

I-95 BRIDGE REPLACEMENT OVER LAKE MARION



JUNE
22,
2023

PIPE INSPECTION REPORT

This report contains the results of the video pipe inspection and assessment of the existing storm water drainage pipes within the project area in Orangeburg and Clarendon Counties.

I-95 BRIDGE REPLACEMENT OVER LAKE MARION

PIPE INSPECTION REPORT

INTRODUCTION/BACKGROUND

During the spring and early summer of 2023, AET and Parrish and Partners performed field assessments and video inspections of the drainage pipes in the project area. AET performed video inspections and Parrish and Partners perform assessments of pipe inlet and outlet sections. Hydraulics of existing crossline pipes within the project area were also evaluated and discussed in a separate report.

The list of pipes that were evaluated and included in this report are generally those within the project area that may be impacted during final design and construction. The list does not include some pipes within the beginning and end stations of the project such as those in the upper part of a pipe network at the rest area. This list also does not include some pipes that were surveyed but are outside the project area. Still other pipes were not video inspected. The appendix of this report lists all pipes and identifies this distinction.

GENERAL STATEMENT OF FINDINGS

As can be seen from the recommendation table in Appendix A, there are a number of the pipes that need some minor repair, resulting from separated or offset joints in the pipe, minor cracking/spalling, and root intrusion. These issues could be the result of poor installation, differential settlement, freeze/thaw cycles, and lack of maintenance (tree growth above pipes), or simply age of the pipe. Regardless of the reason, these issues reduce the hydraulic performance and longevity of the pipe, can induce erosion and/or scour and lead to collapse of the pipe and (sink holes, roadway collapse, etc.).

As mentioned, some pipes were not video inspected. For these, a recommendation is not yet made, however information on the inlet and outlet is provided. There was only one pipe end that was unknown/not found and may be abandoned.

QUANTITIES

A quantity table of repairs and replacements are provided in the Appendix. The following assumptions were used to generate the values:

- All pipes recommended for repair (regardless of condition) have an associated quantity for pipe lining (by pipe size)
- Any end treatments needed are included
- If "Not enough info" was listed as the recommendation due to lack of video inspection, these pipes are assumed to require full replacement

DATA PROVIDED

The appendices include the following evaluations:

- A. Table of Recommendations (P&P)
- B. Culvert Assessments (P&P) – per SCDOT Culvert Inspection guidelines
- C. Robotic Inspections Report (AET) - summarizes condition assessment based on video inspection
- D. Quantities table
- E. Maps – showing pipe number and location

Note: The video for each pipe segment inspected is also available in *.mp4 format.

APPENDIX A

I-95 Bridge Replacement over Lake Marion

DB PREP

Table of Recommendations

#	AET Label	Begin Station	End Station	Size	Length (ft)	Recommendations	Retain / Replace
22	23	5161+08.91	5161+76.40	18	117.9	Repair pipe due to minor cracks, joint separations, and root intrusions.	Repair
23	24	5163+80.15	16+34.60	18	118.1	Repair pipe due to minor cracks, joint separations, and root intrusions. Pipe is undersized for existing watershed area.	Replace
24		UNK	5167+25.32	18	UNK	No video inspection on pipe. Inlet unknown. Outlet (Inlet for #25) structure in good condition. Pipe may could be removed.	Not enough Info.
25		5167+25.32	5168+08.34	18	82.3	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
26		5168+08.34	5168+47.12	18	118.2	No video inspection on pipe. Inlet in good condition. Replace end treatment.	Not enough Info.
27		5170+44.29	5168+08.34	18	234.4	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
28	1	5273+46.74	5273+46.74	18	104.5	Repair pipe due to minor cracks, joint separations, and root intrusions. Add end treatment/outlet protection.	Repair
30		5275+47.78	5275+47.78	48	272.5	No video inspection on pipe. Inlet (debris) and Outlet (underwater) need attention. Runoff could be re-routed.	Not enough Info.
34	3	5278+96.11	5278+96.11	18	102.6	Repair pipe due to minor cracks, joint separations, and root intrusions. Repair cracks in receiving paved ditch as needed.	Repair
35	4	5284+96.62	5284+96.62	18	99	Repair pipe due to minor cracks, joint separations, and root intrusions. Replace end treatment.	Repair
37	8	5290+84.95	5290+84.95	24	170.9	Pipe has minor cracks, joint separations, and root intrusions. End of pipe has failed. Inlet Type 122 connects through deep stand pipe. Include end treatment	Replace
38		5290+84.95	5290+84.95	24	111.1	Pipe appears to be undersized for watershed area.	Replace
42		5291+91.38	5290+84.95	18	102.8	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
44		5293+44.45	5291+94.13	18	150.5	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
45		5293+70.82	5293+47.14	18	23.9	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
51		5297+87.25	5297+69.05	18	108.7	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
52	9	5297+95.76	5297+89.89	18	109.4	Repair pipe due to minor cracks, joint separations, and root intrusions.	Repair
53		5298+84.31	5297+89.89	18	98.5	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
54	10	5304+00.44	5302+37.05	42	389.4	Repair pipe due to minor cracks, joint separations, and root intrusions. Sewer pipe inside. No runoff from SCDOT ROW.	Repair
56	11	5305+45.88	5305+45.88	18	105	Repair pipe due to minor cracks and joint separations.	Repair
57	12	5305+45.88	5304+40.08	18	138.5	Repair pipe due to minor cracks and joint separations.	Repair
58		5305+03.15	5304+47.04	18	56.6	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
59		5306+21.07	5305+05.60	18	115.3	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
60		5306+22.43	5306+22.43	18	63.3	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
61		5308+98.66	5306+23.95	18	273.8	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.
62		5309+12.44	5309+00.40	18	24.1	No video inspection on pipe. Inlet and Outlet in good condition.	Not enough Info.

APPENDIX B

I-95 Bridge Replacement over Lake Marion

DB PREP

SCDOT Culvert Assessment Forms

PIPE ID: 22

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
0	Clarendon	1/0/1900	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5161+08.91	5161+76.40	
Latitude	Longitude	Latitude	Longitude					
33° 31'15.26"	-81° 25'55.99"	33° 31'14.13"	-81° 25'55.64"					
Fill Height > 15' (check if yes)		0	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	X	Natural Stream	0
	Skewed	X	Median	X	Median	0	Other	X
BARREL								
Material:		# Barrels:	0	Area:		Length:	Shape:	
CAP	0			Diameter	18	117.9	Circle	0
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		0				
CMP	0	Diameter	0	Notes:				
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 22

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
0		Interstate	I-95	0	BMP	EMP	1/0/1900	N/A	
					5161+08.91	5161+76.40			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	4
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	4
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 23

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Clarendon	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5163+80.15	16+34.60	
Latitude	Longitude	Latitude	Longitude					
33° 31'12.68"	-81° 25'57.33"	33° 31'11.52"	-81° 25'57.57"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	X	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	118.1	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	X	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	0	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 23

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5163+80.15	16+34.60			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	4	Alignment	4
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	4
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	4
Separated	0	Separated	0	Separated	5	Blocked	3	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - TYPE 112									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 24

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Clarendon	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				UNK	5167+25.32	
Latitude	Longitude	Latitude	Longitude					
UNKOWN	UNKOWN	33° 31'11.09"	-81° 26'1.31"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	0	Natural Stream	0
	Skewed	X	Median	UNK	Median	X	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	UNK	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	0	Rip Rap	0	Stone	0			
		None	0	Other	0			
				None	0			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 24

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					UNK	5167+25.32			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	0
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	0
Scour	0	Scour	0	Scour	0	Corrosion	0		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET UNKNOWN <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 25

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Clarendon	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5167+25.32	5168+08.34	
Latitude	Longitude	Latitude	Longitude					
33° 31'11.09"	-81° 26'1.31"	33° 31'10.54"	-81° 26'2.04"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	0	Shoulder	0	Natural Stream	0
	Skewed	0	Median	X	Median	X	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	82.3	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 25

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5167+25.32	5168+08.34			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	4
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	4		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET TYPE 112, OUTLET MH <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 26

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Clarendon	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5168+08.34	5168+47.12	
Latitude	Longitude	Latitude	Longitude					
33° 31'10.54"	-81° 26'2.04"	33° 31'11.08"	-81° 26'3.26"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	X	Natural Stream	0
	Skewed	X	Median	X	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	118.2	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	X	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	0	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 26

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5168+08.34	5168+47.12			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	4		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	3	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET MH <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 27

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Clarendon	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5170+44.29	5168+08.34	
Latitude	Longitude	Latitude	Longitude					
33° 31'8.97"	-81° 26'4.08"	33° 31'10.54"	-81° 26'2.04"					
Fill Height > 15'(check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	0	Shoulder	0	Natural Stream	0
	Skewed	0	Median	X	Median	X	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	234.4	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 27

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5170+44.29	5168+08.34			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	4		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET TYPE 112, OUTLET MH <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 28

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5273+46.74	5273+46.74	
Latitude	Longitude	Latitude	Longitude					
33° 30'21"	-81° 27'33.95"	33° 30'97"	-81° 27'34.78"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	X	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	X	Natural Stream	0
	Skewed	0	Median	X	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	104.5	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 28

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5273+46.74	5273+46.74			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - TYPE 112									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 30

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5275+47.78	5275+47.78	
Latitude	Longitude	Latitude	Longitude					
33° 29'57.8"	-81° 27'34.55"	33° 29'59.8"	-81° 27'36.71"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	X	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	48	272.5	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 30

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5275+47.78	5275+47.78			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	0
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	0
Scour	0	Scour	0	Scour	0	Corrosion	0		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	0
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	0
Scour	0	Scour	0	Scour	0	Corrosion	0		
BARREL									
Corrosion	0	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET (DEBRIS) AND OUTLET (UNDERWATER) COULD NOT BE INSPECTED									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 34

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point	
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP
Inlet		Outlet				5278+96.11	5278+96.11
Latitude	Longitude	Latitude	Longitude				
33° 29'56.54"	-81° 27'38.74"	33° 29'57.28"	-81° 27'39.56"				
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:
Orientation:	Transverse	X	Inlet Position:		Outlet Position:		Constructed Ditch
	Longitudinal	0	Shoulder	0	Shoulder	X	Natural Stream
	Skewed	0	Median	X	Median	0	Other
BARREL							
Material:		# Barrels:	1	Area:		Length:	Shape:
CAP	0			Diameter	18	102.6	Circle
CMP	0			Width	0		Ellipse
RCP	X			Height	0		Box
HDPE	0						Other
Masonry	0						
Mixed/Other	0						
LINER							
Materials:		Area:		NO LINER <u>Notes:</u>			
CMP	0	Diameter	0				
Concrete	0	Width	0				
Fiberglass	0	Height	0				
Plastic	0						
Other	0						
INLET							
Pipe End Type:		Inlet End Treatment Type:		Apron:			
Beveled	0	Head Wall	0	Concrete	0		
Flared	0	Wing Wall	0	Asphalt	0		
Flat	X	Rip Rap	0	Stone	0		
		None	X	Other	0		
				None	X		
OUTLET							
Pipe End Type:		Outlet End Treatment Type:		Apron:			
Beveled	0	Head Wall	0	Concrete	X		
Flared	0	Wing Wall	0	Asphalt	0		
Flat	X	Rip Rap	0	Stone	0		
		None	X	Other	0		
				None	0		
Inspector Signature:				Inspector Name (Printed):			
1.				1. Don Alexander, P&P			
2.				2. 0.			

PIPE ID: 34

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5278+96.11	5278+96.11			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	3	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - TYPE 112, OUTLET TO CONCRETE LINES DITCH									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 35

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5284+96.62	5284+96.62	
Latitude	Longitude	Latitude	Longitude					
33° 29'52.53"	-81° 27'43.97"	33° 29'53.25"	-81° 27'44.76"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	X	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	X	Natural Stream	0
	Skewed	0	Median	X	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	99	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 35

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5284+96.62	5284+96.62			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	2	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - TYPE 112									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5290+84.95	5290+84.95	
Latitude	Longitude	Latitude	Longitude					
33° 29'48.55"	-81° 27'49.05"	33° 29'49.76"	-81° 27'50.47"					
Fill Height > 15' (check if yes)		Y	Pipe Accepted w/remediation check if yes			N	Purpose:	
Orientation:	Transverse	X	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	X	Natural Stream	0
	Skewed	0	Median	X	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	24	170.9	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER				
CMP	0	Diameter	0	Notes:				
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 37

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5290+84.95	5290+84.95			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	1	Blocked	3	Erosion	5
Scour	0	Scour	0	Scour	2	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - TYPE 112									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 38

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5290+84.95	5290+84.95	
Latitude	Longitude	Latitude	Longitude					
33° 29'47.78"	-81° 27'48.12"	33° 29'48.55"	-81° 27'49.05"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	X	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	X	Shoulder	0	Natural Stream	0
	Skewed	0	Median	0	Median	X	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	24	111.1	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 38

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5290+84.95	5290+84.95			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET & OUTLET TYPE 112									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 42

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5291+91.38	5290+84.95	
Latitude	Longitude	Latitude	Longitude					
33° 29'47.1"	-81° 27'49.04"	33° 29'47.76"	-81° 27'48.12"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	102.8	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 42

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5291+91.38	5290+84.95			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 43

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				+00	+00	
Latitude	Longitude	Latitude	Longitude					
33° 29'46.84"	-81° 27'48.8"	33° 29'47.08"	-81° 27'49.03"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	0	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	0	0	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 43

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					+.00	+.00			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	5
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	5
Scour	0	Scour	0	Scour	0	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	0
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	0
Scour	0	Scour	0	Scour	0	Corrosion	0		
BARREL									
Corrosion	0	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 44

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5293+44.45	5291+94.13	
Latitude	Longitude	Latitude	Longitude					
33° 29'46.02"	-81° 27'50.31"	33° 29'47.08"	-81° 27'49.06"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	150.5	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 44

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5293+44.45	5291+94.13			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 45

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5293+70.82	5293+47.14	
Latitude	Longitude	Latitude	Longitude					
33° 29'45.83"	-81° 27'50.52"	33° 29'46."	-81° 27'50.33"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	23.9	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 45

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5293+70.82	5293+47.14			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 46

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				+00	+00	
Latitude	Longitude	Latitude	Longitude					
33° 29'45.63"	-81° 27'50.17"	33° 29'46."	-81° 27'50.31"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	0	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	0	0	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 46

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					+.00	+.00			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	5
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	5
Scour	0	Scour	0	Scour	0	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	0
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	0
Scour	0	Scour	0	Scour	0	Corrosion	0		
BARREL									
Corrosion	0	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 47

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				+00	+00	
Latitude	Longitude	Latitude	Longitude					
33° 29'44.78"	-81° 27'50.08"	33° 29'45.61"	-81° 27'50.17"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	0	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	0	0	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 47

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					+.00	+.00			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	5
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	5
Scour	0	Scour	0	Scour	0	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	0	Vegetation	0	Alignment	0
Separated	0	Separated	0	Separated	0	Blocked	0	Erosion	0
Scour	0	Scour	0	Scour	0	Corrosion	0		
BARREL									
Corrosion	0	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 51

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5297+87.25	5297+69.05	
Latitude	Longitude	Latitude	Longitude					
33° 29'42.93"	-81° 27'53.58"	33° 29'42.79"	-81° 27'53.72"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	108.7	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 51

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5297+87.25	5297+69.05			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	4	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	4	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 52

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5297+95.76	5297+89.89	
Latitude	Longitude	Latitude	Longitude					
33° 29'42.79"	-81° 27'53.75"	33° 29'43.43"	-81° 27'54.79"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	X	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	X	Natural Stream	0
	Skewed	0	Median	X	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	109.4	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 52

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5297+95.76	5297+89.89			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET & OUTLET TYPE 112									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 53

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5298+84.31	5297+89.89	
Latitude	Longitude	Latitude	Longitude					
33° 29'41.87"	-81° 27'54.17"	33° 29'42.77"	-81° 27'53.74"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	X	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	98.5	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 53

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5298+84.31	5297+89.89			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
0 <u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 54

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5304+00.44	5302+37.05	
Latitude	Longitude	Latitude	Longitude					
33° 29'37.84"	-81° 27'57.75"	33° 29'41.21"	-81° 27'59.98"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	X	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	42	389.4	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 54

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5304+00.44	5302+37.05			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	3	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	2	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
CROSSLINE PIPE FOR GOLF COURSE. NO RUNOFF FROM SCDOT									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 56

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5305+45.88	5305+45.88	
Latitude	Longitude	Latitude	Longitude					
33° 29'37.63"	-81° 28'31"	33° 29'38.23"	-81° 28'1.33"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	0	Shoulder	X	Natural Stream	0
	Skewed	X	Median	X	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	105	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 56

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5305+45.88	5305+45.88			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET & OUTLET TYPE 112									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 57

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5305+45.88	5304+40.08	
Latitude	Longitude	Latitude	Longitude					
33° 29'38.26"	-81° 28'1.34"	33° 29'39.63"	-81° 28'1.43"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	X	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	138.5	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	X			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	0			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 57

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5305+45.88	5304+40.08			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - TYPE 112									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 58

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5305+03.15	5304+47.04	
Latitude	Longitude	Latitude	Longitude					
33° 29'39.08"	-81° 28'2.07"	33° 29'39.51"	-81° 28'1.63"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	X	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	56.6	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	X			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	0			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 58

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5305+03.15	5304+47.04			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	3		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	3		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - GRATE									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 59

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5306+21.07	5305+05.60	
Latitude	Longitude	Latitude	Longitude					
33° 29'38.06"	-81° 28'2.75"	33° 29'39.07"	-81° 28'2.09"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	115.3	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 59

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5306+21.07	5305+05.60			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	3		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - CURB INLET, OUTLET - GRATE									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 60

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5306+22.43	5306+22.43	
Latitude	Longitude	Latitude	Longitude					
33° 29'37.7"	-81° 28'2.11"	33° 29'38.04"	-81° 28'2.73"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	X	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	0	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	63.3	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 60

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5306+22.43	5306+22.43			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET & OUTLET CURB INLET									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 61

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5308+98.66	5306+23.95	
Latitude	Longitude	Latitude	Longitude					
33° 29'35.41"	-81° 28'3.89"	33° 29'37.69"	-81° 28'2.11"					
Fill Height > 15'(check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	273.8	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 61

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5308+98.66	5306+23.95			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET & OUTLET CURB INLET									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

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PIPE ID: 62

Culvert Inventory Form:

District	Work County	Date	Type	Route #	Aux	Mile Point		
7	Orangeburg	5/11/2023	Interstate	I-95	0	BMP	EMP	
Inlet		Outlet				5309+12.44	5309+00.40	
Latitude	Longitude	Latitude	Longitude					
33° 29'35.18"	-81° 28'3.76"	33° 29'35.39"	-81° 28'3.89"					
Fill Height > 15' (check if yes)		N	Pipe Accepted w/remediation check if yes			0	Purpose:	
Orientation:	Transverse	0	Inlet Position:		Outlet Position:		Constructed Ditch	0
	Longitudinal	X	Shoulder	X	Shoulder	X	Natural Stream	0
	Skewed	0	Median	0	Median	0	Other	X
BARREL								
Material:		# Barrels:	1	Area:		Length:	Shape:	
CAP	0			Diameter	18	24.1	Circle	X
CMP	0			Width	0		Ellipse	0
RCP	X			Height	0		Box	0
HDPE	0						Other	0
Masonry	0							
Mixed/Other	0							
LINER								
Materials:		Area:		NO LINER <u>Notes:</u>				
CMP	0	Diameter	0					
Concrete	0	Width	0					
Fiberglass	0	Height	0					
Plastic	0							
Other	0							
INLET								
Pipe End Type:		Inlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
OUTLET								
Pipe End Type:		Outlet End Treatment Type:		Apron:				
Beveled	0	Head Wall	0	Concrete	0			
Flared	0	Wing Wall	0	Asphalt	0			
Flat	X	Rip Rap	0	Stone	0			
		None	X	Other	0			
				None	X			
Inspector Signature:				Inspector Name (Printed):				
1.				1. Don Alexander, P&P				
2.				2. 0.				

PIPE ID: 62

Culvert Assessment Form:

Work County		Type	Route	Aux	Mile Point		Date	Asset #	
7		Interstate	I-95	0	BMP	EMP	5/11/2023	N/A	
					5309+12.44	5309+00.40			
INLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	4	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
OUTLET									
Headwall		Apron		End Section					
Cracked	0	Cracked	0	Cracked	5	Vegetation	5	Alignment	5
Separated	0	Separated	0	Separated	5	Blocked	5	Erosion	5
Scour	0	Scour	0	Scour	5	Corrosion	5		
BARREL									
Corrosion	5	Alignment	0	Joint Separation		0	Blocked	0	
Cracked	0	Sediment	0	Piping		0			
INLET - TYPE 112, OUTLET CURB INLET									
<u>Comments:</u>									
Inspector Signature:					Inspector Name (Printed):				
1.					1. Don Alexander, P&P				
2.					2. 0.				

C:\Temp\reports

APPENDIX C

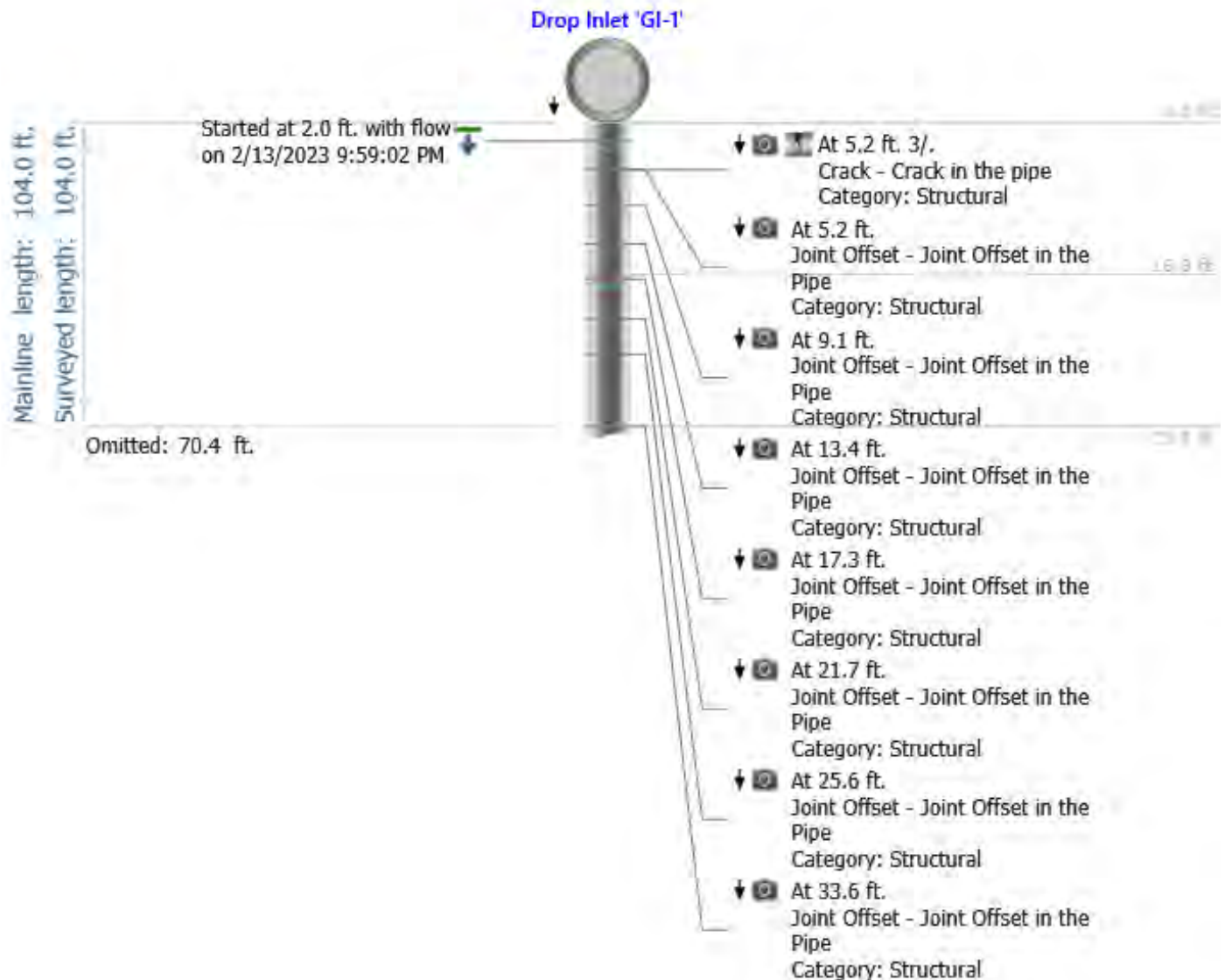
I-95 Bridge Replacement over Lake Marion

DB PREP

Pipe Inspection Reports from AET

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-1	Santee, SC	I-95 NB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/13/2023 9:59 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



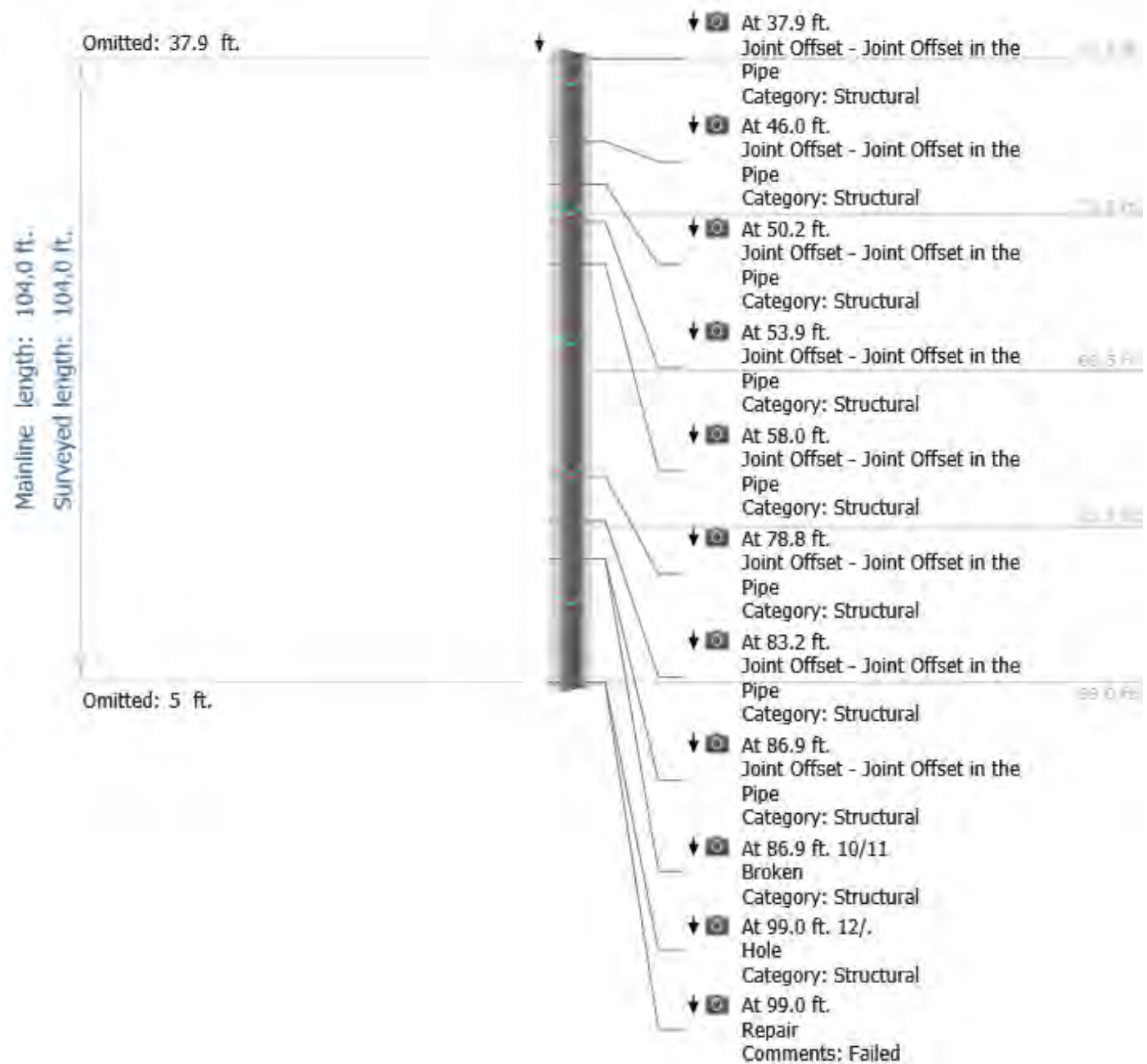
Project name:
I95 Lake Marion

Mainline ID:
EP-1

Start date/time:
2/13/2023 9:59 PM

Direction:
With the flow

Weather:
Dry



Project name:

I95 Lake Marion

Mainline ID:

EP-1

Start date/time:

2/13/2023 9:59 PM

Direction:

With the flow

Weather:

Dry



Main Inspections Small Photos

Mainline ID: EP-1	City: Santee, SC	Address: I-95 NB Median	Project name: I95 Lake Marion
Start date/time: 2/13/2023 9:59 PM	Asset length: 104.0 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-1	Depth US:	Downstream node: EOP-1	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.2 ft.	D		3 /	Crack			



5.2 ft.	D	/	Joint Offset
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

9.1 ft. D / Joint Offset



13.4 ft. D / Joint Offset



17.3 ft. D / Joint Offset



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

21.7 ft. D / Joint Offset



25.6 ft. D / Joint Offset



33.6 ft. D / Joint Offset



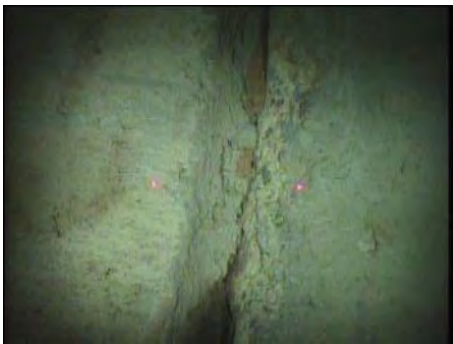
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

37.9 ft. D / Joint Offset



46.0 ft. D / Joint Offset



50.2 ft. D / Joint Offset



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

53.9 ft. D / Joint Offset



58.0 ft. D / Joint Offset



78.8 ft. D / Joint Offset



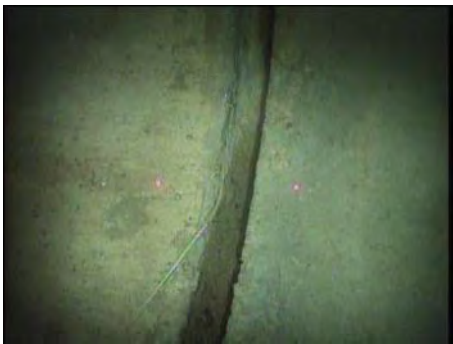
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

83.2 ft. D / Joint Offset



86.9 ft. D / Joint Offset



86.9 ft. D 10 / 11 Broken



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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99.0 ft. D 12 / Hole



99.0 ft. D / Repair

Failed



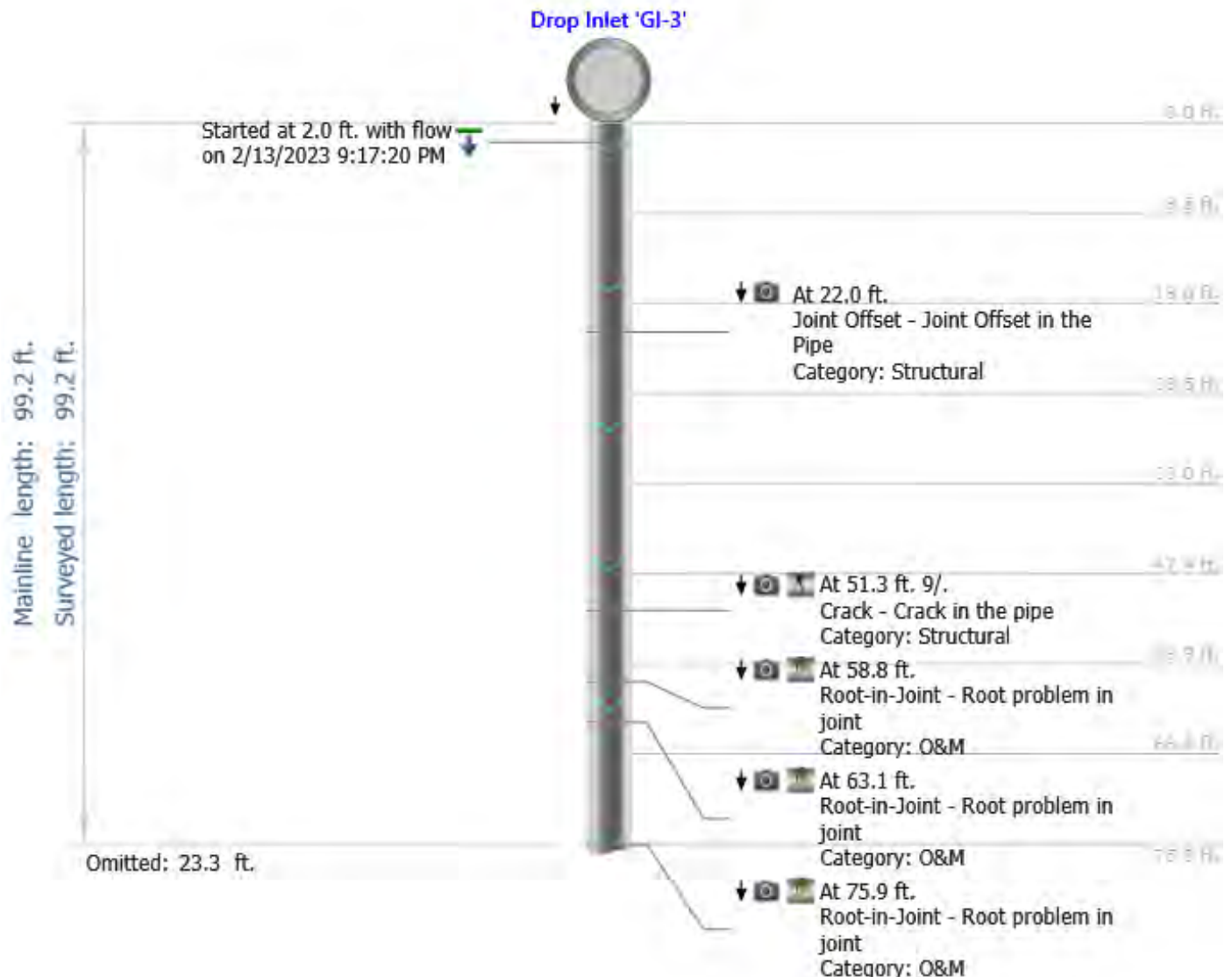
104.0 ft. D / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-3	Santee, SC	I-95 NB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/13/2023 9:17 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Project name:
I95 Lake Marion

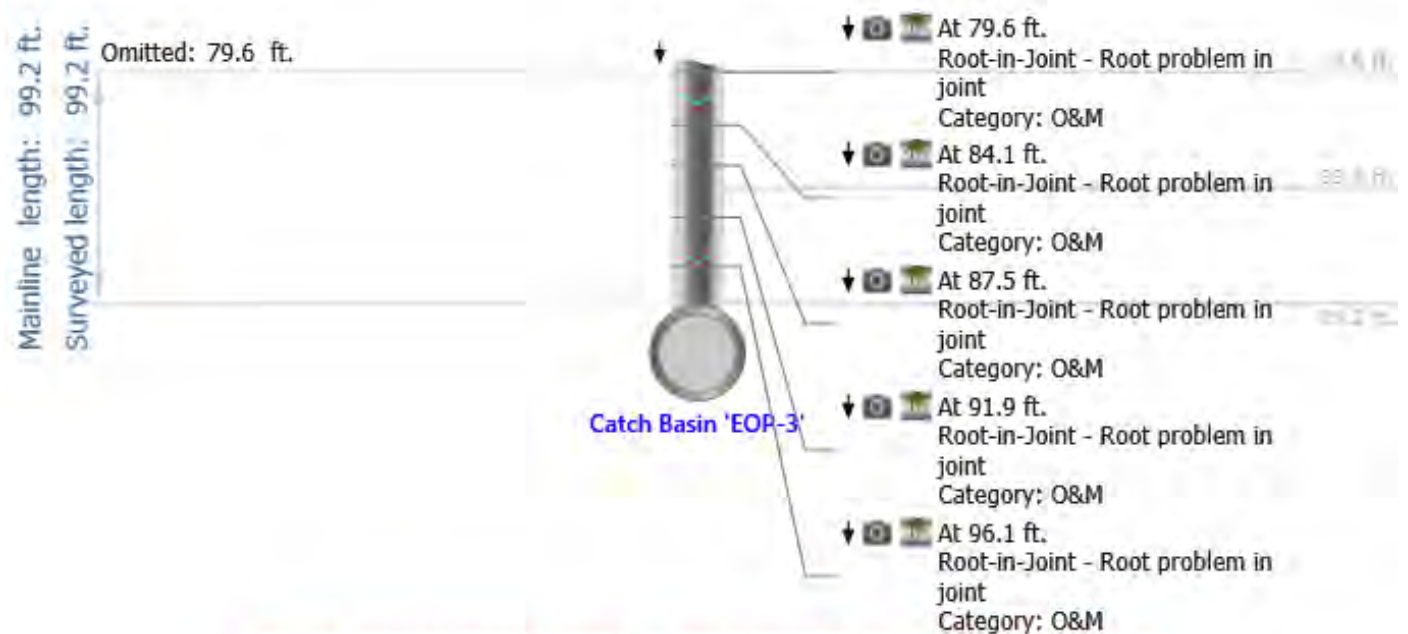
Mainline ID:
EP-3

Start date/time:
2/13/2023 9:17 PM

Direction:
With the flow

Weather:

Dry



Some observations have distance greater than the pipe length

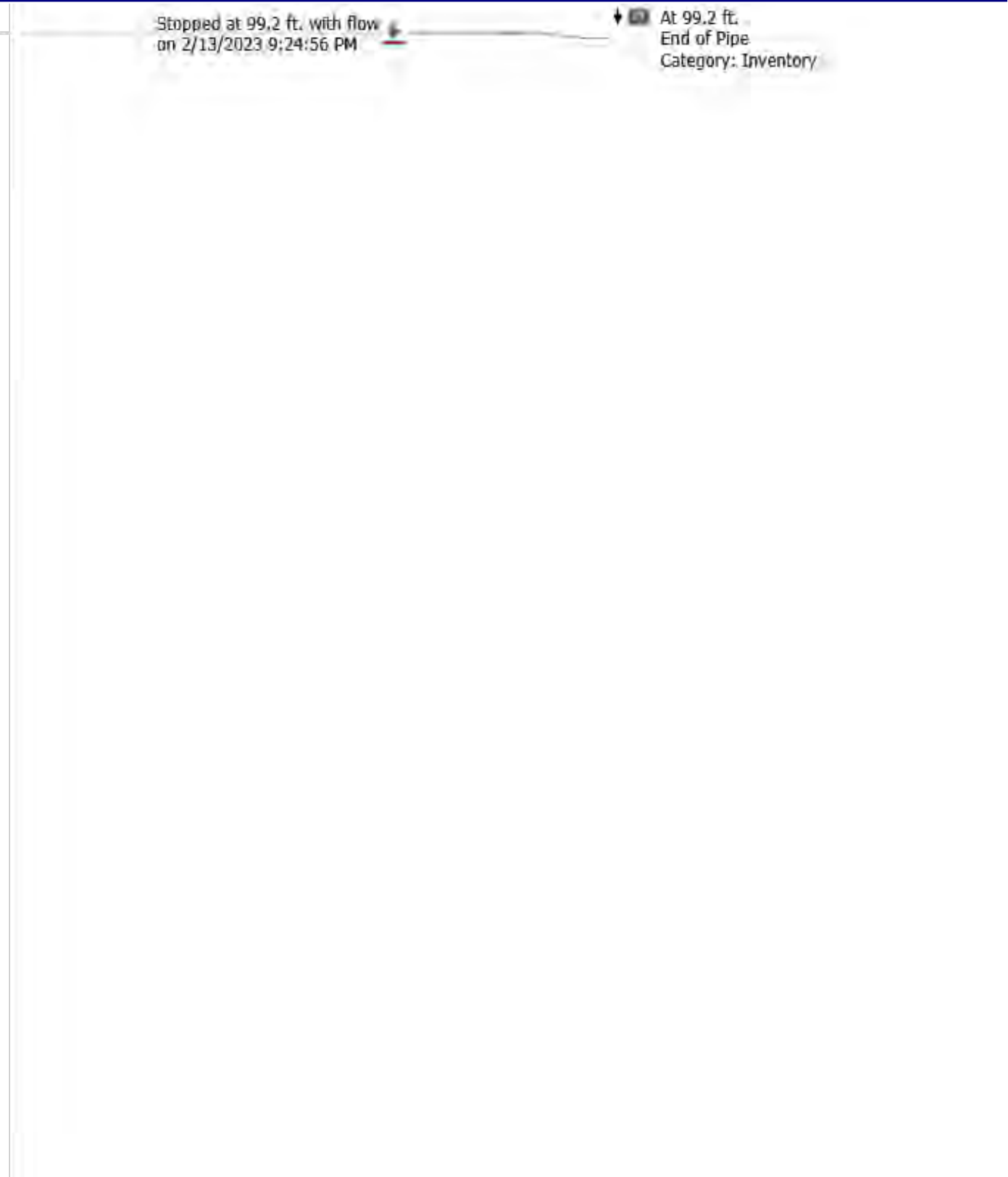
Project name:
I95 Lake Marion

Mainline ID:
EP-3

Start date/time:
2/13/2023 9:17 PM

Direction:
With the flow

Weather:
Dry



Main Inspections Small Photos

Mainline ID: EP-3	City: Santee, SC	Address: I-95 NB Median	Project name: I95 Lake Marion
Start date/time: 2/13/2023 9:17 PM	Asset length: 99.2 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-3	Depth US:	Downstream node: EOP-3	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
22.0 ft.	D		/	Joint Offset			



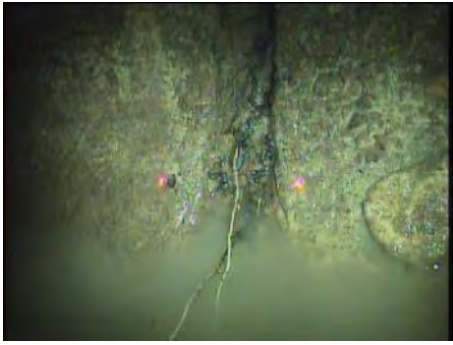
51.3 ft.	D		9 /	Crack			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

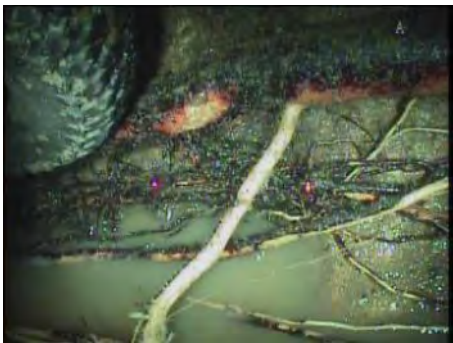
58.8 ft. D / Root-in-Joint



63.1 ft. D / Root-in-Joint



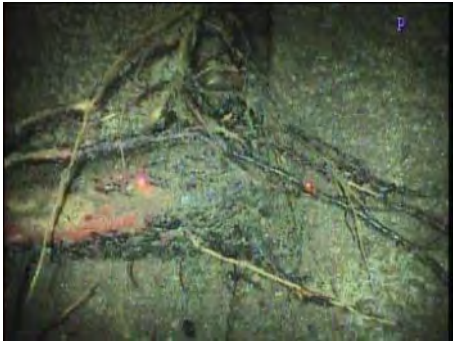
75.9 ft. D / Root-in-Joint



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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79.6 ft. D / Root-in-Joint



84.1 ft. D / Root-in-Joint



87.5 ft. D / Root-in-Joint



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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91.9 ft. D / Root-in-Joint



96.1 ft. D / Root-in-Joint



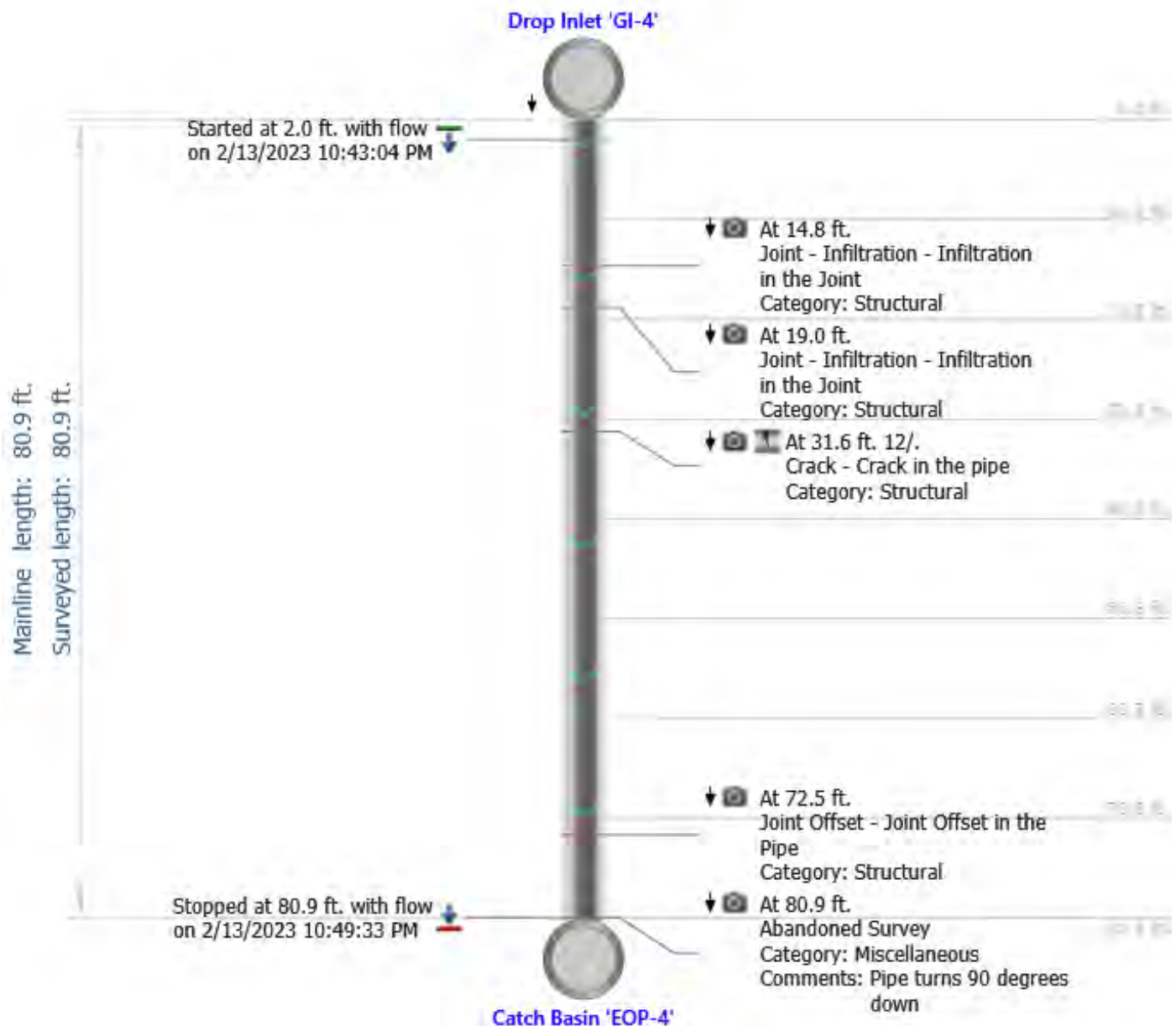
99.2 ft. D / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-4	Santee, SC	I-95 NB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/13/2023 10:43 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

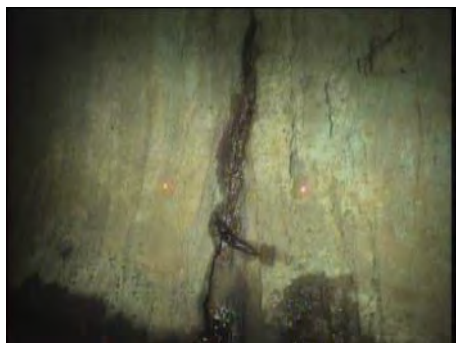
Mainline ID: EP-4	City: Santee, SC	Address: I-95 NB Median	Project name: I95 Lake Marion
Start date/time: 2/13/2023 10:43 PM	Asset length: 80.9 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-4	Depth US:	Downstream node: EOP-4	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
14.8 ft.	D		/	Joint - Infiltration			



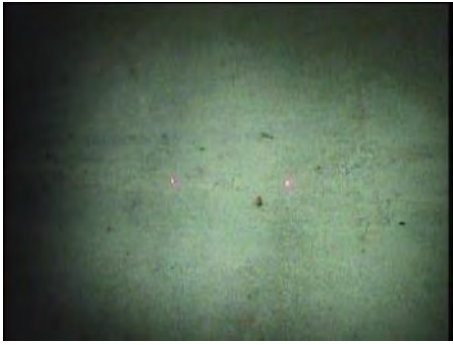
19.0 ft.	D		/	Joint - Infiltration			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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31.6 ft. D 12 / Crack



72.5 ft. D / Joint Offset



80.9 ft. D / Abandoned Survey

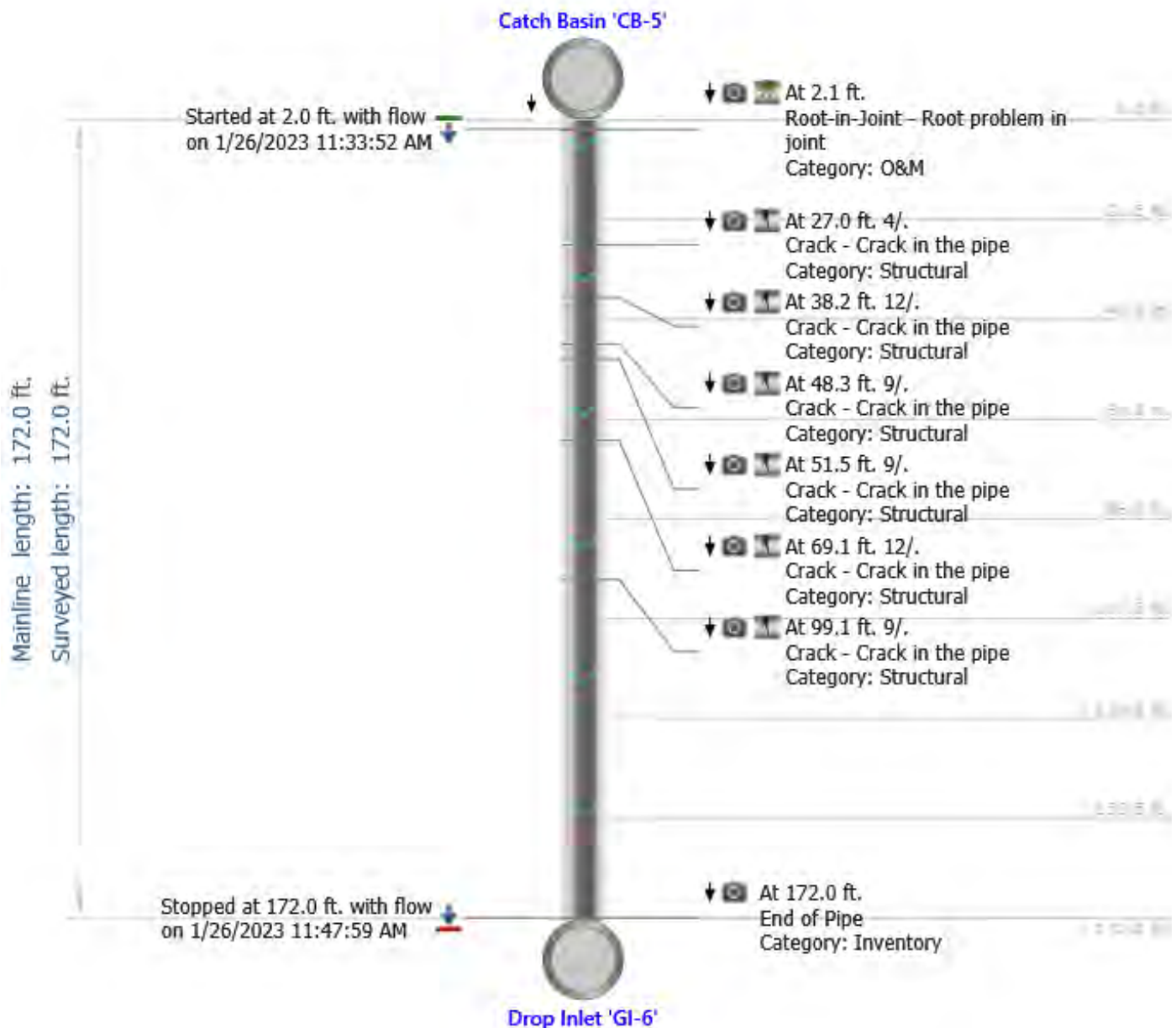
Pipe turns 90 degrees down



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-5	Santee	I-95 NB Rest Area
Start date/time:	Direction:	Weather:	Surface condition:
1/26/2023 11:33 AM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

Mainline ID: EP-5	City: Santee	Address: I-95 NB Rest Area	Project name: I95 Lake Marion
Start date/time: 1/26/2023 11:33 AM	Asset length: 172.0 ft.	Weather: Dry	Operator: Adam
Upstream node: CB-5	Depth US:	Downstream node: GI-6	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
2.1 ft.	D		/	Root-in-Joint			



27.0 ft.	D		4 /	Crack
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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38.2 ft. D 12 / Crack



48.3 ft. D 9 / Crack



51.5 ft. D 9 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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69.1 ft. D 12 / Crack



99.1 ft. D 9 / Crack



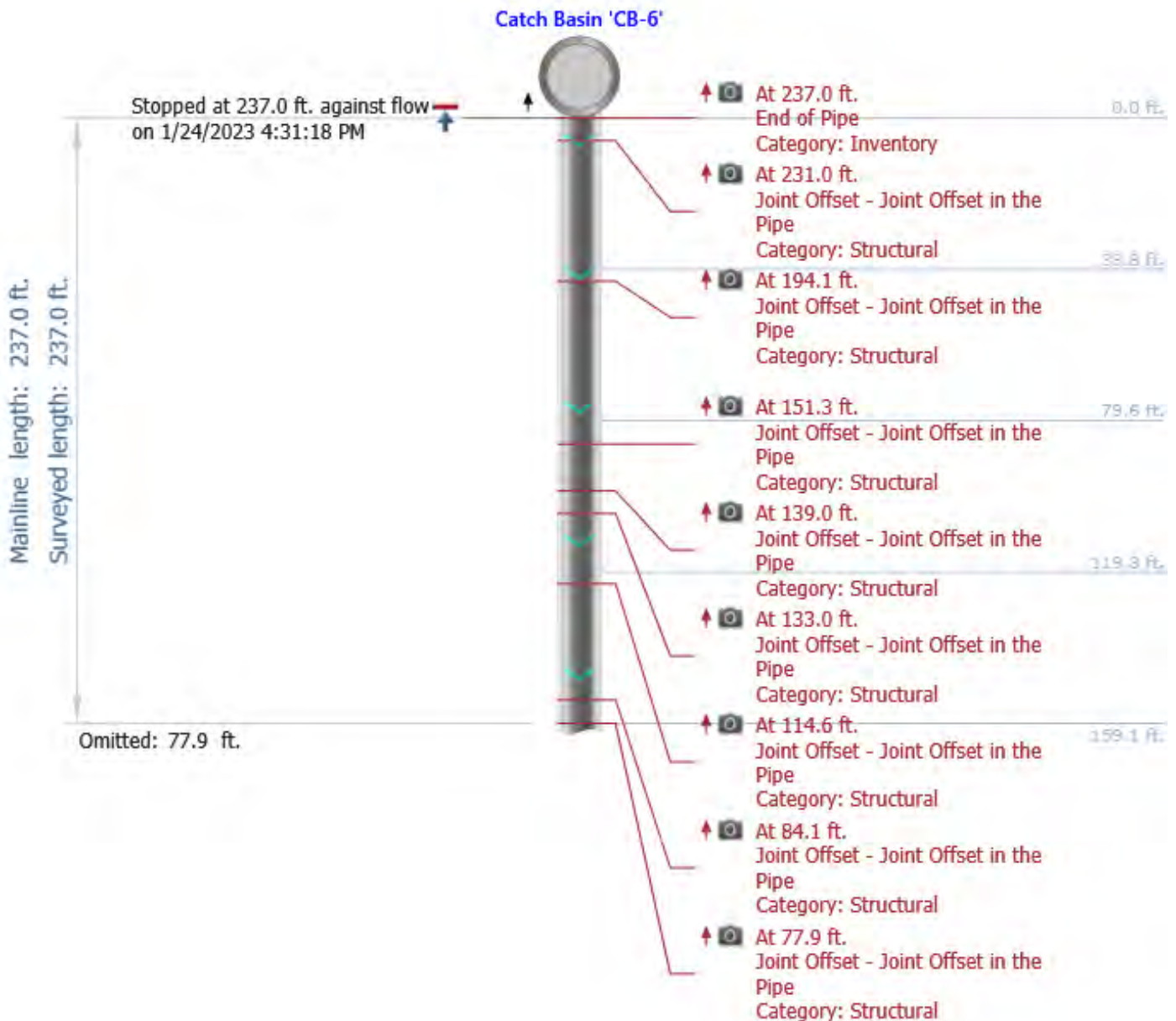
172.0 ft. D / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-6	Santee	I-95 NB Rest Area
Start date/time:	Direction:	Weather:	Surface condition:
1/24/2023 4:14 PM	Against the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Project name:
I95 Lake Marion

Mainline ID:
EP-6

Start date/time:
1/24/2023 4:14 PM

Direction:
Against the flow

Weather:
Dry

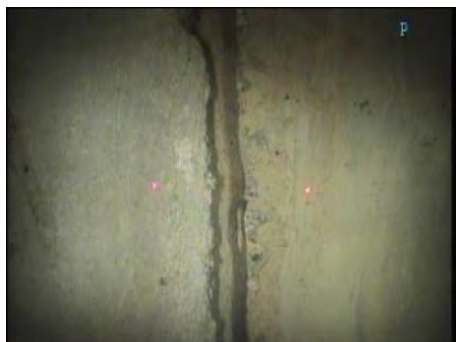


Main Inspections Small Photos

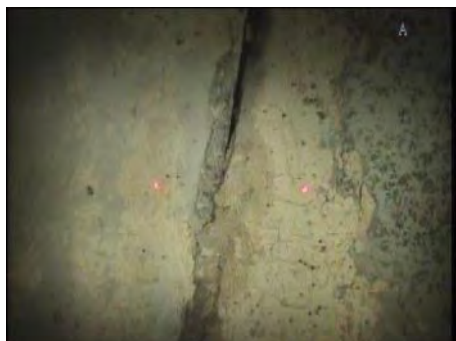
Mainline ID:	City:	Address:	Project name:
EP-6	Santee	I-95 NB Rest Area	I95 Lake Marion
Start date/time:	Asset length:	Weather:	Operator:
1/24/2023 4:14 PM	237.0 ft.	Dry	Adam
Upstream node:	Depth US:	Downstream node:	Depth DS:
CB-6		GI-6	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
22.9 ft.	U		/	Joint Offset			



53.6 ft.	U		/	Joint Offset			
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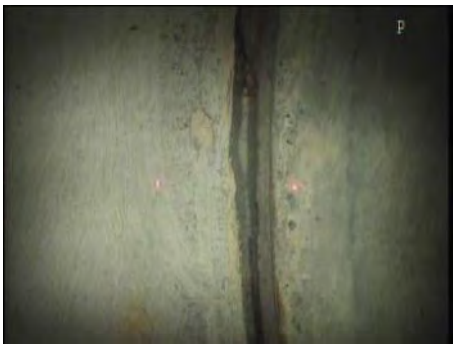
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

59.5 ft. U / Joint Offset



65.5 ft. U / Joint Offset



71.7 ft. U / Joint Offset



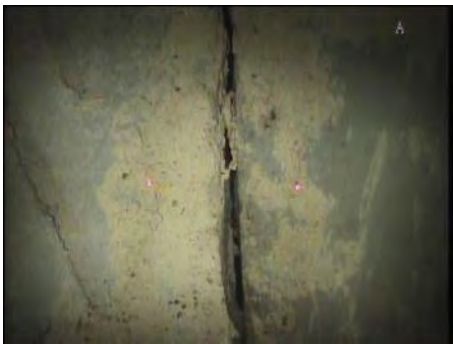
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

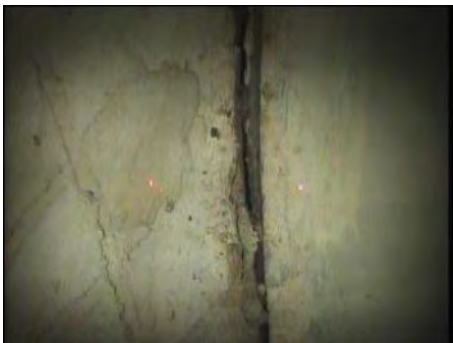
77.9 ft. U / Joint Offset



84.1 ft. U / Joint Offset



114.6 ft. U / Joint Offset



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

133.0 ft. U / Joint Offset



139.0 ft. U / Joint Offset



151.3 ft. U / Joint Offset



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

194.1 ft. U / Joint Offset



231.0 ft. U / Joint Offset



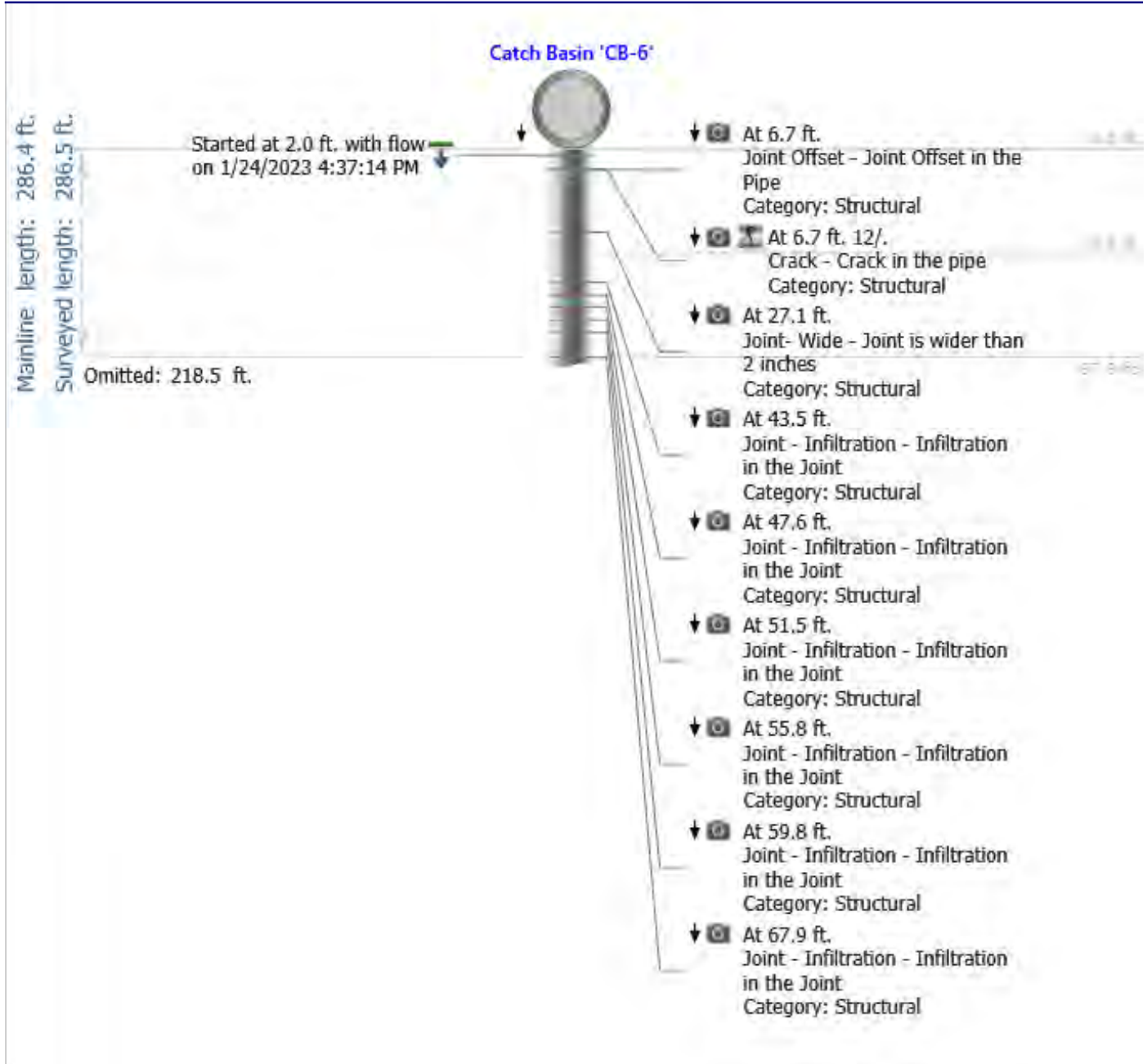
237.0 ft. U / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-7-8	Santee	I-95 NB Rest Area
Start date/time:	Direction:	Weather:	Surface condition:
1/24/2023 4:37 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Project name:
I95 Lake Marion

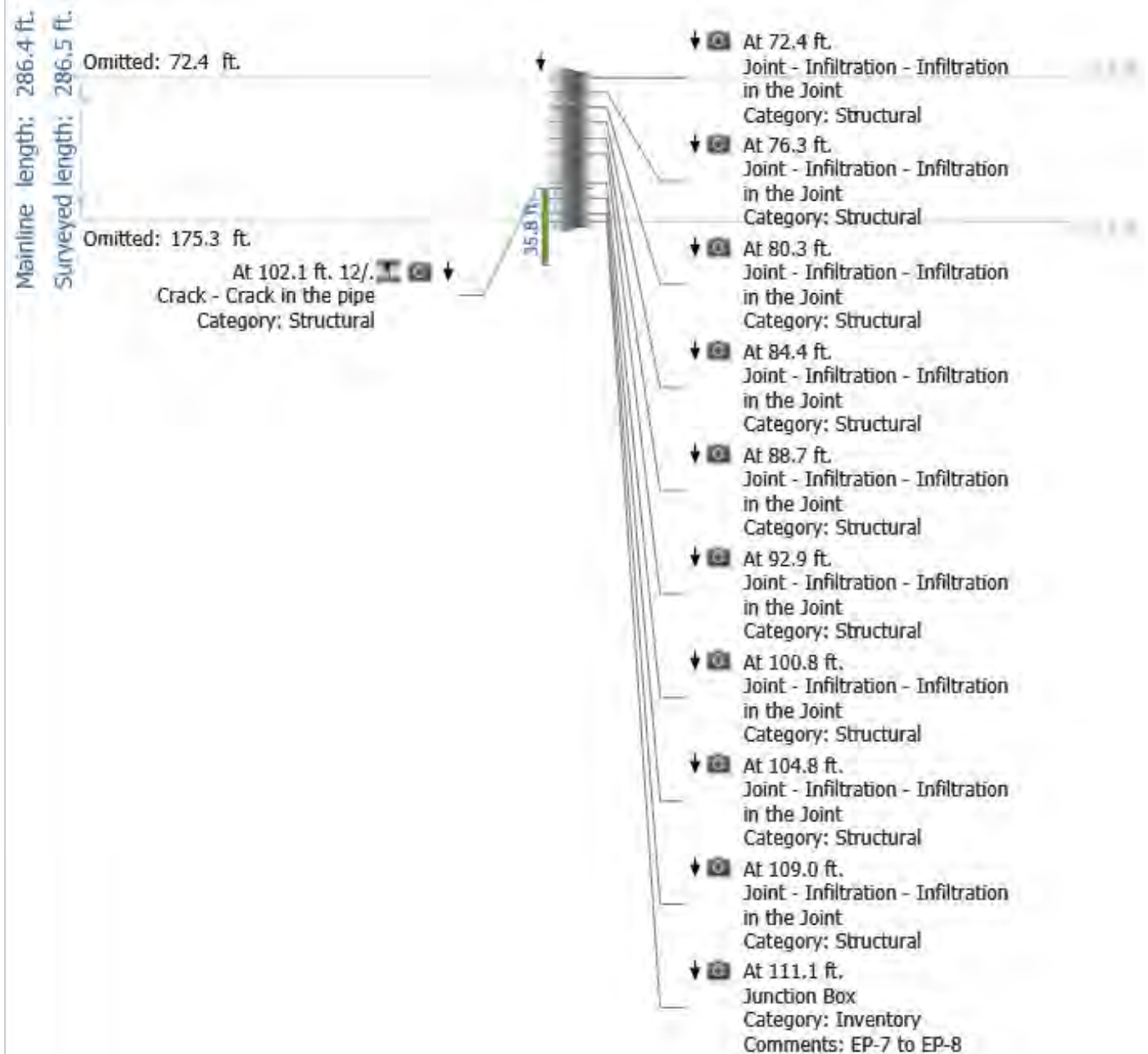
Mainline ID:
EP-7-8

Start date/time:
1/24/2023 4:37 PM

Direction:
With the flow

Weather:

Dry



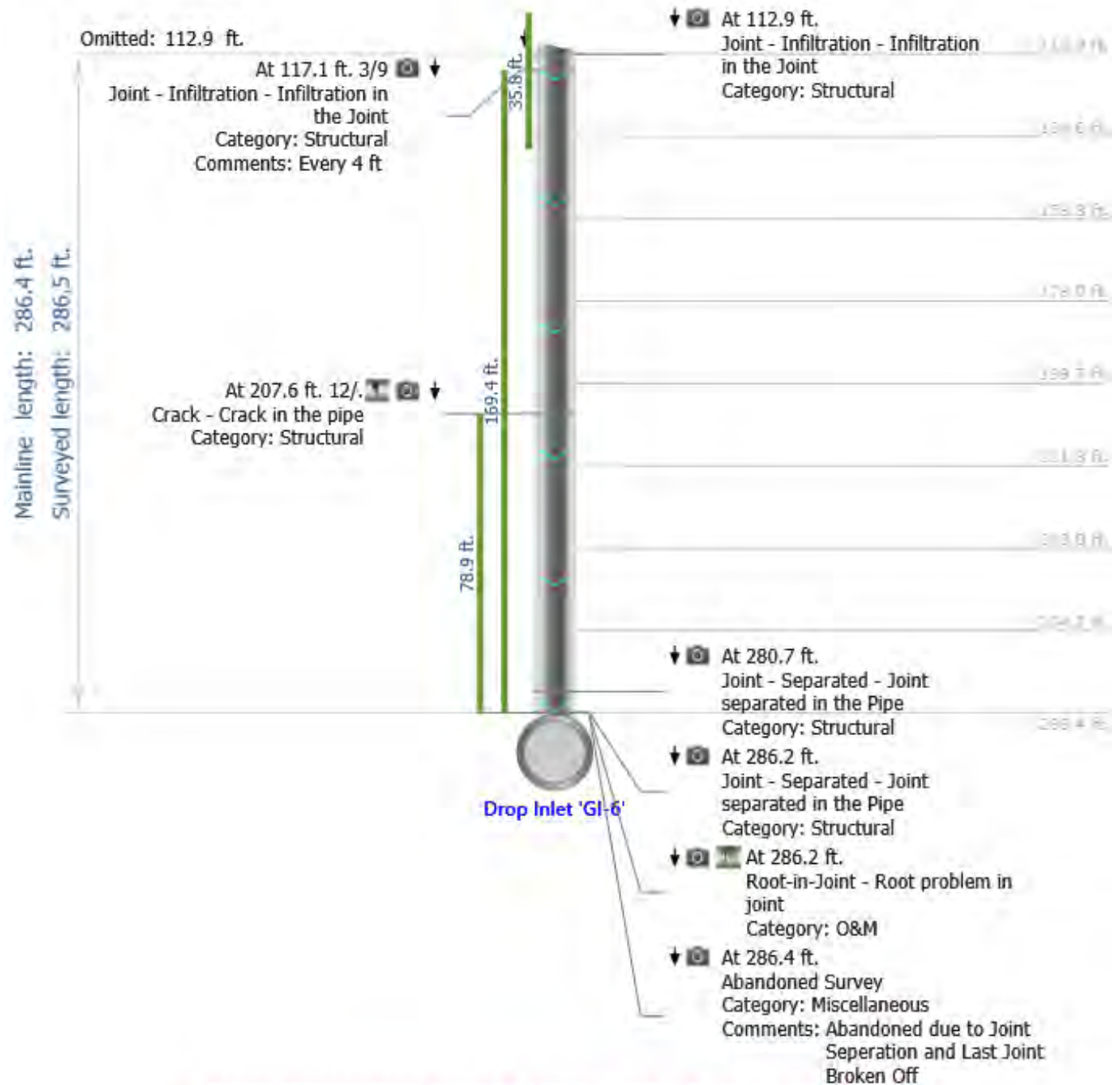
Project name:
I95 Lake Marion

Mainline ID:
EP-7-8

Start date/time:
1/24/2023 4:37 PM

Direction:
With the flow

Weather:
Dry



Some observations have distance greater than the pipe length

Project name:
I95 Lake Marion

Mainline ID:
EP-7-8

Start date/time:
1/24/2023 4:37 PM

Direction:
With the flow

Weather:
Dry



Stopped at 286.5 ft. with flow
on 1/24/2023 5:00:16 PM



Main Inspections Small Photos

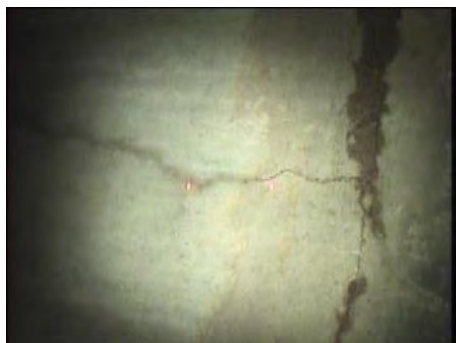
Mainline ID:	City:	Address:	Project name:
EP-7-8	Santee	I-95 NB Rest Area	I95 Lake Marion
Start date/time:	Asset length:	Weather:	Operator:
1/24/2023 4:37 PM	286.4 ft.	Dry	Adam
Upstream node:	Depth US:	Downstream node:	Depth DS:
GI-6		EOP-8	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
6.7 ft.	D		/	Joint Offset			



6.7 ft.	D	12 /	Crack				
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

27.1 ft. D / Joint- Wide



43.5 ft. D / Joint - Infiltration



47.6 ft. D / Joint - Infiltration



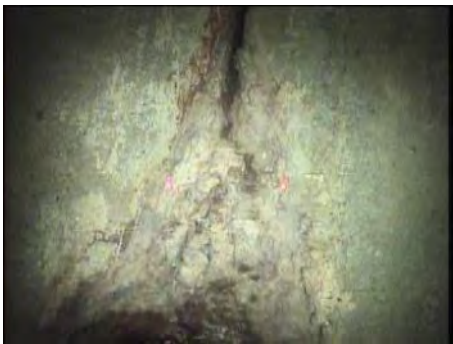
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

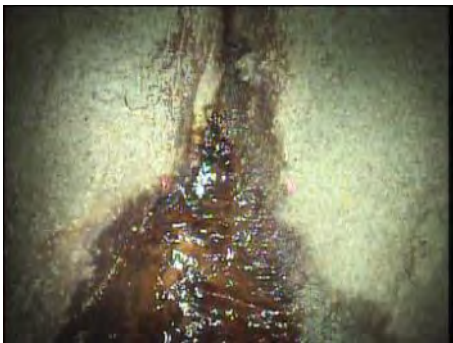
51.5 ft. D / Joint - Infiltration



55.8 ft. D / Joint - Infiltration



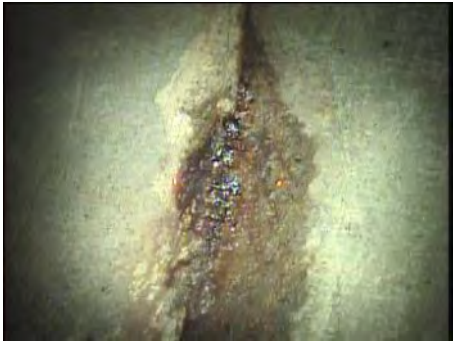
59.8 ft. D / Joint - Infiltration



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

67.9 ft. D / Joint - Infiltration



72.4 ft. D / Joint - Infiltration



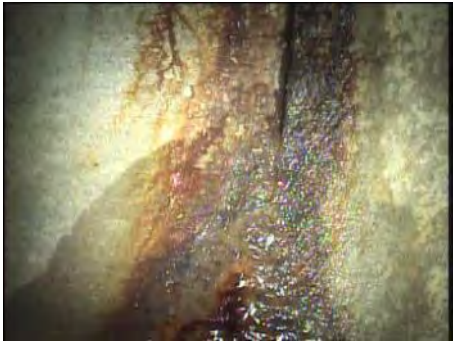
76.3 ft. D / Joint - Infiltration



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

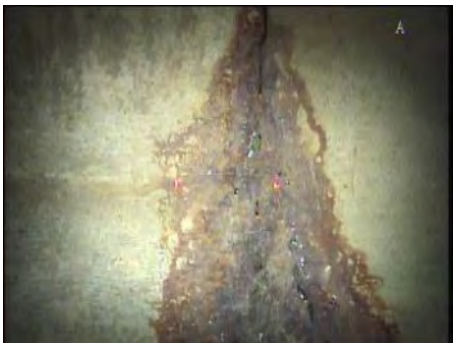
80.3 ft. D / Joint - Infiltration



84.4 ft. D / Joint - Infiltration



88.7 ft. D / Joint - Infiltration



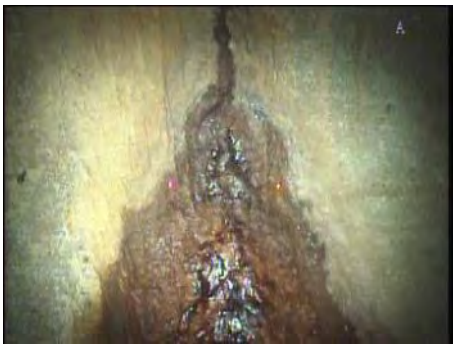
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

92.9 ft. D / Joint - Infiltration



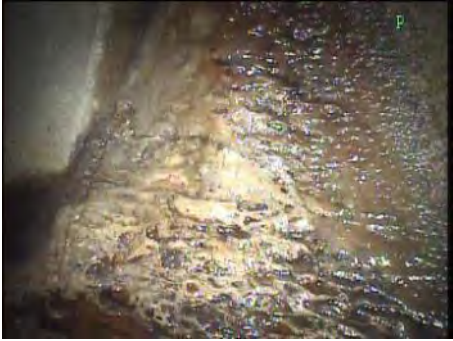
100.8 ft. D / Joint - Infiltration



102.1 ft. D 35.8 ft. 12 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
104.8 ft.	D		/	Joint - Infiltration			
							
109.0 ft.	D		/	Joint - Infiltration			
							
111.1 ft.	D		/	Junction Box		EP-7 to EP-8	
							

Observations

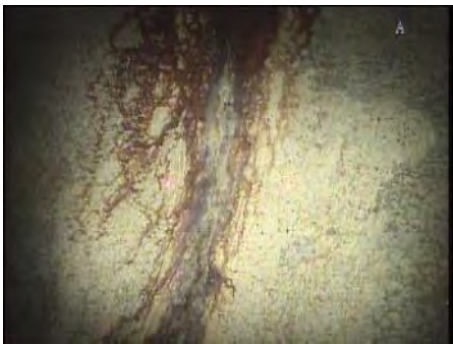
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

112.9 ft. D / Joint - Infiltration



117.1 ft. D 169.4 ft. 3 / 9 Joint - Infiltration

Every 4 ft



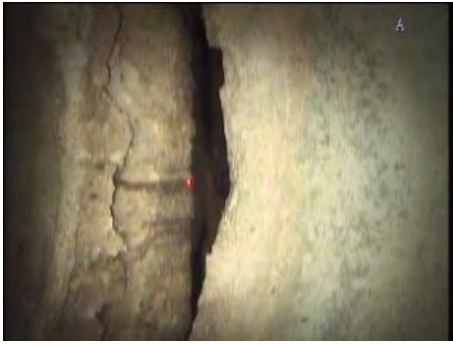
207.6 ft. D 78.9 ft. 12 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

280.7 ft. D / Joint - Separated



286.2 ft. D / Joint - Separated



286.2 ft. D / Root-in-Joint



Observations

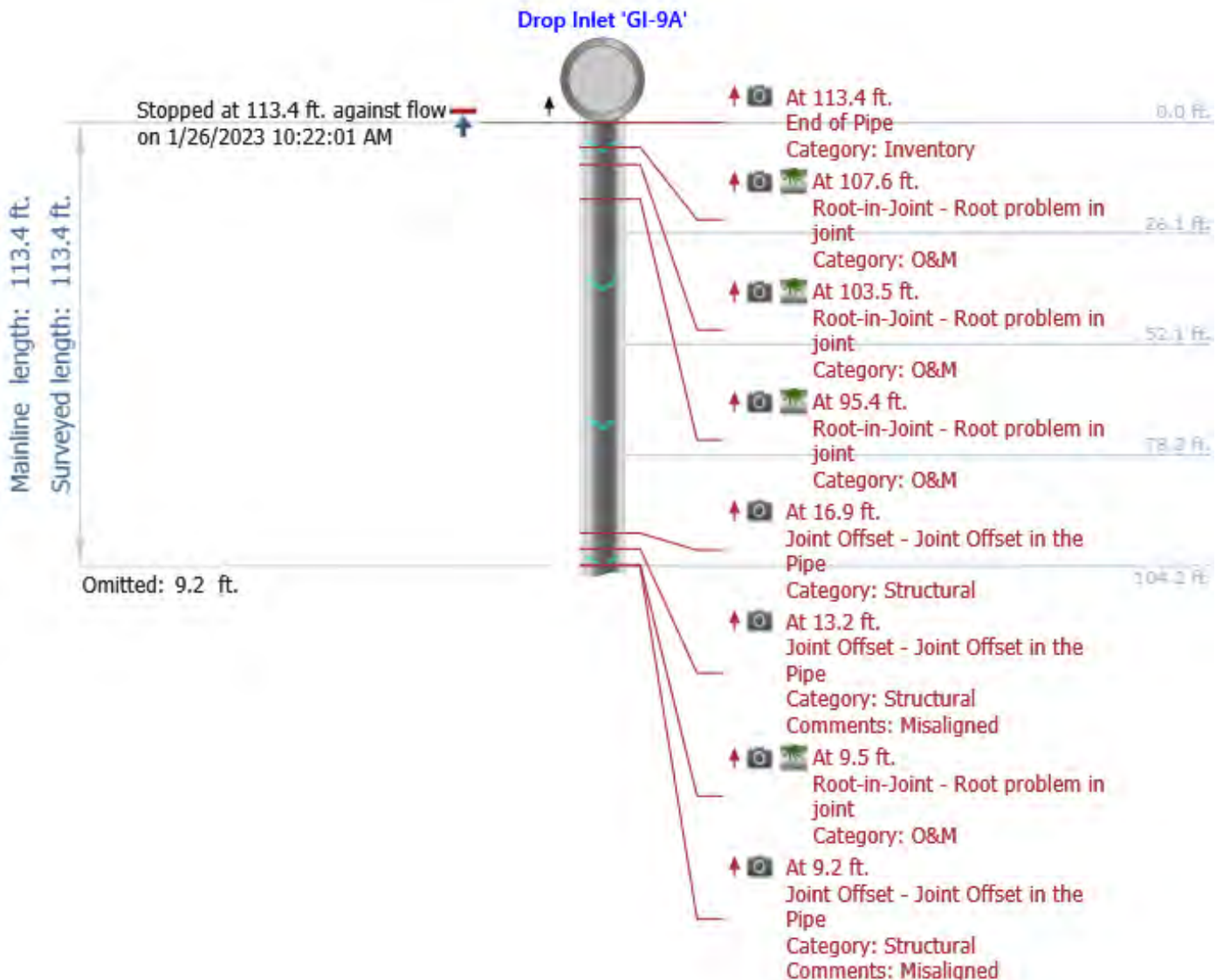
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
286.4 ft.	D		/	Abandoned Survey			Abandoned due to Joint Seperation and Last Joint Broken Off



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-9	Santee	I-95 NB Rest Area
Start date/time:	Direction:	Weather:	Surface condition:
1/26/2023 10:11 AM	Against the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Project name:

I95 Lake Marion

Mainline ID:

EP-9

Start date/time:

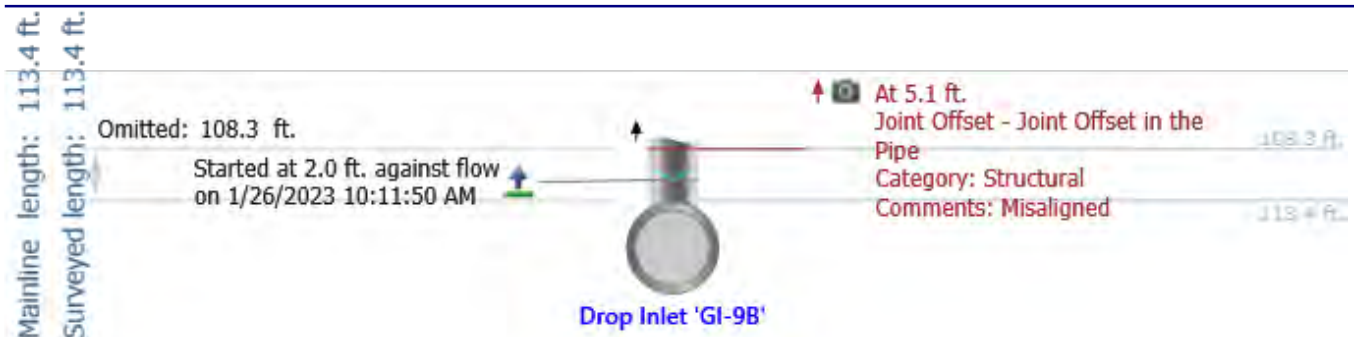
1/26/2023 10:11 AM

Direction:

Against the flow

Weather:

Dry



Main Inspections Small Photos

Mainline ID: EP-9	City: Santee	Address: I-95 NB Rest Area	Project name: I95 Lake Marion
Start date/time: 1/26/2023 10:11 AM	Asset length: 113.4 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-9A	Depth US:	Downstream node: GI-9B	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.1 ft.	U		/	Joint Offset			Misaligned



9.2 ft.	U		/	Joint Offset			Misaligned
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
9.5 ft.	U		/	Root-in-Joint			
							
13.2 ft.	U		/	Joint Offset			Misaligned
							
16.9 ft.	U		/	Joint Offset			
							

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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95.4 ft. U / Root-in-Joint



103.5 ft. U / Root-in-Joint



107.6 ft. U / Root-in-Joint



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
113.4 ft.	U		/	End of Pipe			



Inspection's photos



AET Services

Robotic Inspections

LOCATION: I-95 Lake Marion

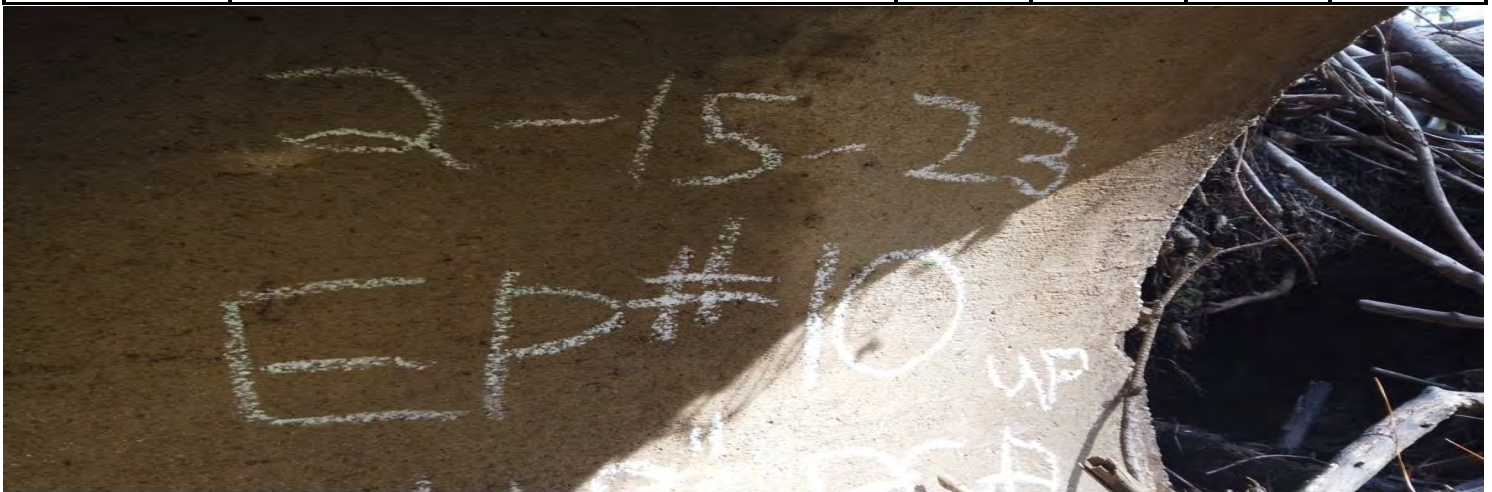
Pipe: EP-10

SIZE: 48"

Linear Feet: 396 FT

Beginning Station	Up Stream EOP-10A
Video Direction	Down Stream EOP-10B

Footage	Defect Description	Top	Right	Left	Bottom
	Start of EP-10				



Footage	Defect Description	Top	Right	Left	Bottom
	Start of EP-10 – Damned Up				



Footage	Defect Description	Top	Right	Left	Bottom
	Start of EP-10 – Sewer Line Running down whole middle of pipe.				



Footage	Defect Description	Top	Right	Left	Bottom
4 ft	Wide Joint		Y		



Footage	Defect Description	Top	Right	Left	Bottom
35 ft	Rebar Showing		Y		



Footage	Defect Description	Top	Right	Left	Bottom
47 ft	Broken/Chip		Y		



Footage	Defect Description	Top	Right	Left	Bottom
155 ft	Crack			Y	

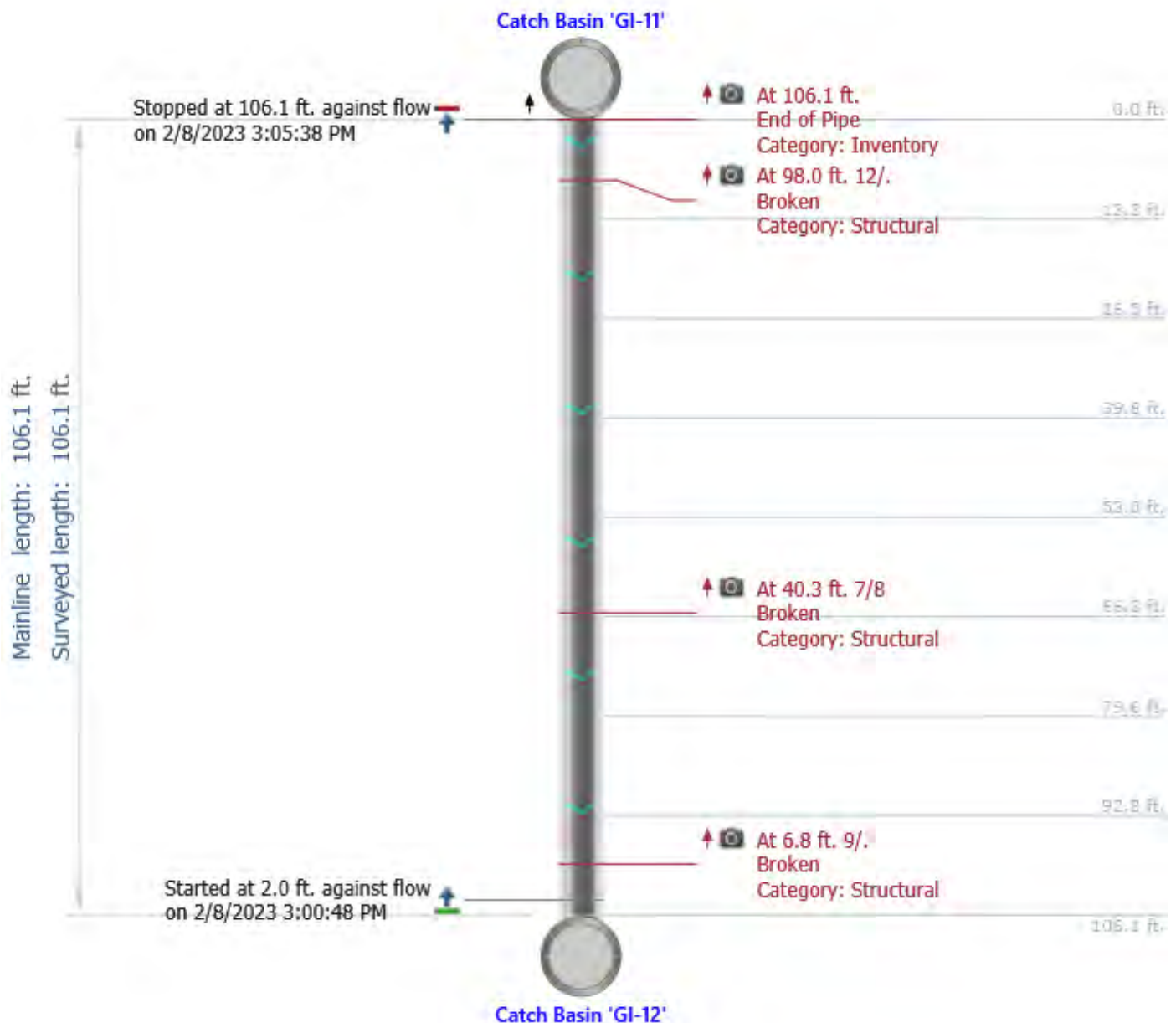


Footage	Defect Description	Top	Right	Left	Bottom
396 ft	End of 48" Pipe			Y	



Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-11	Santee, SC	I-95 SB Rest Area
Start date/time:	Direction:	Weather:	Surface condition:
2/8/2023 3:00 PM	Against the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

Mainline ID: EP-11	City: Santee, SC	Address: I-95 SB Rest Area	Project name: I95 Lake Marion
Start date/time: 2/8/2023 3:00 PM	Asset length: 106.1 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-11	Depth US:	Downstream node: GI-12	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
6.8 ft.	U		9 /	Broken			



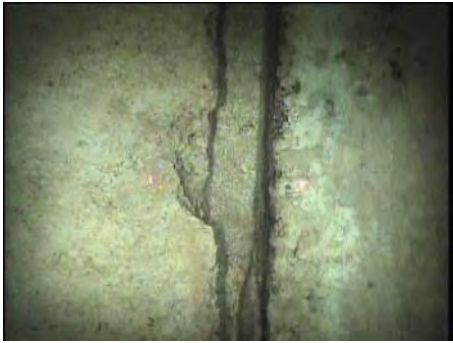
40.3 ft.	U		7 / 8	Broken			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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98.0 ft. U 12 / Broken



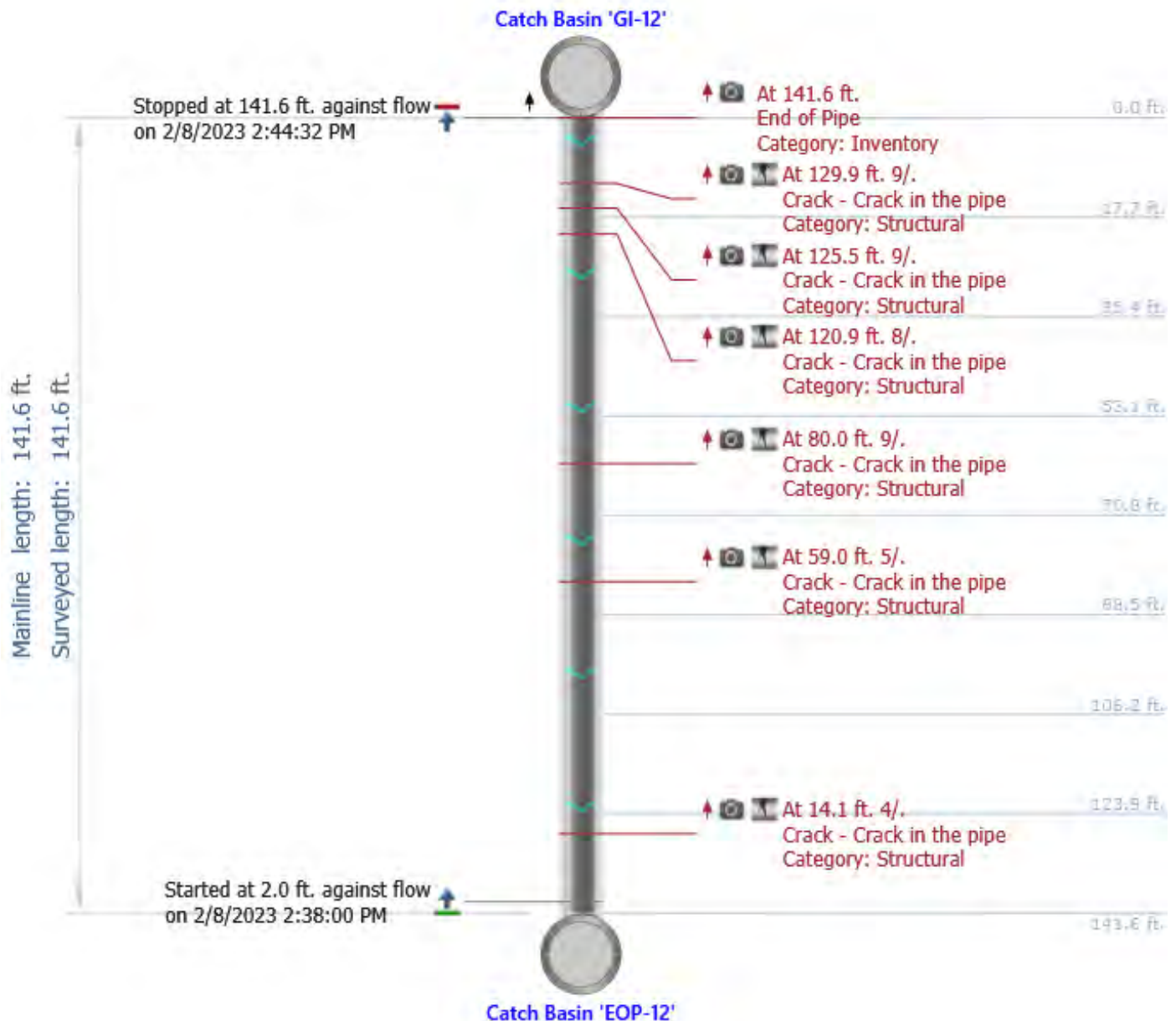
106.1 ft. U / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-12	Santee, SC	I-95 SB Rest Area
Start date/time:	Direction:	Weather:	Surface condition:
2/8/2023 2:38 PM	Against the flow	Dry	Other
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

Mainline ID: EP-12	City: Santee, SC	Address: I-95 SB Rest Area	Project name: I95 Lake Marion
Start date/time: 2/8/2023 2:38 PM	Asset length: 141.6 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-12	Depth US:	Downstream node: EOP-12	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
14.1 ft.	U		4 /	Crack			



59.0 ft.	U		5 /	Crack			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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80.0 ft. U 9 / Crack



120.9 ft. U 8 / Crack



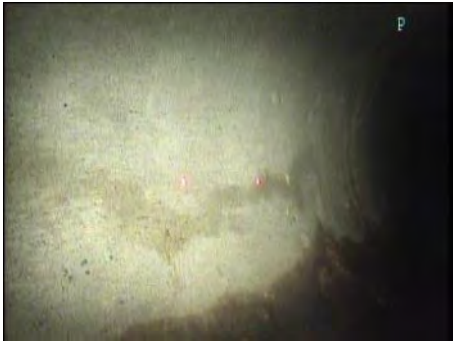
125.5 ft. U 9 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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129.9 ft. U 9 / Crack



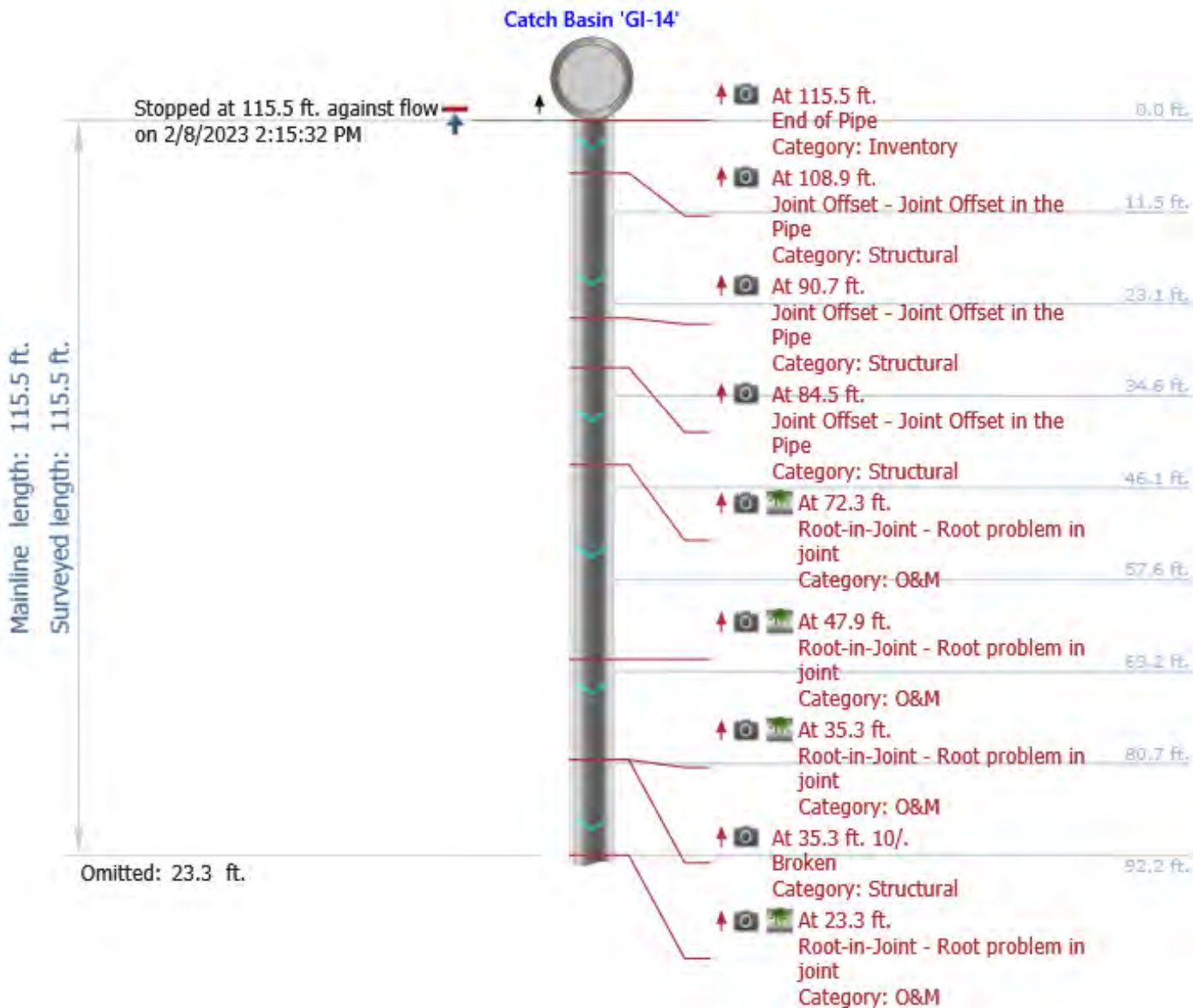
141.6 ft. U / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-14	Santee, SC	I-95 SB Rest Area
Start date/time:	Direction:	Weather:	Surface condition:
2/8/2023 2:01 PM	Against the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Project name:
I95 Lake Marion

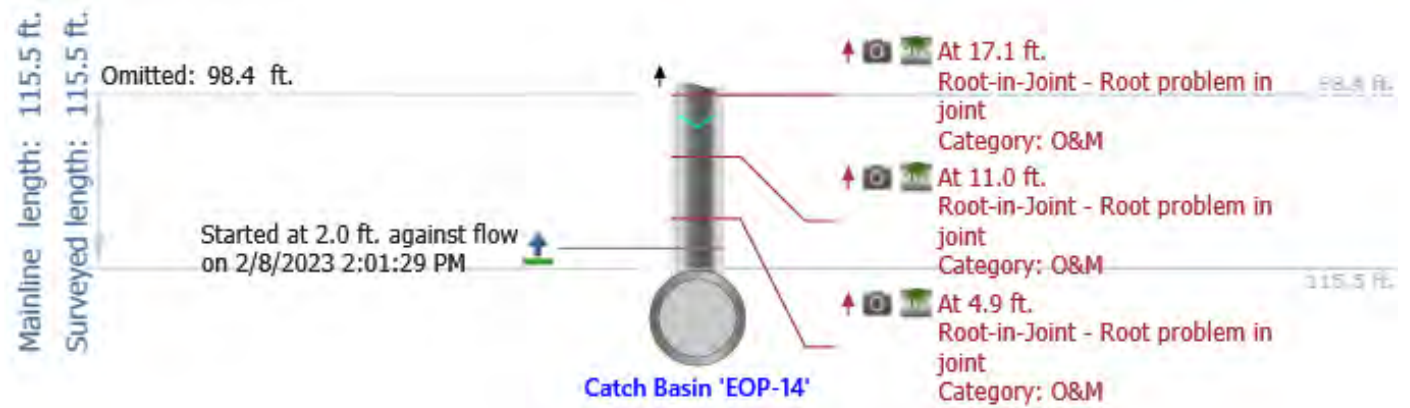
Mainline ID:
EP-14

Start date/time:
2/8/2023 2:01 PM

Direction:
Against the flow

Weather:

Dry



Main Inspections Small Photos

Mainline ID: EP-14	City: Santee, SC	Address: I-95 SB Rest Area	Project name: I95 Lake Marion
Start date/time: 2/8/2023 2:01 PM	Asset length: 115.5 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-14	Depth US:	Downstream node: EOP-14	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
4.9 ft.	U		/	Root-in-Joint			



11.0 ft.	U		/	Root-in-Joint			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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17.1 ft. U / Root-in-Joint



23.3 ft. U / Root-in-Joint



35.3 ft. U / Root-in-Joint



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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35.3 ft. U 10 / Broken



47.9 ft. U / Root-in-Joint



72.3 ft. U / Root-in-Joint



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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84.5 ft. U / Joint Offset



90.7 ft. U / Joint Offset



108.9 ft. U / Joint Offset



Observations

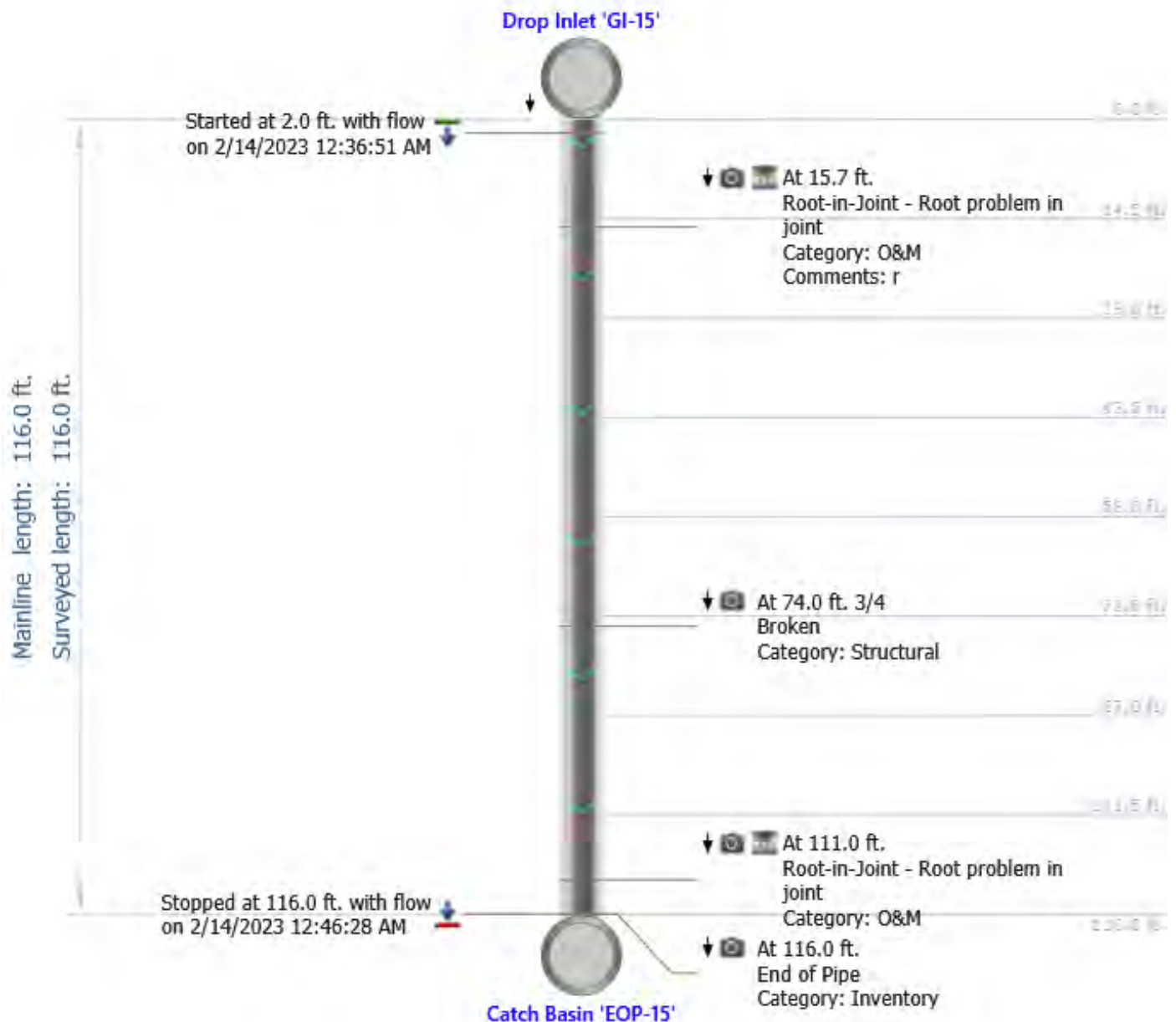
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
115.5 ft.	U		/	End of Pipe			



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-15	Santee, SC	I-95 NB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/14/2023 12:36 AM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
EP-15	Santee, SC	I-95 NB Median	I95 Lake Marion
Start date/time:	Asset length:	Weather:	Operator:
2/14/2023 12:36 AM	116.0 ft.	Dry	Adam
Upstream node:	Depth US:	Downstream node:	Depth DS:
GI-15		EOP-15	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
15.7 ft.	D		/	Root-in-Joint		r	



74.0 ft.	D		3 / 4	Broken			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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111.0 ft. D / Root-in-Joint



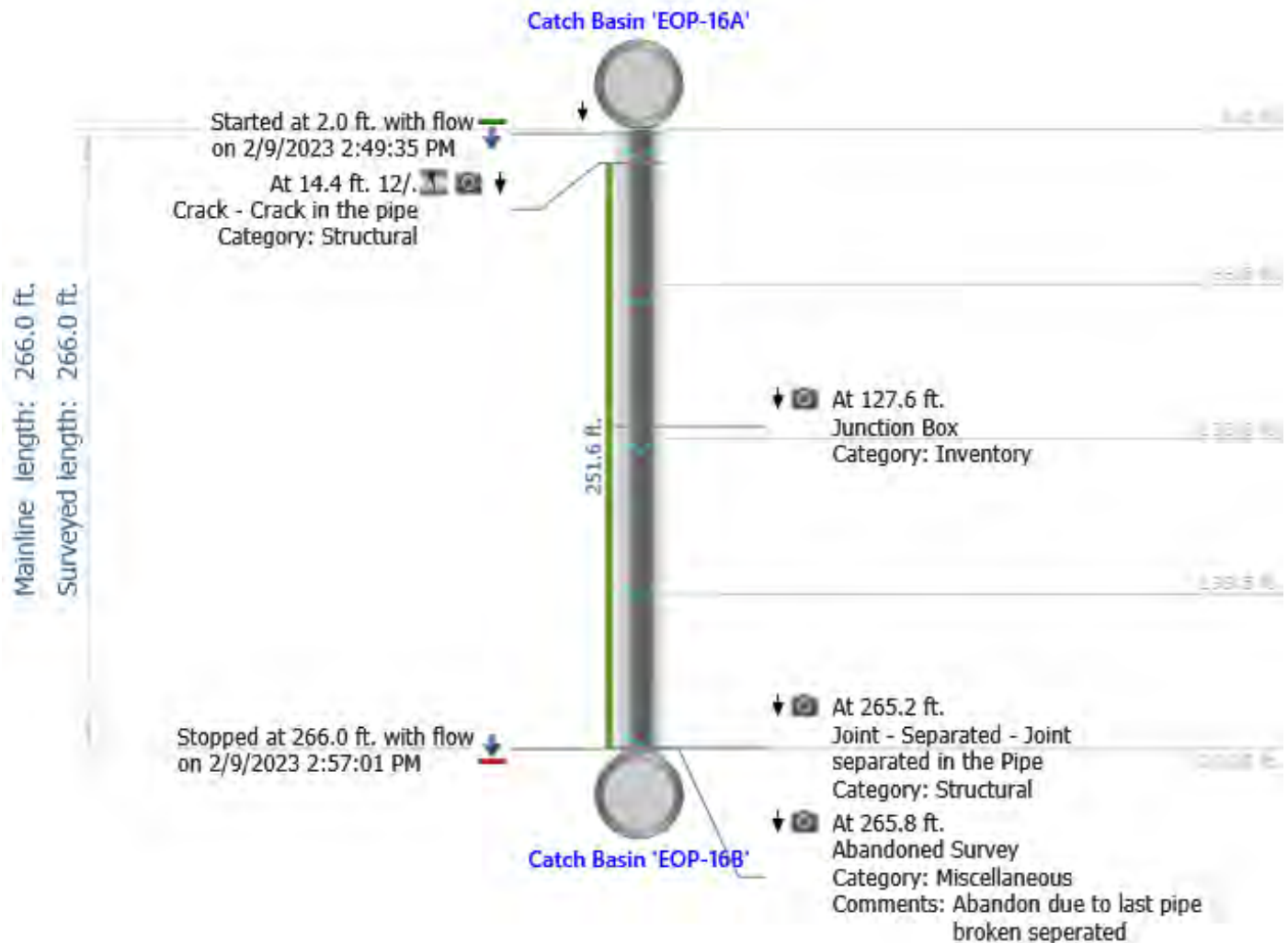
116.0 ft. D / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-16	Santee, SC	I-95 NB
Start date/time:	Direction:	Weather:	Surface condition:
2/9/2023 2:49 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	36.0 in.	36.0 in.



Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
EP-16	Santee, SC	I-95 NB	I95 Lake Marion
Start date/time:	Asset length:	Weather:	Operator:
2/9/2023 2:49 PM	266.0 ft.	Dry	Adam
Upstream node:	Depth US:	Downstream node:	Depth DS:
EOP-16A		EOP-16B	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	36.0 in.	36.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
14.4 ft.	D	251.6 ft.	12 /	Crack			



127.6 ft.	D		/	Junction Box
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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265.2 ft. D / Joint - Separated



265.8 ft. D / Abandoned Survey

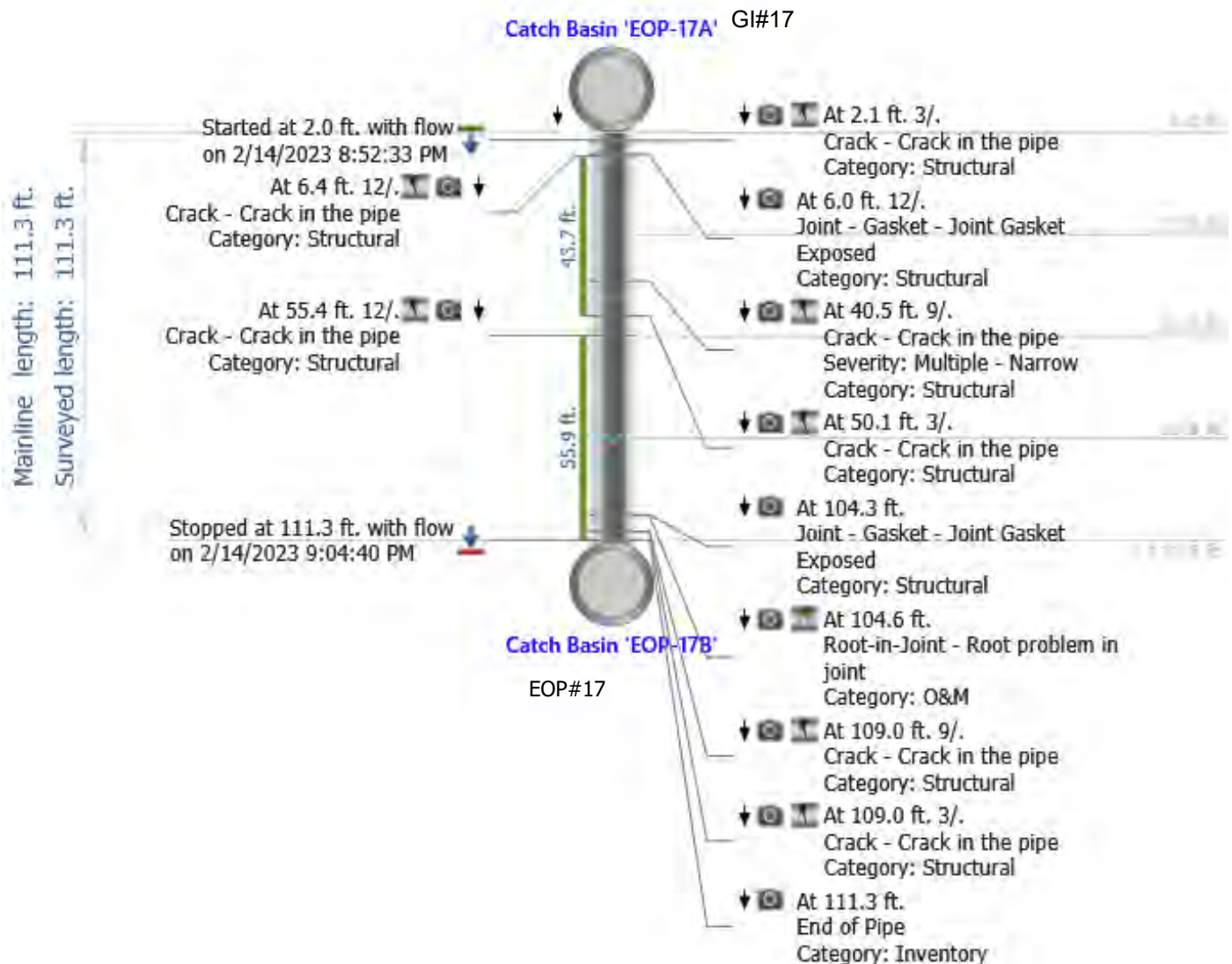
Abandon due to last
pipe broken seperated



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-17	Santee, SC	I-95 SB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/14/2023 8:52 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

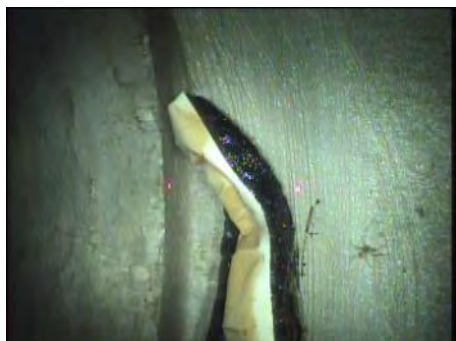
Mainline ID:	City:	Address:	Project name:
EP-17	Santee, SC	I-95 SB Median	I95 Lake Marion
Start date/time:	Asset length:	Weather:	Operator:
2/14/2023 8:52 PM	111.3 ft.	Dry	Adam
Upstream node:	Depth US:	Downstream node:	Depth DS:
EOP-17A/or/ GI#17		EOP-17B/or/ EOP#17	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
2.1 ft.	D		3 /	Crack			



6.0 ft.	D		12 /	Joint - Gasket			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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6.4 ft. D 43.7 ft. 12 / Crack



40.5 ft. D 9 / Crack Multiple - Narrow



50.1 ft. D 3 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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55.4 ft. D 55.9 ft. 12 / Crack



104.3 ft. D / Joint - Gasket



104.6 ft. D / Root-in-Joint



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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109.0 ft. D 9 / Crack



109.0 ft. D 3 / Crack



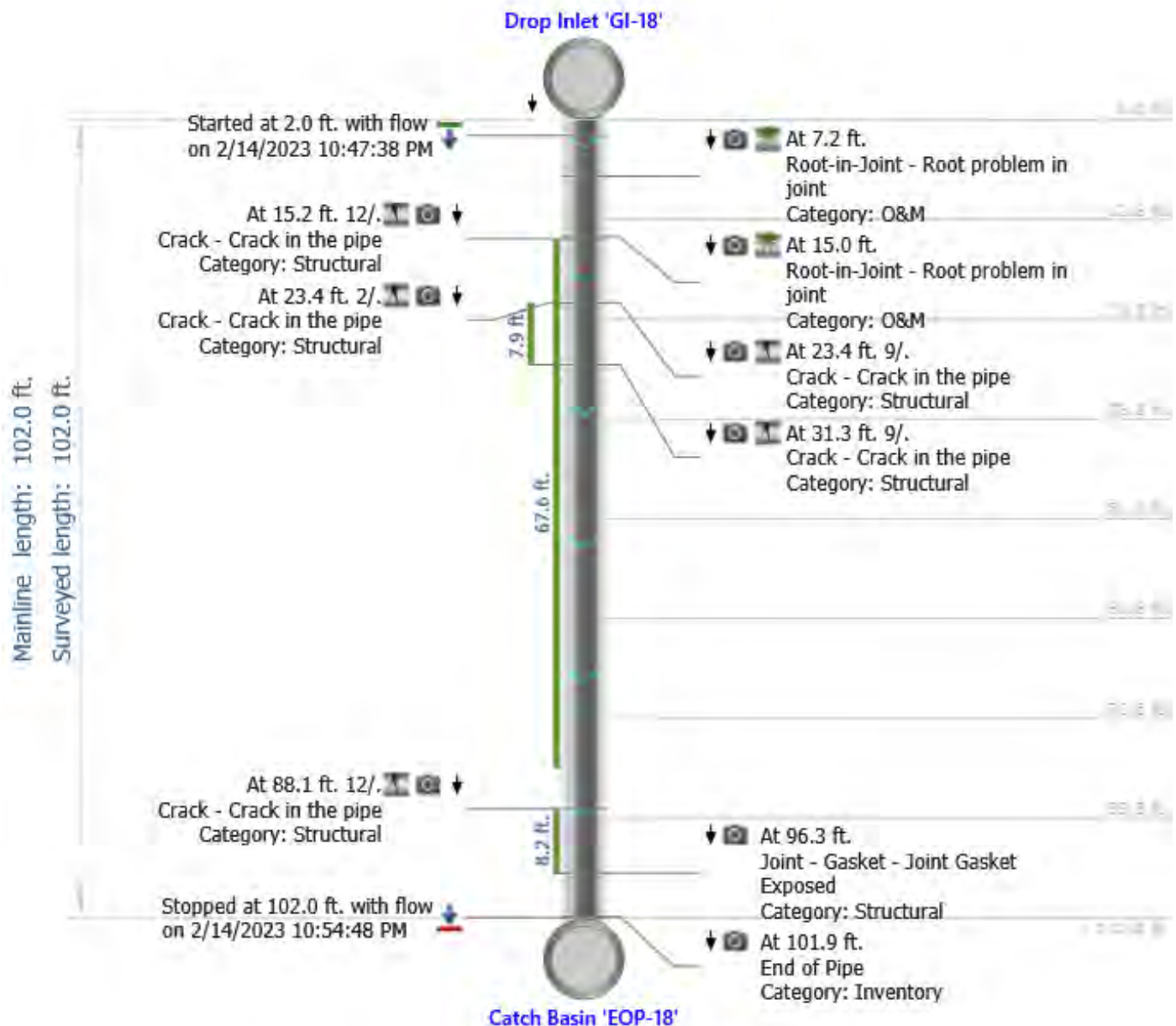
111.3 ft. D / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-18	Santee, SC	I-95 SB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/14/2023 10:47 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

Mainline ID: EP-18	City: Santee, SC	Address: I-95 SB Median	Project name: I95 Lake Marion
Start date/time: 2/14/2023 10:47 PM	Asset length: 102.0 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-18	Depth US: 	Downstream node: EOP-18	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
7.2 ft.	D		/	Root-in-Joint			



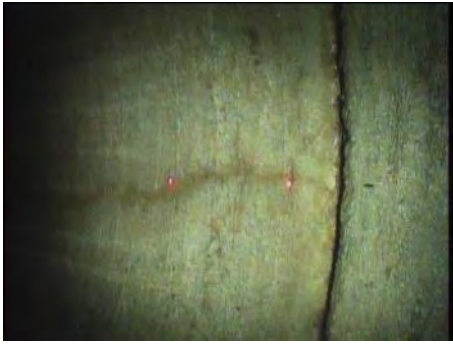
15.0 ft.	D		/	Root-in-Joint			
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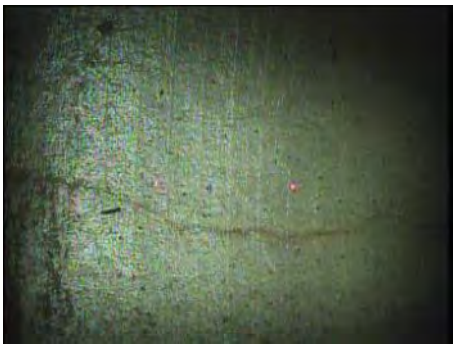
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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15.2 ft. D 67.6 ft. 12 / Crack



23.4 ft. D 9 / Crack



23.4 ft. D 7.9 ft. 2 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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31.3 ft. D 9 / Crack



88.1 ft. D 8.2 ft. 12 / Crack



96.3 ft. D / Joint - Gasket



Observations

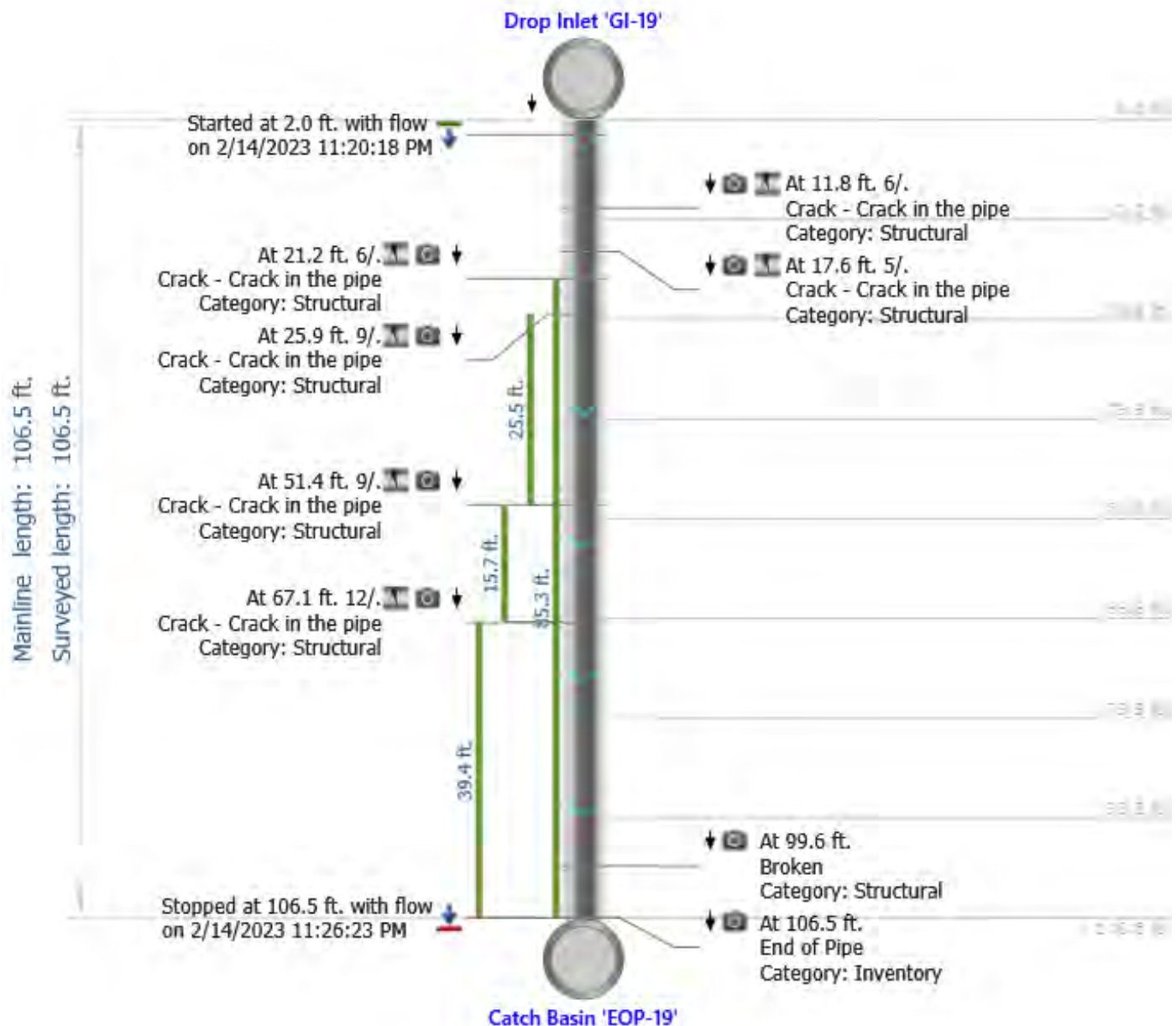
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
101.9 ft.	D		/	End of Pipe			



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-19	Santee, SC	I-95 SB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/14/2023 11:20 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

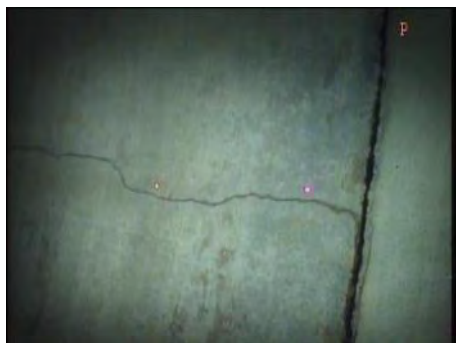
Mainline ID: EP-19	City: Santee, SC	Address: I-95 SB Median	Project name: I95 Lake Marion
Start date/time: 2/14/2023 11:20 PM	Asset length: 106.5 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-19	Depth US:	Downstream node: EOP-19	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
11.8 ft.	D		6 /	Crack			



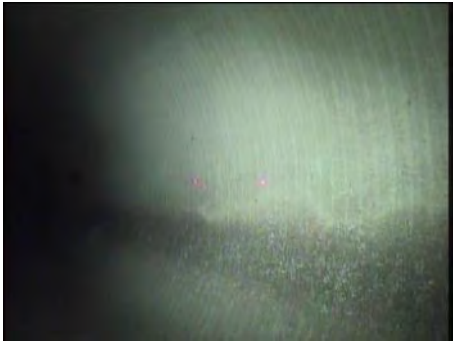
17.6 ft.	D		5 /	Crack			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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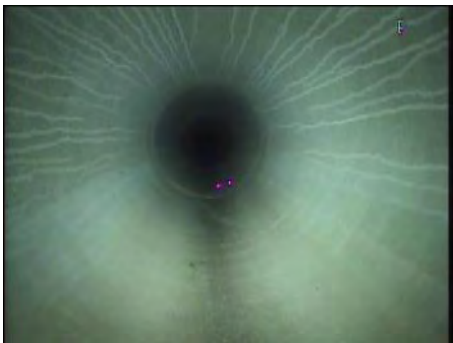
21.2 ft. D 85.3 ft. 6 / Crack



25.9 ft. D 25.5 ft. 9 / Crack



51.4 ft. D 15.7 ft. 9 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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67.1 ft. D 39.4 ft. 12 / Crack



99.6 ft. D / Broken



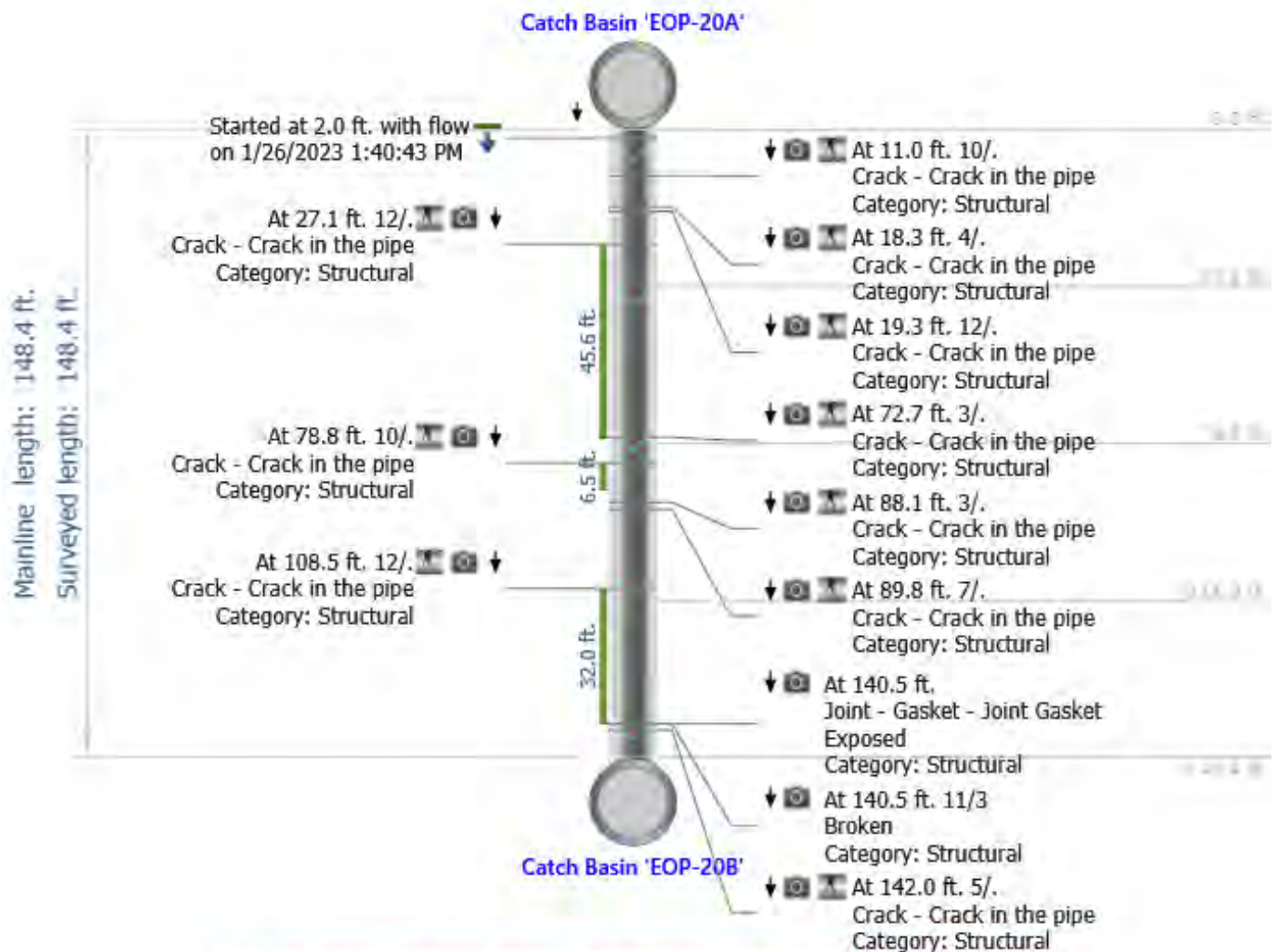
106.5 ft. D / End of Pipe



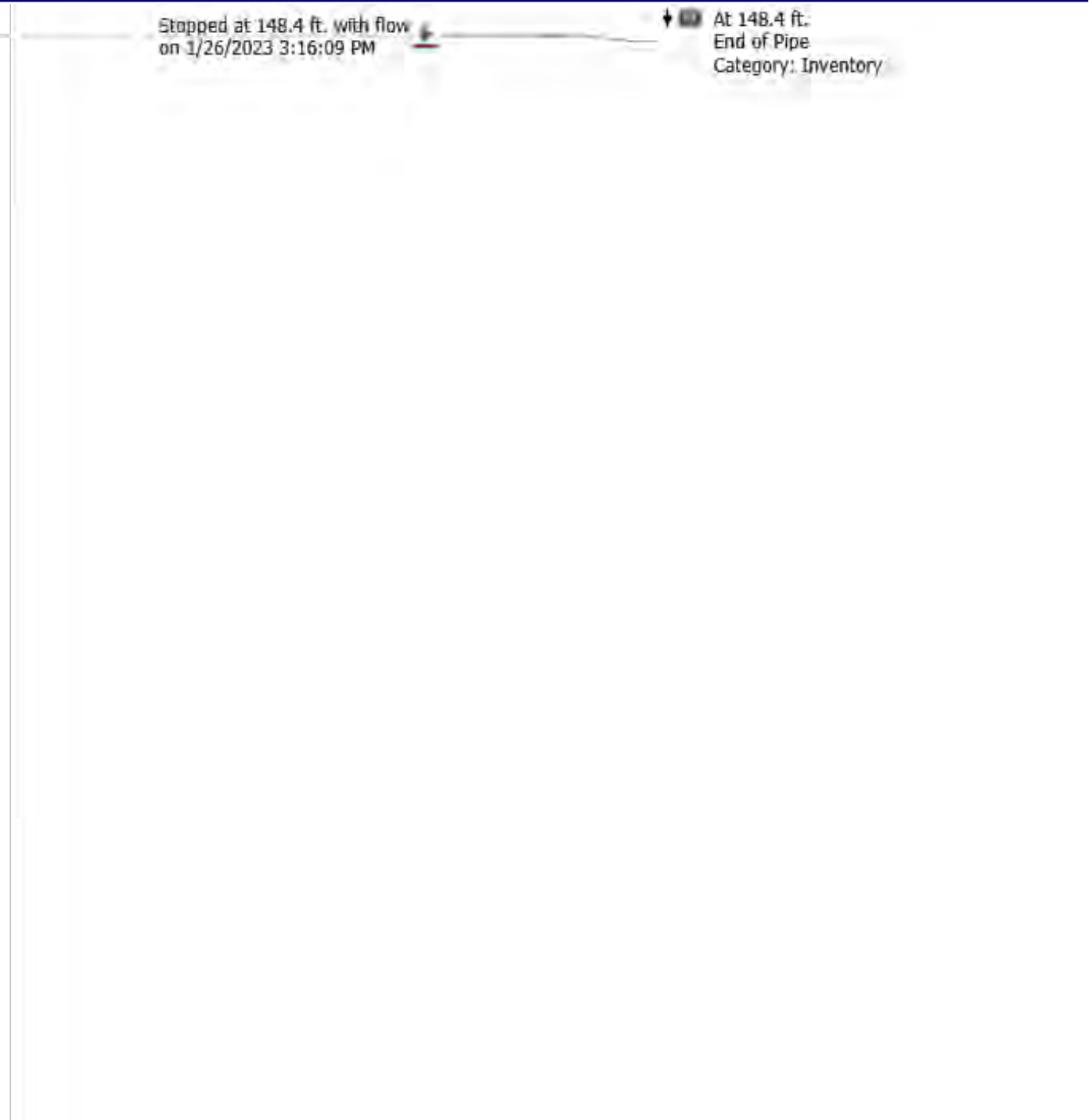
Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-20	Clarendon	I-95 SB Exit 102
Start date/time:	Direction:	Weather:	Surface condition:
1/26/2023 1:40 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Some observations have distance greater than the pipe length

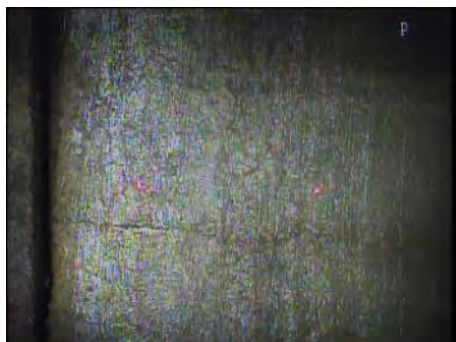


Main Inspections Small Photos

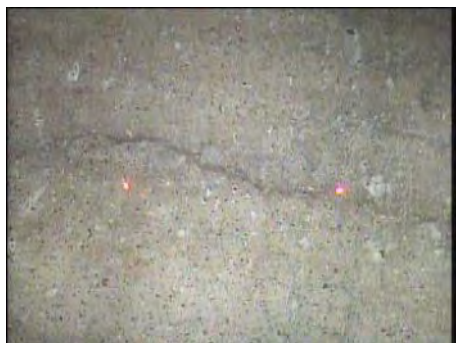
Mainline ID:	City:	Address:	Project name:
EP-20	Clarendon	I-95 SB Exit 102	I95 Lake Marion
Start date/time:	Asset length:	Weather:	Operator:
1/26/2023 1:40 PM	148.4 ft.	Dry	Adam
Upstream node:	Depth US:	Downstream node:	Depth DS:
EOP-20A		EOP-20B	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
11.0 ft.	D		10 /	Crack			



18.3 ft.	D		4 /	Crack			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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19.3 ft. D 12 / Crack



27.1 ft. D 45.6 ft. 12 / Crack



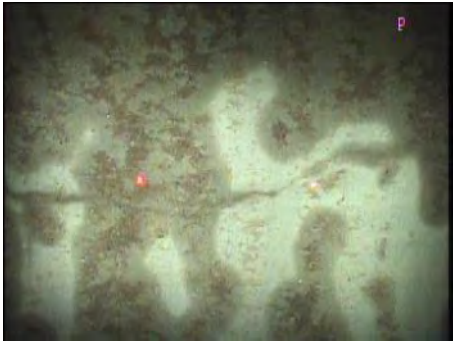
72.7 ft. D 3 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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78.8 ft. D 6.5 ft. 10 / Crack



88.1 ft. D 3 / Crack



89.8 ft. D 7 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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108.5 ft. D 32.0 ft. 12 / Crack



140.5 ft. D / Joint - Gasket



140.5 ft. D 11 / 3 Broken



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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142.0 ft. D 5 / Crack



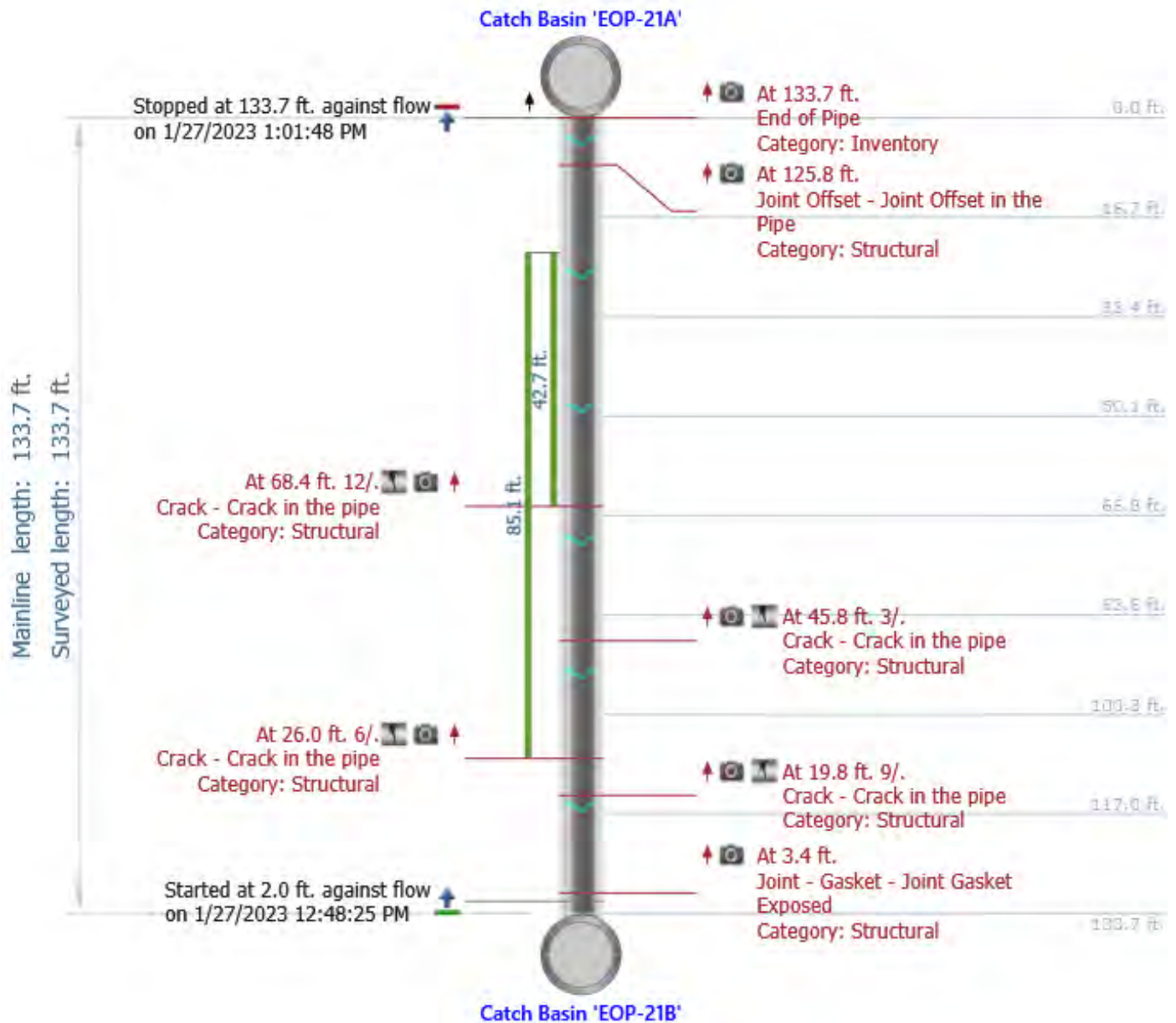
148.4 ft. D / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-21	Clarendon	I-95 SB Exit 102
Start date/time:	Direction:	Weather:	Surface condition:
1/27/2023 12:48 PM	Against the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.

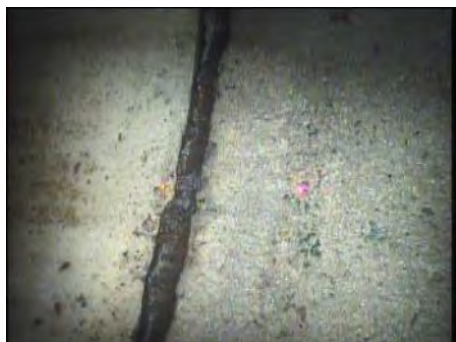


Main Inspections Small Photos

Mainline ID: EP-21	City: Clarendon	Address: I-95 SB Exit 102	Project name: I95 Lake Marion
Start date/time: 1/27/2023 12:48 PM	Asset length: 133.7 ft.	Weather: Dry	Operator: Adam
Upstream node: EOP-21A	Depth US:	Downstream node: EOP-21B	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
3.4 ft.	U		/	Joint - Gasket			



19.8 ft.	U		9 /	Crack			
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Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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26.0 ft. U 85.1 ft. 6 / Crack



45.8 ft. U 3 / Crack



68.4 ft. U 42.7 ft. 12 / Crack



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
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125.8 ft. U / Joint Offset



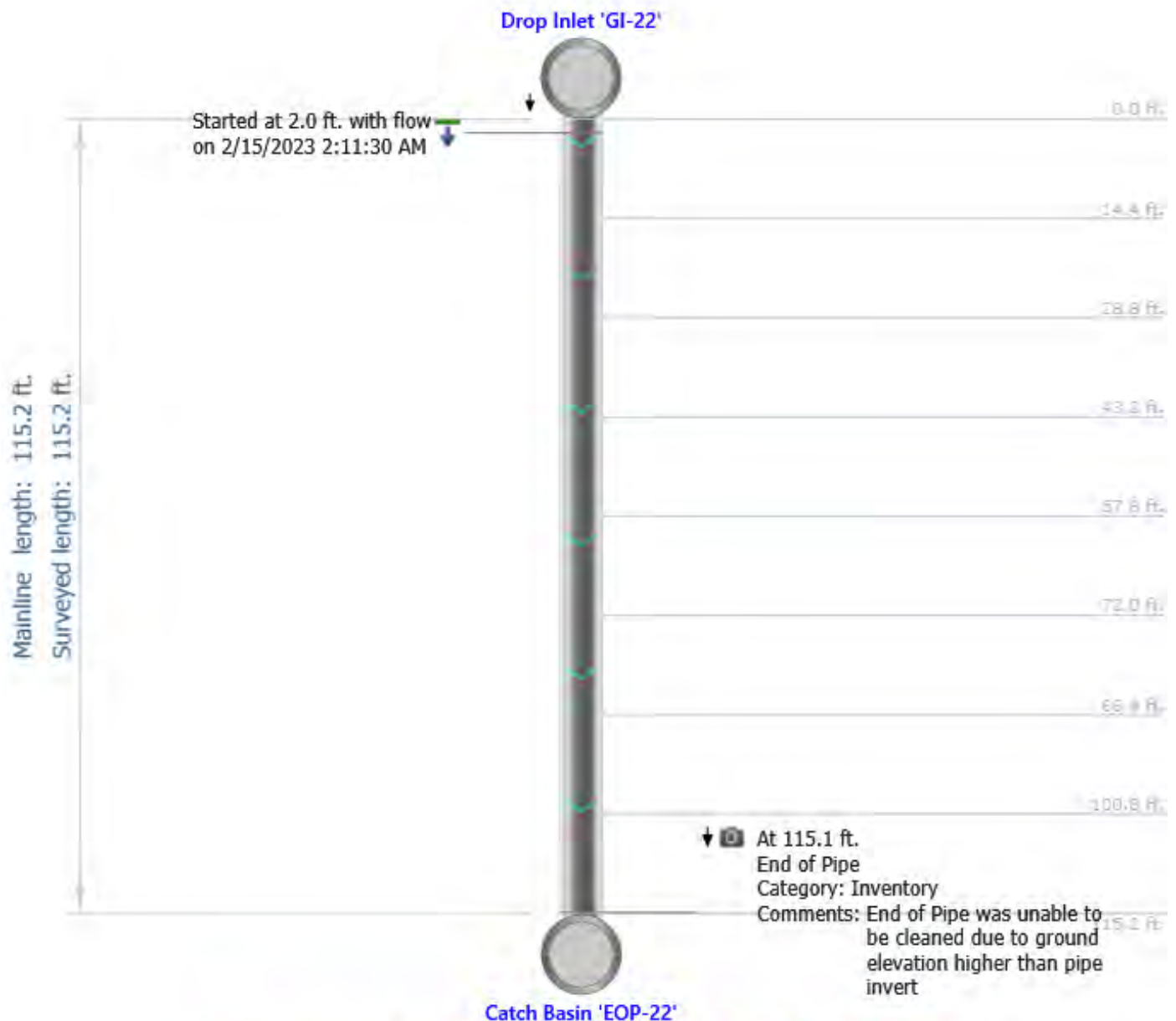
133.7 ft. U / End of Pipe



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-22	Santee, SC	I-95 SB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/15/2023 2:11 AM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Some observations have distance greater than the pipe length

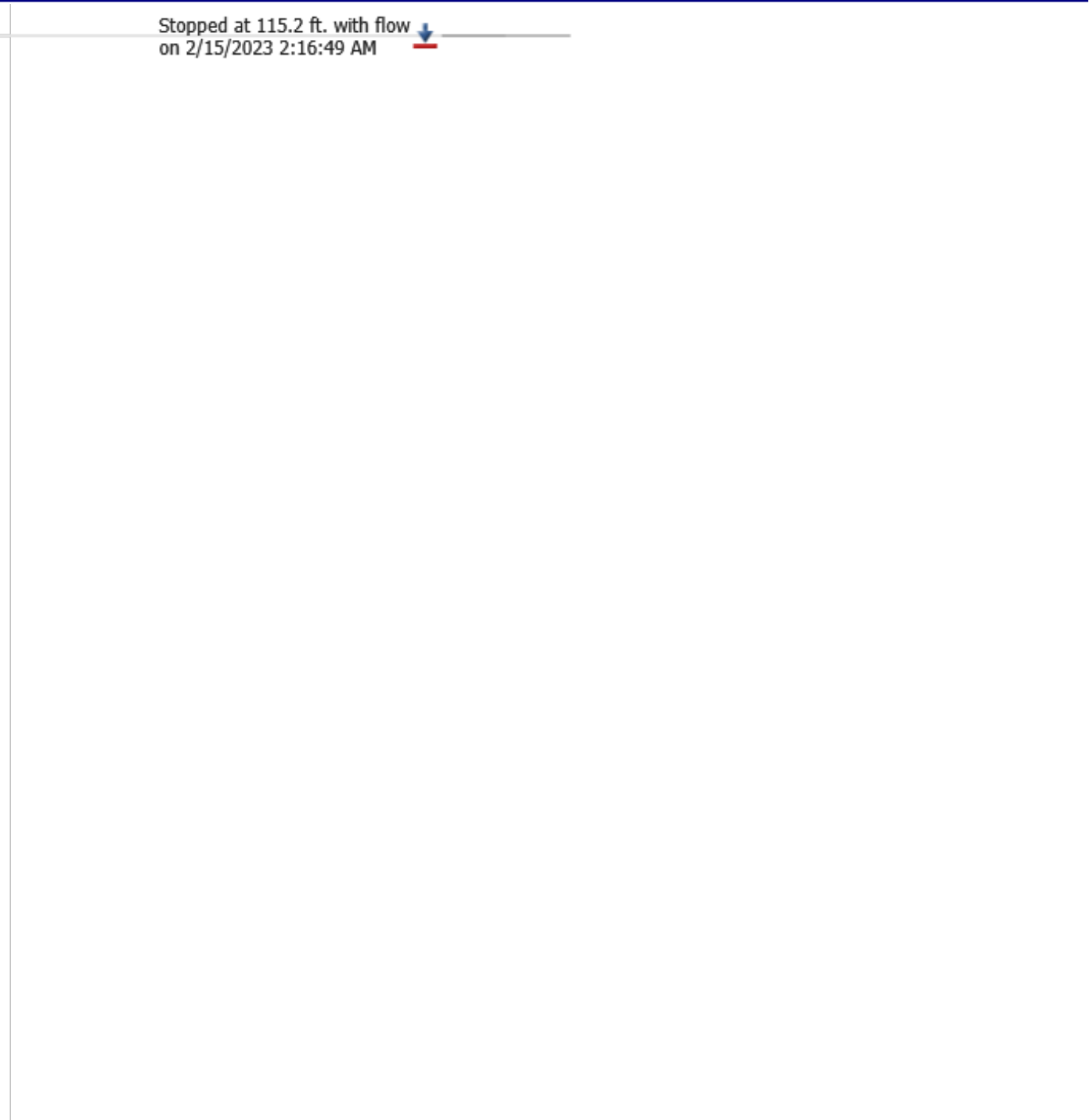
Project name:
I95 Lake Marion

Mainline ID:
EP-22

Start date/time:
2/15/2023 2:11 AM

Direction:
With the flow

Weather:
Dry



Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
EP-22	Santee, SC	I-95 SB Median	I95 Lake Marion
Start date/time:	Asset length:	Weather:	Operator:
2/15/2023 2:11 AM	115.2 ft.	Dry	Adam
Upstream node:	Depth US:	Downstream node:	Depth DS:
GI-22		EOP-22	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.
Comments:			

Observations

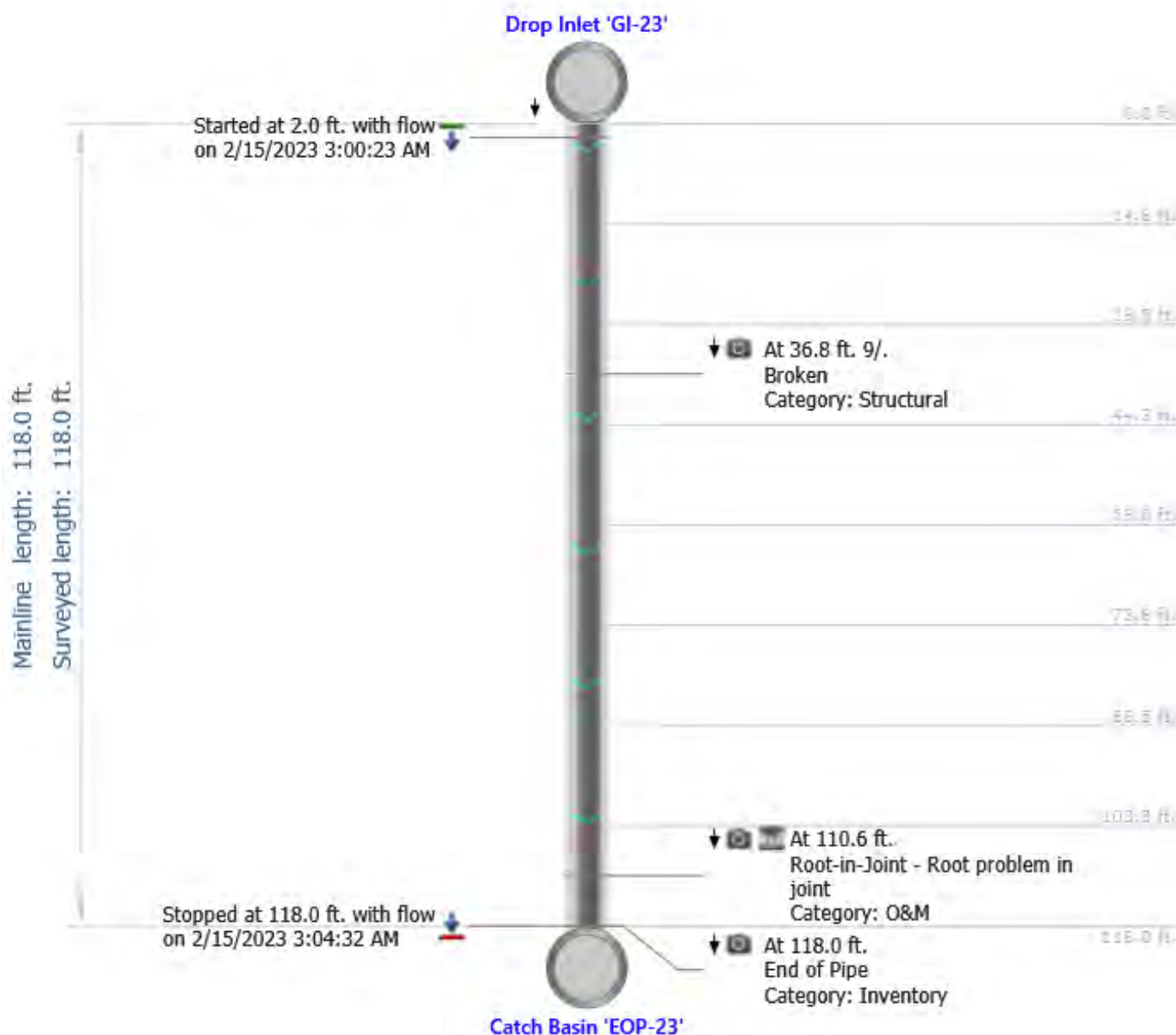
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
115.1 ft.	D		/	End of Pipe			End of Pipe was unable to be cleaned due to ground elevation higher than pipe invert



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-23	Santee, SC	I-95 SB Median
Start date/time:	Direction:	Weather:	Surface condition:
2/15/2023 3:00 AM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	18.0 in.	18.0 in.



Main Inspections Small Photos

Mainline ID: EP-23	City: Santee, SC	Address: I-95 SB Median	Project name: I95 Lake Marion
Start date/time: 2/15/2023 3:00 AM	Asset length: 118.0 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-23	Depth US:	Downstream node: EOP-23	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 18.0 in.	Pipe width: 18.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
36.8 ft.	D		9 /	Broken			



110.6 ft.	D		/	Root-in-Joint			
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Observations

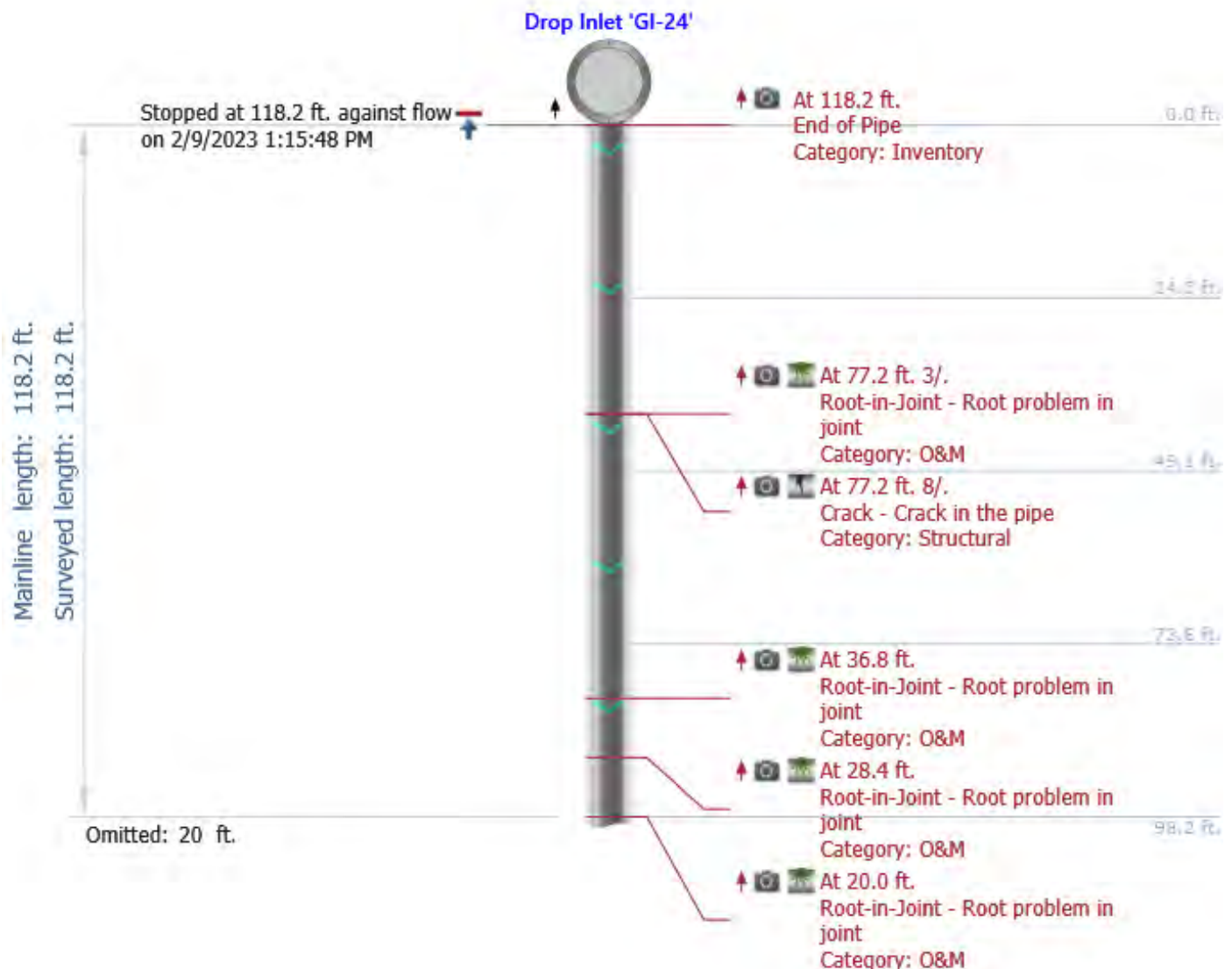
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
118.0 ft.	D		/	End of Pipe			



Inspection's photos

Main Inspections Pipe Run

Project name:	Mainline ID:	City:	Address:
I95 Lake Marion	EP-24	Santee, SC	I-95 NB Exit 102 off Ramp
Start date/time:	Direction:	Weather:	Surface condition:
2/9/2023 1:08 PM	Against the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Concrete Reinforced	24.0 in.	24.0 in.



Project name:
I95 Lake Marion

Mainline ID:
EP-24

Start date/time:
2/9/2023 1:08 PM

Direction:
Against the flow

Weather:

Dry



Main Inspections Small Photos

Mainline ID: EP-24	City: Santee, SC	Address: I-95 NB Exit 102 off Ramp	Project name: I95 Lake Marion
Start date/time: 2/9/2023 1:08 PM	Asset length: 118.2 ft.	Weather: Dry	Operator: Adam
Upstream node: GI-24	Depth US:	Downstream node: EOP-24	Depth DS:
Pipe shape: Circular	Pipe material: Concrete Reinforced	Pipe height: 24.0 in.	Pipe width: 24.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
4.6 ft.	U		/	Root-in-Joint			



12.0 ft.	U		/	Root-in-Joint			
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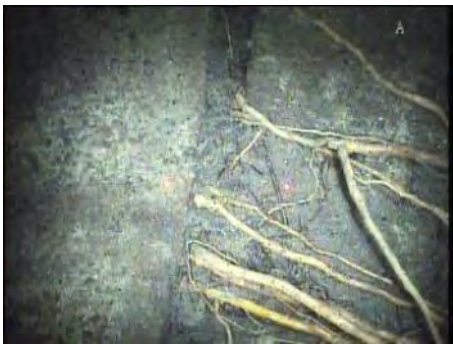
Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

20.0 ft. U / Root-in-Joint



28.4 ft. U / Root-in-Joint



36.8 ft. U / Root-in-Joint



Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
----------	------	--------	---------	------	-------------------	--------	----------

77.2 ft. U 3 / Root-in-Joint



77.2 ft. U 8 / Crack



118.2 ft. U / End of Pipe



Inspection's photos

APPENDIX D

I-95 Bridge Replacement over Lake Marion

DB PREP

Pipe Repair & Replacement Quantities

Pipe Repair & Replacment Quantities

Performed by: Parrish and Partners

Item	Description	Quantity	Unit
7143618	18" SMOOTH WALL PIPE	1741	LF
7143624	24" SMOOTH WALL PIPE	111	LF
7143636	36" SMOOTH WALL PIPE		LF
7143660	48" SMOOTH WALL PIPE	273	LF
7142553	18"RCP-CL3-AASHTO M315-BEV.END	5	EA
7142554	24"RCP-CL3-AASHTO M315-BEV.END	1	EA
7149973	LINE EXISTING 18" PIPE	777	LF
7149974	LINE EXISTING 24" PIPE		LF
7149977	LINE EXISTING 42" PIPE	389	LF
7191605	CATCH BASIN - TYPE 16		EA
7192020	CONST. DI 24" X 36"		EA
7192040	DROP INLET TYPE 112		EA
7192205	CONST. JUNCT BOX		EA
7192010	CONST. DI 24" X 24"		EA
7199100	BEVELING OF PIPE END		EA
7206200	CONCRETE DITCH PAVING		SY
8041010	RIP-RAP (CLASS A)		TON
8041020	RIP-RAP (CLASS B)		TON
8041030	RIP-RAP (CLASS C)		TON
8041040	RIP-RAP (CLASS D)		TON
8151110	TEMP.EROS.CONTRL.BLANKET(ECB)		MSY
8151103	TURF REINFORCEMENT MATTING (TRM) TYPE 3		MSY
8151201	HYDRAULIC EROSION CONTROL PRODUCT (HECP) - TYPE 1		ACRE
8151204	HYDRAULIC EROSION CONTROL PRODUCT (HECP) - TYPE 4		ACRE
8152004	INLET STRUCTURE FILTER - TYPE F (WEIGHTED)		LF
8152007	SEDIMENT TUBES		LF
8153000	SILT FENCE		LF
8156100	DITCH CHECK		TON
8156200	CLEANING INLET STRUCTURE FILTERS		EA
7191205	CATCH BASIN - TYPE 9		EA
7191005	CATCH BASIN - TYPE 1		EA
719125C	DROP IN LET T-125 SINGLE 4'X5' W IA SLAB		EA
719125B	DROP IN LET T-125 SINGLE 4'X2' BOX		EA
8156210	INLET STRUCTURE FILTER - TYPE B		EA
8156211	INLET STRUC.FLTR (TYP E) CB T-1		EA
8156212	INLET STRUC.FLTR (TYP E) CB T-16		EA
8048210	GEOTEX/EROS.CONT (CLASS 2) TYPE C		SY
8100100	PERMANENT COVER		ACRE
8100200	TEMPORARY COVER		ACRE
8104100	FERTILIZER (10-10-10)		TON
8105000	LIME		TON
8109050	SELECTIVE WATERING		GAL
8101110	STRAW OR HAY MULCH W TACKIFIER		ACRE
8156410	AGGREGATE NO.5 OR 57 FOR EROSION CONTROL		TON
7196000	EXTRA DEPTH OF BOX		LF
7193005	PRECAST CONCRETE RISER - 48" DIAMETER		LF
7193105	PRECAST CONCRETE DRAINAGE BASE - 48"		EA
8031080	8" CORR. METAL PIPE SLOPE DRAIN (TEMPORARY)		LF
7192285	72" X 72" JUNCTION BOX		EA

APPENDIX E

I-95 Bridge Replacement over Lake Marion

DB PREP

Maps

11

5160

5160

#

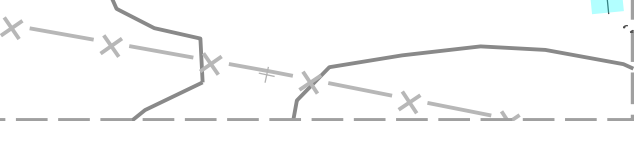
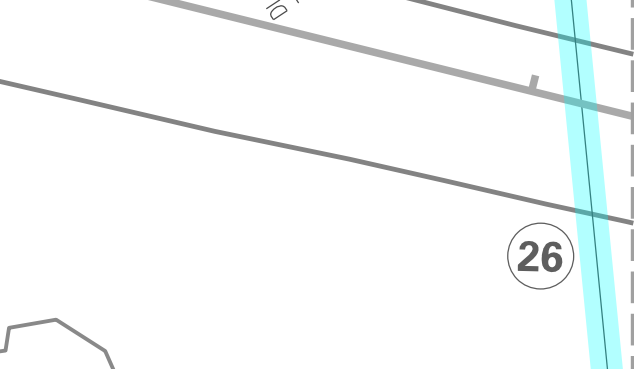
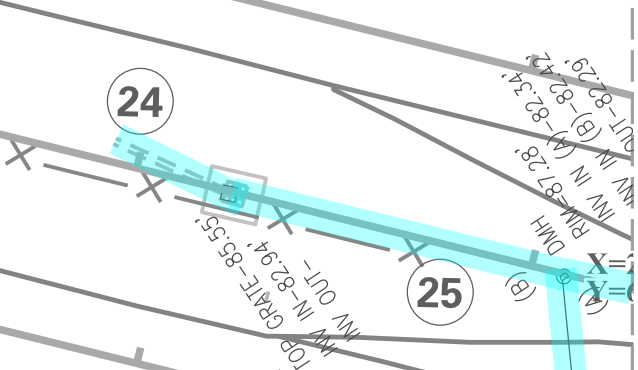
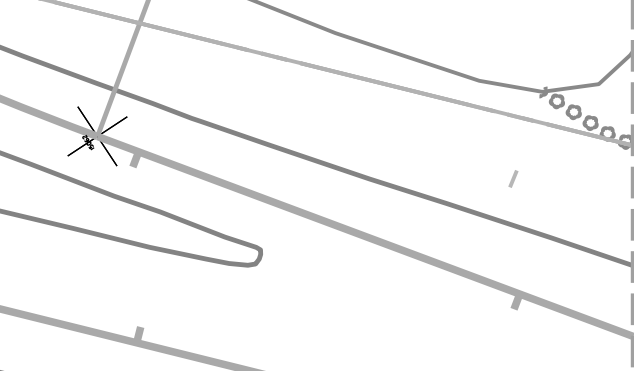
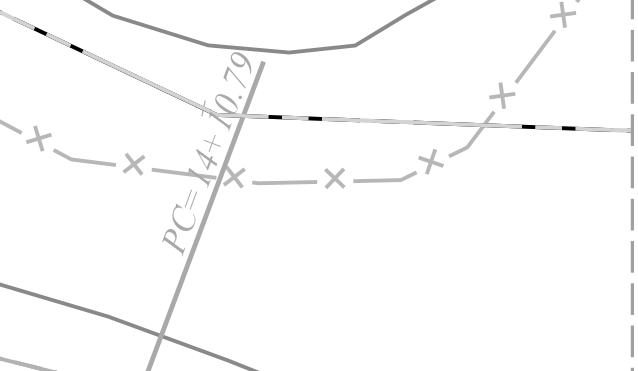
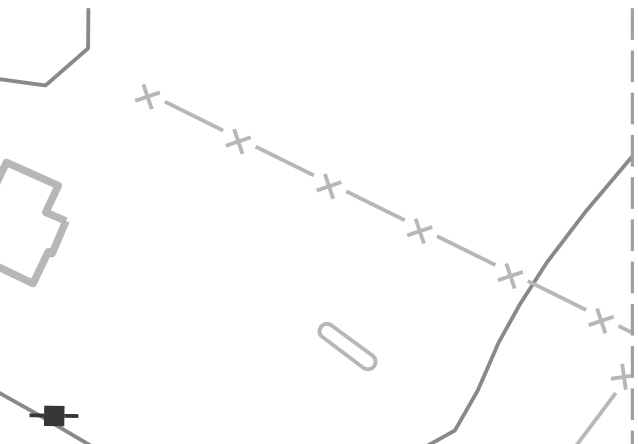
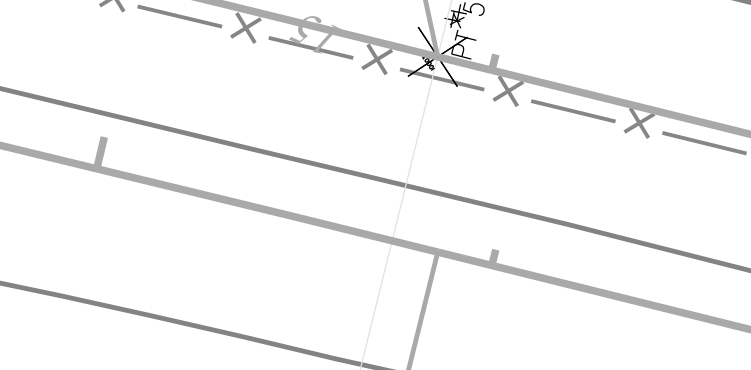
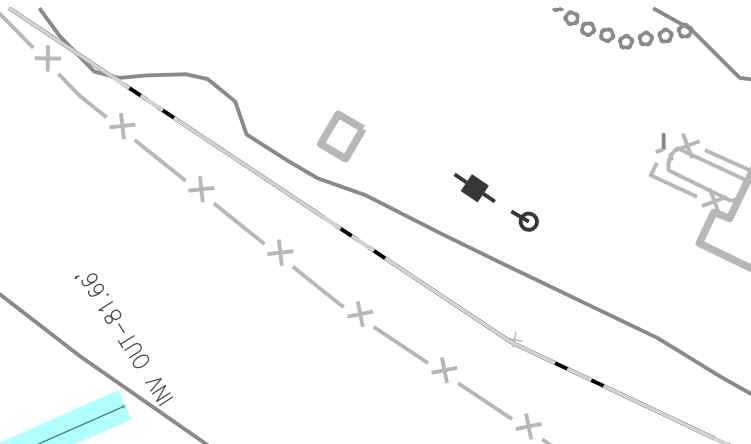
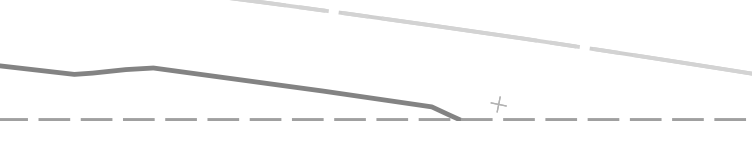
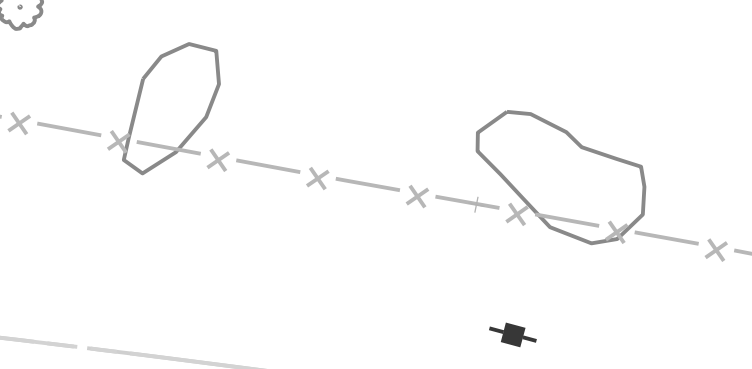
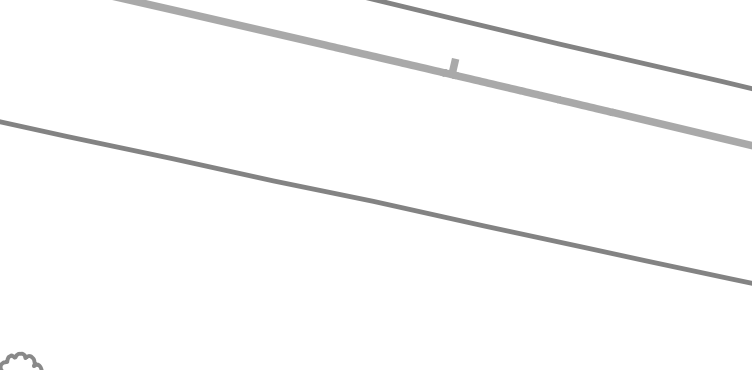
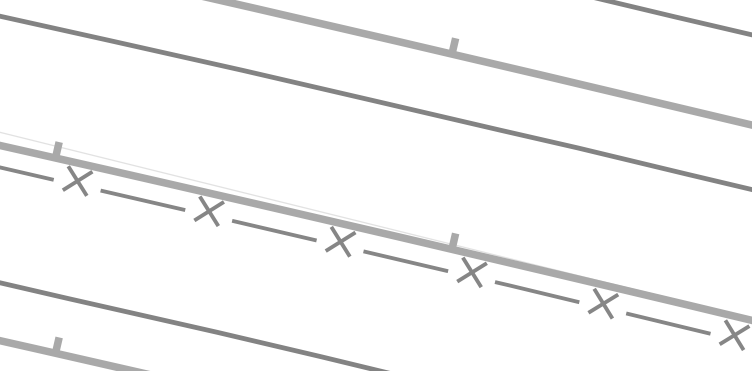
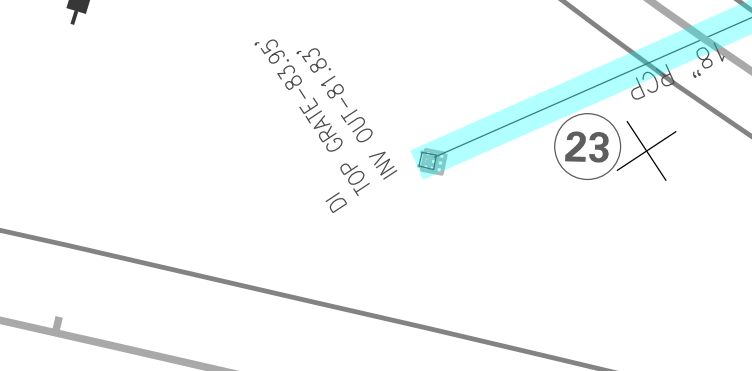
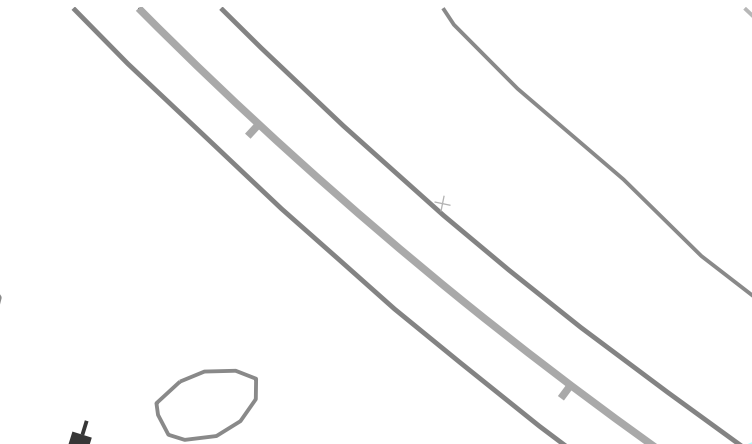
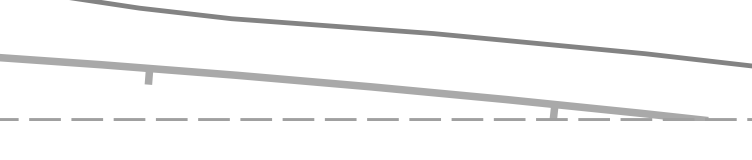
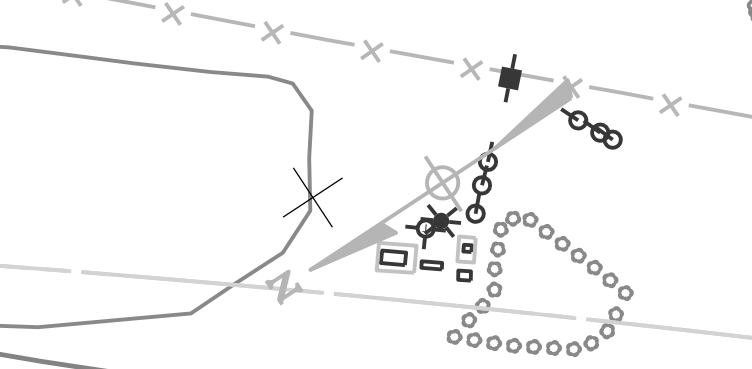
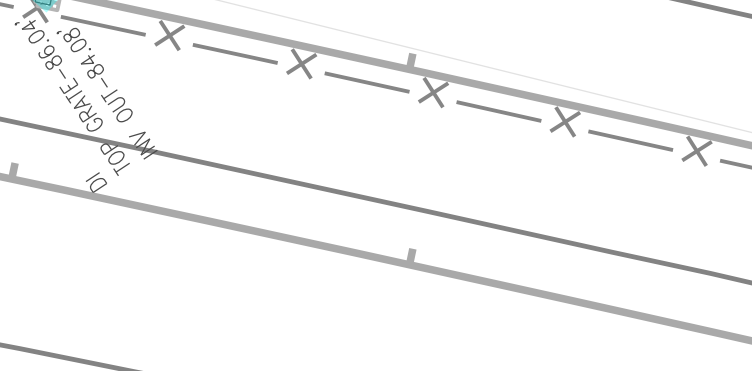
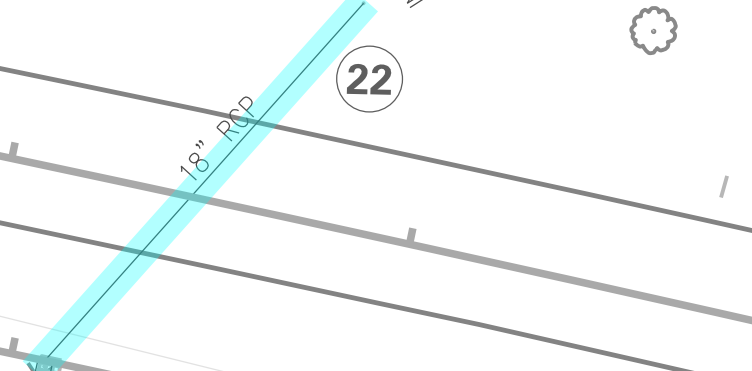
X

X

X

X

X



22

23

24

25

26

INV OUT-84.05'

TOP GRATE-86.041'
INV OUT-84.08'

TOP GRATE-83.95'
INV OUT-81.83'

INV OUT-81.66'

PT=5165+86.30

PT=5165+86.30

PC=14+10.79

PT=5165+86.30

PT=5165+86.30

DMH
INV IN (A)-87.28'
INV IN (B)-82.34'
INV OUT-82.29'

TOP GRATE-85.55'
INV IN-82.94'

12



27

(OWNERSHIP UNK)

172506.0805
13984.8938

N 53° 50' 23" E

5170

5170

5170

5175

5175

5175

Controlled Access Line

Controlled Access Line

Controlled Access Line

Pres. 37.5' R/W

Pres. 100' R/W

Pres. 70' R/W

N 47° 16' 50" E

TOP GRADE - 86.95'
INV. OUT - 83.77'

POB = 10+00.00

W.E. 73.3

W.E. 73.3

40'

13

5275

5280

5275

5280

5275

5280

30

48" RCP

156.32'

5277+98.43

C/L OF I-95

18" RCP

28

18" RCP

34

5279+08.93

14
R/W

C/L OF US 301

OUTLET UNKNOWN

Pres. 70' R/W

INV IN-84.22'

24" RCP

31

29

DI GRATE-85.89'
INV OUT-84.88'
TOP GRATE-85.89'

DI GRATE-85.59'
INV IN-84.29'
TOP GRATE-85.59'

DI GRATE-86.64'
INV IN-84.00'
TOP GRATE-86.64'

DI GRATE-86.13'
INV IN-84.13'
TOP GRATE-86.13'

S&M GOTO 622.1
RIM=88.00
INV IN-78.84'

DI TOP-90.84'
INV IN-78.84'
INV OUT-78.48'

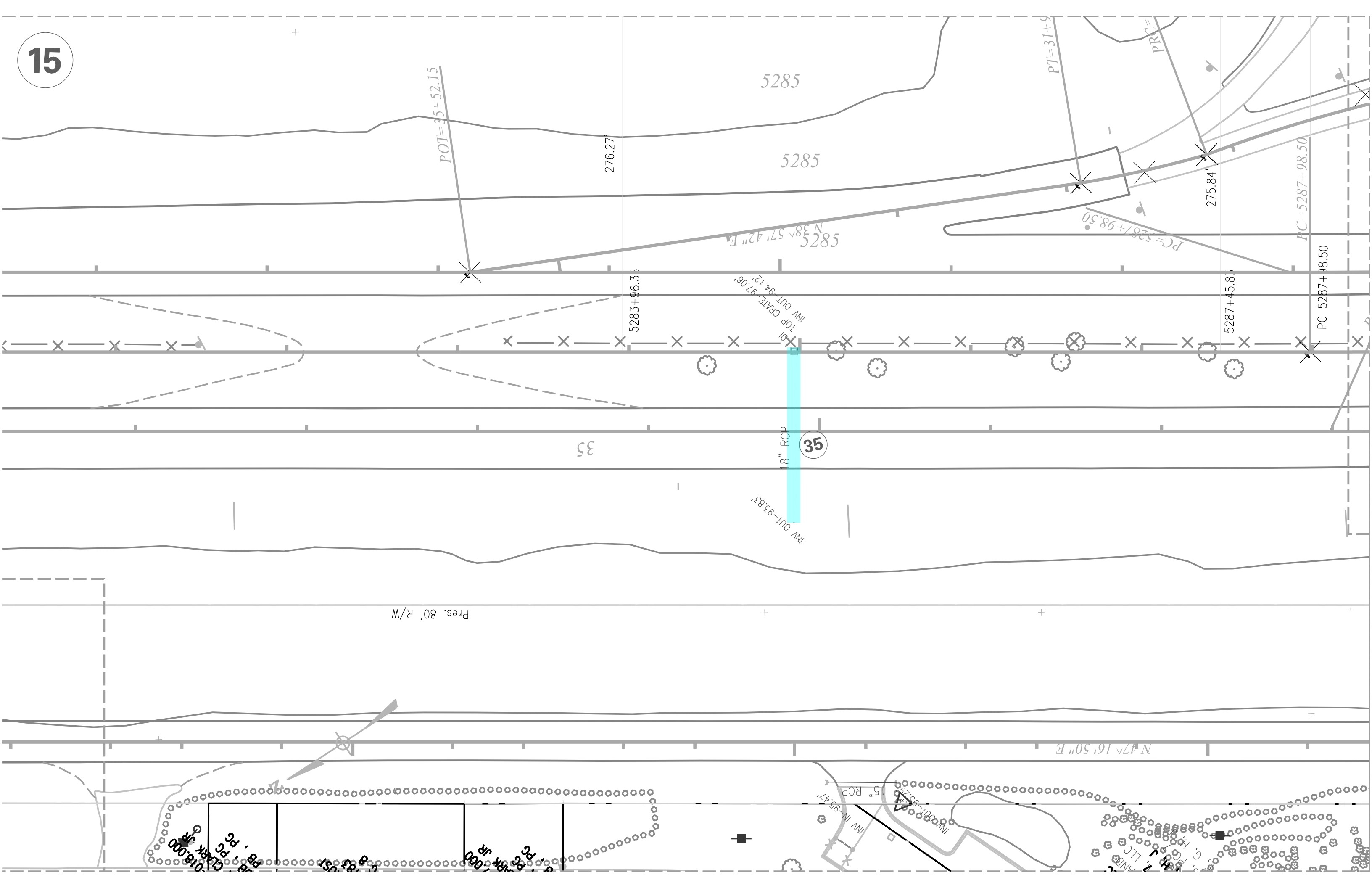
INV OUT-92.37'

33

INV IN-93.33'
15" RCP

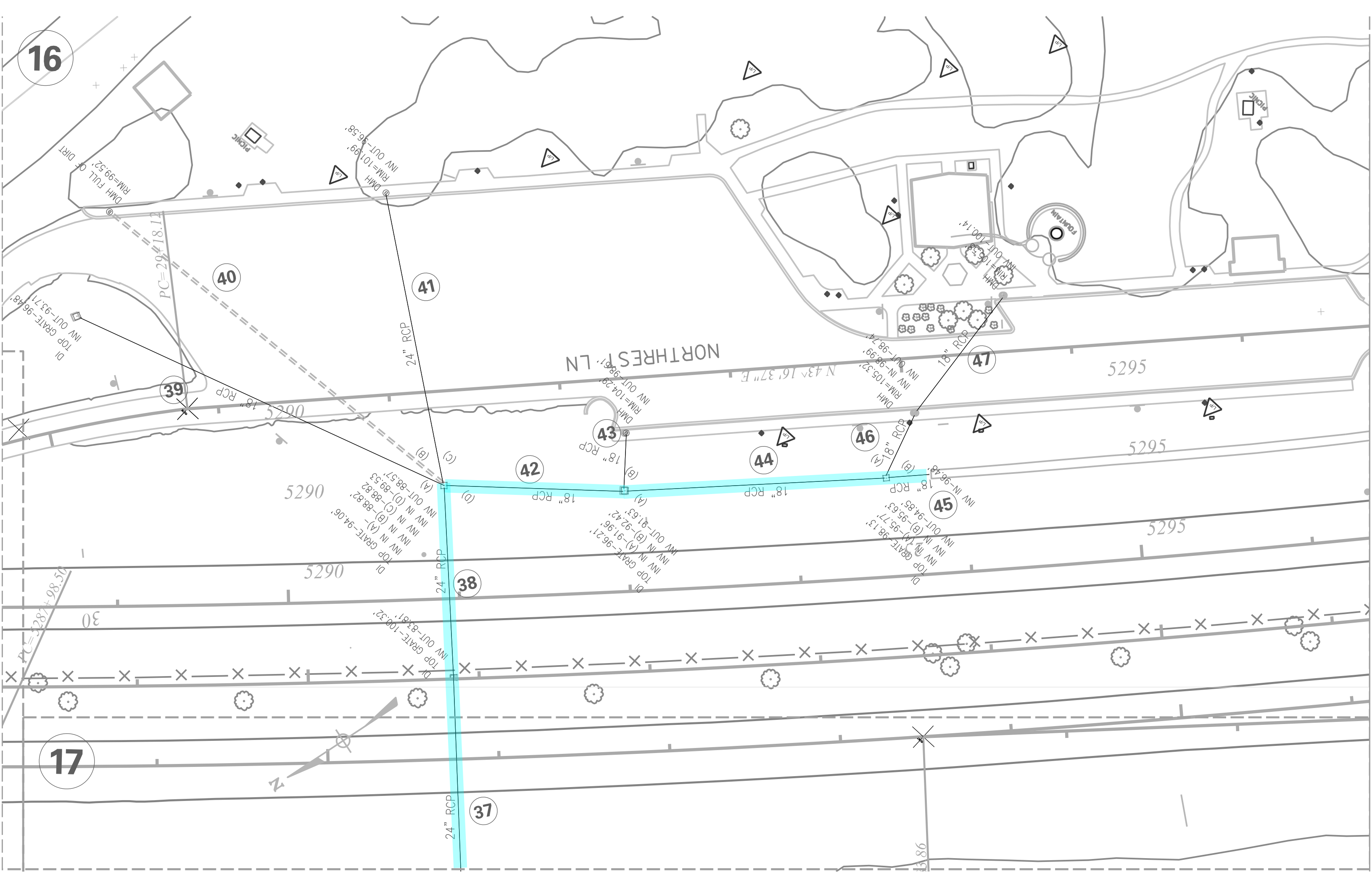
S&M
RIM=97.99
INV IN-97.99'

15



16

17



17

37

24" RCP

INV OUT-75.77

POT=37+83.86

BASS DR

50

18" RCP

INV IN-98.30

INV OUT-86.02

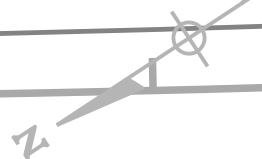
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30

25

0324-10-01-009.000
BALLARDS POINTE III, LLC
PB DB, PG 1, LLC
PB 346, PG 7
LOT K & WATER PARCEL
OUTLET BRANCHING
SERVICES, UTILITY AND

0324-10-01-012.000
BALLARDS POINTE III, LLC
PB DB, PG 3
PB 393, PG 3
PARCELS V & M



18

20

