
31	60.24	102.88
32	62.18	103.18
33	64.12	103.46
34	66.07	103.70
35	68.01	103.95
36	69.95	104.23
37	71.90	104.56
38	73.84	104.96
39	75.78	105.41
40	77.72	105.89
41	79.67	106.38
42	81.61	106.86
43	83.55	107.33
44	85.50	107.83
45	87.44	108.52
46	89.38	109.25
47	91.33	109.89
48	93.27	110.31
49	95.21	110.58
50	97.16	110.86
51	99.10	111.21
52	101.04	111.60
53	102.99	111.93
54	104.93	112.22
55	106.87	112.61

Order	Station [ft]	Elevation [ft]
56	108.81	113.03
57	110.76	113.43
58	112.70	114.05
59	114.64	114.77
60	116.59	115.49
61	118.53	116.20
62	120.47	116.92
63	122.42	117.63
64	124.36	118.27
65	125.67	118.65
66	126.99	118.59
67	128.30	118.53
68	129.61	118.41
69	130.93	118.22
70	132.24	117.85
71	133.55	117.51
72	134.87	117.22
73	136.18	117.04
74	137.49	116.98
75	138.81	116.91
76	140.12	116.82
77	141.44	116.77
78	142.75	116.74
79	144.06	116.71
80	145.38	116.69

Comment:

Weir Cross Section: X-0970W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	51.46
1	1.66	51.44
2	3.32	51.42
3	4.97	51.36
4	6.63	51.29
5	8.29	51.25
6	9.95	51.17
7	11.61	51.06
8	13.27	50.89
9	14.92	50.83
10	16.58	50.80
11	18.24	50.66

Order	Station [ft]	Elevation [ft]
12	19.90	50.54
13	21.56	50.42
14	23.21	50.31
15	24.87	50.22
16	26.53	50.13
17	28.19	50.03
18	29.85	49.94
19	31.50	49.87
20	33.16	49.82
21	34.82	49.76
22	36.48	49.68
23	38.14	49.67
24	39.80	49.64
25	41.45	49.60
26	43.11	49.53
27	44.77	49.46
28	46.43	49.38
29	48.09	49.32
30	49.74	49.27
31	51.40	49.23
32	53.06	49.16

Comment:

Weir Cross Section: X-0990W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	47.54
1	1.65	47.58
2	3.30	47.62
3	4.95	47.61
4	6.60	47.59
5	8.58	47.62
6	10.56	47.73
7	12.54	47.85
8	14.52	47.97
9	16.50	48.06
10	18.48	48.17
11	20.46	48.26
12	22.44	48.39
13	24.42	48.53
14	26.40	48.68
15	28.38	48.83

Order	Station [ft]	Elevation [ft]
16	30.36	48.98
17	32.34	49.11
18	34.32	49.24
19	36.30	49.42
20	38.28	49.59
21	40.26	49.75
22	42.24	49.87
23	44.22	49.99
24	46.20	50.17
25	48.18	50.37
26	50.16	50.56
27	52.14	50.76
28	54.12	50.96
29	56.10	51.11
30	58.08	51.18
31	60.06	51.25
32	62.04	51.33
33	64.01	51.40
34	65.99	51.45
35	67.97	51.46
36	69.95	51.46

Comment:

Weir Cross Section: X-1010W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	48.01
1	1.43	48.15
2	2.86	48.27
3	4.29	48.39
4	5.72	48.51
5	7.15	48.62
6	8.57	48.72
7	10.00	48.81
8	11.43	48.87
9	12.86	48.91
10	14.29	48.92
11	15.72	48.97
12	17.15	49.02
13	18.58	49.06
14	20.01	49.10
15	21.44	49.13

Order	Station [ft]	Elevation [ft]
16	22.86	49.21
17	24.29	49.31
18	25.72	49.40
19	27.15	49.49
20	28.58	49.55
21	30.01	49.65
22	31.44	49.81
23	32.87	49.95
24	34.30	50.10
25	35.73	50.16
26	37.16	50.22
27	38.58	50.28
28	40.01	50.33
29	41.44	50.33
30	42.87	50.37
31	44.30	50.44
32	45.73	50.47

Comment:

Weir Cross Section: X-1020W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	50.47
1	2.27	50.46
2	4.55	50.40
3	6.82	50.32
4	9.10	50.28
5	11.37	50.18
6	13.65	50.07
7	15.92	50.06
8	18.20	49.95
9	20.47	49.77
10	22.75	49.65
11	25.02	49.66
12	27.30	49.61
13	29.57	49.44
14	31.85	49.48
15	34.12	49.49
16	36.40	49.50

Comment:

Weir Cross Section: X-1050W

Scenario: Scenario1
Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	49.91
1	2.11	49.86
2	4.22	49.82
3	6.34	49.78
4	8.45	49.69
5	10.56	49.47
6	12.67	49.26
7	14.78	49.14
8	16.90	49.08
9	19.01	49.01
10	21.12	48.92
11	23.23	48.78
12	25.34	48.64
13	27.46	48.54
14	29.57	48.44
15	31.68	48.32
16	33.79	48.18
17	35.24	48.13
18	36.69	48.08
19	38.13	48.02
20	39.58	47.95
21	41.03	47.87
22	42.47	47.78
23	43.92	47.68
24	45.37	47.62
25	46.81	47.56
26	48.26	47.50
27	49.71	47.48
28	51.15	47.47
29	52.60	47.47
30	54.05	47.45
31	55.49	47.36
32	56.94	47.34
33	58.39	47.40
34	59.83	47.41
35	61.28	47.40
36	62.73	47.37
37	64.17	47.35
38	65.62	47.35
39	67.07	47.35
40	68.51	47.33
41	69.96	47.35
42	71.41	47.37
43	72.85	47.40

Order	Station [ft]	Elevation [ft]
44	74.30	47.42
45	75.75	47.44
46	77.19	47.45
47	78.64	47.46
48	80.09	47.47

Comment:

Weir Cross Section: X-1150W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	124.54
1	1.72	124.53
2	3.44	124.53
3	5.16	124.51
4	6.88	124.49
5	8.60	124.49
6	10.32	124.48
7	12.04	124.48
8	13.76	124.45
9	15.48	124.45
10	17.20	124.45
11	18.91	124.44
12	20.63	124.44
13	22.35	124.44
14	24.07	124.45
15	25.79	124.44
16	27.51	124.42
17	29.23	124.39
18	30.95	124.39
19	32.67	124.38
20	34.39	124.39
21	36.11	124.41
22	37.83	124.41
23	39.55	124.40
24	41.27	124.39
25	42.99	124.38
26	44.71	124.38
27	46.43	124.37
28	48.15	124.36
29	49.87	124.34
30	51.59	124.33
31	53.30	124.32

Order	Station [ft]	Elevation [ft]
32	55.02	124.30
33	56.74	124.28
34	58.46	124.25
35	60.18	124.23
36	61.90	124.22
37	63.62	124.20
38	65.34	124.18
39	67.06	124.15
40	68.78	124.13
41	70.50	124.11
42	72.22	124.09
43	73.94	124.07
44	75.66	124.04
45	77.38	124.01
46	79.10	124.00
47	80.82	123.99
48	82.54	123.97
49	84.26	123.94
50	85.98	123.93
51	87.70	123.94
52	89.41	123.93
53	91.13	123.93
54	92.85	123.93
55	94.57	123.92
56	96.29	123.92
57	98.01	123.91
58	99.73	123.90
59	101.45	123.88
60	103.17	123.89
61	104.89	123.89
62	106.61	123.89
63	108.33	123.90
64	110.05	123.90
65	111.36	123.91
66	112.67	123.90
67	113.98	123.89
68	115.28	123.88
69	116.59	123.88
70	117.90	123.89
71	119.21	123.89
72	120.52	123.88
73	121.83	123.87
74	123.14	123.86
75	124.45	123.86
76	125.76	123.85
77	127.06	123.84
78	128.37	123.83
79	129.68	123.82
80	130.99	123.79

Order	Station [ft]	Elevation [ft]
81	132.30	123.78
82	133.61	123.77
83	134.92	123.76
84	136.23	123.76
85	137.54	123.74
86	138.85	123.72
87	140.15	123.70
88	141.46	123.68
89	142.77	123.67
90	144.08	123.66
91	145.39	123.65
92	146.70	123.64
93	148.01	123.62
94	149.32	123.61
95	150.63	123.58
96	151.93	123.55
97	153.24	123.53
98	154.55	123.52
99	155.86	123.50
100	157.17	123.48
101	158.48	123.46
102	159.79	123.45
103	161.10	123.47
104	162.41	123.49
105	163.71	123.50
106	165.02	123.50
107	166.33	123.47
108	167.64	123.45
109	168.95	123.42
110	170.26	123.42
111	171.57	123.43
112	172.88	123.42
113	174.19	123.41
114	175.50	123.41
115	176.80	123.41
116	178.11	123.43
117	179.42	123.44
118	180.73	123.46
119	182.04	123.47
120	183.35	123.49
121	184.66	123.50
122	185.97	123.52
123	187.28	123.53
124	188.58	123.53
125	189.89	123.55
126	191.20	123.57
127	192.51	123.58
128	193.82	123.60
129	196.15	123.61

Order	Station [ft]	Elevation [ft]
130	198.47	123.61
131	200.80	123.61
132	203.13	123.63
133	205.45	123.61
134	207.78	123.59
135	210.11	123.59
136	212.43	123.60
137	214.76	123.60
138	217.09	123.62
139	219.41	123.64
140	221.74	123.71
141	224.06	123.78
142	226.39	123.84
143	228.72	123.87
144	231.04	123.92
145	233.37	124.02
146	235.70	124.11
147	238.02	124.19
148	240.35	124.29
149	242.68	124.39
150	245.00	124.47
151	247.33	124.54
152	249.66	124.61
153	251.98	124.71
154	254.31	124.80
155	256.64	124.86
156	258.96	124.91
157	261.29	124.95
158	263.62	125.02
159	265.94	125.08
160	268.27	125.12

Comment:

Weir Cross Section: X-1160W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	125.22
1	1.97	125.25
2	3.93	125.28
3	5.90	125.26
4	7.87	125.19
5	9.84	125.14

Order	Station [ft]	Elevation [ft]
6	11.80	125.17
7	13.77	125.18
8	15.74	125.17
9	17.71	125.14
10	19.67	125.10
11	21.64	125.02
12	23.61	124.89
13	25.58	124.77
14	27.54	124.69
15	29.51	124.64
16	31.48	124.57
17	33.09	124.53
18	34.70	124.49
19	36.31	124.43
20	37.91	124.37
21	39.52	124.32
22	41.13	124.25
23	42.74	124.18
24	44.35	124.11
25	45.96	124.04
26	47.57	123.98
27	49.18	123.95
28	50.79	123.92
29	52.40	123.90
30	54.01	123.88
31	55.62	123.84
32	57.23	123.80
33	58.84	123.76
34	60.44	123.70
35	62.05	123.64
36	63.66	123.54
37	65.27	123.49
38	66.88	123.47
39	68.49	123.50
40	70.10	123.52
41	71.71	123.54
42	73.32	123.56
43	74.93	123.60
44	76.54	123.65
45	78.15	123.72
46	79.76	123.78
47	81.37	123.80
48	82.98	123.80
49	84.58	123.79
50	86.19	123.73
51	87.80	123.64
52	89.41	123.54
53	91.02	123.47
54	92.63	123.43

Order	Station [ft]	Elevation [ft]
55	94.24	123.42
56	95.85	123.42
57	97.46	123.45
58	99.07	123.50
59	100.68	123.53
60	102.29	123.56
61	103.90	123.60
62	105.51	123.67
63	107.11	123.74
64	108.72	123.82
65	110.33	123.88
66	111.94	123.92
67	113.55	123.99
68	115.16	124.08
69	116.77	124.17
70	118.38	124.24
71	119.99	124.28
72	121.60	124.30
73	123.21	124.30
74	124.82	124.30
75	126.43	124.32
76	128.04	124.34
77	129.65	124.36
78	131.25	124.36
79	132.86	124.35
80	134.47	124.36
81	136.34	124.36
82	138.22	124.36
83	140.09	124.38
84	141.96	124.41
85	143.83	124.47
86	145.70	124.57
87	147.57	124.71
88	149.44	124.93
89	151.31	125.27
90	153.19	125.58
91	155.06	125.53
92	156.93	125.25
93	158.80	125.61
94	160.67	125.99
95	162.54	126.51
96	164.41	126.63
97	166.24	126.54
98	168.06	126.23
99	169.88	126.00
100	171.71	125.91
101	173.53	125.90
102	175.36	125.97
103	177.18	126.06

Order	Station [ft]	Elevation [ft]
104	179.00	126.24
105	180.83	126.50
106	182.65	126.68
107	184.48	126.76
108	186.30	126.78
109	188.12	126.80
110	189.95	127.03
111	191.77	127.19
112	193.59	127.16

Comment:

Weir Cross Section: X-1180W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	121.84
1	1.42	121.84
2	2.83	121.84
3	4.25	121.84
4	5.66	121.84
5	7.08	121.84
6	8.50	121.82
7	9.91	121.81
8	11.33	121.82
9	12.75	121.81
10	14.16	121.78
11	15.58	121.79
12	16.99	121.82
13	18.41	121.85
14	19.83	121.86
15	21.24	121.84
16	22.66	121.84
17	24.08	121.87
18	25.49	121.89
19	26.91	121.89
20	28.32	121.91
21	29.74	121.92
22	31.16	121.91
23	32.57	121.89
24	33.99	121.89
25	35.40	121.88
26	36.82	121.86
27	38.24	121.84

Order	Station [ft]	Elevation [ft]
28	39.65	121.82
29	41.07	121.81
30	42.49	121.81
31	43.90	121.81
32	45.32	121.81
33	46.73	121.80
34	48.15	121.80
35	49.57	121.80
36	50.98	121.80
37	52.40	121.80
38	53.81	121.83
39	55.23	121.84
40	56.65	121.84
41	58.06	121.84
42	59.48	121.84
43	60.90	121.85
44	62.31	121.86
45	63.73	121.86
46	65.14	121.86
47	66.56	121.90
48	67.98	121.91
49	69.39	121.89
50	70.81	121.90
51	72.23	121.92
52	73.64	121.92
53	75.06	121.92
54	76.47	121.92
55	77.89	121.93
56	79.31	121.94
57	80.72	121.96
58	82.14	121.99
59	83.55	121.96
60	84.97	121.93
61	86.39	121.96
62	87.80	121.99
63	89.22	121.99
64	90.64	122.00
65	92.05	122.01
66	93.47	122.02
67	94.88	122.03
68	96.30	122.02
69	97.72	122.00
70	99.13	121.99
71	100.55	121.99
72	101.96	121.99
73	103.38	121.99
74	104.80	121.98
75	106.21	122.00
76	107.63	122.01

Order	Station [ft]	Elevation [ft]
77	109.05	122.01
78	110.46	122.00
79	111.88	121.99
80	113.29	121.96
81	114.71	121.94
82	116.13	121.94
83	117.54	121.95
84	118.96	121.96
85	120.38	121.96
86	121.79	121.95
87	123.21	121.94
88	124.62	121.94
89	126.04	121.91
90	127.46	121.90
91	128.87	121.90
92	130.29	121.88
93	131.70	121.86
94	133.12	121.85
95	134.54	121.87
96	135.95	121.87
97	137.37	121.86
98	138.79	121.85
99	140.20	121.85
100	141.62	121.85
101	143.03	121.86
102	144.45	121.86
103	145.87	121.86
104	147.28	121.87
105	148.70	121.86
106	150.12	121.85
107	151.53	121.86
108	152.95	121.86
109	154.36	121.86
110	155.78	121.86
111	157.20	121.86
112	158.61	121.87
113	160.03	121.88
114	161.44	121.86
115	162.86	121.85
116	164.28	121.84
117	165.69	121.84
118	167.11	121.84
119	168.53	121.83
120	169.94	121.82
121	171.36	121.81
122	172.77	121.81
123	174.19	121.83
124	175.61	121.86
125	177.02	121.89

Order	Station [ft]	Elevation [ft]
126	178.44	121.87
127	179.85	121.84
128	181.27	121.85
129	183.49	121.86
130	185.71	121.87
131	187.93	121.93
132	190.14	121.97
133	192.36	121.98
134	194.58	121.98
135	196.80	122.03
136	199.02	122.09
137	201.24	122.12
138	203.45	122.13
139	205.67	122.17
140	207.89	122.23
141	210.11	122.27
142	212.33	122.31
143	214.54	122.37
144	216.76	122.46
145	218.98	122.58
146	221.20	122.69
147	223.42	122.78
148	225.64	122.89
149	227.85	123.02
150	230.07	123.08
151	232.29	123.20
152	234.51	123.33
153	236.73	123.48
154	238.95	123.60
155	241.16	123.67
156	243.38	123.71
157	245.60	123.77
158	247.82	123.83
159	250.04	123.86
160	252.25	123.91

Comment:

Weir Cross Section: X-1190W

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	123.50
1	2.35	123.47

Order	Station [ft]	Elevation [ft]
2	4.69	123.42
3	7.04	123.35
4	9.38	123.29
5	11.73	123.23
6	14.07	123.17
7	16.42	123.07
8	18.76	122.93
9	21.11	122.82
10	23.45	122.74
11	25.80	122.65
12	28.14	122.56
13	30.49	122.48
14	32.83	122.43
15	35.18	122.36
16	37.52	122.29
17	39.87	122.26
18	42.22	122.23
19	44.56	122.18
20	46.91	122.11
21	49.25	122.05
22	51.60	122.03
23	53.94	122.00
24	56.29	121.96
25	58.63	121.94
26	60.98	121.92
27	63.32	121.87
28	65.67	121.85
29	68.01	121.78
30	70.36	121.69
31	72.70	121.63
32	75.05	121.62
33	76.61	121.60
34	78.18	121.58
35	79.74	121.58
36	81.31	121.57
37	82.87	121.54
38	84.43	121.52
39	86.00	121.50
40	87.56	121.48
41	89.12	121.45
42	90.69	121.39
43	92.25	121.36
44	93.82	121.34
45	95.38	121.33
46	96.94	121.29
47	98.51	121.26
48	100.07	121.23
49	101.64	121.22
50	103.20	121.22

Order	Station [ft]	Elevation [ft]
51	104.76	121.18
52	106.33	121.15
53	107.89	121.13
54	109.46	121.12
55	111.02	121.11
56	112.58	121.09
57	114.15	121.06
58	115.71	121.03
59	117.27	121.02
60	118.84	121.02
61	120.40	121.02
62	121.97	121.02
63	123.53	121.01
64	125.09	121.00
65	126.36	120.99
66	127.62	120.98
67	128.89	120.99
68	130.15	121.01
69	131.42	121.03
70	132.68	121.03
71	133.95	121.04
72	135.21	121.06
73	136.47	121.07
74	137.74	121.07
75	139.00	121.06
76	140.27	121.07
77	141.53	121.09
78	142.80	121.09
79	144.06	121.11
80	145.33	121.10
81	146.59	121.10
82	147.86	121.11
83	149.12	121.12
84	150.38	121.13
85	151.65	121.14
86	152.91	121.16
87	154.18	121.19
88	155.44	121.20
89	156.71	121.22
90	157.97	121.24
91	159.24	121.26
92	160.50	121.29
93	161.76	121.31
94	163.03	121.34
95	164.29	121.38
96	165.56	121.41
97	167.82	121.45
98	170.08	121.49
99	172.34	121.52

Order	Station [ft]	Elevation [ft]
100	174.60	121.56
101	176.87	121.57
102	179.13	121.61
103	181.39	121.62
104	183.65	121.66
105	185.91	121.69
106	188.17	121.74
107	190.44	121.78
108	192.70	121.87
109	194.96	121.97
110	197.22	122.06
111	199.48	122.14
112	201.74	122.21
113	203.70	122.25
114	205.66	122.27
115	207.61	122.31
116	209.57	122.36
117	211.53	122.38
118	213.48	122.41
119	215.44	122.45
120	217.40	122.49
121	219.35	122.52
122	221.31	122.55
123	223.27	122.57
124	225.22	122.59
125	227.18	122.62
126	229.14	122.62
127	231.09	122.62
128	233.05	122.64
129	234.35	122.66
130	235.65	122.67
131	236.95	122.67
132	238.25	122.69
133	239.55	122.71
134	240.85	122.70
135	242.15	122.69
136	243.45	122.70
137	244.75	122.70
138	246.05	122.71
139	247.35	122.72
140	248.64	122.72
141	249.94	122.73
142	251.24	122.74
143	252.54	122.74
144	253.84	122.74
145	255.14	122.75
146	256.44	122.76
147	257.74	122.77
148	259.04	122.77

Order	Station [ft]	Elevation [ft]
149	260.34	122.77
150	261.64	122.75
151	262.94	122.73
152	264.24	122.71
153	265.54	122.68
154	266.84	122.64
155	268.14	122.61
156	269.44	122.59
157	270.74	122.56
158	272.04	122.53
159	273.34	122.49
160	274.64	122.44
161	276.49	122.35
162	278.35	122.28
163	280.20	122.23
164	282.06	122.21
165	283.91	122.19
166	285.77	122.18
167	287.62	122.14
168	289.48	122.08
169	291.33	122.01
170	293.19	121.98
171	295.04	121.89
172	296.90	121.80
173	298.75	121.78
174	300.61	121.80
175	302.46	121.77
176	304.32	121.67
177	306.18	121.56
178	308.03	121.45
179	309.89	121.36
180	311.74	121.30
181	313.60	121.25
182	315.45	121.19
183	317.31	121.15
184	319.16	121.07
185	321.02	121.01
186	322.87	120.97
187	324.73	120.97
188	326.58	120.98
189	328.44	121.00
190	330.29	120.99
191	332.15	120.97
192	334.00	120.96
193	336.20	120.94
194	338.40	120.87
195	340.59	120.81
196	342.79	120.71
197	344.98	120.60

Order	Station [ft]	Elevation [ft]
198	347.18	120.50
199	349.38	120.42
200	351.57	120.33
201	353.77	120.22
202	355.97	120.13
203	358.16	120.06
204	360.36	120.02
205	362.55	120.01
206	364.75	119.99
207	366.95	119.96
208	369.14	119.98
209	371.34	119.97
210	373.54	119.86
211	375.73	119.85
212	377.93	119.88
213	380.12	119.89
214	382.32	119.82
215	384.52	119.72
216	386.71	119.65
217	388.91	119.58
218	391.11	119.50
219	393.30	119.46
220	395.50	119.42
221	397.69	119.39
222	399.89	119.36
223	402.09	119.28
224	404.28	119.17
225	406.53	119.12
226	408.78	119.12
227	411.03	119.18
228	413.27	119.23
229	415.52	119.22
230	417.77	119.13
231	420.02	119.01
232	422.26	118.93
233	424.51	118.86
234	426.76	118.80
235	429.01	118.73
236	431.25	118.72
237	433.50	118.76
238	435.75	118.83
239	438.00	118.88
240	440.24	118.92
241	442.49	118.95
242	444.74	118.96
243	446.99	118.85
244	449.23	118.84
245	451.48	118.85
246	453.73	118.87

Order	Station [ft]	Elevation [ft]
247	455.98	118.90
248	458.22	118.94
249	460.47	118.98
250	462.72	119.06
251	464.97	119.14
252	467.22	119.13
253	469.46	119.17
254	471.71	119.20
255	473.96	119.27
256	476.21	119.38
257	477.52	119.46
258	478.83	119.57
259	480.14	119.67
260	481.45	119.76
261	482.77	119.85
262	484.08	119.92
263	485.39	119.98
264	486.70	120.01
265	488.02	120.04
266	489.33	120.07
267	490.64	120.09
268	491.95	120.09
269	493.26	120.12
270	494.58	120.16
271	495.89	120.20
272	497.20	120.24
273	498.51	120.30
274	499.83	120.36
275	501.14	120.41
276	502.45	120.45
277	503.76	120.52
278	505.07	120.58
279	506.39	120.64
280	507.70	120.70
281	509.01	120.78
282	510.32	120.85
283	511.64	120.95
284	512.95	121.04
285	514.26	121.12
286	515.57	121.19
287	516.88	121.23
288	518.20	121.28
289	519.51	121.34
290	520.82	121.40
291	522.13	121.46
292	523.45	121.50
293	524.76	121.53
294	526.07	121.57
295	527.38	121.61

Order	Station [ft]	Elevation [ft]
296	528.69	121.67
297	530.01	121.73
298	531.32	121.81
299	532.63	121.88
300	533.94	121.92
301	535.26	121.96
302	536.57	122.04
303	537.88	122.13
304	539.19	122.21
305	540.50	122.28
306	541.82	122.35
307	543.13	122.45
308	544.44	122.56
309	545.75	122.64
310	547.06	122.71
311	548.38	122.76
312	549.69	122.82
313	551.00	122.86
314	552.31	122.92
315	553.63	122.97
316	554.94	123.03
317	556.25	123.08
318	557.56	123.12
319	558.87	123.15
320	560.19	123.17

Comment:

Scenario	Sim	Node Name	Warning Stage	Maximum Stage	Maximum Stage Time	Maximum Inflow	Total Maximum Outflow	Max Change	Maximum Surface Ar
Scenario1	100 YR-24 HR	N-0350C	0.00	43.00	114.69	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-105	0.00	0.00	0.56	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-106	0.00	0.00	7.04	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-108	0.00	0.00	0.10	0.10	0.0000	0	
Scenario1	100 YR-24 HR	GT-109	0.00	0.00	0.24	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-110	0.00	0.00	0.44	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-111	0.00	0.00	0.43	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-112	0.00	0.00	0.43	0.37	0.0000	0	
Scenario1	100 YR-24 HR	GT-113	0.00	0.00	0.66	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-114	0.00	0.00	0.98	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-115	0.00	0.00	0.59	0.02	0.0000	0	
Scenario1	100 YR-24 HR	GT-115_1	0.00	0.00	0.68	0.02	0.0000	0	
Scenario1	100 YR-24 HR	GT-115A	0.00	0.00	0.60	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-117	0.00	0.00	2.31	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-117-1	0.00	0.00	2.31	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-118	0.00	0.00	0.00	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-119	0.00	0.00	0.04	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-120	0.00	0.00	0.00	0.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-126	0.00	0.00	0.41	1.00	0.0000	0	
Scenario1	100 YR-24 HR	GT-128	0.00	0.00	0.10	0.17	0.0000	0	
Scenario1	100 YR-24 HR	N-0410	0.00	40.95	43.96	0.00	0.0000	0	
Scenario1	100 YR-24 HR	N-100	0.00	125.37	3.91	3.90	0.0000	469	
Scenario1	100 YR-24 HR	N-101	0.00	123.64	14.69	8.70	0.0000	45751	
Scenario1	100 YR-24 HR	N-102	0.00	123.64	23.81	14.53	0.0000	34634	
Scenario1	100 YR-24 HR	N-103	0.00	122.03	31.29	30.58	0.0000	39373	
Scenario1	100 YR-24 HR	N-104	0.00	121.42	23.29	22.40	0.0000	41863	
Scenario1	100 YR-24 HR	N-105	0.00	117.91	56.78	11.16	0.0000	164215	
Scenario1	100 YR-24 HR	N-106	0.00	119.20	32.39	7.04	0.0000	217754	
Scenario1	100 YR-24 HR	N-106A	0.00	119.55	12.66	8.80	0.0000	20825	
Scenario1	100 YR-24 HR	N-106B	0.00	119.20	21.47	10.86	0.0000	70531	
Scenario1	100 YR-24 HR	N-107	0.00	118.65	16.20	1.00	0.0000	112836	
Scenario1	100 YR-24 HR	N-107A	0.00	117.81	5.10	4.13	0.0000	30449	
Scenario1	100 YR-24 HR	N-107B	0.00	116.99	3.61	1.53	0.0000	28959	
Scenario1	100 YR-24 HR	N-107C	0.00	118.21	1.98	0.00	0.0000	38896	
Scenario1	100 YR-24 HR	N-108	0.00	115.99	10.36	5.44	0.0000	22947	
Scenario1	100 YR-24 HR	N-109	0.00	115.99	18.46	0.24	0.0000	86232	
Scenario1	100 YR-24 HR	N-109A	0.00	114.06	2.63	0.10	0.0000	13796	
Scenario1	100 YR-24 HR	N-109B	0.00	112.86	15.43	0.00	0.0000	107342	
Scenario1	100 YR-24 HR	N-109C	0.00	116.20	29.84	0.00	0.0000	131487	
Scenario1	100 YR-24 HR	N-109D	0.00	117.35	1.26	0.00	0.0000	7846	
Scenario1	100 YR-24 HR	N-110	0.00	115.16	17.64	0.96	0.0000	48304	
Scenario1	100 YR-24 HR	N-111	0.00	115.16	7.70	0.43	0.0000	31070	

Scenario	Sim	Node Name	Warning Stage	Maximum Stage	Maximum Total Inflow	Maximum Total Outflow	Max Change	Maximum Surface Ar
Scenario1	100 YR-24 HR	N-112	0.00	109.22	21.75	0.43	0.0000	50093
Scenario1	100 YR-24 HR	N-113	0.00	109.63	4.88	4.64	0.0000	2825
Scenario1	100 YR-24 HR	N-114	0.00	106.56	16.29	0.98	0.0000	31633
Scenario1	100 YR-24 HR	N-115	0.00	98.29	16.34	1.27	0.0000	37156
Scenario1	100 YR-24 HR	N-115A	0.00	103.79	5.02	0.60	0.0000	11583
Scenario1	100 YR-24 HR	N-116	0.00	99.07	20.25	18.97	0.0000	2829
Scenario1	100 YR-24 HR	N-117	0.00	96.73	29.62	4.62	0.0000	44473
Scenario1	100 YR-24 HR	N-118	0.00	46.23	41.74	63.91	-0.0006	100
Scenario1	100 YR-24 HR	N-119	0.00	80.01	18.02	0.04	0.0000	46865
Scenario1	100 YR-24 HR	N-120	0.00	47.87	29.14	29.11	-0.0001	320
Scenario1	100 YR-24 HR	N-120A	0.00	48.52	25.09	25.06	0.0000	2933
Scenario1	100 YR-24 HR	N-120B	0.00	47.87	37.70	31.80	0.0000	49907
Scenario1	100 YR-24 HR	N-122	0.00	46.30	26.39	8.15	0.0000	46060
Scenario1	100 YR-24 HR	N-123	0.00	46.11	29.57	29.56	0.0000	2759
Scenario1	100 YR-24 HR	N-123A	0.00	45.91	28.05	26.56	0.0000	50175
Scenario1	100 YR-24 HR	N-124	0.00	45.15	13.40	12.78	0.0000	9398
Scenario1	100 YR-24 HR	N-125	0.00	45.46	26.58	25.63	0.0000	6388
Scenario1	100 YR-24 HR	N-125A	0.00	45.42	19.16	16.36	0.0000	34994
Scenario1	100 YR-24 HR	N-126	0.00	42.79	84.59	44.33	0.0000	82525
Scenario1	100 YR-24 HR	N-126A	0.00	44.08	85.80	0.00	0.0000	630473
Scenario1	100 YR-24 HR	N-127	0.00	43.52	34.62	35.00	0.0000	22379
Scenario1	100 YR-24 HR	N-127A	0.00	44.08	53.38	45.24	0.0000	93650
Scenario1	100 YR-24 HR	N-127B	0.00	44.31	54.27	16.24	0.0000	130576
Scenario1	100 YR-24 HR	N-127C	0.00	44.07	93.42	89.63	0.0000	74679
Scenario1	100 YR-24 HR	N-128	0.00	43.29	101.28	92.98	0.0000	94691
Scenario1	100 YR-24 HR	N-128A	0.00	44.93	281.11	0.03	0.0000	1385957
Scenario1	100 YR-24 HR	N-128B	0.00	44.69	37.76	22.50	0.0000	155752
Scenario1	100 YR-24 HR	N-128C	0.00	45.14	20.55	15.30	0.0000	64794
Scenario1	100 YR-24 HR	NTZ-1040	0.00	43.33	35.00	35.23	0.0000	2182
Scenario1	100 YR-24 HR	NTZ-1080	0.00	122.68	0.00	0.00	0.0000	0
Scenario1	100 YR-24 HR	NTZ-1520	0.00	0.00	22.20	0.00	0.0000	0
Scenario1	100 YR-24 HR	NTZ-1530	0.00	43.80	160.66	0.00	0.0000	0
Scenario1	100 YR-24 HR	NTZ-1540	0.00	0.00	13.04	0.00	0.0000	0
Scenario1	100 YR-24 HR	NTZ-1550	0.00	44.90	54.50	0.00	0.0000	0
Scenario1	100 YR-24 HR	NTZ-1570	0.00	0.00	0.00	0.00	0.0000	0

APPENDIX 5

HIGHLANDS COUNTY SOIL SURVEY

Summary of Geotechnical Parameters for Dry Pond Design
SR 70 from US 27 to CR 29 (Segment 13)
Highlands County, Florida
FPID No. 414506-4-32-01
Tierra Project No: 6511-24-002

SMF Site Name	Boring Name	Boring Location[1] FL State Plane East		Estimated SHGWT[3]		Field/Lab Permeability Test Results					Confining Layer[5]		Estimated Fillable Porosity
		Northing (feet)	Easting (feet)	Depth (feet)	Elevation (feet, NAVD 88)	Approximate Test/Sample Depth[2] (feet)	Approximate Test/Sample Elevation (feet, NAVD 88)	Soil Stratum Tested	Saturated Horizontal Hydraulic Conductivity[4] (feet/day)	Saturated Vertical Hydraulic Conductivity[4] (feet/day)	Approximate Depth[2] (feet)	Approximate Elevation (feet, NAVD 88)	
SMF 6	PBA13-SMF6-1	1044734	552981	2.5	117.3	2.0	117.8	1	32	32	---	---	0.25
	PBA13-SMF6-2	1044772	553100	2.5	117.2	2.0	118.2	1	47	47	---	---	
	PBA13-SMF6-3	1044674	553270	2.5	117.3	2.5 - 4.0	117.3 - 115.8	1	23	23	---	---	
	PBS13-SMF6-1	1045280	878060	---	---	8.0 - 12.0	111.8 - 107.8	1	44	44	35.0	84.8	
	PBS13-SMF6-2	1045344	878191	---	---	6.0 - 12.0	113.7 - 107.7	1	32	32	40.0	79.7	
SMF 7	PBA13-SMF7-1	1045214	556482	9.0	104.4	9.0 - 12.0	104.4 - 101.4	1	43	43	---	---	0.25
	PBA13-SMF7-2	1045272	556625	15.5	102.6	16.0 - 18.0	102.1 - 100.1	1	40	40	---	---	
	PBA13-SMF7-3	1045167	556818	4.5	101.0	4.0 - 6.0	101.5 - 99.5	1	46	46	---	---	
	PBA13-SMF7-4	1045202	556950	7.5	101.1	9.0 - 12.0	99.6 - 96.6	1	36	36	---	---	
	PBA13-SMF7-5	1045090	556891	4.5	101.4	4.0	101.9	1	39	39	---	---	
	PBS13-SMF7-1	1045547	881452	---	---	8.0 - 14.0	104.9 - 98.9	1	43	43	35.0	77.9	
	PBS13-SMF7-2	1045607	881908	---	---	10.0 - 16.0	96.6 - 90.6	1	29	29	35.0	71.6	

[1] Boring locations and elevations of borings labeled "PBA" were provided by the Project Surveyor. Borings labeled "PBS" were located in the field by Tierra using a hand-held Garmin non-survey grade global positioning system (GPS) device with a reported accuracy of +/- 10 feet. Elevations for the "PBS" borings were determined using the approximiate coordinates obtained by Tierra in conjunction with project design files and should be considered approximate.

[2] Depth below existing grades at time of field exploration.

[3] Seasonal high groundwater table depth estimated based on soil stratigraphy, measured groundwater levels from the borings, the Highlands County, Florida USDA Soil Survey information and past experience with similar soil conditions.

[4] The Saturated Hydraulic Conductivity values presented above are not factored. The design engineer should apply an appropriate factor of safety.

[5] Based on Standard Penetration Test (SPT) borings completed to date.

Summary of SMF/FPC Seasonal High Groundwater Table Estimates
SR 70 from US 27 to CR 29 (Segment 13)
Highlands County, Florida
FPID No. 414506-4-32-01
Tierra Project No: 6511-24-002

SMF/FPC Site Name	Boring Name	Boring Location[1] FL State Plane East		Surveyed Ground Elevation[1] (feet, NAVD 88)	Boring Depth[2] (feet)	Measured Groundwater Table			USDA Soil Survey		Estimated SHGWT[4]	
		Northing (feet)	Easting (feet)			Date Recorded	Depth[2] (feet)	Elevation (feet, NAVD 88)	Map Unit No.	Estimated SHGWT[3] Depth (feet)	Depth (feet)	Elevation (feet, NAVD 88)
SMF 6	PBA13-SMF6-1	1044734	552981	119.8	6.0	6/26/2024	4.2	115.6	45	+2.0-0.0/>6.0	2.5	117.3
	PBA13-SMF6-2	1044772	553100	119.7	6.0	6/26/2024	4.4	115.3	45	+2.0-0.0/>6.0	2.5	117.2
	PBA13-SMF6-3	1044674	553270	119.8	6.5	6/26/2024	4.8	115.0	45	+2.0-0.0/>6.0	2.5	117.3
SMF 7	PBA13-SMF7-1	1045214	556482	113.4	13.0	7/2/2024	12.2	101.2	45	+2.0-0.0/>6.0	9.0	104.4
	PBA13-SMF7-2	1045272	556625	118.1	18.0	7/2/2024	GNE[5]	<100.1	45	+2.0-0.0/>6.0	15.5	102.6
	PBA13-SMF7-3	1045167	556818	105.5	8.0	7/2/2024	7.3	98.2	45	+2.0-0.0/>6.0	4.5	101.0
	PBA13-SMF7-4	1045202	556950	108.6	12.5	7/1/2024	11.7	96.9	45	+2.0-0.0/>6.0	7.5	101.1
	PBA13-SMF7-5	1045090	556891	105.9	8.5	7/1/2024	8.1	97.8	45	+2.0-0.0/>6.0	4.5	101.4
SMF 8/9A	PBA13-SMF8-9A-1	1044819	564106	44.2	4.0	6/20/2024	2.2	42.0	13	0.3-1.5	1.0	43.2
	PBA13-SMF8-9A-2	1044566	564128	44.2	5.0	6/20/2024	2.0	42.2	13	0.3-1.5	1.0	43.2
	PBA13-SMF8-9A-3	1044808	564452	44.5	5.0	6/20/2024	2.3	42.2	13	0.3-1.5	1.0	43.5
	PBA13-SMF8-9A-4	1044548	564449	44.6	5.0	6/20/2024	2.7	41.9	13	0.3-1.5	1.5	43.1
FPC 12	PBA13-FPC12-1	1044816	559328	101.5	21.0	6/17/2024	GNE[5]	<80.5	45	+2.0-0.0/>6.0	18.0	83.5
	PBA13-FPC12-2	1044589	559331	103.1	21.0	6/17/2024	GNE[5]	<82.1	45	+2.0-0.0/>6.0	20.0	83.1
	PBA13-FPC12-3	1044764	559496	109.0	21.0	6/18/2024	GNE[5]	<88.0	45	+2.0-0.0/>6.0	>21.0	<88.0
	PBA13-FPC12-4	1044559	559497	96.2	19.5	6/18/2024	18.8	77.4	45	+2.0-0.0/>6.0	17.0	79.2

[1] Boring locations and ground elevations were provided by the project surveyor.
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[3] Seasonal high groundwater table depth estimated based on the Highlands County, Florida USDA Soil Survey information.
[4] Seasonal high groundwater table depth estimated based on soil stratigraphy, measured groundwater levels from the borings, the Highlands County, Florida USDA Soil Survey information and past experience with similar soil conditions.
[5] GNE: Groundwater Not Encountered

Summary of Roadway Seasonal High Groundwater Table Estimates
SR 70 from US 27 to CR 29 (Segment 13)
Highlands County, Florida
FPID No. 414506-4-32-01
Tierra Project No: 6511-24-002

Boring Name	Boring Location[1] FL State Plane East		Surveyed Ground Elevation[1] (feet, NAVD 88)	Boring Depth[2] (feet)	Measured Groundwater Table			USDA Soil Survey		Estimated SHGWT[4]	
	Northing (feet)	Easting (feet)			Date Recorded	Depth[2] (feet)	Elevation (feet, NAVD 88)	Map Symbol	Estimated SHGWT[3] Depth (feet)	Depth[2] (feet)	Elevation (feet, NAVD 88)
US 27											
SH-US27-1	1044103	549248	136.0	7.0	1/21/2024	GNE[5]	<129.0	1	>6.0	>7.0	<129.0
SH-US27-2	1044539	549426	132.9	7.0	1/21/2024	GNE[5]	<125.9	1	>6.0	>7.0	<125.9
SH-US27-3	1045578	549245	132.0	7.0	1/21/2024	GNE[5]	<125.0	1/9	>6.0	>7.0	<125.0
SH-US27-4	1046038	549419	130.0	7.0	1/21/2024	GNE[5]	<123.0	1/9	>6.0	>7.0	<123.0
SR 70											
SH13-330L	1045164	549795	127.0	8.0	1/11/2024	7.3	119.7	9	>6.0	5.0	122.0
SH13-335R	1044931	550273	124.2	5.5	1/9/2024	5.0	119.2	9/45	+2.0-0.0/>6.0	3.5	120.7
SH13-340R	1044984	550778	123.1	5.0	1/9/2024	4.3	118.8	45	+2.0-0.0/>6.0	2.8	120.3
SH13-345R	1044994	551283	120.9	5.0	1/8/2024	2.6	118.3	45	+2.0-0.0/>6.0	1.0	119.9
SH13-350R	1044974	551787	122.1	5.0	1/8/2024	4.2	117.9	45	+2.0-0.0/>6.0	2.5	119.6
SH13-355R	1044970	552280	123.6	5.5	1/9/2024	5.2	118.4	45	+2.0-0.0/>6.0	3.8	119.8
SH13-360R	1044984	552786	119.7	4.5	1/9/2024	3.5	116.2	45	+2.0-0.0/>6.0	1.5	118.2
SH13-365L	1045062	553280	118.6	5.0	1/11/2024	2.4	116.2	45	+2.0-0.0/>6.0	1.0	117.6
SH13-370R	1044971	553763	117.9	5.0	1/9/2024	2.6	115.3	45	+2.0-0.0/>6.0	1.0	116.9
SH13-375R	1044957	554280	121.6	8.0	1/9/2024	7.5	114.1	45	+2.0-0.0/>6.0	6.0	115.6
SH13-380R	1044905	554750	114.1	4.0	1/9/2024	1.5	112.6	45	+2.0-0.0/>6.0	0.0	114.1
SH13-385R	1044961	555272	115.6	5.5	1/9/2024	4.8	110.8	45	+2.0-0.0/>6.0	3.0	112.6
SH13-390R	1044953	555793	112.5	5.0	1/9/2024	3.9	108.6	45	+2.0-0.0/>6.0	2.5	110.0
SH13-395R	1044947	556287	109.7	5.0	1/9/2024	4.0	105.7	45	+2.0-0.0/>6.0	2.5	107.2
SH13-400R	1044956	556789	111.2	10.5	1/9/2024	9.5	101.7	45	+2.0-0.0/>6.0	8.0	103.2
SH13-405R	1044947	557292	110.6	14.5	1/9/2024	13.9	96.7	45	+2.0-0.0/>6.0	12.5	98.1
SH13-410R	1044947	557784	110.6	20.5	1/9/2024	20.1	90.5	45	+2.0-0.0/>6.0	17.0	93.6
SH13-415R	1044918	558183	102.7	14.5	1/9/2024	13.8	88.9	45	+2.0-0.0/>6.0	10.0	92.7
SH13-420R	1044915	558784	97.2	13.0	1/9/2024	12.3	84.9	45	+2.0-0.0/>6.0	10.5	86.7
SH13-425R	1044916	559287	95.2	15.0	1/10/2024	14.0	81.2	45	+2.0-0.0/>6.0	11.0	84.2
SH13-430R	1044954	559844	96.9	21.0	1/10/2024	20.3	76.6	45	+2.0-0.0/>6.0	18.0	78.9
SH13-435R	1044937	560264	83.0	10.5	1/10/2024	9.5	73.5	45	+2.0-0.0/>6.0	7.5	75.5
SH13-440L	1045046	560809	72.1	6.0	1/11/2024	5.3	66.8	21/45	+2.0-0.0/>6.0	3.5	68.6

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[5] GNE: Groundwater Not Encountered

[6] ABG: Estimated seasonal high groundwater table is above existing grade. Tierra recommends SHGWT be evaluated by the project biologist based on biological indicators.

Summary of Roadway Seasonal High Groundwater Table Estimates
SR 70 from US 27 to CR 29 (Segment 13)
Highlands County, Florida
FPID No. 414506-4-32-01
Tierra Project No: 6511-24-002

Boring Name	Boring Location[1] FL State Plane East		Surveyed Ground Elevation[1] (feet, NAVD 88)	Boring Depth[2] (feet)	Measured Groundwater Table			USDA Soil Survey		Estimated SHGWT[4]	
	Northing (feet)	Easting (feet)			Date Recorded	Depth[2] (feet)	Elevation (feet, NAVD 88)	Map Symbol	Estimated SHGWT[3] Depth (feet)	Depth[2] (feet)	Elevation (feet, NAVD 88)
SH13-445R	1044950	561330	49.0	6.0	1/10/2024	1.3	47.7	21	+2.0-0.0	ABG[6]	>49.0
SH13-450L	1045067	561775	46.2	4.0	1/11/2024	1.9	44.3	20/21	+2.0-0.0	0.0	46.2
SH13-455L	1045044	562322	45.6	4.0	1/11/2024	1.8	43.8	26	+2.0-0.0	ABG[6]	>45.6
SH13-460L	1045057	562783	44.2	3.0	1/11/2024	0.7	43.5	26	+2.0-0.0	ABG[6]	>44.2
SH13-465L	1045050	563239	45.0	3.5	1/11/2024	1.9	43.1	26	+2.0-0.0	0.5	44.5
SH13-470L	1045050	563807	45.3	5.0	1/11/2024	3.6	41.7	13/26	+2.0-0.0/0.3-1.5	1.5	43.8

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[6] ABG: Estimated seasonal high groundwater table is above existing grade. Tierra recommends SHGWT be evaluated by the project biologist based on biological indicators.

Summary of SMF/FPC Alternatives Seasonal High Groundwater Table Estimates
SR 70 from US 27 to CR 29 (Segment 13)
Highlands County, Florida
FPID No. 414506-4-52-01
Tierra Project No: 6511-24-002

SMF/FPC Site Name	Boring Name	Boring Location[1]				Surveyed Ground Elevation[1] (feet, NAVD 88)	Boring Depth[2] (feet)	Measured Groundwater Table			USDA Soil Survey		Estimated SHGWT[4]	
		FL State Plane East		C/L Const. SR 70				Date Recorded	Depth[2] (feet)	Elevation (feet, NAVD 88)	Map Unit No.	Estimated SHGWT[3] Depth (feet)	Depth (feet)	Elevation (feet, NAVD 88)
		Northing (feet)	Easting (feet)	Station (feet)	Offset (feet)									
SMF 1301B	PBA-SMF1301B-1	1045168	552519	1298+29	175 LT.	120.4	5.5	2/21/2025	4.2	116.2	45	+2.0-0.0/>6.0	2.5	117.9
	PBA-SMF1301B-2	1045236	552737	1300+48	245 LT.	120.0	5.0	2/21/2025	4.0	116.0	45	+2.0-0.0/>6.0	2.0	118.0
FPC 1301A	PBA-SMF1301B-2	1045236	552737	1300+48	245 LT.	120.0	5.0	2/21/2025	4.0	116.0	45	+2.0-0.0/>6.0	2.0	118.0
	PBA-FPC1301A-1	1045213	552951	1302+62	224 LT.	119.2	4.5	2/21/2025	3.6	115.6	45	+2.0-0.0/>6.0	1.5	117.7
FPC 1301B	PBA-FPC1301B-1	1044800	552878	1301+91	190 RT.	122.3	6.5	2/22/2025	5.8	116.5	45	+2.0-0.0/>6.0	4.5	117.8
	PBA-FPC1301B-2	1044632	552709	1300+24	359 RT.	118.9	3.5	2/23/2025	2.0	116.9	45	+2.0-0.0/>6.0	0.5	118.4
SMF 1301C	PBA-FPC1301A-1	1045213	552951	1302+62	224 LT.	119.2	4.5	2/21/2025	3.6	115.6	45	+2.0-0.0/>6.0	1.5	117.7
	PBA-SMF1301C-1	1045203	553188	1304+99	215 LT.	120.1	6.0	2/21/2025	4.8	115.3	45	+2.0-0.0/>6.0	2.5	117.6
SMF 1301A	PBA13-SMF6-1	1044734	552981	1302+95	256 RT.	119.8	6.0	6/26/2024	4.2	115.6	45	+2.0-0.0/>6.0	2.5	117.3
	PBA13-SMF6-2	1044772	553100	1304+13	216 RT.	119.7	6.0	6/26/2024	4.4	115.3	45	+2.0-0.0/>6.0	2.5	117.2
	PBA13-SMF6-3	1044674	553270	1305+85	314 RT.	119.8	6.5	6/26/2024	5	115.0	45	+2.0-0.0/>6.0	2.5	117.3
FPC 1303A	PBA-FPC1303A-1	1044763	554799	1321+13	215 RT.	117.0	7.5	2/21/2025	5	111.8	45	+2.0-0.0/>6.0	2.5	114.5
FPC1306A	PBA-FPC1306A-1	1044776	556064	1333+78	194 RT.	113.0	7.5	2/21/2025	7	106.4	45	+2.0-0.0/>6.0	4.5	108.5
SMF 1302A	PBA13-SMF7-1	1045214	556482	1337+93	246 LT.	113.4	13.0	7/2/2024	12.2	101.2	45	+2.0-0.0/>6.0	9.0	104.4
	PBA13-SMF7-2	1045272	556625	1339+36	305 LT.	118.1	18.0	7/2/2024	GNE[5]	<100.1	45	+2.0-0.0/>6.0	15.5	102.6
	PBA13-SMF7-3	1045167	556818	1341+29	201 LT.	105.5	8.0	7/2/2024	7.3	98.2	45	+2.0-0.0/>6.0	4.5	101.0
	PBA13-SMF7-4	1045202	556950	1342+61	237 LT.	108.6	12.5	7/1/2024	11.7	96.9	45	+2.0-0.0/>6.0	7.5	101.1
	PBA13-SMF7-5	1045090	556891	1342+03	124 LT.	105.9	8.5	7/1/2024	8.1	97.8	45	+2.0-0.0/>6.0	4.5	101.4
SMF 1302C	PBA-SMF1302C-1	1044712	557159	1344+73	252 RT.	106.4	10.5	2/19/2025	8.80	97.6	45	+2.0-0.0/>6.0	6.5	99.9
	PBA-SMF1302C-2	1044703	557558	1348+72	259 RT.	107.8	15.0	2/19/2025	14.00	93.8	45	+2.0-0.0/>6.0	12.5	95.3
SMF 1302B	SH13-410R	1044947	557784	1350+97	14 RT.	110.6	20.5	1/9/2024	20.1	90.5	45	+2.0-0.0/>6.0	17.0	93.6
	PBA-SMF1302B-2	1045198	558041	1353+52	239 LT.	109.4	19.5	2/19/2025	GNE	<89.9	45	+2.0-0.0/>6.0	18.0	91.4
FPC 1308B	PBA-FPC1308B-1	1044536	558278	1355+93	421 RT.	92.7	7.0	2/16/2025	4.30	88.4	45	+2.0-0.0/>6.0	2.0	90.7
	SH13-415R	1044918	558183	1354+96	41 RT.	102.7	14.5	1/9/2024	13.8	88.9	45	+2.0-0.0/>6.0	10.0	92.7
	SH13-420R	1044915	558784	1360+97	40 RT.	97.2	13.0	1/9/2024	12.3	84.9	45	+2.0-0.0/>6.0	10.5	86.7

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Summary of SMF/FPC Alternatives Seasonal High Groundwater Table Estimates
SR 70 from US 27 to CR 29 (Segment 13)
Highlands County, Florida
FPID No. 414506-4-52-01
Tierra Project No: 6511-24-002

SMF/FPC Site Name	Boring Name	Boring Location[1]				Surveyed Ground Elevation[1] (feet, NAVD 88)	Boring Depth[2] (feet)	Measured Groundwater Table			USDA Soil Survey		Estimated SHGWT[4]	
		FL State Plane East		C/L Const. SR 70				Date Recorded	Depth[2] (feet)	Elevation (feet, NAVD 88)	Map Unit No.	Estimated SHGWT[3] Depth (feet)	Depth (feet)	Elevation (feet, NAVD 88)
		Northing (feet)	Easting (feet)	Station (feet)	Offset (feet)									
FPC 12	PBA13-FPC12-1	1044816	559328	1366+40	140 RT.	101.5	21.0	6/17/2024	GNE[5]	<80.5	45	+2.0-0.0/>6.0	18.0	83.5
	PBA13-FPC12-2	1044589	559331	1366+43	367 RT.	103.1	21.0	6/17/2024	GNE[5]	<82.1	45	+2.0-0.0/>6.0	20.0	83.1
	PBA13-FPC12-3	1044764	559496	1368+08	192 RT.	109.0	21.0	6/18/2024	GNE[5]	<88.0	45	+2.0-0.0/>6.0	>21.0	<88.0
	PBA13-FPC12-4	1044559	559497	1368+09	397 RT.	96.2	19.5	6/18/2024	18.8	77.4	45	+2.0-0.0/>6.0	17.0	79.2
FPC 1309A/ FPC 1390B	SH13-430R	1044954	559844	1371+56	2 RT.	96.9	21.0	1/10/2024	20.3	76.6	45	+2.0-0.0/>6.0	18.0	78.9
	SH13-435R	1044937	560264	1375+77	16 RT.	83.0	10.5	1/10/2024	9.5	73.5	45	+2.0-0.0/>6.0	7.5	75.5
	PBA-FPC1309A	1044692	559913	1372+25	264 RT.	105.7	20.0	2/20/2025	GNE[5]	<85.7	45	+2.0-0.0/>6.0	>20.0	<85.7
SMF 1303D	PBA-SMF1303D-1	1045044	560561	1378+71	97 LT.	81.4	12.0	2/20/2025	11.3	70.1	45	+2.0-0.0/>6.0	9.0	72.4
SMF 1303C	PBA-SMF1303C-1	1044571	563511	1408+23	345 RT.	44.3	3.5	2/20/2025	2.1	42.2	26	+2.0-0.0	0.5	43.8
	PBA-SMF1303C-2	1044485	563801	1411+13	432 RT.	43.8	9.5	2/20/2025	2.9	40.9	13	0.3-1.5	0.5	43.3
SMF 1303A	PBA13-SMF8-9A-1	1044819	564106	1414+19	99 RT.	44.2	4.0	6/20/2024	2.2	42.0	13	0.3-1.5	1.0	43.2
	PBA13-SMF8-9A-2	1044566	564128	1414+40	351 RT.	44.2	5.0	6/20/2024	2.0	42.2	13	0.3-1.5	1.0	43.2
	PBA13-SMF8-9A-3	1044808	564452	1417+65	111 RT.	44.5	5.0	6/20/2024	2.3	42.2	13	0.3-1.5	1.0	43.5
	PBA13-SMF8-9A-4	1044548	564449	1417+60	372 RT.	44.6	5.0	6/20/2024	2.7	41.9	13	0.3-1.5	1.5	43.1
SMF 1303B	PBA-SMF1303B-1	1045288	564235	1415+49	369 LT.	42.8	8.3	2/21/2025	3.9	38.9	13	0.3-1.5	1.0	41.8
	PBA-SMF1303B-2	1045282	564625	1419+39	362 LT.	43.5	10.3	2/21/2025	5.5	38.0	13	0.3-1.5	1.5	42.0

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[5] GNE: Groundwater Not Encountered

APPENDIX 6

EXHIBITS

BASIN 6-2
21.6 AC.

BASIN 6-1
18.8 AC.

ZONE A

ZONE A

ZONE A

ZONE A

EXIST. ROW

EXIST. ROW

US HWY 27

SR 70

MYERS RD

PLACID PINE DR

℄ CONST. SR 70

N

0 50 200

Feet

LEGEND

FLOW DIRECTION
BASIN BOUNDARY
PARCEL LINE
FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

EXISTING DRAINAGE MAP

SHEET NO. 1

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awaller 11/17/2025 11:14:23 AM



LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE
- FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

EXISTING DRAINAGE MAP

SHEET NO. 2

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REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			EXISTING DRAINAGE MAP	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	HONG TING CHIU, P.E. P.E. LICENSE NUMBER 80386 HNTB CORPORATION 201 N FRANKLIN STREET SUITE 1200 TAMPA, FL 33602	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		3
					70	HIGHLANDS	414506-4-52-01		

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awaller 11/17/2025 11:14:28 AM

BASIN 8-4
52.8 AC.

EXIST. ROW

BEAR RD

℄ CONST. SR 70

SR 70

EXIST. ROW

BASIN 8-3
60.2 AC.

N

0 50 200
Feet

LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

EXISTING DRAINAGE MAP

SHEET NO. 4

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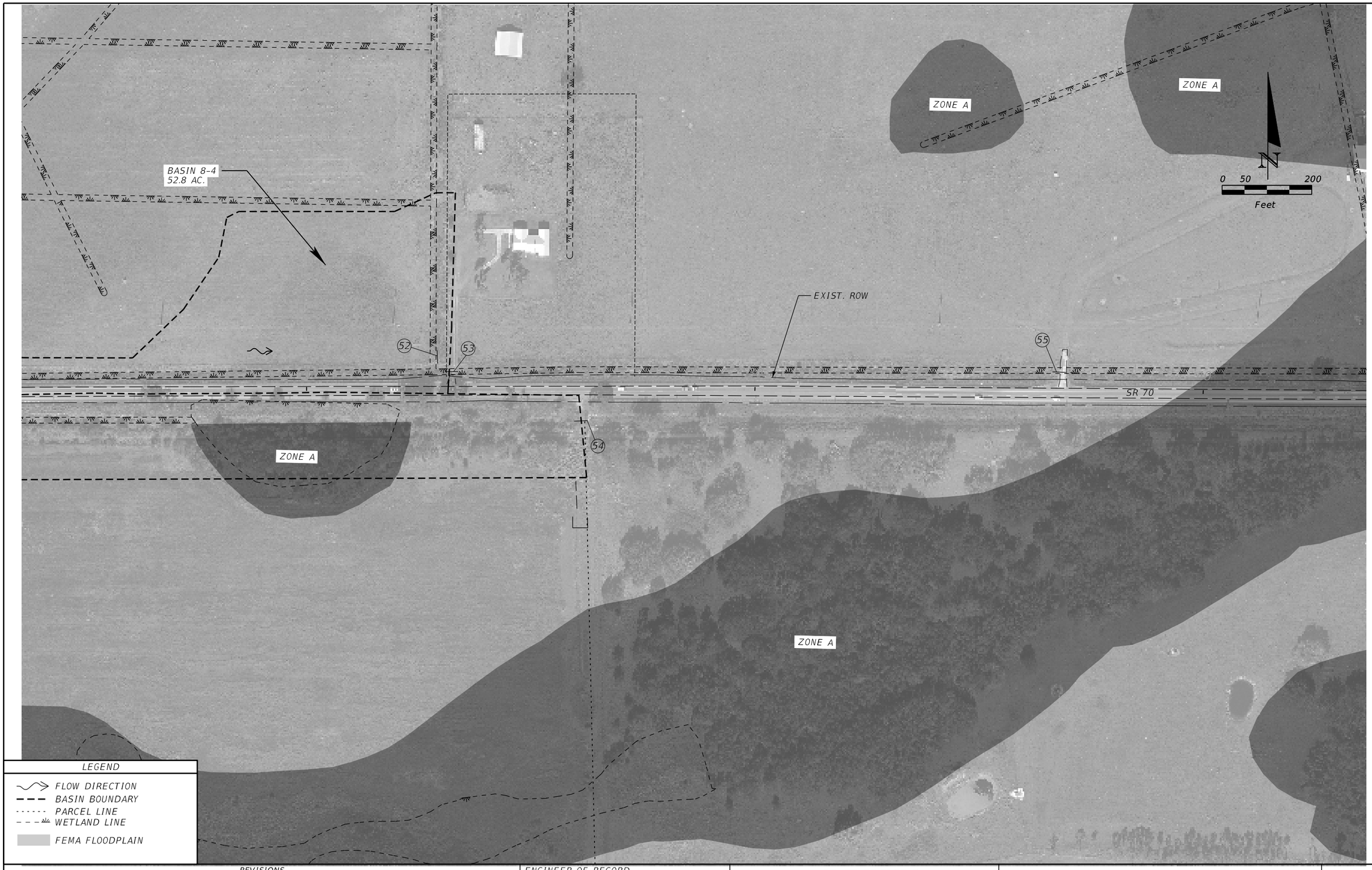
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REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			EXISTING DRAINAGE MAP	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	HONG TING CHIU, P.E. P.E. LICENSE NUMBER 80386 HNTB CORPORATION 201 N FRANKLIN STREET SUITE 1200 TAMPA, FL 33602	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		5
					70	HIGHLANDS	414506-4-52-01		

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LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE
- FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

EXISTING DRAINAGE MAP

SHEET NO. 6

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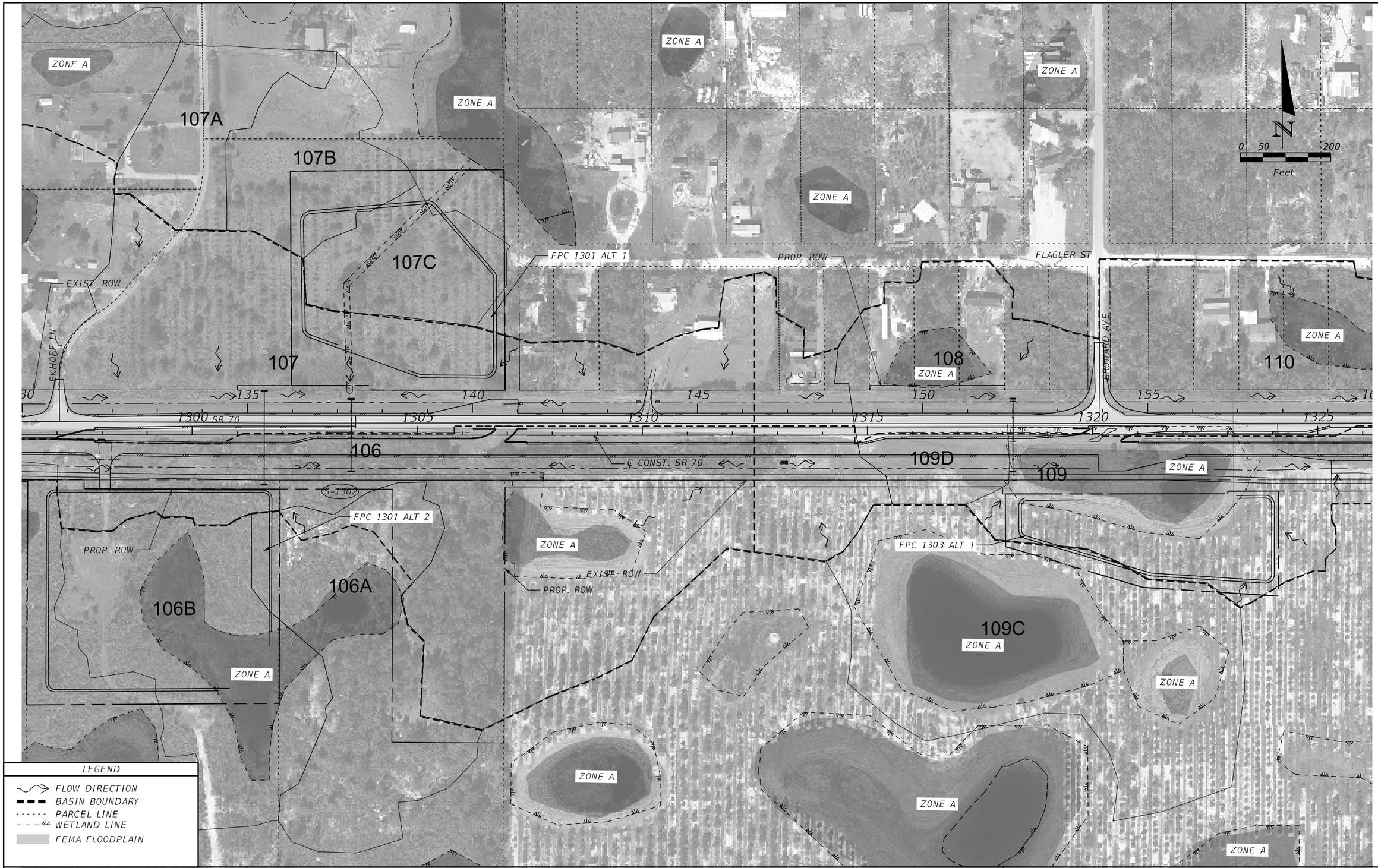
LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- FEMA FLOODPLAIN

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			FPC DRAINAGE MAP	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	HONG TING CHIU, P.E. P.E. LICENSE NUMBER 80386 HNTB CORPORATION 201 N FRANKLIN STREET SUITE 1200 TAMPA, FL 33602	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		1
					70	HIGHLANDS	414506-4-52-01		

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

FPC DRAINAGE MAP

SHEET NO. 2

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LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE
- FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

FPC DRAINAGE MAP

SHEET NO. 3

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LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

FPC DRAINAGE MAP

SHEET NO. 4

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LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE
- FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

FPC DRAINAGE MAP

SHEET NO. 5

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

FPC DRAINAGE MAP

SHEET NO. 6

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LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

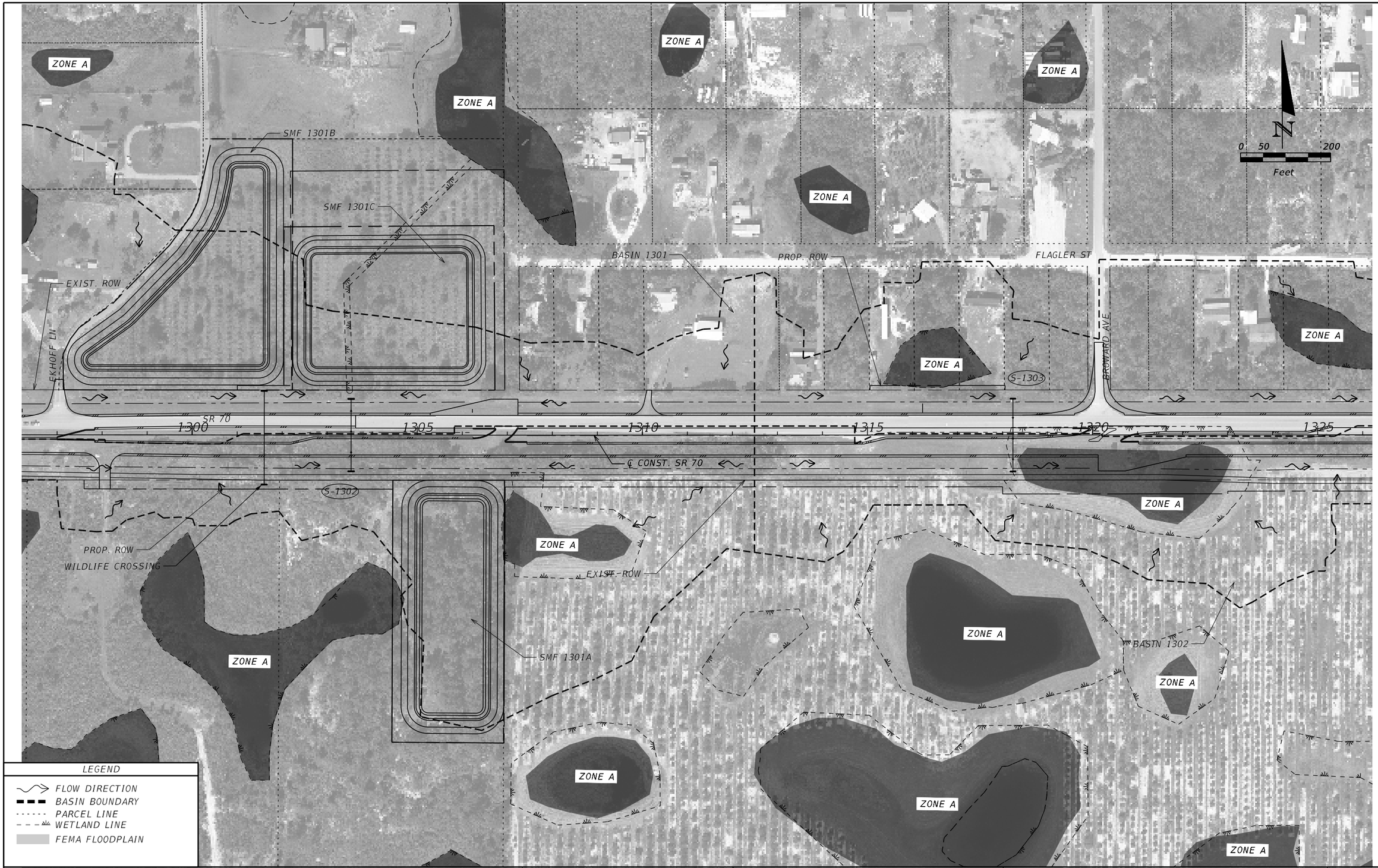
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

SMF DRAINAGE MAP

SHEET NO. 1

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LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE
- FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

SMF DRAINAGE MAP

SHEET NO. 2

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ZONE A
ZONE A
ZONE A
ZONE A
ZONE A
ZONE A
ZONE A
ZONE A
ZONE A
ZONE A
ZONE A
ZONE A

N
0 50 200
Feet

FLAGLER ST
HIGHLANDS BLVD
PROP. ROW
SMF 1302A
S-1304
℄ CONST. SR 70
CITRUS BLVD
EXIST. ROW
SMF 1302B
1330
1335
1340
1345
1350
1355
SR 70
BASIN 1302
PROP. ROW
TURNER RD
BASIN 1303
SMF 1302C

LEGEND
- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE
- FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

SMF DRAINAGE MAP

SHEET NO. 3

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LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SMF DRAINAGE MAP	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	HONG TING CHIU, P.E. P.E. LICENSE NUMBER 80386 HNTB CORPORATION 201 N FRANKLIN STREET SUITE 1200 TAMPA, FL 33602	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		4
					70	HIGHLANDS	414506-4-52-01		

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LEGEND

- FLOW DIRECTION
- BASIN BOUNDARY
- PARCEL LINE
- WETLAND LINE
- FEMA FLOODPLAIN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

HONG TING CHIU, P.E.
P.E. LICENSE NUMBER 80386
HNTB CORPORATION
201 N FRANKLIN STREET SUITE 1200
TAMPA, FL 33602

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
70	HIGHLANDS	414506-4-52-01

SMF DRAINAGE MAP

SHEET NO. 5

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REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SMF DRAINAGE MAP	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	HONG TING CHIU, P.E. P.E. LICENSE NUMBER 80386 HNTB CORPORATION 201 N FRANKLIN STREET SUITE 1200 TAMPA, FL 33602	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		6
					70	HIGHLANDS	414506-4-52-01		

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APPENDIX 7

CONSTRUCTION COST ESTIMATES

Unit Costs Derived from FDOT Historical Cost 12 Month Statewide Moving Averages.

				Basin 1301 Alternatives		
				Alt. 1	Alt. 2	Alt. 3
	Pay Item Number	UNIT	Unit Cost	SMF 1301A	SMF 1301B	SMF 1301C
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 36"S/CD	0430-175-136	LF	$ 258.32	150	300	160
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 48"S/CD	0430-175-148	LF	$ 399.49	150	300	160
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 60"S/CD	0430-175-160	LF	$ 620.66	150	300	160
INFLOW MANHOLES, J-8, <10'	0425-2-91	EA	$ 14,004.38	2	3	2
INFLOW MITERED END SECTION, OPTIONAL ROUND, 60" CD	0430-982-143	EA	$ 21,000.00	1	1	1
INLETS, DT BOT, TYPE C, MODIFY	0425-1529	EA	$ 7,020.29			
INLETS, DT BOT, TYPE E, MODIFY	0425-1559	EA	$ 12,196.29	1	1	1
REGULAR EXCAVATION	0120-1	CY	$ 13.81	3774.929	1867.724	7894.681
EMBANKMENT	0120-6	CY	$ 61.70	5435.468	7184.580	2995.098
PERFORMANCE TURF	0570-1-1	SY	$ 3.51	9020.680	11693.944	9368.136
CLEARING & GRUBBING	0110-1-1	AC	$ 15,000.00	3.319	4.286	3.910
ESTIMATED CONSTRUCTION COST				**$721,917**	**$1,033,174**	**$651,112**
ESTIMATED ROW COST				**$375,000**	**$295,000**	**$275,000**

Unit Costs Derived from FDOT Historical Cost 12 Month Statewide Moving Averages.

				Basin 1302 Alternatives		
				Alt. 1	Alt. 2	Alt. 3
	Pay Item Number	**UNIT**	**Unit Cost**	**SMF 1302A**	**SMF 1302B**	**SMF 1302C**
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 30"S/CD	0430-175-130	LF	$ 222.20	300		130
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 42"S/CD	0430-175-142	LF	$ 306.90	300		130
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 54"S/CD	0430-175-154	LF	$ 484.54	300	240	130
INFLOW MANHOLES, J-8, <10'	0425-2-91	EA	$ 14,004.38	3	1	2
INFLOW MITERED END SECTION, OPTIONAL ROUND, 54" CD	0430-982-142	EA	$ 16,750.00	1	1	1
INLETS, DT BOT, TYPE C, MODIFY	0425-1529	EA	$ 7,020.29			
INLETS, DT BOT, TYPE E, MODIFY	0425-1559	EA	$ 12,196.29	1	1	1
REGULAR EXCAVATION	0120-1	CY	$ 13.81	16532.309	12618.296	27216.425
EMBANKMENT	0120-6	CY	$ 61.70	6956.184	10830.022	0.000
PERFORMANCE TURF	0570-1-1	SY	$ 3.51	12999.344	13262.376	16612.984
CLEARING & GRUBBING	0110-1-1	AC	$ 15,000.00	3.784	2.998	4.224
ESTIMATED CONSTRUCTION COST				**$1,134,944**	**$1,093,229**	**$686,264**
ESTIMATED ROW COST				**$520,000**	**$460,000**	**$300,000**

Unit Costs Derived from FDOT Historical Cost 12 Month Statewide Moving Averages.

				Basin 1303 Alternatives				
				Alt. 1	Alt. 2	Alt. 3		
	Pay Item Number	UNIT	Unit Cost	SMF 1303A	SMF 1303B	SMF 1303C	SMF 1303D	SMF 1303E
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 42"S/CD	0430-175-142	LF	$ 306.90		150			
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 54"S/CD	0430-175-154	LF	$ 484.54		150			
INFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 66"S/CD	0430-175-166	LF	$ 775.99	300	150			100
INFLOW MANHOLES, J-8, <10'	0425-2-91	EA	$ 14,004.38		2			
INFLOW MITERED END SECTION, OPTIONAL ROUND, 66" CD	0430-982-144	EA	$ 22,000.00	1	1			2
INLETS, DT BOT, TYPE C, MODIFY	0425-1529	EA	$ 7,020.29				4	1
INLETS, DT BOT, TYPE E, MODIFY	0425-1559	EA	$ 12,196.29	1	1	1		
OUTFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 30"S/CD	0430-175-130	LF	$ 222.20				150	
OUTFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 42"S/CD	0430-175-142	LF	$ 306.90				150	
OUTFLOW PIPE CULVERT, OPT MATERIAL, ROUND, 54"S/CD	0430-175-154	LF	$ 484.54	100	150	100	150	300
OUTFLOW MANHOLES, J-8, <10'	0425-2-91	EA	$ 14,004.38					
OUTFLOW MITERED END SECTION, OPTIONAL ROUND, 54" CD	0430-982-142	EA	$ 16,750.00	1	1	1	1	1
REGULAR EXCAVATION	0120-1	CY	$ 13.81	379.724	548.158	3782.849	0.000	0.000
EMBANKMENT	0120-6	CY	$ 61.70	7421.736	9456.295	7275.665	0.000	0.000
PERFORMANCE TURF	0570-1-1	SY	$ 3.51	9579.928	14837.640	8365.296	0.000	0.000
CLEARING & GRUBBING	0110-1-1	AC	$ 15,000.00	4.313	4.731	5.574		
ESTIMATED CONSTRUCTION COST				**$893,685**	**$1,100,813**	**$1,179,136**		
ESTIMATED ROW COST				**$255,000**	**$310,000**	**$395,000**	**$0.00**	**$0.00**

COST ESTIMATES FOR FPC SITES

FPC 1301A					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	CY	8002.2	$ 13.81	$ 110,510.38
CLEARING AND GRUBBING	110-1-1	AC	5.28	$ 15,000.00	$ 79,200.00
PERFORMANCE TURF	570-1-1	SY	11084	$ 3.51	$ 38,904.84
Total:					**$ 228,616.00**

FPC 1301B					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	CY	9083.1	$ 13.81	$ 125,437.61
CLEARING AND GRUBBING	110-1-1	AC	7.09	$ 15,000.00	$ 106,350.00
PERFORMANCE TURF	570-1-1	SY	11957.444	$ 3.51	$ 41,970.63
EMBANKMENT	0120-6	CY	1426	$ 61.70	$ 87,984.20
TYPE B STABILIZATION	0160-4	SY	1833	$ 8.11	$ 14,865.63
Total:					**$ 376,609.00**

FPC 1303A					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	CY	3888.2	$ 13.81	$ 53,696.04
CLEARING AND GRUBBING	110-1-1	AC	2.66	$ 15,000.00	$ 106,350.00
PERFORMANCE TURF	570-1-1	SY	4889	$ 3.51	$ 41,970.63
					$ 202,017.00

FPC 1306A					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	CY	1226.2	$ 13.81	$ 16,933.82
CLEARING AND GRUBBING	110-1-1	AC	0.67	$ 15,000.00	$ 10,050.00
PERFORMANCE TURF	570-1-1	SY	1646	$ 3.51	$ 5,777.46
Total:					**$ 32,762.00**

FPC 1309A					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD	430-175-124	LF	600	$ 156.40	$ 93,840.00
MITERED END SECTION, OPTIONAL ROUND, 24" CD	430-982-129	EA	2	$ 3,837.62	$ 7,675.24
MANHOLES, P-7, <10'	425-2-71	EA	1	$ 13,276.84	$ 13,276.84
REGULAR EXCAVATION	0120-1	CY	1952	$ 13.81	$ 26,959.88
CLEARING AND GRUBBING	110-1-1	AC	3.69	$ 15,000.00	$ 55,350.00
PERFORMANCE TURF	570-1-1	SY	16166	$ 3.51	$ 56,742.66
Total:					**$ 253,845.00**

SWALE 1309B					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	EA	674.1	$ 13.81	$ 9,309.32
CLEARING AND GRUBBING	110-1-1	CY	1.1897	$ 15,000.00	$ 17,845.50
RETAINING WALL		EA	1	$ 355,000.00	$ 355,000.00
INLETS, DT BOT, TYPE E, <10'	0425-1551	EA	3	$ 8,684.99	$ 26,054.97
PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 24"S/CD	0430-175-124	LF	550	$ 156.40	$ 86,020.00
MITERED END SECTION, OPTIONAL ROUND, 24" CD	430-982-129	EA	1	$ 3,837.62	$ 3,837.62
CONCRETE DITCH PAVEMENT, NON REINFORCED, 4"	0524-1-2	SY	772	$ 184.13	$ 142,209.74
PERFORMANCE TURF	570-1-1	SY	5759	$ 3.51	$ 20,214.09
Total:					**$ 660,492.00**

FPC 1309C					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	AC	1839	$ 13.81	$ 25,399.35
CLEARING AND GRUBBING	110-1-1	SY	1.5252	$ 15,000.00	$ 22,878.00
PERFORMANCE TURF	570-1-1	SY	5495	$ 3.51	$ 19,287.45
Total:					**$ 67,565.00**

FPC for SMF 1303A					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	CY	145.2	$ 13.81	$ 2,005.21
CLEARING AND GRUBBING	110-1-1	AC	0.64	$ 15,000.00	$ 9,600.00
PERFORMANCE TURF	570-1-1	SY	2420	$ 3.51	$ 8,494.20
Total:					**$ 11,605**

FPC for SMF 1303B					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	CY	3517.1	$ 13.81	$ 48,571.15
CLEARING AND GRUBBING	110-1-1	AC	1.01	$ 15,000.00	$ 15,150.00
PERFORMANCE TURF	570-1-1	SY	2711	$ 3.51	$ 9,515.61
Total:					**$ 63,721**

FPC for SMF 1303C					
Description	**Pay Item**	**Unit**	**Quantity**	**Unit Price**	**Cost**
REGULAR EXCAVATION	0120-1	CY	3920.4	$ 13.81	$ 54,140.72
CLEARING AND GRUBBING	110-1-1	AC	3.69	$ 15,000.00	$ 55,350.00
PERFORMANCE TURF	570-1-1	SY	2953	$ 3.51	$ 10,365.03
Total:					**$ 109,491**

CONCEPTUAL ESTIMATE, ALTERNATES / SEGMENTS: PHASE COSTS SUMMARY

The basis for this estimate is "cost" not market value

**** EXEMPT FROM PUBLIC DISCLOSURE - FS: 337.168 ****

ITEM SEG: 4145064 **COUNTY:** Highlands **Project:** SR 70 from US 27 to CR 29

COST EST. NUMBER: 25010C **FAP NO.:** 1502-018-P

FOR: J. Fowler, PE, HNTB

BY: A. Perry, J. Harper, CPM, FDOT R/W **DATE:** 10/23/2025

Alternate / Segment: Segment 13 Preferred Alternatives - FPC Sites

Description:	Size Acres:	Parcels	Relo.Cnt					Total:
FPC 1301A	5.28	1	0					$325,000
FPC 1301B	6.21	1	0					$275,000
FPC 1303A	2.66	1	0					$170,000
FPC 1306A	0.66	1	0					$130,000
FPC 1309A	3.69	1	0					$235,000
FPC 1309B (SWALE)	1.19	1	0					$165,000

CONCEPTUAL ESTIMATE, ALTERNATES / SEGMENTS: PHASE COSTS SUMMARY

The basis for this estimate is "cost" not market value

**** EXEMPT FROM PUBLIC DISCLOSURE - FS: 337.168 ****

ITEM SEG: 4145064 **COUNTY:** Highlands **Project:** SR 70 from US 27 to CR 29

COST EST. NUMBER: 25010C **FAP NO.:** 1502-018-P

FOR: J. Fowler, PE, HNTB

BY: A. Perry, J. Harper, CPM, FDOT R/W **DATE:** 10/23/2025

Alternate / Segment: Segment 13 Preferred Alternatives - SMF Sites

Description:	Size Acres:	Parcels	Relo.Cnt					Total:
SMF 1301A	3.32	1	0					$375,000
SMF 1301B	4.29	1	0					$295,000
SMF 1301C	3.91	1	0					$275,000
SMF 1302A	3.79	5	0					$520,000
SMF 1302B	2.63	5	0					$460,000
SMF 1302C	3.96	1	0					$300,000
SMF 1303A	5.55	1	0					$255,000
SMF 1303B	5.74	2	0					$310,000
SMF 1303C	9.45	1	0					$395,000

APPENDIX 8

COMMENTS

Submittal Report

Financial Project:	414506-4-52-01	Submittal Type:	POND SITING REPORT
Submittal Phase:	INITIAL	Submittal Staff Type:	CONSULTANT
Received Date:	5/19/2025	Response Due Date:	7/7/2025
Grace Period:	0	District:	FIRST
Status:	OPEN	Create Date:	5/19/2025
Create User Id:	KNPLGJO	Last Update:	5/19/2025
		Last Update User Id:	KNPLGJO

Description:

Pond Siting Report (DRAFT)

*Notice - This project is a planned Design build project - Schedule has not been set and is subject to change. The ERC review does not include an RFP.

Threads:

Name	Assignment	Due Date	Status	Comments
Brent Setchell	LEAD REVIEWER	6/16/2025	ACTIVE	0
Name	**Assignment**	**Due Date**	**Status**	**Comments**
Joe Lauk	IN-HOUSE PROJECT MANAGER	6/16/2025	ACTIVE	0
Name	**Assignment**	**Due Date**	**Status**	**Comments**
JOHN FOWLER	CONSULTANT PROJECT MANAGER	7/7/2025	ACTIVE	0
Name	**Assignment**	**Due Date**	**Status**	**Comments**
Karina Della Sera	LEAD REVIEWER	6/16/2025	ACTIVE	0
Name	**Assignment**	**Due Date**	**Status**	**Comments**
KENNETH YINGER	REVIEWER	6/16/2025	ACTIVE	2

No	Status	Current Holder	Reference	Categories
4	COMMENT SUBMITTED FOR RESPONSE	JOHN FOWLER	PSR	DRAINAGE

Created By	Created On	Version	Delegate For
KENNETH YINGER	6/16/2025	1	

The following was noted in the Pond Siting Report:	
The proposed project will require substantial fill for the proposed typical section for that segment beyond the “ridge” and into the flat “plains” on the eastern portion of the project. Please estimate the embankment fill that may be necessary within the “plains” and the borrow that will become available with the preferred SMF sites and FPC sites along the ridge. This could help determine whether it would be cost effective to provide cup-for-cup FPC or reduce or eliminate FPC by further detailed analysis. A written response is required.	This PSR estimates the size of the SMF alternatives based on the differences in runoff volume using the NRCS equation, and the size of the FPC alternatives based on a volumetric basis. It should also be noted that SR 70 corridor will require substantial fillings that there is ongoing discussion of a regional borrow pit on a programmatic level. A refined/detailed analysis is anticiapted for the Concept Design in order to secure the ERP. This comment will be further discussed with FDOT PM and District Drainage to determine further detailed analysis is needed (which it appears to be beyond the current scopes) for the Final PSR.

No	Status	Current Holder	Reference	Categories
5	COMMENT SUBMITTED FOR RESPONSE	JOHN FOWLER	PSR	DRAINAGE

Created By	Created On	Version	Delegate For
KENNETH YINGER	6/16/2025	1	

The following was noted in the Pond Siting Report:	
In general, the “Okeechobee Plains” consists of unsuitable materials, such as muck and peat. Please review the previous and existing borings of the SR 70 roadway within the plains to determine whether some of the proposed SMF or FPC sites, and the existing or proposed roadways will require removal of unsuitable materials from the project. While this may not be a normal function in the PD&E phase, it will help determine the practicability of the proposed project. This comment is for information only. A written response is NOT required.	Unsuitable material has been encountered in the flat "plains" region along SR 70 per the geotechnical engineer. The roadway embankment fill volume will need to account for the roadway subsoil excavation volume. In coordination with the geotechnical engineer, the volume of suitable borrow materials from the SMF and FPC sites in the flat "plains" region will be estimated in the Final PSR for the purpose of pond siting analysis. The roadway embankment fill volume will be determined by the roadway engineer during the Concept Design, but not for the purpose of pond siting analysis.

Name	Assignment	Due Date	Status	Comments
Kisan Patel	LEAD REVIEWER	6/16/2025	ACTIVE	0*

Name	Assignment	Due Date	Status	Comments
MICHAEL VAUGHN	LEAD REVIEWER	6/16/2025	ACTIVE	0*

Name	Assignment	Due Date	Status	Comments
Nicole Monies	LEAD REVIEWER	6/16/2025	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Ramasamy Venkatesan	REVIEWER	6/16/2025	ACTIVE	2

No	Status	Current Holder	Reference	Categories
2	COMMENT SUBMITTED FOR RESPONSE	JOHN FOWLER		GEOTECH/MATERIALS

Created By	Created On	Version	Delegate For
Ramasamy Venkatesan	6/10/2025	1	

The following was noted in the Pond Siting Report:	
Horizontal and vertical hydraulic conductivity results/values seems to be high. A suitable reduction factor may have to be applied to come up the design values and pond sizing. Not sure what values were used in preliminary design/pond sizing? A written response is required.	Preliminary horizontal and vertical hydraulic conductivity values were estimated based on the USDA soil characteristics and used in the ICPR model to establish flood elevations. The values will be refined based on the recommended values (plus safety factor) from the geotechnical engineer. The methodology and calculations for estimating the hydraulic conductivity values will be provided in the Final PSR.

No	Status	Current Holder	Reference	Categories
3	COMMENT SUBMITTED FOR RESPONSE	JOHN FOWLER		GEOTECH/MATERIALS

Created By	Created On	Version	Delegate For
Ramasamy Venkatesan	6/10/2025	1	

The following was noted in the Pond Siting Report:	
Not sure what methodology is used in arriving at the hydraulic conductivity values. Please include a set of calculations including the methodology used in the geotech reports/PSR report appendix. A written response is required.	Preliminary horizontal and vertical hydraulic conductivity values were estimated based on the USDA soil characteristics and used in the ICPR model to establish flood elevations. The values will be refined based on the recommended values (plus safety factor) from the geotechnical engineer. The methodology and calculations for estimating the hydraulic conductivity values will be provided in the Final PSR.

Name	Assignment	Due Date	Status	Comments
Ryan Molloy	LEAD REVIEWER	6/16/2025	ACTIVE	0

Name	Assignment	Due Date	Status	Comments
Tia Norman	REVIEWER	6/16/2025	ACTIVE	1

No	Status	Current Holder	Reference	Categories
1	COMMENT SUBMITTED FOR RESPONSE	JOHN FOWLER		ENVIRONMENTAL PERMITS

Created By	Created On	Version	Delegate For
Tia Norman	6/9/2025	1	

The following was noted in the Pond Siting Report:	
Please see the PSR checklist attached with comments A written response is required.	(1) Agree. The environemntal assessment data will be refined and updated. The selection of the preferred alternatives will be coordinated with PD&E team. (2) Agree. Section 4.1.3 will be revised to correctly describe the FPC site alternatives rather than the SMF site alternatives.

APPENDIX 9

REFERENCES

ERP Permit No. 25519.001

ERP Permit No. 27810.000

ERP PERMIT NO. 25519.001

SR 25 US 27 @ SR 70 Intersection Improvements
Highlands County, FL

Prepared by: RAC Date: 8/30/2019
Checked by: SC Date: 8/30/2019

SR 70 Treatment Swale (RT & LT)

Sta. 101+40 to Sta. 107+00

Station (ft)	B/L	Side	FL (ft)	Slope	tc	Cw	Zone 7 i10	Area (acres)	Q (cfs)	Ditch Section fs	bw (ft)	bs	Ditch Lining	"n"	"d" (ft)	A (sq ft)	V (fps)	L (ft)	Remarks
101+40	C\L	LT	**130.00**		10			0.00		6	**8**	4					0.4	0	High Point
102+00	C\L	LT	129.10	**-1.50%**	13	0.30	6.9	0.19	0.4	6	8	4	Grass	0.060	0.08	0.7	0.6	60	
103+00	C\L	LT	127.60	**-1.50%**	16	0.30	6.3	0.50	0.9	6	8	4	Grass	0.060	0.14	1.2	0.8	160	
104+00	C\L	LT	126.10	**-1.50%**	18	0.30	6.0	0.81	1.5	6	8	4	Grass	0.060	0.18	1.6	0.9	260	
105+00	C\L	LT	124.60	**-1.50%**	19	0.30	5.8	1.12	1.9	6	8	4	Grass	0.060	0.21	1.9	1.0	360	
105+40	C\L	LT	**124.00**	**-1.50%**	23	0.30	5.4	1.24	2.0	6	8	4	Grass	0.060	0.22	2.0	1.0	400	MES

Sta. 105+40

Weir Elevation 124.50 ft
Water Quality Volume :
Provided = 893 cf.
Total Provided = 15183 **OK**
Required = 6654 cf.

STAGE : 124.0 124.3 124.5 125.0 ft.
AREA : 0.0 0.0 0.0 0.0 ac.
AREA : 160 210 260 1200 sq.ft.
PERC : 0.02 0.02 0.03 0.14 cfs

Avg. S.H.W.T. = 122.9 Avg. Swale bottom = 124.3
Unsaturated Storage Volume Available = 105 cf.
Recovery = 1.2 hours
Permeability of 10.1 in/hr and the F.S. = 2

Sta. 107+15

Weir Elevation 124.50 ft
Water Quality Volume :
Provided = 14290 cf.

STAGE : 122.4 123.5 124.5 126.6 ft.
AREA : 0.126 0.253 0.282 0.341 ac.
AREA : 5481 11030 12299 14837 sq.ft.
PERC : 0.64 1.28 1.43 1.73 cfs

Avg. S.H.W.T. = 122.9 Avg. Swale bottom = 123.5
Unsaturated Storage Volume Available = 1891.74 cf.
Recovery = 0.4 hours
Permeability of 10.1 in/hr and the F.S. = 2

101+40	C\L	RT	**130.00**		10			0.00		6	**8**	4					0.4	0	High Point
102+00	C\L	RT	129.03	**-1.63%**	13	0.30	6.9	0.19	0.4	6	8	4	Grass	0.060	0.08	0.7	0.6	60	
103+00	C\L	RT	127.40	**-1.63%**	15	0.30	6.3	0.50	0.9	6	8	4	Grass	0.060	0.14	1.2	0.8	160	
104+00	C\L	RT	125.78	**-1.63%**	18	0.30	6.0	0.81	1.5	6	8	4	Grass	0.060	0.18	1.6	0.9	260	
105+00	C\L	RT	124.15	**-1.63%**	19	0.30	5.8	1.12	1.9	6	8	4	Grass	0.060	0.21	1.9	1.0	360	
105+40	C\L	RT	123.50	**-1.63%**	23	0.22	5.3	2.48	2.9	6	8	4	Grass	0.060	0.26	2.4	1.2	400	
106+00	C\L	RT	123.12	**-0.63%**	24	0.21	5.3	2.67	3.0	6	8	4	Grass	0.060	0.35	3.4	0.9	460	
107+00	C\L	RT	122.50	**-0.63%**	26	0.22	5.1	2.98	3.3	6	8	4	Grass	0.060	0.37	3.7	0.9	560	
107+15	C\L	RT	**122.41**	**-0.63%**	28	0.22	4.9	3.02	3.3	6	8	4	Grass	0.060	0.37	3.7	0.9	575	DBI

								Lc @ h = 0.4'			Control	DHW ft	
Totals	**tc**	**Cw**	**i_{10}**	**i_{25}**	**Area**	**Q_{10}**	**Q_{25}**	**Lc_{10}**	**Lc_{25}**	**Lc**	el ft	10 yr	25 yr
105+40	23	0.30	5.5	6.3	1.24	2.0	2.3	2.6	3.0	**7.0**	124.5	124.71	124.73
107+15	28	0.22	5.0	5.8	3.02	3.4	3.9	4.3	4.9	**7.0**	124.5	124.79	124.82

Basin 1 Design Calculations
Basin 1, Right

STA	Length	pavement width	lane inc area	lane cum area	lane cum area (ac)	incr shldr	total DCIA width	total DCIA inc area	total DCIA cum area	increase in DCIA, right
14050	0	0	0	0	0.0000	1	5	0	0	0
14100	50	1	25	25	0.0006	1	6	275	275	75
14150	50	1.8	70	95	0.0022	1	6.8	320	595	195
14200	50	2.5	107.5	202.5	0.0046	1	7.5	357.5	952.5	352.5
14250	50	3	137.5	340	0.0078	1	8	387.5	1340	540
14300	50	4	175	515	0.0118	1	9	425	1765	765
14350	50	5	225	740	0.0170	1	10	475	2240	1040
14400	50	6	275	1015	0.0233	1	11	525	2765	1365
14450	50	7	325	1340	0.0308	1	12	575	3340	1740
14500	50	8	375	1715	0.0394	1	13	625	3965	2165
14550	50	8	400	2115	0.0486	1	13	650	4615	2615
14600	50	9	425	2540	0.0583	1	14	675	5290	3090
14650	50	10	475	3015	0.0692	1	15	725	6015	3615
14700	50	11	525	3540	0.0813	1	16	775	6790	4190
14750	50	12	575	4115	0.0945	1	17	825	7615	4815
14800	50	12	600	4715	0.1082	1	17	850	8465	5465
14850	50	12	600	5315	0.1220	1	17	850	**9315**	**6115**

L= 800

DCIA =9315 sqft
Increase in DCIA = 6115 sqft

Basin 1 Required Treatment volume = 9315*.5/12 (DCIA)
Required Treat vol = 388 sqft

Basin 1 Attenuation:

increase in DCIA = 6115 sqft
0.14 ac

P for 100yr 9 inches
CN = 66
Q = 4.84 inches

CN = 98
Q = 8.76 inches

Delta Q = 3.92 inches

Increase in Vol = 1997 cuft (Attenuation volume needed for increased DCIA)

SWFWMD
JAN - 5 2005
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DEC 29 2004
Southwest Florida Water Management District

Basin 2 Design Calculations
Basin 2, Right

STA	Length	pavement width proposed	inc area proposed	DCIA proposed	Drainage Area Width	Ex Pave Width	Ex Pavement Area	Existing Pave Total Area	
14850	0	18	0	0	50	4	0	0	
14900	50	18	900	900	65	4	200	200	Basin 2 Pond 21
15000	100	18	1800	2700	105	4	400	600	
15050	50	18	900	3600		4	200	800	
15080	30	18	540	**4140**		4	120	920	
15080	0	18	540	4140	NA	4	120	920	Drains directly to wetland
15800	720	18	12960	**17100**	NA	4	2880	**3800**	

Required Basin 2 treatment volume = 1/2" * 17100 sqft/12 = 712.5 cuft (based on south DCIA)

P for 100yr 24hr = 9 inches

CN = 66 CN = 98

Q = 4.84 inches Q = 8.76 inches

Delta Q = 3.92 inches

Increase in Basin 2 DCIA = 13300 sqft (proposed DCIA of 17100 sqft less existing DCIA of 3800 sqft)

Basin 2 Volume Increase = 4343.48 cuft (required attenuation volume for Basin 2)

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Southwest Florida Water Management District

Basin 3 Design Calculations
Basin 3, Right

Required Basin 3 treatment volume = 1/2" * DCIA			
South DCIA = (STA 175+50 - STA 158+00) x 18-ft =		**31500 sqft**	
Basin 3 Required Treatment =		1312.5 cuft	(based on south DCIA)
Pond 31 Treatment Volume =		**795 cuft**	
Pond 32 Treatment Volume =		**465 cuft**	
Total Treatment Volume =		**1260 cuft**	
P for 100yr 24hr =	9 inches		
CN = 66		CN = 98	
Q =	4.84 inches	Q = 8.76	inches
		Delta Q = 3.92	inches
Basin 3 Increase in DCIA =		**24500**	
Basin 3 100yr Vol increase =		8001 cuft	

Southwest Florida Water Management District
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Basin 4 Design Calculations
Basin 4, Right

Required Basin 4 treatment volume = 1/2" * DCIA

South DCIA =			**16101 sqft**	
Basin 4 Required Treatment =			670.875 cuft	(based on south DCIA)
P for 100yr 24hr =	9 inches			
CN = 66			CN = 98	
Q =	4.84 inches		Q = 8.76	inches
			Delta Q = 3.92	inches
Basin 4 Increase in DCIA =			**11563 cuft**	
Basin 4 100yr Vol increase =			3776 cuft	

Southwest Florida Water Management District
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