

## Carolina Crossroads - Video Inspection Summary - Phase 2 - 04/09/2021

Culvert ID	ROW Alignment	Station	# Of Barrels	Pipe Size (D or WxH)	Length (ft) per Field Survey	Recommendations for Pipe Based on Video Inspection Report
EC-4201	I20000X	206+30	1	4'x4'	444	If retained, repair or seal cracking within culvert. Contractor to place appropriately designed outlet protection at downstream scour hole.
EP-4210	BRD002P	227+10	1	18"	277	If retained, remove and replace pipe 8' of pipe from outfall to Shell JB. Slip line or replace remainder of existing pipe to outfall south of Broad River Road.
EP-4211	I20CDW1	7210+65	1	18"	45	Replace existing pipe.
EP-4212	I20CDW1	7210+90	1	18"	66	Replace existing pipe.
EP-4213	BRDRE0P	3212+45	1	15"	88	Replace existing pipe.
EP-4220	BRD002P	216+90	1	18"	40	Replace existing pipe.
EP-4221	BRD002P	217+50	1	18"	72	Replace existing pipe.
EP-4222	BRD002P	219+50	1	15"	487	Replace existing pipe.
EP-4223	BRD002P	223+00	1	18"	211	VPI not performed due to inaccessibility. Contractor to investigate.
EP-4224	BRD002P	221+95	1	18"	31	Replace existing pipe.
EP-4225	BRD002P	221+94	1	18"	27	Replace existing pipe.
EP-4226	BRD002P	223+00	1	15"	190	Replace existing pipe.
EP-4227	BRD002P	224+35	1	15"	53	Replace existing pipe.
EP-4228	BRD002P	224+70	1	15"	41	Replace existing pipe.
EP-4240	BRD002P	241+40	1	18"	68	Replace existing pipe.
EP-4241	BRD002P	241+50	1	18"	104	Replace existing pipe.
EP-4242	BRD002P	242+20	1	18"	114	Replace existing pipe.
EP-4301	I20000X	222+65	1	24"	280	Clear all debris. Further investigation needed by contractor.
EP-4401	I20000X	240+60	1	18"	212	Slip line or replace existing pipe from north side of I-20 to median. Slip line or replace existing pipe from median of I-20 to outfall on EB side of I-20. Remove and replace pipe from 90' south of I-20 median to outfall due to severe joint separation.
EP-4501	I20000X	252+85	1	30"	225	Slip line or replace existing pipe.
EP-4601	I20000X	262+80	1	24"	291	Slip line or replace existing pipe from outfall on south side of I-20 to approximately 40' south of inlet on north side of I-20. Remove and replace 40' of pipe from inlet on north side of I-20 due to severe joint separation.

# I-20/I-26/I-126 Corridor Improvement Project

Alignment I20000X, Station 206+30

Structure EC-4201

4' x 4' RCBC

## Summary:

F&ME assessed the overall condition of a 4' x 4' RCBC designated as EC-4201.

## Observations:

- Dimensions – Verified 4' x 4' RCBC. Measured length of 444 LF; plan length of 446 LF.
- Scan direction – Inlet to outfall.
- General notes – None
- Observations:
  - 1) 23.8 feet – Severe transverse crack in top of culvert (0.23" gap); infiltration weeping on left and right sides of culvert.
  - 2) 28.9 feet – Transverse crack in top of culvert; infiltration weeping.
  - 3) 42.7 feet – Infiltration weeping on left and right sides of culvert.
  - 4) 58.2 feet – Transverse crack on right side of culvert.
  - 5) 63.7 feet – Transverse crack on top of culvert.
  - 6) 82.0 feet – Infiltration weeping on left and right sides.
  - 7) 93.1 feet – Infiltration weeping on left and right sides.
  - 8) 99.0 feet – Severe transverse crack on all four sides of culvert.
  - 9) 118.5 feet – Transverse crack and infiltration on left, right, and top of culvert.
  - 10) 134.8 feet – Infiltration on right side of culvert.
  - 11) 142.9 feet – Transverse crack and infiltration weeping on left, right, and top of culvert.
  - 12) 148.8 feet – Transverse crack and infiltration weeping on top of culvert.
  - 13) 151.8 feet – Junction box on old pipe inlet; transverse crack and infiltration weeping on top of culvert.
  - 14) 159.2 feet – Transverse crack and infiltration weeping on top of culvert.
  - 15) 165.2 feet – Transverse crack and infiltration weeping on top of culvert.
  - 16) 172.4 feet – Transverse crack and infiltration weeping on top of culvert.
  - 17) 177.3 feet – Infiltration weeping.
  - 18) 180.2 feet – Transverse crack and infiltration weeping on top of culvert.
  - 19) 194.7 feet – Infiltration weeping on left and right sides of culvert.
  - 20) 210.1 feet – Transverse crack and infiltration weeping on top of culvert.
  - 21) 217.9 feet – Transverse crack and infiltration weeping on top of culvert.
  - 22) 227.4 feet – Transverse crack and infiltration weeping on top of culvert.
  - 23) 231.2 feet – Transverse crack and infiltration weeping on top of culvert.
  - 24) 242.7 feet – Infiltration weeping; small root intrusion.
  - 25) 248.8 feet – Transverse crack and infiltration weeping on top of culvert.
  - 26) 254.0 feet – Infiltration weeping.
  - 27) 261.5 feet – Infiltration weeping.



# I-20/I-26/I-126 Corridor Improvement Project

Alignment I20000X, Station 206+30

Structure EC-4201

4' x 4' RCBC

## **Summary:**

F&ME assessed the overall condition of a 4' x 4' RCBC designated as EC-4201.

## **Observations:**

- Dimensions – Verified 4' x 4' RCBC. Measured length of 444 LF; plan length of 446 LF.
- Scan direction – Inlet to outfall.
- General notes – None
- Observations:
  - 28) 265.1 feet – Transverse crack and infiltration weeping on top of culvert.
  - 29) 273.4 feet – Transverse crack, fine root intrusion, and infiltration weeping on top of culvert.
  - 30) 292.6 feet – Infiltration weeping.
  - 31) 299.4 feet – Infiltration weeping.
  - 32) 306.3 feet – Transverse crack, fine root intrusion, and infiltration weeping on top of culvert.
  - 33) 311.0 feet – Transverse crack, fine root intrusion, and infiltration weeping on top of culvert.
  - 34) 321.8 feet – Severe transverse crack in top of culvert (0.23" gap); infiltration weeping on left and right sides of culvert.
  - 35) 325.3 feet – Chimney inlet built over culvert; infiltration weeping.
  - 36) 343.4 feet – Infiltration weeping.
  - 37) 349.0 feet – Transverse crack of top of culvert; infiltration weeping on left and right sides of culvert.
  - 38) 366.6 feet – Transverse crack of top of culvert; infiltration weeping on left and right sides of culvert.
  - 39) 376.8 feet – Transverse crack on left side of culvert.
  - 40) 378.3 feet – Transverse crack on right side of culvert.
  - 41) 382.6 to 383.9 feet – Transverse crack and infiltration weeping on left, right, and top sides of culvert.
  - 42) 392.7 to 394.1 feet – Transverse crack and infiltration weeping on left, right, and top sides of culvert.
  - 43) 422.9 feet – Transverse crack of top of culvert; infiltration weeping on left and right sides of culvert.

### Project Information

<b>Surveyor Name</b>	GCS	<b>Certificate Number</b>	U-0917-07009391
<b>Owner</b>	SCDOT	<b>Customer</b>	F&ME
<b>Drainage Area</b>		<b>PO Number</b>	
<b>Pipe Segment Reference</b>		<b>Date</b>	3/29/2019 11:04
<b>Street</b>	I-26	<b>City</b>	COLUMBIA
<b>Comments</b>			

### Manhole

<b>Upstream MH</b>	EC 4201 INLET	<b>Rim to Invert (U)</b>	
<b>Grade to Invert (U)</b>		<b>Rim to Grade (U)</b>	
<b>Downstream MH</b>	EC 4201 OUTFALL	<b>Rim to Invert (D)</b>	
<b>Grade to Invert (D)</b>		<b>Rim to Grade (D)</b>	
<b>Sewer Use</b>		<b>Direction of Survey</b>	Downstream

### Pipe

<b>Height (Diameter)</b>	4	<b>Width</b>	4
<b>Shape</b>	Square	<b>Material</b>	Reinforced Concrete Pipe
<b>Lining Method</b>		<b>Pipe Joint Length</b>	
<b>Total Length</b>		<b>Length Surveyed</b>	443.5
<b>Year Laid</b>		<b>Year Renewed</b>	

### Misc

<b>Flow Control</b>		<b>Media Label</b>	DVD
<b>Purpose</b>		<b>Sewer Category</b>	
<b>Pre-Cleaning</b>	Not Known	<b>Date Cleaned</b>	
<b>Weather</b>		<b>Location Code</b>	
<b>Additional Info</b>		<b>Location Details</b>	

### Custom

<b>Number of Taps</b>	0	<b>Number of Roots</b>	20
<b>Num Cracks / Fractures</b>	33	<b>Number of Broken / Holes / Collapse</b>	0
<b>Number of Deposits</b>	0	<b>Custom6</b>	
<b>Custom7</b>		<b>Struct Grade</b>	
<b>OM Grade</b>		<b>Overall Grade</b>	

### Pacp 6

<b>Reverse Setup ID</b>		<b>Sheet (Group) Number</b>	
<b>Imperial Units (US)</b>	True	<b>Pressure Value</b>	
<b>Work Order</b>		<b>Project</b>	CCR PIPE
		<b>Completed</b>	Yes

# Project: CCR PIPE

Date: 3/29/2019 11:04:00 AM

Street: I-26

Length Surveyed: 443.5

Pacp Quick Overall Rating:

Height (Diameter): 4

Street: I-26

Pipe Segment Reference:

Upstream MH: EC 4201 INLET

Downstream MH: EC 4201

OUTFALL

EC-4201

Direction of Survey:

Downstream

Material: Reinforced Concrete

Pipe

Distance	Fault Observation	Time	Picture
0.0	<p><b>Discharge Point</b>  <b>Severity: None</b>  <b>Remarks: EC 4201 INLET</b></p>	32	
0.0	<p><b>Water Level</b>  <b>Severity: None</b>  <b>Percent: 5</b></p>	46	
23.8	<p><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	04:21	




Distance	Fault Observation	Time	Picture
23.8	<b>Infil Weeper</b> <b>Position: 9 To 7</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	05:01	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>Crack Circumferential</p> <p>03:29:19 149/-91' +1.4% +23.7ft</p>
23.8	<b>Infil Dripper</b> <b>Position: 4</b> <b>Severity: None</b> <b>Maint Weight: 3</b>	05:43	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>10:16 -8/-88' +1.4% +23.7ft</p>
23.8	<b>Infil Weeper</b> <b>Position: 1 To 4</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	06:08	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>10:16 41/-88' +1.4% +23.7ft</p>

EC-4201

Distance	Fault Observation	Time	Picture
28.9	<b>Infil Weeper</b> <b>Position: 2 To 4</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	07:33	
28.9	<b>Infil Weeper</b> <b>Position: 8 To 10</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	08:43	
28.9	<b>Crack</b> <b>Circumferential</b> <b>Position: 11 To 1</b> <b>Severity: None</b> <b>Struct Weight: 1</b>	08:46	

EC-4201



Distance	Fault Observation	Time	Picture
42.7	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b></p>	10:43	 <p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03.29.19 -176/-82' +0.5% +42.7ft</p>
42.7	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b></p>	11:10	 <p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03.29.19 19/-82' +0.5% +42.7ft</p>
42.7	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 10 To 1</b>  <b>Severity: None</b>  <b>Joint</b></p>	11:42	 <p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03.29.19 111/-87' +0.5% +42.7ft</p>

EC-4201




Distance	Fault Observation	Time	Picture
58.2	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 1 To 4</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	13:02	
58.2	<p align="center"><b>Infil Stain</b>  <b>Position: 3 To 4</b>  <b>Severity: None</b>  <b>Remarks: FROM CRACK</b></p>	13:30	
63.3	<p align="center"><b>Roots Fine Barrel</b>  <b>Position: 1 To 4</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	16:04	

**EC-4201**

Distance	Fault Observation	Time	Picture
63.7	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 8 To 12</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	16:18	
64.0	<p align="center"><b>Infil Stain</b>  <b>Position: 8 To 10</b>  <b>Severity: None</b></p>	16:55	
82.0	<p align="center"><b>Infil Weeper</b>  <b>Position: 2 To 4</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	18:46	

EC-4201



Distance	Fault Observation	Time	Picture
82.0	<b>Roots Fine Barrel</b> <b>Position: 3 To 4</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	20:06	
82.0	<b>Roots Fine Barrel</b> <b>Position: 10</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	20:17	
82.0	<b>Infil Weeper</b> <b>Position: 8 To 10</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	20:54	

EC-4201

Distance	Fault Observation	Time	Picture
93.1	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 8</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	24:14	
93.1	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	25:10	
99.0	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	27:32	

EC-4201




Distance	Fault Observation	Time	Picture
99.0	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b></p>	26:42	
99.0	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 1 To 5</b>  <b>Severity: None</b></p>	27:18	
99.1	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 5 To 7</b>  <b>Severity: None</b>  <b>Remarks: FLOOR</b>  <b>HAS CRACK OR</b>  <b>THE REST OF</b>  <b>JOINT IS PARGED</b>  <b>Struct Weight: 1</b></p>	28:23	

EC-4201




Distance	Fault Observation	Time	Picture
118.5	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 2 To 3</b>  <b>Severity: None</b>  <b>Remarks: CRACK</b>  <b>WITH WEEPING</b>  <b>Struct Weight: 1</b></p>	30:25	
118.5	<p style="text-align: center;"><b>Roots Fine Joint</b>  <b>Position: 4 To 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	30:43	
118.5	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 7 To 12</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	31:26	

EC-4201






Distance	Fault Observation	Time	Picture
118.5	<b>Infil Weeper</b> <b>Position: 7 To 9</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	32:21	
118.5	<b>Picture Number: 2</b> <b>Infil Weeper</b> <b>Position: 7 To 9</b>	0	
134.8	<b>Roots Fine Barrel</b> <b>Position: 7 To 4</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	33:59	




EC-4201

Distance	Fault Observation	Time	Picture
134.8	<b>Infil Weeper</b> <b>Position: 7 To 5</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	36:22	 <p>CCR PIPE EC 4201 INLET TO EC 4201 OUTFALL</p> <p>03,29,19 34/-89' +2.4% +134.7ft</p>
142.9	<b>Infil Weeper</b> <b>Position: 7 To 10</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	38:21	 <p>CCR PIPE EC 4201 INLET TO EC 4201 OUTFALL</p> <p>03,29,19 147/-91' +2.5% +142.9ft</p>
142.9	<b>Infil Dripper</b> <b>Position: 12</b> <b>Severity: None</b> <b>Maint Weight: 3</b>	37:21	 <p>CCR PIPE EC 4201 INLET TO EC 4201 OUTFALL</p> <p>10:49 87/-90' +2.4% +142.9ft</p>

EC-4201

Distance	Fault Observation	Time	Picture
142.9	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 10 To 2</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	37:44	
142.9	<p align="center"><b>Infil Weeper</b>  <b>Position: 2 To 4</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	38:14	
148.8	<p align="center"><b>Infil Dripper</b>  <b>Position: 1</b>  <b>Severity: None</b>  <b>Maint Weight: 3</b></p>	39:51	

**EC-4201**

Distance	Fault Observation	Time	Picture
148.8	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	40:11	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>10:52 42+/-83' +3.1% +148.8ft</p>
148.8	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Remarks: CRACK</b>  <b>WITH POSSIBLE</b>  <b>ROOTS</b>  <b>Struct Weight: 1</b></p>	41:06	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>10:53 -87/85' +3.1% +148.8ft</p>
151.8	<p style="text-align: center;"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: JUNCTION</b>  <b>BUILT OVER PIPE</b></p>	44:56	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>03:29.19 101+/-88' +0.5% +151.7ft</p>

EC-4201






Distance	Fault Observation	Time	Picture
151.8	<b>Roots Fine Barrel</b> <b>Position: 1 To 5</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	45:51	
151.8	<b>Infil Weeper</b> <b>Position: 1 To 5</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	46:15	
151.8	<b>Crack Circumferential</b> <b>Position: 12 To 1</b> <b>Severity: None</b> <b>Struct Weight: 1</b>	46:34	

EC-4201



Distance	Fault Observation	Time	Picture
151.8	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	47:18	
159.2	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	48:47	
159.2	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 1 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	49:24	

EC-4201

Distance	Fault Observation	Time	Picture
159.2	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	49:57	 <p>CCR PIPE EC 4201 INLET TO EC 4201 OUTFALL</p> <p>11:02 4/79' +1.8% +159.1ft</p>
165.2	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	51:03	 <p>CCR PIPE EC 4201 INLET TO EC 4201 OUTFALL</p> <p>11:04 123/-89' +1.0% +165.1ft</p>
165.2	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 1 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	51:26	 <p>CCR PIPE EC 4201 INLET TO EC 4201 OUTFALL</p> <p>03,29,19 35/-90' +1.0% +165.1ft</p>

EC-4201



Distance	Fault Observation	Time	Picture
165.2	<p>Infil Dropper            Position: 4            Severity: None            Maint Weight: 3</p>	51:46	 <p>CCR PIPE            EC 4201 INLET            To EC 4201 OUTFALL</p> <p>Infil Dropper</p> <p>11:04 -11/-88' +1.0% +165.1ft</p>
165.2	<p>Infil Weeper            Position: 7 To 10            Severity: None            Maint Weight: 2</p>	52:29	 <p>Infil Weeper</p> <p>03:29.19 -41/79' +1.0% +165.1ft</p>
172.4	<p>Infil Weeper            Position: 1 To 5            Severity: None            Maint Weight: 2</p>	53:49	 <p>CCR PIPE            EC 4201 INLET            To EC 4201 OUTFALL</p> <p>Infil Weeper</p> <p>03:29.19 42/-86' +1.1% +172.4ft</p>

EC-4201

Distance	Fault Observation	Time	Picture
172.4	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 12 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	54:28	
177.3	<p style="text-align: center;"><b>Roots Fine Barrel</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	56:04	
177.3	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	57:09	

EC-4201




Distance	Fault Observation	Time	Picture
180.2	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 12 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	57:37	
180.2	<p align="center"><b>Infil Stain</b>  <b>Position: 12 To 2</b>  <b>Severity: None</b></p>	58:05	
180.2	<p align="center"><b>Infil Weeper</b>  <b>Position: 2 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	58:24	

**EC-4201**






Distance	Fault Observation	Time	Picture
194.7	<p align="center"> <b>Infil Stain</b>  <b>Position: 10 To 2</b>  <b>Severity: None</b>  <b>Joint</b> </p>	1:01:07	
194.7	<p align="center"> <b>Infil Weeper</b>  <b>Position: 2 To 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b> </p>	1:01:27	
194.7	<p align="center"> <b>Infil Weeper</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b> </p>	1:01:59	

EC-4201

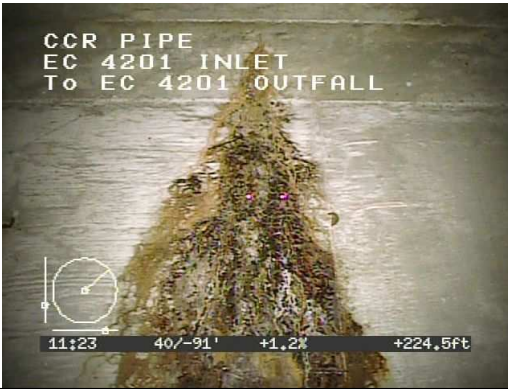


Distance	Fault Observation	Time	Picture
210.1	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	1:03:35	
210.1	<p align="center"><b>Infil Weeper</b>  <b>Position: 1 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:03:57	
210.1	<p align="center"><b>Infil Weeper</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:04:34	

**EC-4201**






Distance	Fault Observation	Time	Picture
217.9	<b>Roots Fine Barrel</b> <b>Position: 7 To 1</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:07:23	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>11:21 50/-102' +0.3% +217.9ft</p>
217.9	<b>Infil Stain</b> <b>Position: 7 To 5</b> <b>Severity: None</b>	1:07:52	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>11:21 4/-102' +0.3% +217.9ft</p>
217.9	<b>Crack</b> <b>Circumferential</b> <b>Position: 11 To 1</b> <b>Severity: None</b> <b>Struct Weight: 1</b>	1:08:29	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>03.29.19 -68/97' +0.3% +217.9ft</p>

EC-4201

Distance	Fault Observation	Time	Picture
224.6	<b>Roots Fine Barrel</b> <b>Position: 1 To 5</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:10:49	
224.6	<b>Infil Stain</b> <b>Position: 1 To 5</b> <b>Severity: None</b>	1:09:43	
227.4	<b>Crack</b> <b>Circumferential</b> <b>Position: 11 To 1</b> <b>Severity: None</b> <b>Struct Weight: 1</b>	1:12:41	

EC-4201

Distance	Fault Observation	Time	Picture
227.4	<b>Roots Fine Barrel</b> <b>Position: 7 To 12</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:11:43	
227.4	<b>Picture Number: 2</b> <b>Roots Fine Barrel</b> <b>Position: 7 To 12</b>	0	
227.4	<b>Infil Weeper</b> <b>Position: 7 To 11</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:12:32	

EC-4201

Distance	Fault Observation	Time	Picture
231.2	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	1:15:09	<p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>11:27 78/-83' +1.0% +231.1ft</p>
231.2	<p align="center"><b>Roots Fine Barrel</b>  <b>Position: 1 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:14:07	<p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03,29,19 44/-93' +1.0% +231.1ft</p>
231.2	<p align="center"><b>Infil Weeper</b>  <b>Position: 1 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:14:27	<p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03,29,19 25/-93' +1.0% +231.1ft</p>

EC-4201



Distance	Fault Observation	Time	Picture
231.7	<b>Roots Fine Barrel</b> <b>Position: 10</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:15:13	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>03.29.19 -46/93' +0.8% +231.6ft</p>
242.7	<b>Infil Stain</b> <b>Position: 12 To 2</b> <b>Severity: None</b> <b>Joint</b>	1:18:54	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>11:31 59/-83' +1.0% +242.6ft</p>
242.7	<b>Infil Weeper</b> <b>Position: 2 To 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 2</b>	1:19:19	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>03.29.19 26/-83' +1.0% +242.6ft</p>

EC-4201

Distance	Fault Observation	Time	Picture
242.7	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b></p>	1:18:13	
248.8	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 12</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	1:19:37	
248.8	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 12</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:22:08	

EC-4201

Distance	Fault Observation	Time	Picture
250.4	<p align="center"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: CHIMNEY INLET</b></p>	1:23:29	
254.0	<p align="center"><b>Infil Dripper</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Maint Weight: 3</b></p>	1:22:06	
261.5	<p align="center"><b>Infil Dripper</b>  <b>Position: 3</b>  <b>Severity: None</b>  <b>Maint Weight: 3</b></p>	1:23:19	

**EC-4201**

Distance	Fault Observation	Time	Picture
261.6	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 11 To 3</b>  <b>Severity: None</b></p>	1:24:09	
265.1	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 10 To 11</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	1:25:23	
265.1	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 11</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:25:45	

EC-4201



Distance	Fault Observation	Time	Picture
273.3	<b>Roots Fine Barrel</b> <b>Position: 12</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:27:57	
273.3	<b>Infil Stain</b> <b>Position: 7 To 5</b> <b>Severity: None</b>	1:28:44	
273.4	<b>Crack</b> <b>Circumferential</b> <b>Position: 11 To 1</b> <b>Severity: None</b> <b>Struct Weight: 1</b>	1:26:48	

EC-4201

Distance	Fault Observation	Time	Picture
292.6	<p align="center"><b>Infil Weeper</b>  <b>Position: 2 To 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b></p>	1:30:55	
292.6	<p align="center"><b>Infil Stain</b>  <b>Position: 7 To 2</b>  <b>Severity: None</b>  <b>Joint</b></p>	1:31:31	
295.8	<p align="center"><b>Infil Stain</b>  <b>Position: 7 To 9</b>  <b>Severity: None</b></p>	1:32:50	

**EC-4201**

Distance	Fault Observation	Time	Picture
299.4	<b>Infil Weeper</b> <b>Position: 1 To 5</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:33:58	
299.5	<b>Roots Fine Barrel</b> <b>Position: 7 To 10</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:34:42	
299.6	<b>Infil Weeper</b> <b>Position: 7 To 8</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:35:28	

EC-4201

Distance	Fault Observation	Time	Picture
306.2	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 10 To 11</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	1:36:45	<p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03,29,19 -84/92' +0,0% +306,1ft</p>
306.3	<p align="center"><b>Roots Fine Barrel</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:37:22	<p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>11:55 -30/92' +0,0% +306,2ft</p>
306.3	<p align="center"><b>Infil Stain</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b></p>	1:37:48	<p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03,29,19 -9/92' +0,0% +306,2ft</p>




EC-4201



Distance	Fault Observation	Time	Picture
310.9	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 2</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	1:38:51	
311.0	<p align="center"><b>Roots Fine Barrel</b>  <b>Position: 2 To 4</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:39:19	
311.0	<p align="center"><b>Infil Stain</b>  <b>Position: 1 To 5</b>  <b>Severity: None</b></p>	1:39:39	

EC-4201



Distance	Fault Observation	Time	Picture
321.8	<p style="text-align: center;"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: 0.23</b></p>	1:41:37	
321.8	<p style="text-align: center;"><b>Crack Circumferential</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	1:42:17	
321.8	<p style="text-align: center;"><b>Infil Dripper</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Maint Weight: 3</b></p>	1:43:27	

EC-4201

Distance	Fault Observation	Time	Picture
321.8	<b>Roots Fine Barrel</b> <b>Position: 11 To 12</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:43:15	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>12:01 109/-93' +0.7% +321.7ft</p>
321.8	<b>Infil Weeper</b> <b>Position: 2 To 5</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:43:47	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>12:02 32/-93' +0.7% +321.7ft</p>
321.8	<b>Infil Weeper</b> <b>Position: 7 To 10</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	1:44:41	<p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>Infil Weeper</p> <p>12:03 -8/97' +0.7% +321.7ft</p>

EC-4201

Distance	Fault Observation	Time	Picture
325.3	<p style="text-align: center;"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: CHIMNEY INLET BUILT OVER CULVERT</b></p>	1:46:03	
325.3	<p style="text-align: center;"><b>Infil Dripper</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Maint Weight: 3</b></p>	1:46:42	
325.3	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:47:10	

EC-4201



Distance	Fault Observation	Time	Picture
343.4	<p>Infil Weeper            Position: 2 To 5            Severity: None            Maint Weight: 2</p>	1:52:57	
343.4	<p>Infil Stain            Position: 10 To 1            Severity: None            Joint</p>	1:54:58	
343.4	<p>Picture Number: 2            Infil Stain            Position: 10 To 1</p>	0	

EC-4201



Distance	Fault Observation	Time	Picture
343.4	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 9</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b></p>	1:54:25	
348.9	<p style="text-align: center;"><b>Roots Fine Barrel</b>  <b>Position: 2 To 4</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:56:10	
349.0	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 2 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	1:56:34	




EC-4201

Distance	Fault Observation	Time	Picture
349.0	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 10 To 11</b>  <b>Severity: None</b></p>	1:58:48	
349.0	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	1:58:13	
349.0	<p style="text-align: center;"><b>Picture Number: 2</b>  <b>Crack</b>  <b>Circumferential</b>  <b>Position: 11 To 1</b></p>	0	

EC-4201


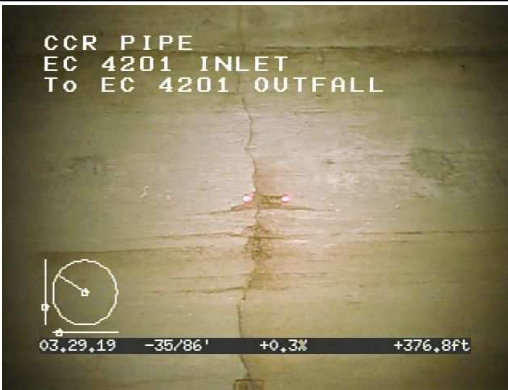
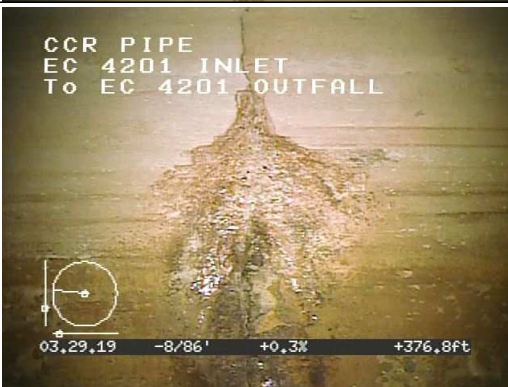
Distance	Fault Observation	Time	Picture
358.5	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 2 To 4</b>  <b>Severity: None</b></p>	1:59:58	
366.6	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 9 To 2</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	2:01:41	
366.6	<p style="text-align: center;"><b>Infil Dripper</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Maint Weight: 3</b></p>	2:01:59	

EC-4201

Distance	Fault Observation	Time	Picture
366.6	<b>Roots Fine Barrel</b> <b>Position: 11 To 12</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	2:02:32	
366.6	<b>Infil Stain</b> <b>Position: 7 To 10</b> <b>Severity: None</b>	2:02:59	
366.6	<b>Infil Weeper</b> <b>Position: 2 To 5</b> <b>Severity: None</b> <b>Maint Weight: 2</b>	2:03:41	

EC-4201



Distance	Fault Observation	Time	Picture
376.8	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 7 To 11</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	2:05:32	 <p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>12:25    24/86'    +0.3%    +376.7ft</p>
376.8	<p style="text-align: center;"><b>Picture Number: 2</b>  <b>Crack</b>  <b>Circumferential</b>  <b>Position: 7 To 11</b></p>	0	 <p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03:29.19    -35/86'    +0.3%    +376.8ft</p>
376.9	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 7 To 9</b>  <b>Severity: None</b></p>	2:08:03	 <p>CCR PIPE  EC 4201 INLET  To EC 4201 OUTFALL</p> <p>03:29.19    -8/86'    +0.3%    +376.8ft</p>

EC-4201

Distance	Fault Observation	Time	Picture
378.2	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	2:06:59	
378.3	<p style="text-align: center;"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 12 To 3</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	2:07:39	
378.3	<p style="text-align: center;"><b>Picture Number: 2</b>  <b>Crack</b>  <b>Circumferential</b>  <b>Position: 12 To 3</b></p>	0	

EC-4201


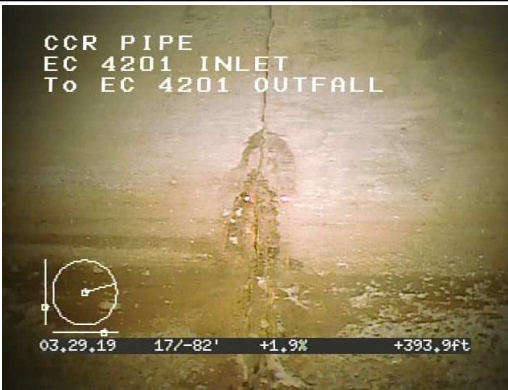

Distance	Fault Observation	Time	Picture
382.6	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 8 To 11</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	2:11:16	
382.7	<p align="center"><b>Infil Stain</b>  <b>Position: 7 To 11</b>  <b>Severity: None</b></p>	2:09:39	
382.7	<p align="center"><b>Roots Fine Barrel</b>  <b>Position: 10</b>  <b>Severity: None</b>  <b>Maint Weight: 2</b></p>	2:10:29	

EC-4201

Distance	Fault Observation	Time	Picture
383.9	<p>Infil Weeper            Position: 2 To 5            Severity: None            Maint Weight: 2</p>	2:11:39	
383.9	<p>Crack            Circumferential            Position: 1 To 1            Severity: None            Struct Weight: 1</p>	2:14:23	
392.7	<p>Crack            Circumferential            Position: 8 To 10            Severity: None            Remarks: CRACK            WITH STAIN            Struct Weight: 1</p>	2:14:42	

EC-4201

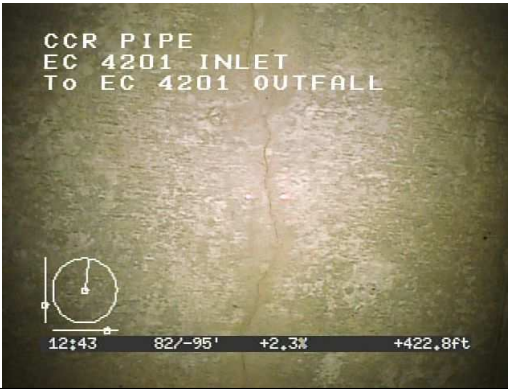




Distance	Fault Observation	Time	Picture
392.7	Picture Number: 2 Crack Circumferential Position: 8 To 10	0	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>03,29,19 -37/86' +1.9% +392.6ft</p>
394.1	Infil Stain Position: 4 To 5 Severity: None Joint	2:16:21	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>03,29,19 17/-82' +1.9% +393.9ft</p>
394.1	Infil Stain Position: 7 To 10 Severity: None Joint	2:17:19	 <p>CCR PIPE EC 4201 INLET To EC 4201 OUTFALL</p> <p>12:37 -39/77' +2.0% +393.9ft</p>

EC-4201

Distance	Fault Observation	Time	Picture
396.7	<p align="center"><b>Infil Stain</b>  <b>Position: 2 To 5</b>  <b>Severity: None</b></p>	2:19:00	
397.6	<p align="center"><b>Infil Stain</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b></p>	2:20:07	
397.6	<p align="center"><b>Picture Number: 2</b>  <b>Infil Stain</b>  <b>Position: 7 To 10</b></p>	0	

EC-4201

Distance	Fault Observation	Time	Picture
422.9	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 10 To 1</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	2:23:23	
422.9	<p align="center"><b>Picture Number: 2</b>  <b>Crack</b>  <b>Circumferential</b>  <b>Position: 10 To 1</b></p>	0	
423.1	<p align="center"><b>Infil Stain</b>  <b>Position: 2 To 4</b>  <b>Severity: None</b></p>	2:24:31	

EC-4201

Distance	Fault Observation	Time	Picture
423.1	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 9</b>  <b>Severity: None</b></p>	2:25:15	
443.5	<p style="text-align: center;"><b>Discharge Point</b>  <b>Severity: None</b></p>	2:27:28	

Created with the  report generator

EC-4201



# Project: CCRPIPE

Date: 3/29/2019 11:04:00 AM

Street: I-26

Length Surveyed: 443.5

Pacp Quick Overall Rating:

Height (Diameter): 4

Street: I-26

Pipe Segment Reference:

Upstream MH: EC 4201 INLET

Downstream MH: EC 4201  
OUTFALL

Direction of Survey:  
Downstream

Material: Reinforced Concrete  
Pipe

EC-4201

ID Number: EC 4201 INLET

(0.0) ADP - Discharge Point Remark: EC 4201  
INLET

(0.0) MWL - Water Level

(23.8) ID - Infil Dropper - Position: 4

(23.8) IW - Infil Weeper - Position: 1 To 4

(28.9) IW - Infil Weeper - Position: 2 To 4

(42.7) IW - Infil Weeper - Position: 3 To 5

(58.2) CC - Crack Circumferential - Position: 1 To  
4

(58.2) IS - Infil Stain - Position: 3 To 4 Remark:  
FROM CRACK

(63.3) RFB - Roots Fine Barrel - Position: 1 To 4

(82.0) IW - Infil Weeper - Position: 2 To 4

(82.0) RFB - Roots Fine Barrel - Position: 3 To 4

(93.1) IW - Infil Weeper - Position: 3 To 5

(23.8) CC - Crack Circumferential - Position: 11 To  
1

(23.8) IW - Infil Weeper - Position: 9 To 7

(28.9) IW - Infil Weeper - Position: 8 To 10

(28.9) CC - Crack Circumferential - Position: 11 To  
1

(42.7) IW - Infil Weeper - Position: 7 To 10

(42.7) IS - Infil Stain - Position: 10 To 1

(63.7) CC - Crack Circumferential - Position: 8 To  
12

(64.0) IS - Infil Stain - Position: 8 To 10

(82.0) RFB - Roots Fine Barrel - Position: 10

(82.0) IW - Infil Weeper - Position: 8 To 10

(93.1) IW - Infil Weeper - Position: 7 To 8

(99.0) CC - Crack Circumferential - Position: 7 To  
10



(99.0) IS - Infil Stain - Position: 1 To 5		(99.0) IS - Infil Stain - Position: 7 To 10
(99.1) CC - Crack Circumferential - Position: 5 To 7 Remark: FLOOR HAS CRACK OR THE REST OF JOINT IS PARGED		<b>EC-4201</b>
(118.5) CC - Crack Circumferential - Position: 2 To 3 Remark: CRACK WITH WEEPING		
(118.5) RFJ - Roots Fine Joint - Position: 4 To 5		
		(118.5) CC - Crack Circumferential - Position: 7 To 12
		(118.5) IW - Infil Weeper - Position: 7 To 9
		Photo Num: 2 (118.5) IW - Infil Weeper - Position: 7 To 9
		(134.8) RFB - Roots Fine Barrel - Position: 7 To 4
		(134.8) IW - Infil Weeper - Position: 7 To 5
		(142.9) IW - Infil Weeper - Position: 7 To 10
(142.9) ID - Infil Drripper - Position: 12		
		(142.9) CC - Crack Circumferential - Position: 10 To 2
(142.9) IW - Infil Weeper - Position: 2 To 4		
(148.8) ID - Infil Drripper - Position: 1		
		(148.8) IW - Infil Weeper - Position: 7 To 5
		(148.8) CC - Crack Circumferential - Position: 11 To 1 Remark: CRACK WITH POSSIBLE ROOTS
(151.8) MGO - General Observation Remark: JUNCTION BUILT OVER PIPE		
(151.8) RFB - Roots Fine Barrel - Position: 1 To 5		
(151.8) IW - Infil Weeper - Position: 1 To 5		
(151.8) CC - Crack Circumferential - Position: 12 To 1		
		(151.8) IW - Infil Weeper - Position: 7 To 10
		(159.2) CC - Crack Circumferential - Position: 11 To 1
(159.2) IW - Infil Weeper - Position: 1 To 5		
		(159.2) IW - Infil Weeper - Position: 7 To 10
		(165.2) CC - Crack Circumferential - Position: 11 To 1
(165.2) IW - Infil Weeper - Position: 1 To 5		
(165.2) ID - Infil Drripper - Position: 4		
		(165.2) IW - Infil Weeper - Position: 7 To 10
(172.4) IW - Infil Weeper - Position: 1 To 5		
(172.4) CC - Crack Circumferential - Position: 12 To 1		
		(177.3) RFB - Roots Fine Barrel - Position: 7 To 10
		(177.3) IW - Infil Weeper - Position: 7 To 10

EC-4201

(180.2) CC - Crack Circumferential - Position: 12 To 1

(180.2) IS - Infil Stain - Position: 12 To 2

(180.2) IW - Infil Weeper - Position: 2 To 5

(194.7) IW - Infil Weeper - Position: 2 To 5

(194.7) IS - Infil Stain - Position: 10 To 2

(194.7) IW - Infil Weeper - Position: 7 To 10

(210.1) IW - Infil Weeper - Position: 1 To 5

(210.1) CC - Crack Circumferential - Position: 11 To 1

(210.1) IW - Infil Weeper - Position: 7 To 10

(217.9) RFB - Roots Fine Barrel - Position: 7 To 1

(217.9) IS - Infil Stain - Position: 7 To 5

(217.9) CC - Crack Circumferential - Position: 11 To 1

(224.6) RFB - Roots Fine Barrel - Position: 1 To 5

(224.6) IS - Infil Stain - Position: 1 To 5

(227.4) CC - Crack Circumferential - Position: 11 To 1

(227.4) RFB - Roots Fine Barrel - Position: 7 To 12

Photo Num: 2 (227.4) RFB - Roots Fine Barrel - Position: 7 To 12

(227.4) IW - Infil Weeper - Position: 7 To 11

(231.2) CC - Crack Circumferential - Position: 11 To 1

(231.2) RFB - Roots Fine Barrel - Position: 1 To 5

(231.2) IW - Infil Weeper - Position: 1 To 5

(231.7) RFB - Roots Fine Barrel - Position: 10

(242.7) IS - Infil Stain - Position: 12 To 2

(242.7) IW - Infil Weeper - Position: 2 To 5

(242.7) IW - Infil Weeper - Position: 7 To 10

(248.8) CC - Crack Circumferential - Position: 11 To 12

(248.8) IW - Infil Weeper - Position: 7 To 12

(250.4) MGO - General Observation Remark: CHIMNEY INLET

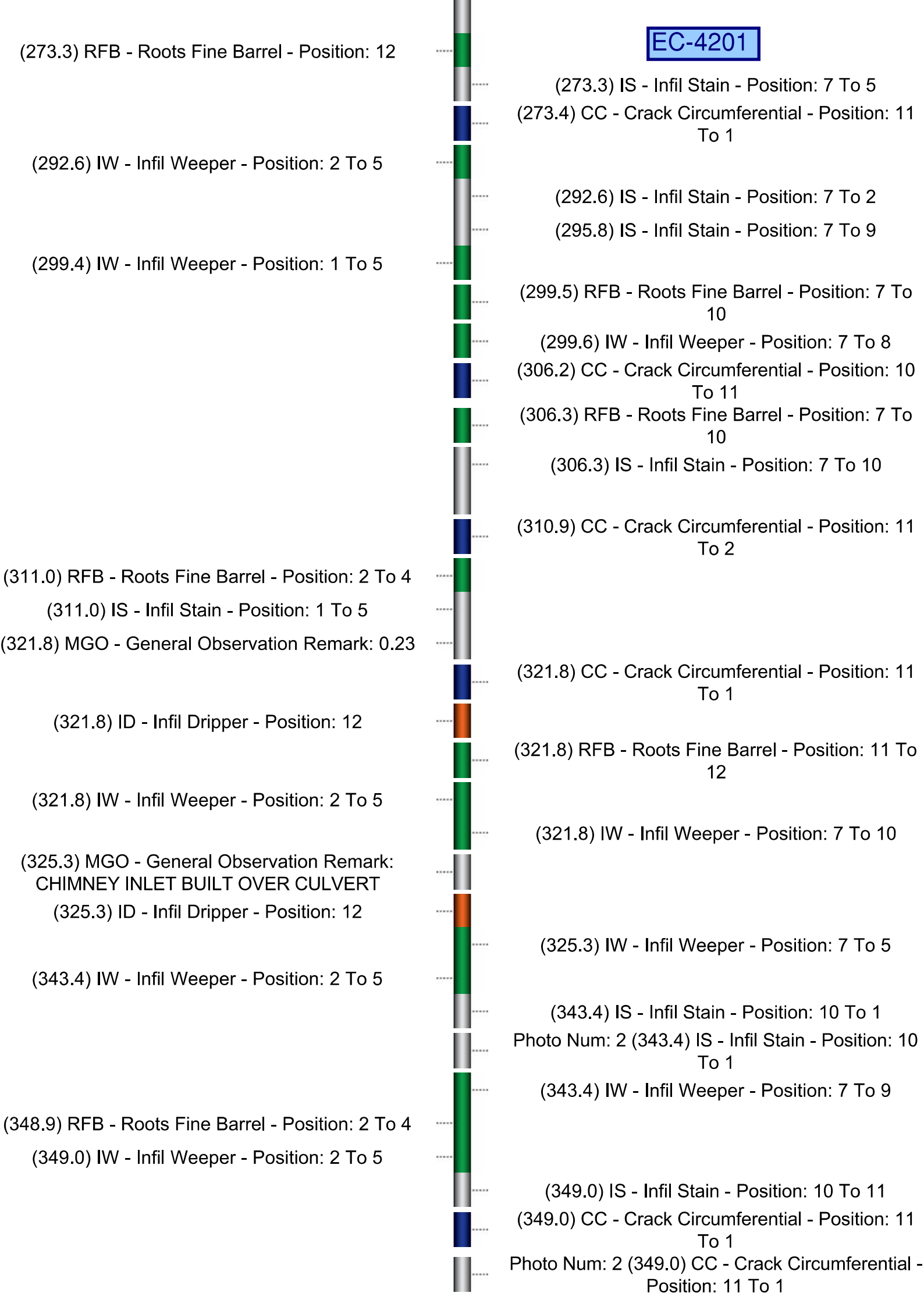
(254.0) ID - Infil Dripper - Position: 12

(261.5) ID - Infil Dripper - Position: 3

(261.6) IS - Infil Stain - Position: 11 To 3

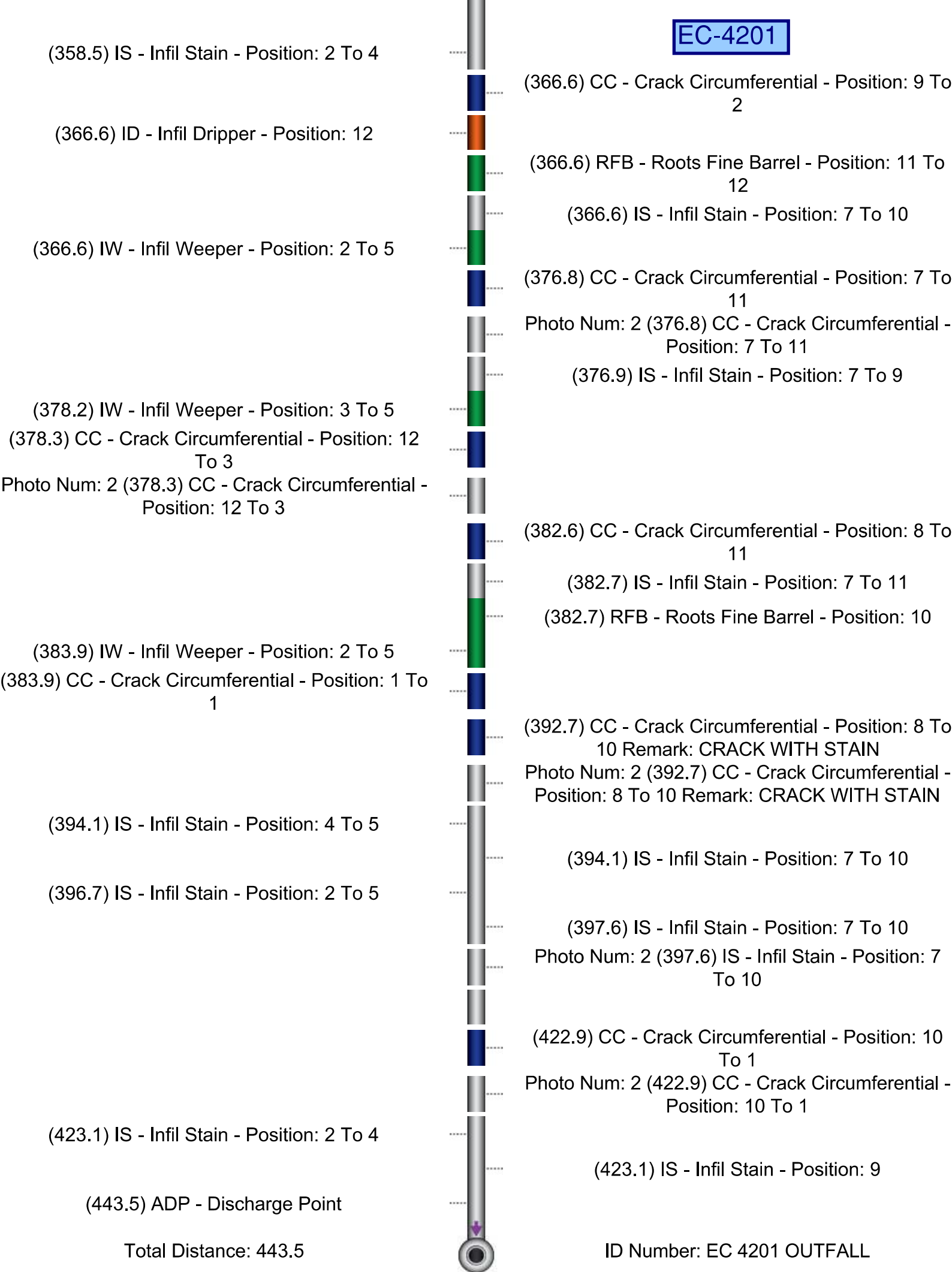
(265.1) CC - Crack Circumferential - Position: 10 To 11

(265.1) IW - Infil Weeper - Position: 7 To 11





EC-4201



# Project: CCR PIPE

Date: 3/29/2019 11:04:00 AM

Street: I-26

Length Surveyed: 443.5

Pacp Quick Overall Rating:

Height (Diameter): 4

Street: I-26

Pipe Segment Reference:

Upstream MH: EC 4201 INLET

Downstream MH: EC 4201

OUTFALL

Direction of Survey:

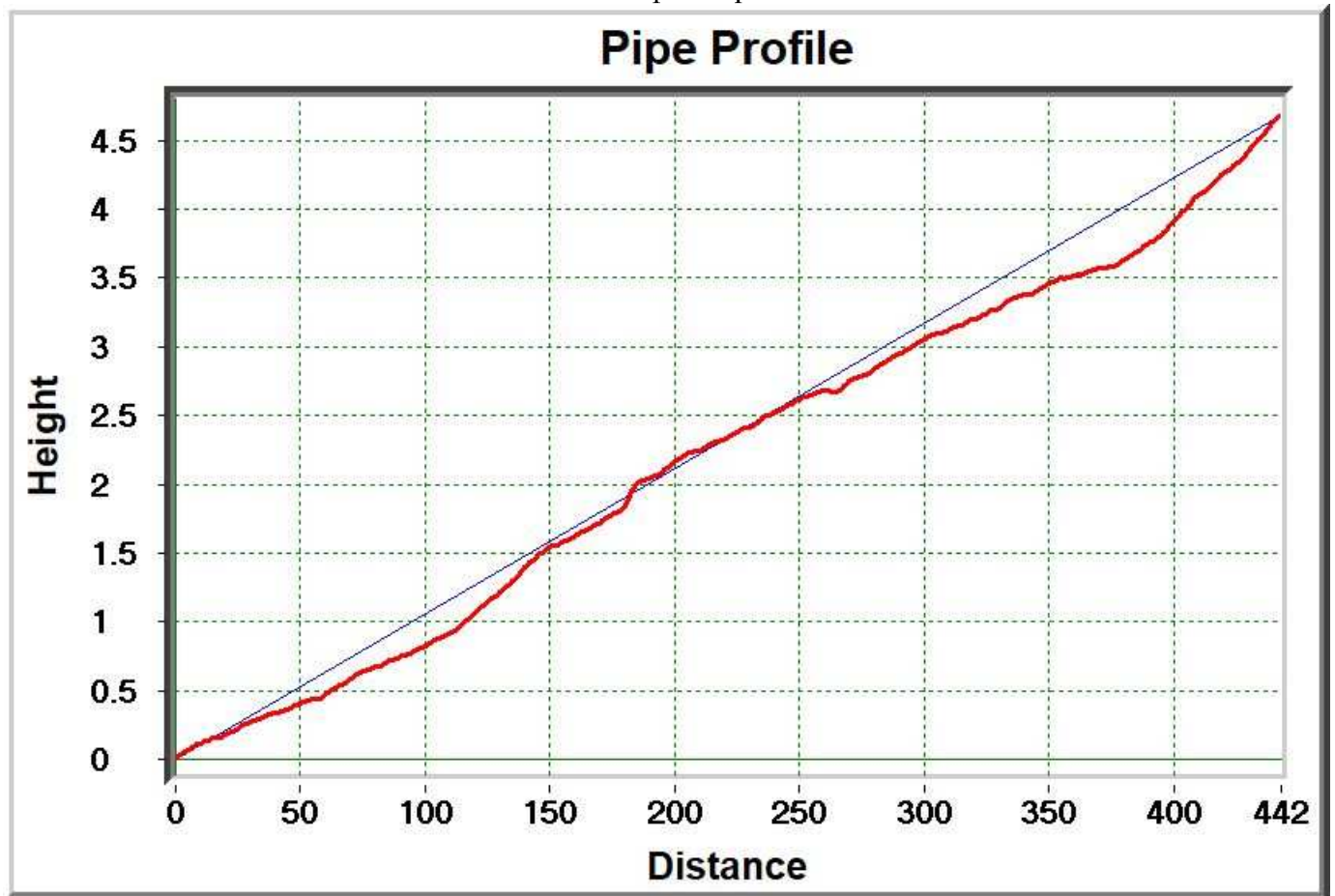
Downstream

Material: Reinforced Concrete

Pipe

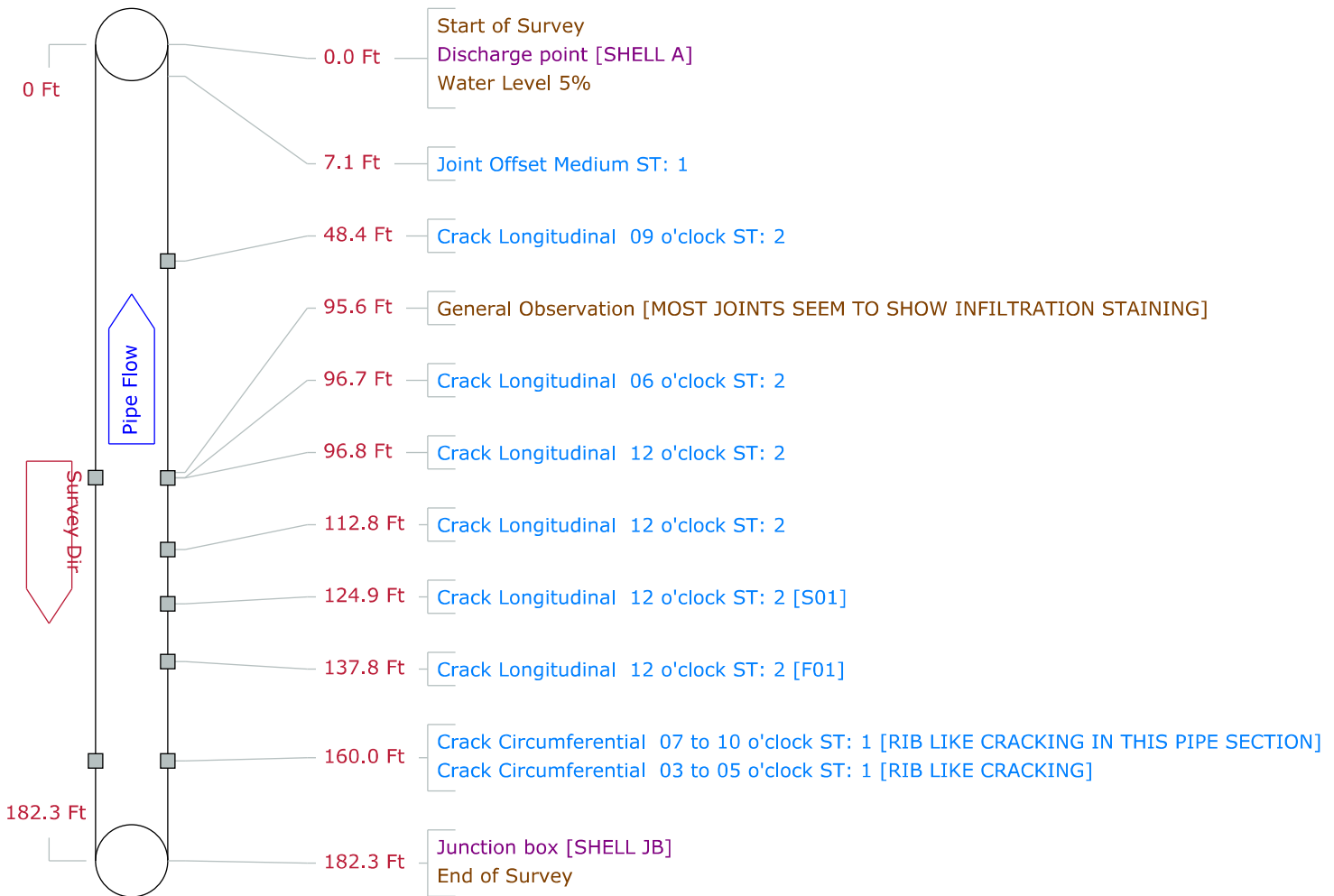
EC-4201

Percent Grade Mean: 1.05  
Plot Distance From: 0 To 445  
Max Percent Difference: 3  
Number of Window Values: 1  
Percent Difference Max for Windows Values: 60  
Number of Feet to Average: 1  
Final number of points plotted: 413



Pipe Graphic Report of PSR SHELL JB B for HDR

<b>Setup</b> 35	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/01/06	<b>Time</b> 11:35	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 182.3 Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 182.30 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b>	SET UP ON INTERSTATE ENTRANCE RAMP	<b>Structural</b>	<b>O &amp; M</b>
<b>Location</b>		<b>Miscellaneous</b>	<b>Hydraulic</b>
<b>Project</b> Carolina Crossroads		<b>Work Order</b>	
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>		<b>GPS Accuracy</b>	



CCTV Picture List of SHELL JB B for HDR

<b>Work Order</b>			<b>Setup 35</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** Count 7.1 Ft  
**Code** [Joint Offset Medium](#)  
**Remarks**  
**File Name** 245.jpg



**Video Index** Count 48.4 Ft  
**Code** [Crack Longitudinal](#)  
**Remarks**  
**File Name** 246.jpg



**Video Index** Count 95.6 Ft  
**Code** [General Observation](#)  
**Remarks** MOST JOINTS SEEM TO SHOW INFILTRATION STAINING  
**File Name** 247.jpg



**Video Index** Count 96.7 Ft  
**Code** [Crack Longitudinal](#)  
**Remarks**  
**File Name** 248.jpg



**Video Index** Count 96.8 Ft  
**Code** [Crack Longitudinal](#)  
**Remarks**  
**File Name** 249.jpg



**Video Index** Count 112.8 Ft  
**Code** [Crack Longitudinal](#)  
**Remarks**  
**File Name** 250.jpg



**Video Index** Count 124.9 Ft  
**Code** [Crack Longitudinal](#)  
**Remarks**  
**File Name** 251.jpg



CCTV Picture List of SHELL JB B for HDR

<b>Work Order</b>			<b>Setup 35</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index**                      **Count** 160.0 Ft  
**Code** [Crack Circumferential](#)  
**Remarks** RIB LIKE CRACKING IN THIS PIPE SECTION  
**File Name** 252.jpg

<b>Work Order</b>			<b>Setup 35</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snapshots\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index**                      **Count** 160.0 Ft  
**Code** Crack Circumferential  
**Remarks** RIB LIKE CRACKING  
**File Name** 253.jpg

<b>Work Order</b>			<b>Setup 35</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR SHELL JB B for HDR**

<b>Setup</b> 35	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2021/01/06	<b>Time</b> 11:35	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Down</b> SHELL A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Up	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18 <b>Width</b>	<b>ins</b> <b>Preclean</b> J	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b> <b>Total length</b> 182.3 <b>Ft</b>	<b>Length Surveyed</b> 182.3 <b>Ft</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b> SET UP ON INTERSTATE ENTRANCE RAMP	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

Count	Video	CD Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0		ST							Start of Survey
0.0		ADP							Discharge point
0.0		MWL			5				Water Level
7.1		JOM							Joint Offset Medium
48.4		CL				J	09		Crack Longitudinal
95.6		MGO							General Observation
96.7		CL				J	06		Crack Longitudinal
96.8		CL				J	12		Crack Longitudinal
112.8		CL				J	12		Crack Longitudinal
124.9		S01				J	12		Crack Longitudinal
137.8		F01				J	12		Crack Longitudinal
160.0		CC					07 10		Crack Circumferential
160.0		CC					03 05		Crack Circumferential
182.3		AJB							Junction box
182.3		FH							End of Survey

182.3 Ft Total Length Surveyed

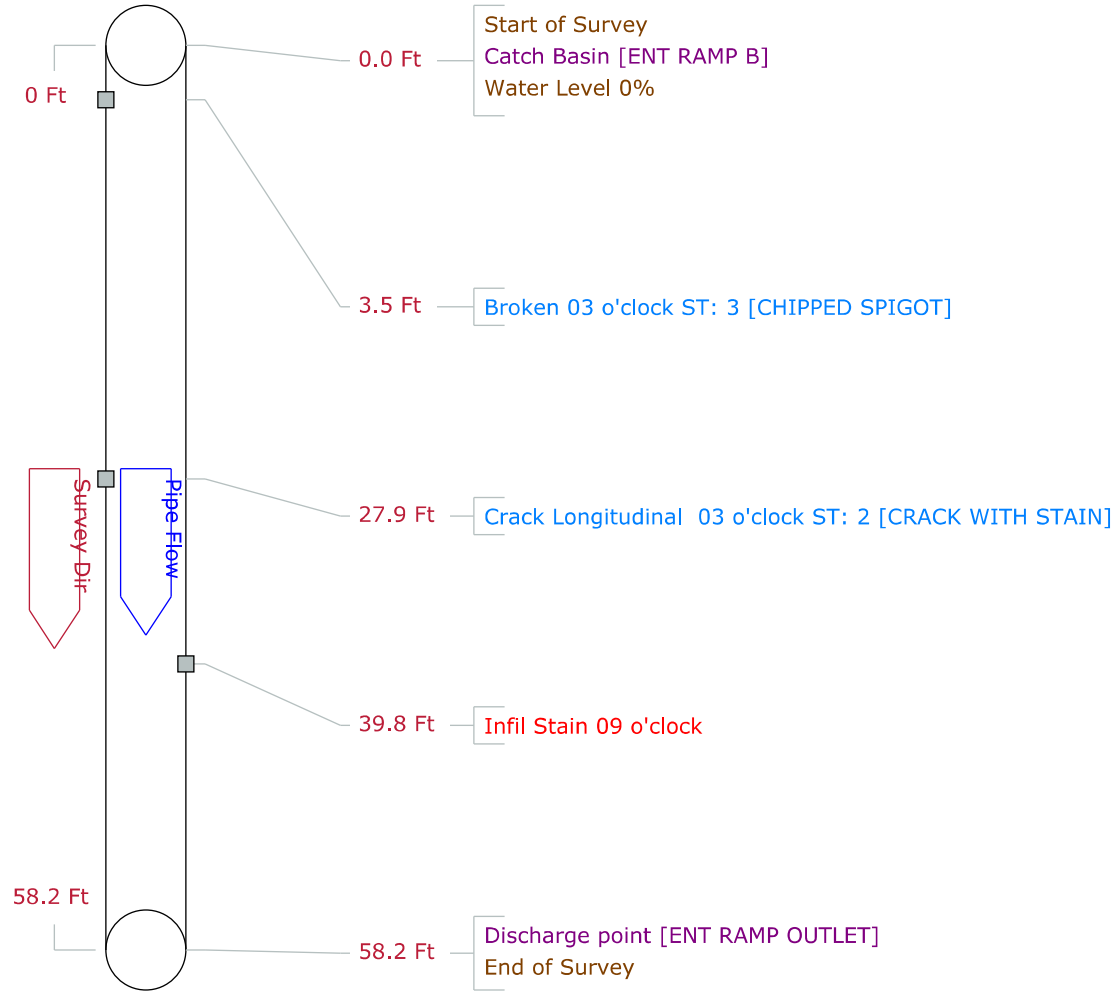
<b>Scores</b>	<b>Structural:</b>	<b>Pipe Rating</b> 17	<b>Pipe Ratings Index</b> 1.7	<b>Quick Rating</b> 2713
	<b>O&amp;M:</b>	<b>Pipe Rating</b> 0	<b>Pipe Ratings Index</b> 0	<b>Quick Rating</b> 0000
	<b>Overall</b>	<b>Pipe Rating</b> 17	<b>Pipe Ratings Index</b> 1.7	<b>Quick Rating</b> 2713





Pipe Graphic Report of PSR ENT RAMP B B for HDR

<b>Setup</b> 37	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2021/01/06	<b>Time</b> 13:16	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> ENT RAMP B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> ENT RAMP OUTLET	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>PreClean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 58.2 Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 58.20 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b>	SET UP ON INTERSTATE ENTRANCE RAMP	<b>Structural</b>	<b>O &amp; M</b>
<b>Location</b>		<b>Miscellaneous</b>	<b>Hydraulic</b>
<b>Project</b> Carolina Crossroads		<b>Work Order</b>	
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>		<b>GPS Accuracy</b>	



<b>Work Order</b>			<b>Setup 37</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 3.5 Ft  
**Code** Broken  
**Remarks** CHIPPED SPIGOT  
**File Name** 258.jpg



**Video Index** **Count** 27.9 Ft  
**Code** Crack Longitudinal  
**Remarks** CRACK WITH STAIN  
**File Name** 259.jpg



**Video Index** **Count** 39.8 Ft  
**Code** Infil Stain  
**Remarks**  
**File Name** 260.jpg

CCTV Picture List of ENT RAMP B B for HDR

<b>Work Order</b>			<b>Setup 37</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR ENT RAMP B B for HDR**

<b>Setup</b> 37	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/01/06	<b>Time</b> 13:16	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> ENT RAMP B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Down</b> ENT RAMP OUTLET	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Down	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 58.2 Ft	<b>Length Surveyed</b> 58.2 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b> SET UP ON INTERSTATE ENTRANCE RAMP	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							ENT RAMP B
0.0			MWL Water Level			0				
3.5			B Broken				J	03		CHIPPED SPIGOT
27.9			CL Crack Longitudinal				J	03		CRACK WITH STAIN
39.8			IS Infil Stain					09		
58.2			ADP Discharge point							ENT RAMP OUTLET
58.2			FH End of Survey							

58.2 Ft Total Length Surveyed

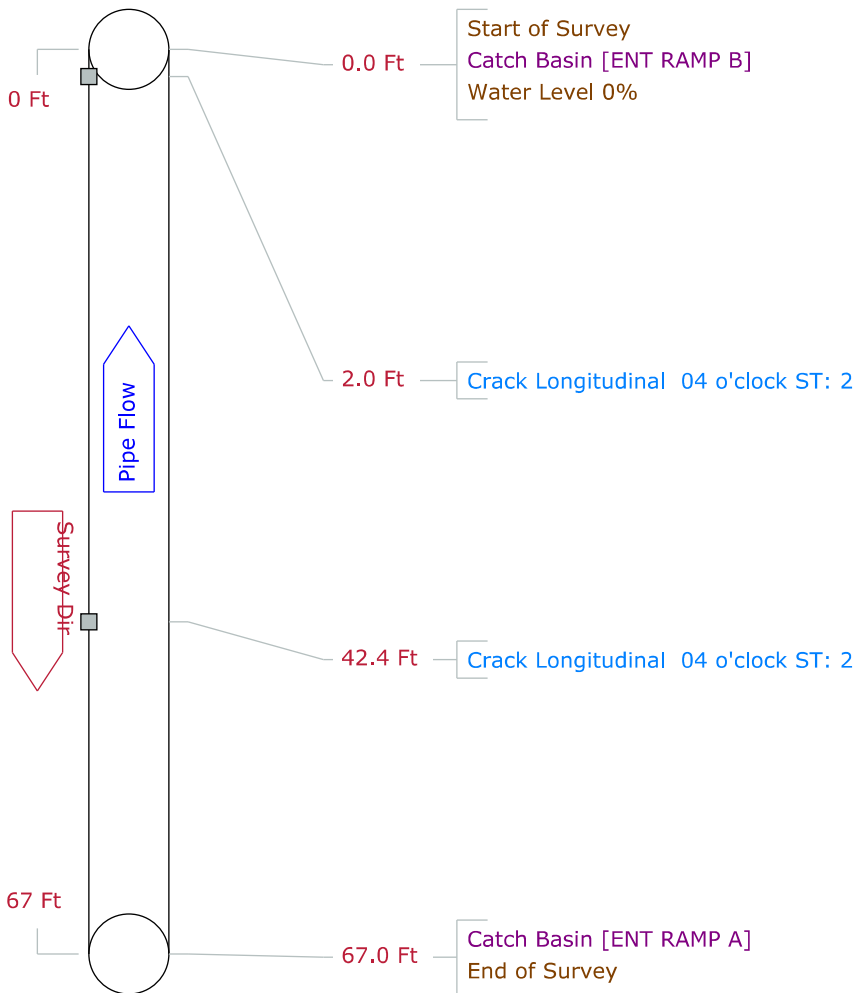
<b>Scores</b>	<b>Structural:</b> Pipe Rating 5	Pipe Ratings Index 2.5	Quick Rating 3121
	<b>O&amp;M:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>Overall</b> Pipe Rating 5	Pipe Ratings Index 2.5	Quick Rating 3121



Pipe Graphic Report of PSR ENT RAMP A B for HDR

EP-4212

<b>Setup</b> 36	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2021/01/06	<b>Time</b> 13:00	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> ENT RAMP A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> ENT RAMP B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>PreClean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 67.0 Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 67.00 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP ON INTERSTATE ENTRANCE RAMP	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



SCA Underground  
 Phone: (803) 730-3568  
 Address: PO box Suite 102, West Columbia, SC

<b>Work Order</b>			<b>Setup 36</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 2.0 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 255.jpg



**Video Index** **Count** 42.4 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 256.jpg

<b>Work Order</b>			<b>Setup 36</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

Tabular Report of PSR ENT RAMP A B for HDR

EP-4212

Setup	36	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT	
Drainage		Survey Customer						
P/O #		Date	2021/01/06	Time	13:00	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details						
Up	ENT RAMP A	Rim to invert		Grade to invert		Rim to grade	Ft	
Down	ENT RAMP B	Rim to invert		Grade to invert		Rim to grade	Ft	
Use	Stormwater	Direction	Up	Flow control		Media No		
Shape	Circular	Height	18	Width	ins	Preclean J	Date Cleaned	
Material	Reinforced Concrete Pipe	Joint length		Ft	Total length	67.0	Ft	
Lining		Year laid		Year rehabilitated		Weather		
Purpose		Cat				Pressure		
Additional info	SET UP ON INTERSTATE ENTRANCE RAMP					Structural	O & M	Constructional
Location						Miscellaneous		
Project	Carolina Crossroads			Work Order				
Northing		Easting		Elevation				
Coordinate System				GPS Accuracy				

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							ENT RAMP B
0.0			MWL Water Level			0				
2.0			CL Crack Longitudinal				J	04		
42.4			CL Crack Longitudinal				J	04		
67.0			ACB Catch Basin							ENT RAMP A
67.0			FH End of Survey							

67.0 Ft Total Length Surveyed

Scores	Structural:	Pipe Rating	4	Pipe Ratings Index	2	Quick Rating	2200
	O&M:	Pipe Rating	0	Pipe Ratings Index	0	Quick Rating	0000
	Overall	Pipe Rating	4	Pipe Ratings Index	2	Quick Rating	2200

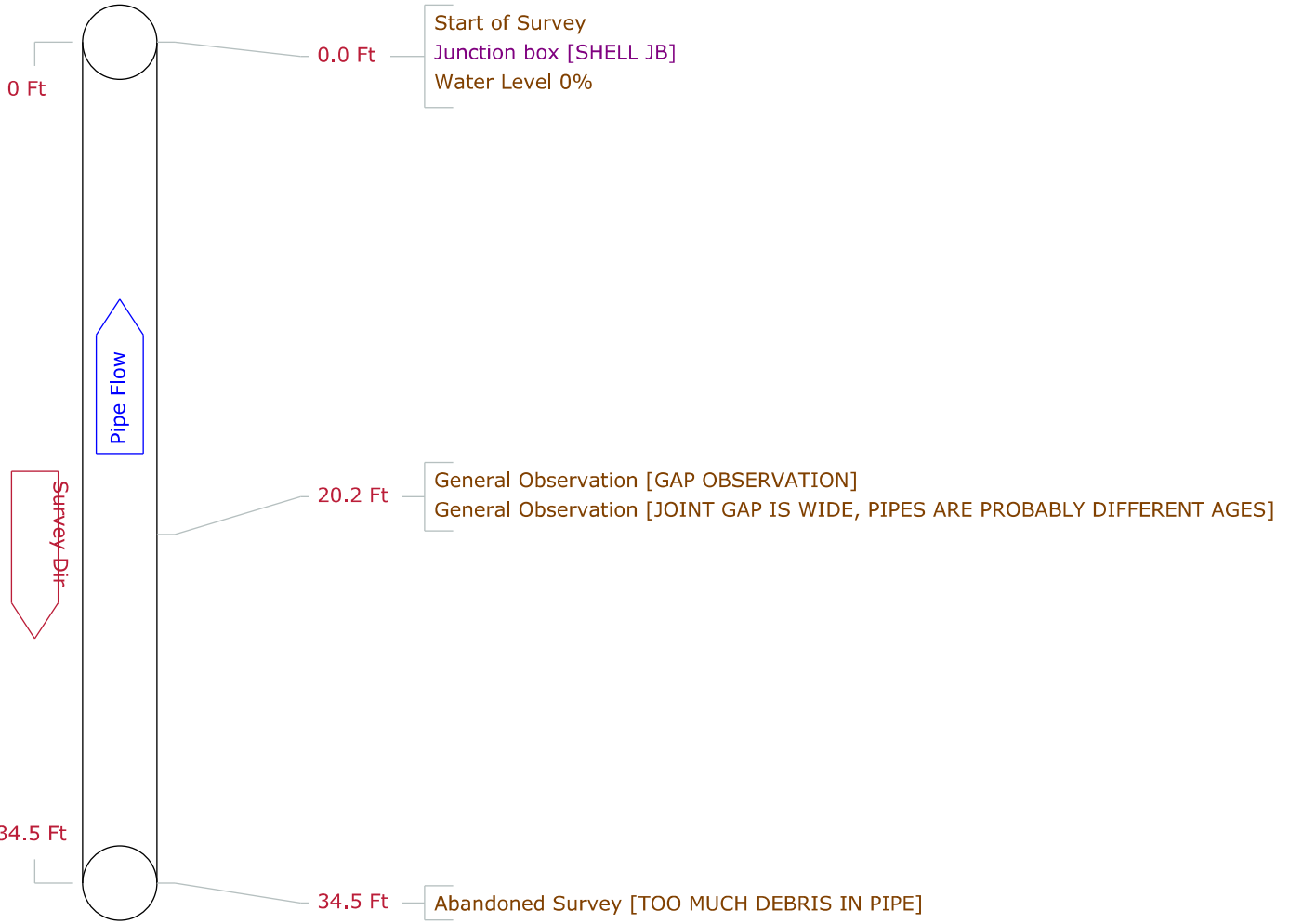


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Pipe Graphic Report of PSR SHELL B A for HDR

<b>Setup</b> 38	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/01/06	<b>Time</b> 18:14	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 34.50 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP AT SHELL STATION	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



<b>Work Order</b>			<b>Setup 38</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 20.2 Ft  
**Code** General Observation  
**Remarks** GAP OBSERVATION  
**File Name** 262.jpg



**Video Index** **Count** 20.2 Ft  
**Code** General Observation  
**Remarks** JOINT GAP IS WIDE, PIPES ARE PROBABLY DIFFERENT AGES  
**File Name** 263.jpg



**Video Index** **Count** 34.5 Ft  
**Code** Abandoned Survey  
**Remarks** TOO MUCH DEBRIS IN PIPE  
**File Name** 264.jpg



**Video Index** **Count** 34.5 Ft  
**Code** Abandoned Survey  
**Remarks** TOO MUCH DEBRIS IN PIPE  
**File Name** 265.jpg

<b>Work Order</b>			<b>Setup 38</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/06	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

EP-4213

**Tabular Report of PSR SHELL B A for HDR**

<b>Setup</b> 38	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/01/06	<b>Time</b> 18:14	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Up	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean J</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Length Surveyed</b> 34.5 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b> SET UP AT SHELL STATION	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

Count	Video	CD Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0		ST							Start of Survey
0.0		AJB							Junction box
0.0		MWL			0				Water Level
20.2		MGO							General Observation
20.2		MGO							General Observation
34.5		MSA							Abandoned Survey

34.5 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>O&amp;M:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>Overall</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000

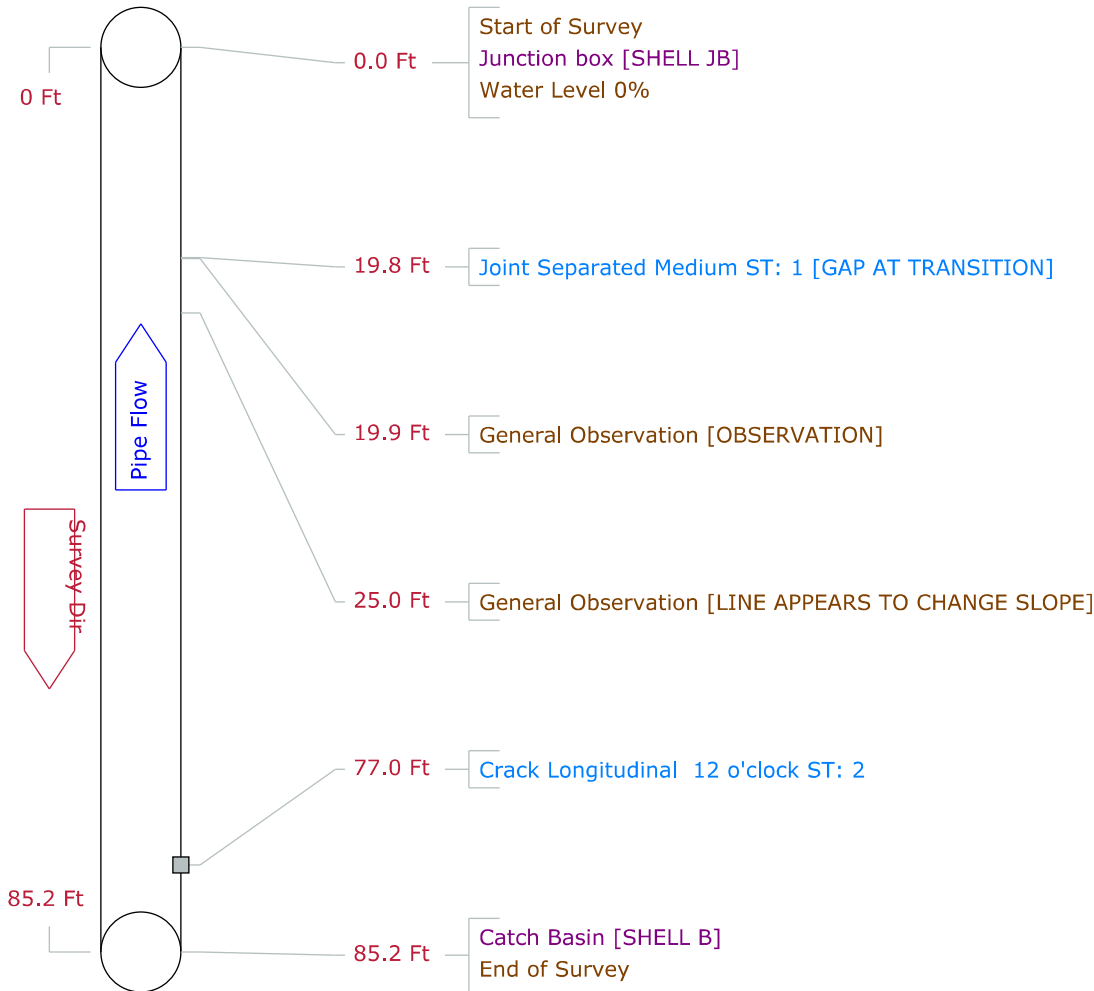


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Pipe Graphic Report of PSR SHELL B B for HDR

EP-4213

Setup	47	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT
Drainage	Survey Customer						
P/O #		Date	2021/02/24	Time	13:56	Street	BROAD RIVER RD
City	COLUMBIA	Further location details					
Up	SHELL B	Rim to invert		Grade to invert		Rim to grade	Ft
Down	SHELL JB	Rim to invert		Grade to invert		Rim to grade	Ft
Use	Stormwater	Direction	Upstream	Flow control		Media No	
Shape	Circular	Height	15	Width	ins	Preclean	J
Material	Reinforced Concrete Pipe	Joint length	Ft	Total length	85.2	Ft	Length Surveyed 85.20
Lining		Year laid		Year rehabilitated		Weather	
Purpose		Cat					
Additional info	SET UP AT SHELL STATION			Structural		O & M	Constructional
Location				Miscellaneous		Hydraulic	
Project	Carolina Crossroads			Work Order			
Northing		Easting		Elevation			
Coordinate System		GPS Accuracy					





<b>Work Order</b>			<b>Setup 47</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/24	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 19.8 Ft  
**Code** [Joint Separated Medium](#)  
**Remarks** GAP AT TRANSITION  
**File Name** 327.jpg



**Video Index** **Count** 19.9 Ft  
**Code** [General Observation](#)  
**Remarks** OBSERVATION  
**File Name** 328.jpg



**Video Index** **Count** 77.0 Ft  
**Code** [Crack Longitudinal](#)  
**Remarks**  
**File Name** 329.jpg

<b>Work Order</b>			<b>Setup 47</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/24	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR SHELL B B for HDR**

<b>Setup</b> 47	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/02/24	<b>Time</b> 13:56	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Up	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean J</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 85.2 Ft	<b>Length Surveyed</b> 85.2 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b> SET UP AT SHELL STATION	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			AJB Junction box							SHELL JB
0.0			MWL Water Level			0				
19.8			JSM Joint Separated Medium							GAP AT TRANSITION
19.9			MGO General Observation							OBSERVATION
25.0			MGO General Observation							LINE APPEARS TO CHANGE SLOP
77.0			CL Crack Longitudinal				J	12		
85.2			ACB Catch Basin							SHELL B
85.2			FH End of Survey							

85.2 Ft Total Length Surveyed

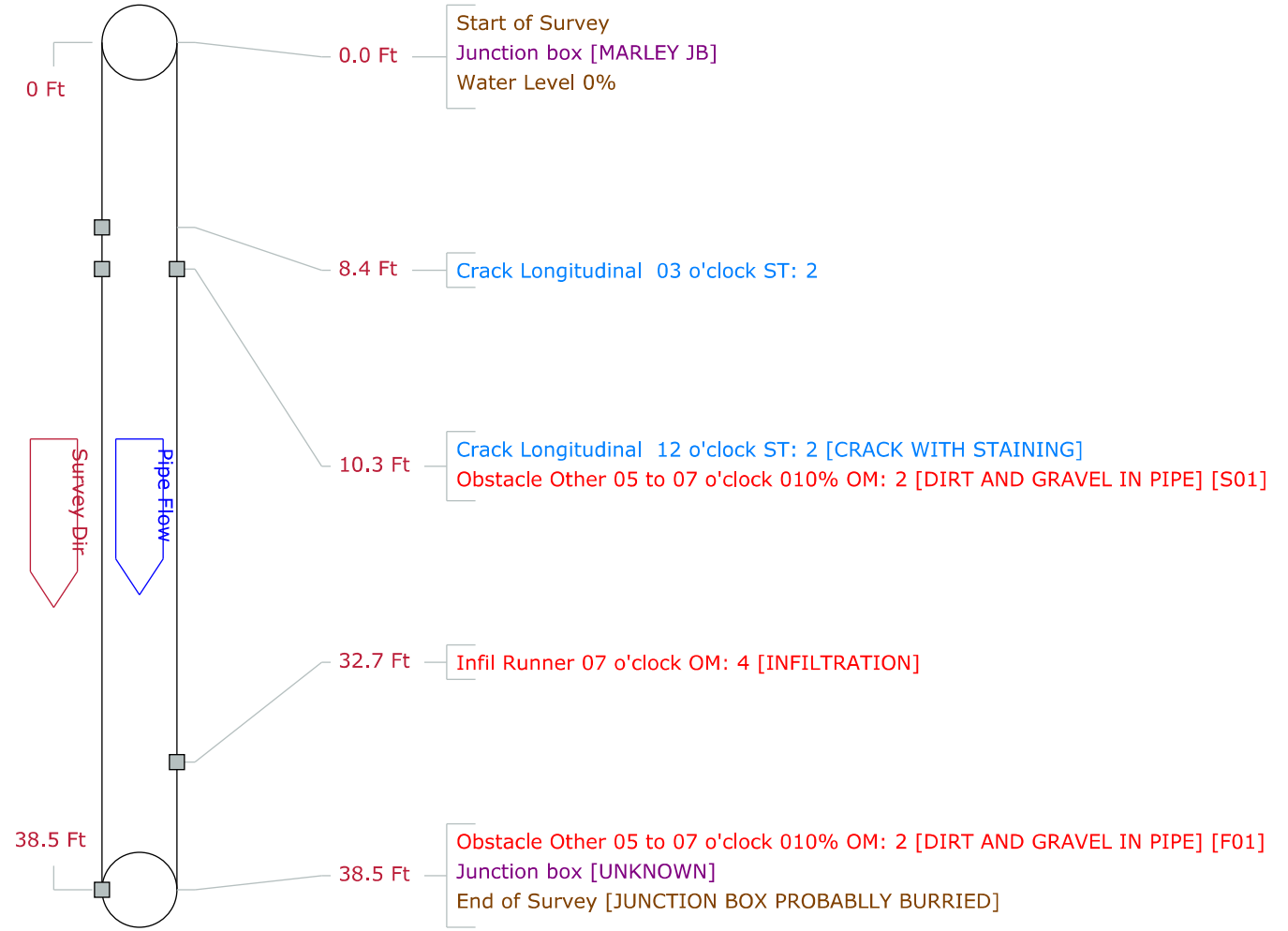
<b>Scores</b>	<b>Structural:</b> Pipe Rating 3	Pipe Ratings Index 1.5	Quick Rating 2111
	<b>O&amp;M:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>Overall</b> Pipe Rating 3	Pipe Ratings Index 1.5	Quick Rating 2111



Pipe Graphic Report of PSR MARLEY JB B for HDR

EP-4220

<b>Setup</b> 33	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT		
<b>Drainage</b>		<b>Survey Customer</b>			
<b>P/O #</b>	<b>Date</b> 2021/01/05	<b>Time</b> 14:14	<b>Street</b> BROAD RIVER RD		
<b>City</b> COLUMBIA	<b>Further location details</b>				
<b>Up</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Down</b> UNKNOWN	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>		<b>Media No</b>	
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b>	ins	Preclean J	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b>	<b>Total length</b> 38.5	<b>Ft</b>	<b>Length Surveyed</b> 38.50
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>		
<b>Purpose</b>	<b>Cat</b>				
<b>Additional info</b>	SET UP ON MALEY AND BROAD RIVER RD		<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>			<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads			<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>		<b>Elevation</b>		
<b>Coordinate System</b>			<b>GPS Accuracy</b>		



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 Address: PO box Suite 102, West Columbia, SC

<b>Work Order</b>			<b>Setup 33</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/05	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



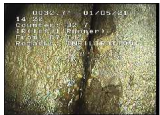
**Video Index** **Count** 8.4 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 233.jpg



**Video Index** **Count** 10.3 Ft  
**Code** Crack Longitudinal  
**Remarks** CRACK WITH STAINING  
**File Name** 234.jpg



**Video Index** **Count** 10.3 Ft  
**Code** Obstacle Other  
**Remarks** DIRT AND GRAVEL IN PIPE  
**File Name** 235.jpg



**Video Index** **Count** 32.7 Ft  
**Code** Infil Runner  
**Remarks** INFILTRATION  
**File Name** 236.jpg



<b>Work Order</b>			<b>Setup 33</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/05	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

Tabular Report of PSR MARLEY JB

B for HDR

EP-4220

Setup	33	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT	
Drainage		Survey Customer						
P/O #		Date	2021/01/05	Time	14:14	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details						
Up	MARLEY JB	Rim to invert		Grade to invert		Rim to grade	Ft	
Down	UNKNOWN	Rim to invert		Grade to invert		Rim to grade	Ft	
Use	Stormwater	Direction	Down	Flow control		Media No		
Shape	Circular	Height	18	Width	ins	Preclean J	Date Cleaned	
Material	Reinforced Concrete Pipe	Joint length		Ft	Total length	38.5	Ft	
Lining		Year laid		Year rehabilitated		Weather		
Purpose		Cat				Pressure		
Additional info	SET UP ON MALEY AND BROAD RIVER RD					Structural	O & M	Constructional
Location						Miscellaneous		
Project	Carolina Crossroads			Work Order				
Northing		Easting		Elevation				
Coordinate System				GPS Accuracy				

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			AJB Junction box							MARLEY JB
0.0			MWL Water Level			0				
8.4			CL Crack Longitudinal				J	03		
10.3			CL Crack Longitudinal				J	12		CRACK WITH STAINING
10.3		S01	OBZ Obstacle Other			10		05 07		DIRT AND GRAVEL IN PIPE
32.7			IR Infil Runner				J	07		INFILTRATION
38.5		F01	OBZ Obstacle Other			10		05 07		DIRT AND GRAVEL IN PIPE
38.5			AJB Junction box							UNKNOWN
38.5			FH End of Survey							JUNCTION BOX PROBABLY BUR

38.5 Ft Total Length Surveyed

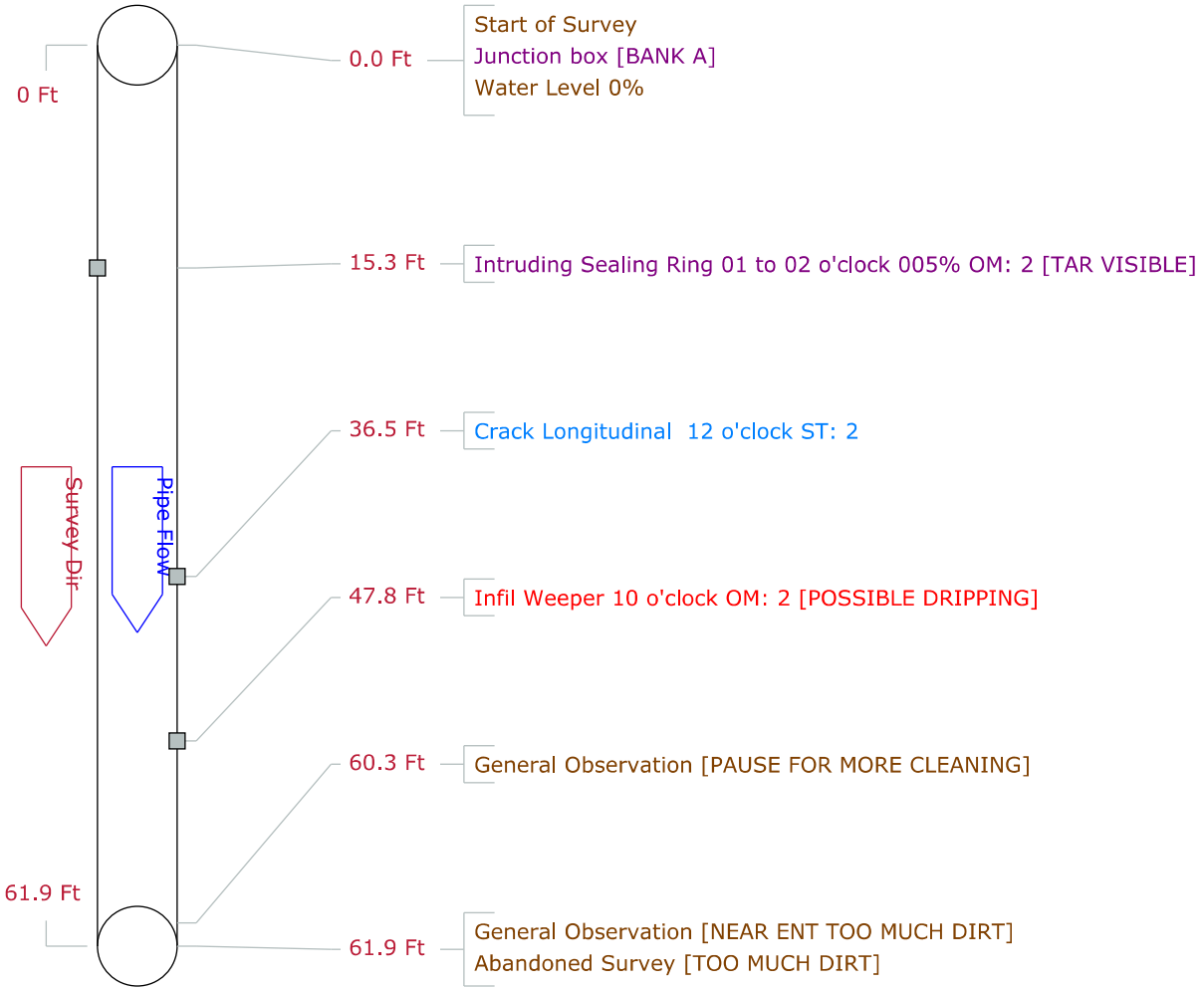
Scores	Structural:	Pipe Rating	4	Pipe Ratings Index	2	Quick Rating	2200
	O&M:	Pipe Rating	16	Pipe Ratings Index	2.3	Quick Rating	4126
	Overall	Pipe Rating	20	Pipe Ratings Index	4.3	Quick Rating	4128



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Pipe Graphic Report of PSR BANK A B for HDR

<b>Setup</b> 32	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/01/05	<b>Time</b> 11:40	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> BANK A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 61.90 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b>	SET UP AT BANK PARKING LOT		<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>
<b>Location</b>			<span style="color: orange;">Miscellaneous</span> <span style="color: blue;">Hydraulic</span>
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



<b>Work Order</b>			<b>Setup 32</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/05	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 15.3 Ft  
**Code** Intruding Sealing Ring  
**Remarks** TAR VISIBLE  
**File Name** 229.jpg



**Video Index** **Count** 36.5 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 230.jpg



**Video Index** **Count** 47.8 Ft  
**Code** Infil Weeper  
**Remarks** POSSIBLE DRIPPING  
**File Name** 231.jpg

<b>Work Order</b>			<b>Setup 32</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/05	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



Tabular Report of PSR BANK A

B

for HDR

EP-4221

Setup	32	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT	
Drainage		Survey Customer						
P/O #		Date	2021/01/05	Time	11:40	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details						
Up	BANK A	Rim to invert		Grade to invert		Rim to grade	Ft	
Down	MARLEY JB	Rim to invert		Grade to invert		Rim to grade	Ft	
Use	Stormwater	Direction	Down	Flow control		Media No		
Shape	Circular	Height	18	Width	ins	Preclean J	Date Cleaned	
Material	Reinforced Concrete Pipe	Joint length		Ft	Total length	Ft	Length Surveyed 61.9 Ft	
Lining		Year laid		Year rehabilitated		Weather		
Purpose		Cat				Pressure		
Additional info	SET UP AT BANK PARKING LOT					Structural	O & M	Constructional
Location						Miscellaneous		
Project	Carolina Crossroads			Work Order				
Northing		Easting		Elevation				
Coordinate System				GPS Accuracy				

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			AJB Junction box							BANK A
0.0			MWL Water Level			0				
15.3			ISSR Intruding Sealing Ring			5	01	02		TAR VISIBLE
36.5			CL Crack Longitudinal				J	12		
47.8			IW Infil Weeper				J	10		POSSIBLE DRIPPING
60.3			MGO General Observation							PAUSE FOR MORE CLEANING
61.9			MGO General Observation							NEAR ENT TOO MUCH DIRT
61.9			MSA Abandoned Survey							TOO MUCH DIRT

61.9 Ft Total Length Surveyed

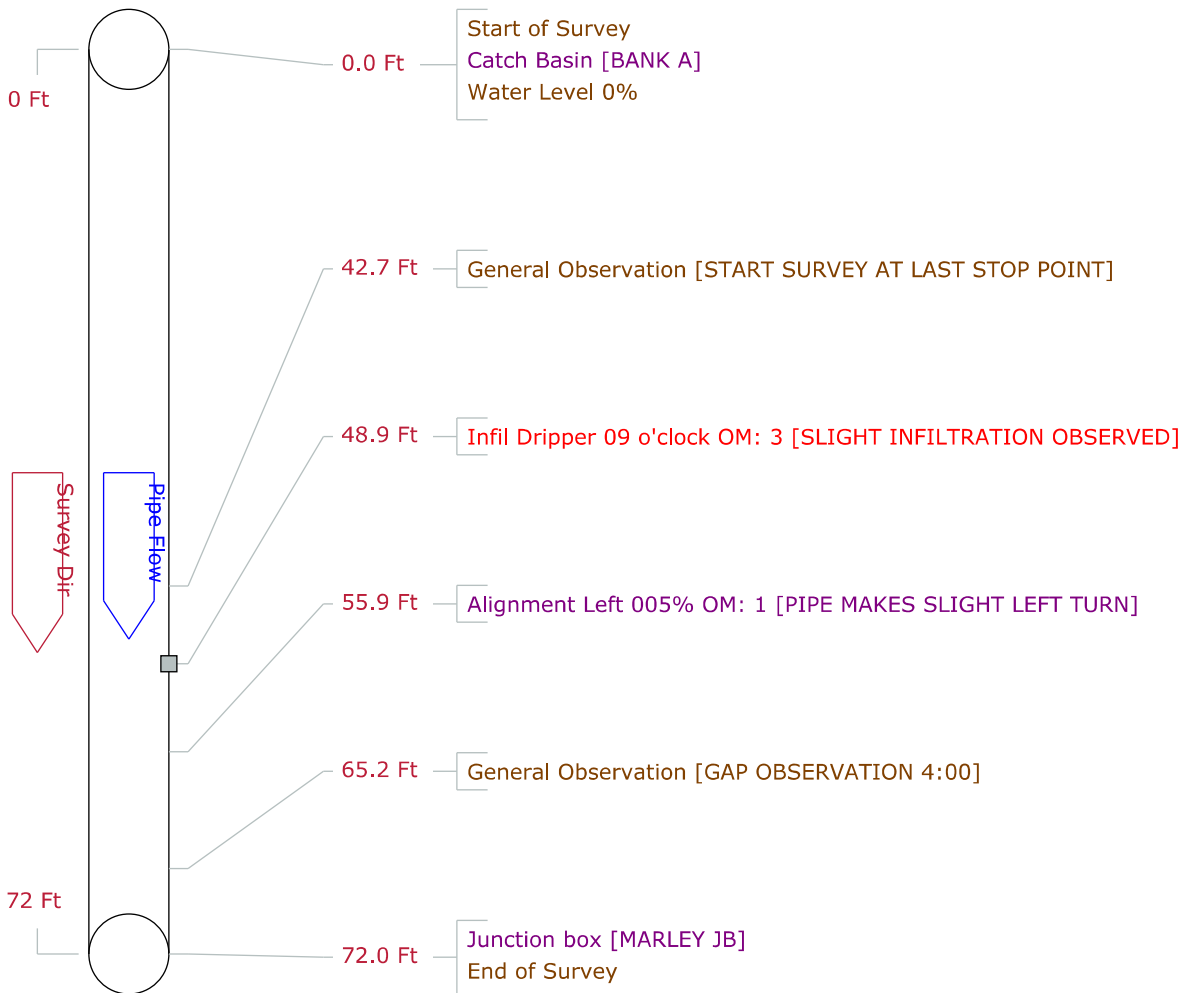
Scores	Structural:	Pipe Rating 2	Pipe Ratings Index 2	Quick Rating 2100
	O&M:	Pipe Rating 4	Pipe Ratings Index 2	Quick Rating 2200
	Overall	Pipe Rating 6	Pipe Ratings Index 4	Quick Rating 2300



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Phone:(803)730-3568

Pipe Graphic Report of PSR BANK A C for HDR

<b>Setup</b> 44	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2021/02/17	<b>Time</b> 13:52	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> BANK A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 72.0 Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 72.00 Ft
<b>Purpose</b>	<b>Cat</b>		<b>Weather</b>
<b>Additional info</b>	SET UP AT BANK PARKING LOT		<span style="color:blue">Structural</span> <span style="color:red">O &amp; M</span> <span style="color:purple">Constructional</span> <span style="color:orange">Miscellaneous</span> <span style="color:blue">Hydraulic</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>		<b>GPS Accuracy</b>
<b>Coordinate System</b>			



<b>Work Order</b>			<b>Setup 44</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/17	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 48.9 Ft  
**Code** Infil Dripper  
**Remarks** SLIGHT INFILTRATION OBSERVED  
**File Name** 311.jpg



**Video Index** **Count** 65.2 Ft  
**Code** General Observation  
**Remarks** GAP OBSERVATION 4:00  
**File Name** 312.jpg

<b>Work Order</b>			<b>Setup 44</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/17	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

Tabular Report of PSR BANK A C for HDR

Setup	44	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT	
Drainage		Survey Customer						
P/O #		Date	2021/02/17	Time	13:52	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details						
Up	BANK A	Rim to invert		Grade to invert		Rim to grade	Ft	
Down	MARLEY JB	Rim to invert		Grade to invert		Rim to grade	Ft	
Use	Stormwater	Direction	Down	Flow control		Media No		
Shape	Circular	Height	18	Width	ins	Preclean J	Date Cleaned	
Material	Reinforced Concrete Pipe	Joint length		Ft	Total length	72.0	Ft	
Lining		Year laid		Year rehabilitated		Weather		
Purpose		Cat				Pressure		
Additional info	SET UP AT BANK PARKING LOT					Structural	O & M	Constructional
Location						Miscellaneous		
Project	Carolina Crossroads			Work Order				
Northing		Easting		Elevation				
Coordinate System				GPS Accuracy				

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							BANK A
0.0			MWL Water Level			0				
42.7			MGO General Observation							START SURVEY AT LAST STOP P
48.9			ID Infil Dripper				J	09		SLIGHT INFILTRATION OBSERVE
55.9			LL Alignment Left			5				PIPE MAKES SLIGHT LEFT TURN
65.2			MGO General Observation							GAP OBSERVATION 4:00
72.0			AJB Junction box							MARLEY JB
72.0			FH End of Survey							

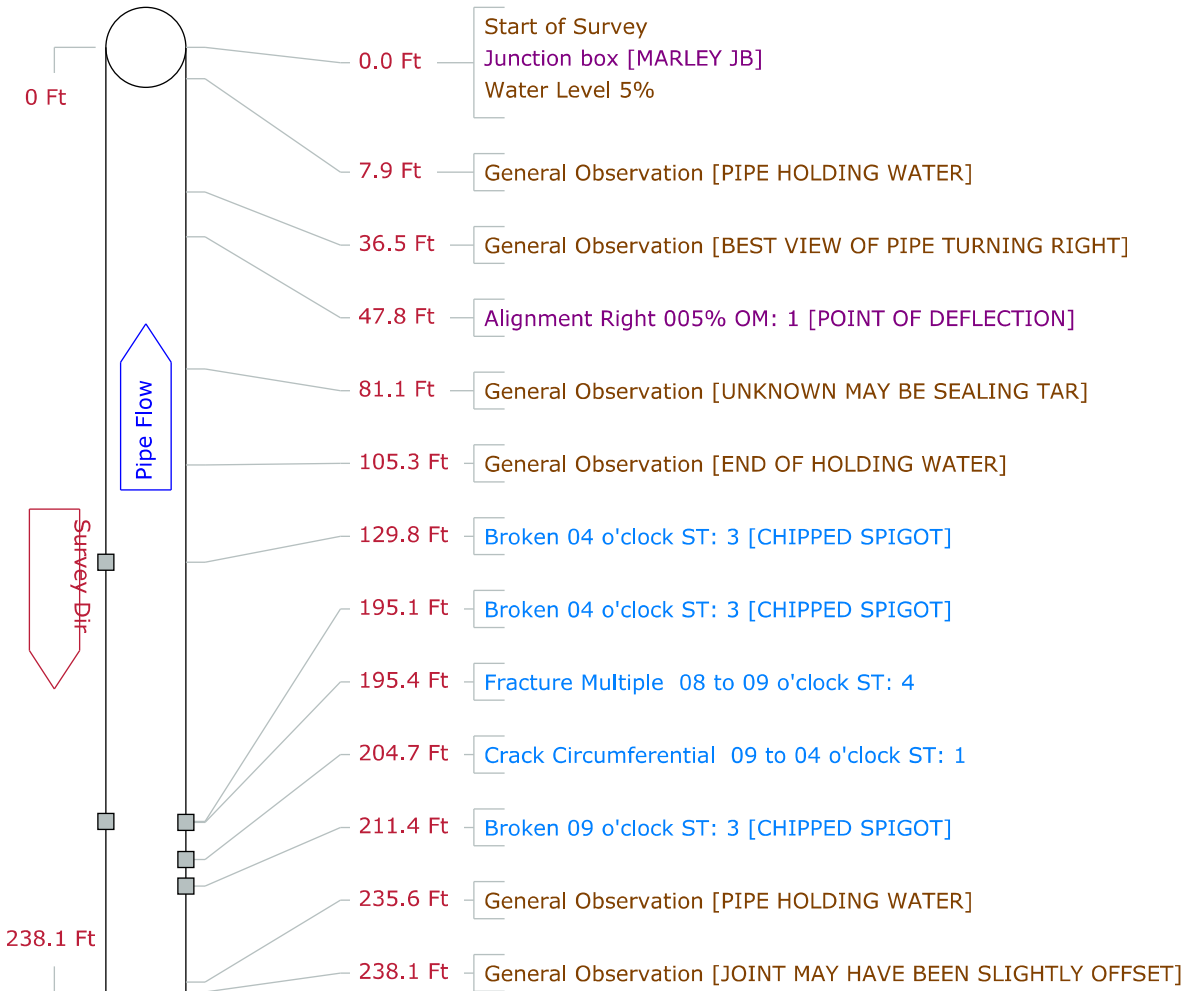
72.0 Ft Total Length Surveyed

Scores	Structural:	Pipe Rating	0	Pipe Ratings Index	0	Quick Rating	0000
	O&M:	Pipe Rating	4	Pipe Ratings Index	2	Quick Rating	3111
	Overall	Pipe Rating	4	Pipe Ratings Index	2	Quick Rating	3111



Pipe Graphic Report of PSR SHELL D C for HDR

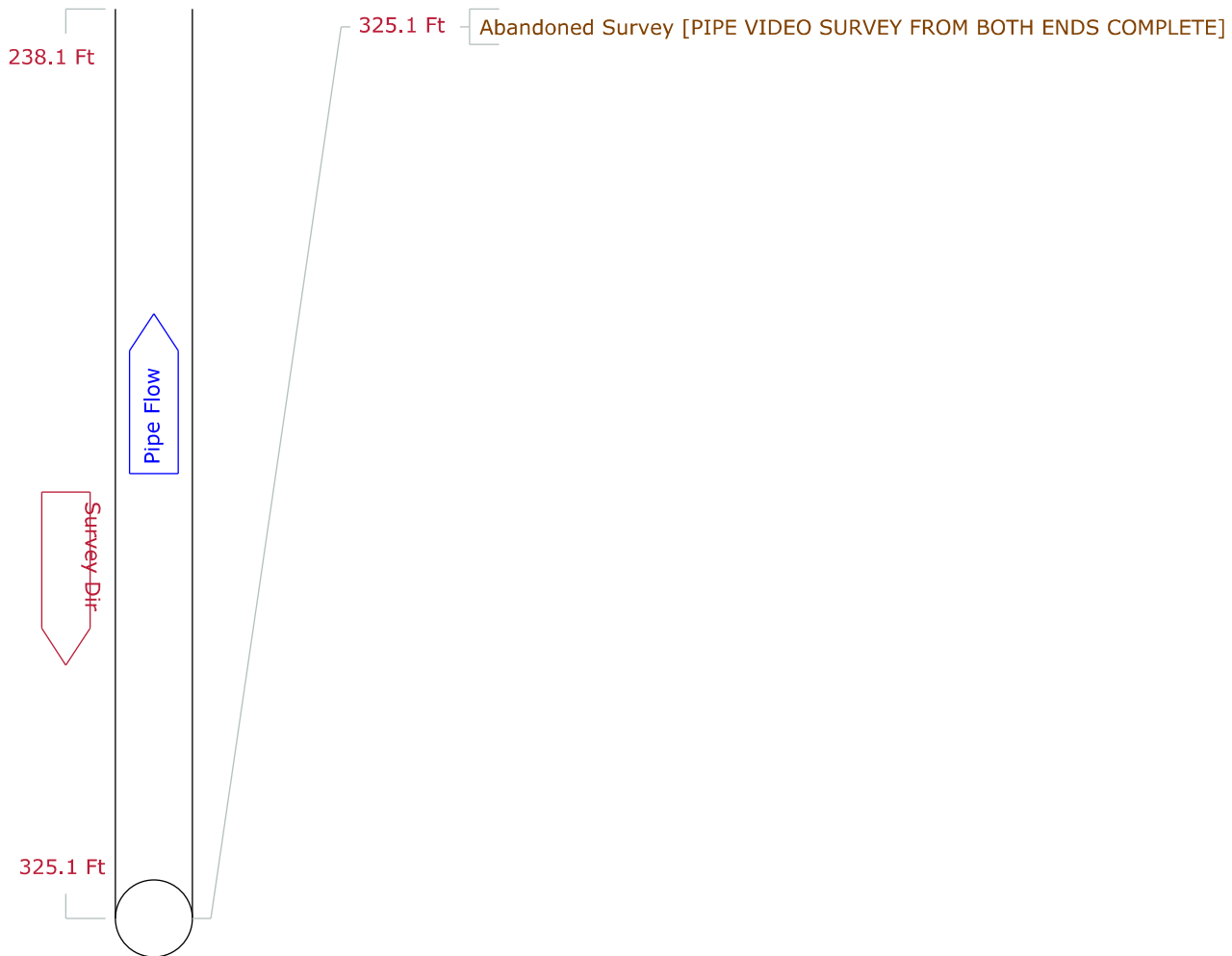
<b>Setup</b> 46	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/02/17	<b>Time</b> 14:35	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL D	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 325.10 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP ON MARLEY	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		





Pipe Graphic Report of PSR SHELL D C for HDR

<b>Setup</b> 46	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT		
<b>Drainage</b>		<b>Survey Customer</b>			
<b>P/O #</b>	<b>Date</b> 2021/02/17	<b>Time</b> 14:35	<b>Street</b> BROAD RIVER RD		
<b>City</b> COLUMBIA	<b>Further location details</b>				
<b>Up</b> SHELL D	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Down</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>		<b>Media No</b>	
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b>	ins	Preclean J	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b>	<b>Total length</b>	<b>Ft</b>	<b>Length Surveyed</b> 325.10 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>		
<b>Purpose</b>	<b>Cat</b>				
<b>Additional info</b>	SET UP ON MARLEY		<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>			<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads			<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>		<b>Elevation</b>		
<b>Coordinate System</b>	<b>GPS Accuracy</b>				



<b>Work Order</b>			<b>Setup 46</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/17	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 7.9 Ft  
**Code** General Observation  
**Remarks** PIPE HOLDING WATER  
**File Name** 317.jpg



**Video Index** **Count** 36.5 Ft  
**Code** General Observation  
**Remarks** BEST VIEW OF PIPE TURNING RIGHT  
**File Name** 318.jpg



**Video Index** **Count** 81.1 Ft  
**Code** General Observation  
**Remarks** UNKNOWN MAY BE SEALING TAR  
**File Name** 319.jpg



**Video Index** **Count** 129.8 Ft  
**Code** Broken  
**Remarks** CHIPPED SPIGOT  
**File Name** 320.jpg



**Video Index** **Count** 195.1 Ft  
**Code** Broken  
**Remarks** CHIPPED SPIGOT  
**File Name** 321.jpg



**Video Index** **Count** 195.4 Ft  
**Code** Fracture Multiple  
**Remarks**  
**File Name** 322.jpg



**Video Index** **Count** 204.7 Ft  
**Code** Crack Circumferential  
**Remarks**  
**File Name** 323.jpg

<b>Work Order</b>			<b>Setup 46</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/17	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



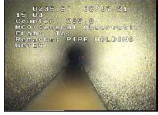
**Video Index** **Count** 211.4 Ft

**Code** Broken

**Remarks** CHIPPED SPIGOT

**File Name** 324.jpg

<b>Work Order</b>			<b>Setup 46</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/17	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snapshots\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 235.6 Ft  
**Code** General Observation  
**Remarks** PIPE HOLDING WATER  
**File Name** 325.jpg

CCTV Picture List of SHELL D C for HDR

<b>Work Order</b>			<b>Setup 46</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/17	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

Tabular Report of PSR SHELL D C for HDR

Setup	46	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT
Drainage	Survey Customer						
P/O #	Date	2021/02/17	Time	14:35	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details					
Up	SHELL D	Rim to invert	Grade to invert	Rim to grade	Ft		
Down	MARLEY JB	Rim to invert	Grade to invert	Rim to grade	Ft		
Use	Stormwater	Direction	Up	Flow control	Media No		
Shape	Circular	Height	15	Width	ins	Preclean	J
Material	Reinforced Concrete Pipe	Joint length	Ft	Total length	Ft	Length Surveyed	325.1 Ft
Lining		Year laid		Year rehabilitated		Weather	
Purpose		Cat				Pressure	
Additional info	SET UP ON MARLEY				Structural	O & M	Constructional
Location					Miscellaneous		
Project	Carolina Crossroads			Work Order			
Northing	Easting			Elevation			
Coordinate System				GPS Accuracy			

Count	Video	CD Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0		ST	Start of Survey						
0.0		AJB	Junction box						MARLEY JB
0.0		MWL	Water Level		5				
7.9		MGO	General Observation						PIPE HOLDING WATER
36.5		MGO	General Observation						BEST VIEW OF PIPE TURNING RI
47.8		LR	Alignment Right		5				POINT OF DEFLECTION
81.1		MGO	General Observation						UNKNOWN MAY BE SEALING TAR
105.3		MGO	General Observation						END OF HOLDING WATER
129.8		B	Broken			J	04		CHIPPED SPIGOT
195.1		B	Broken			J	04		CHIPPED SPIGOT
195.4		FM	Fracture Multiple			J	08 09		
204.7		CC	Crack Circumferential				09 04		
211.4		B	Broken			J	09		CHIPPED SPIGOT
235.6		MGO	General Observation						PIPE HOLDING WATER
238.1		MGO	General Observation						JOINT MAY HAVE BEEN SLIGHTLY
325.1		MSA	Abandoned Survey						PIPE VIDEO SURVEY FROM BOTH

325.1 Ft Total Length Surveyed

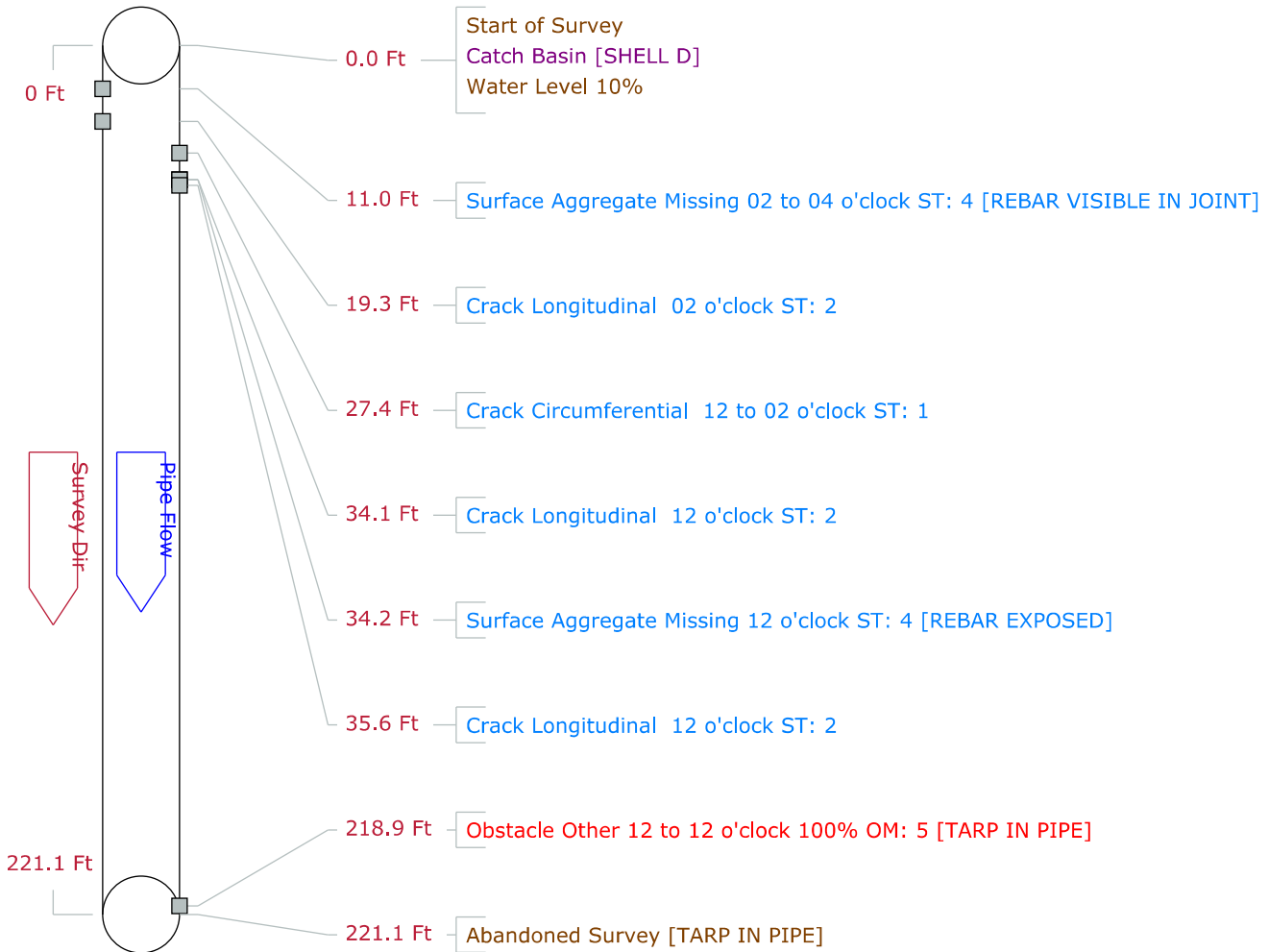
Scores	Structural:	Pipe Rating	14	Pipe Ratings Index	2.8	Quick Rating	4133
	O&M:	Pipe Rating	1	Pipe Ratings Index	1	Quick Rating	1100
	Overall	Pipe Rating	15	Pipe Ratings Index	3.8	Quick Rating	4133





Pipe Graphic Report of PSR SHELL D A for HDR

<b>Setup</b> 34	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/01/05	<b>Time</b> 15:00	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL D	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 221.10 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP AT TITLE LOAN OFFICE	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



<b>Work Order</b>	<b>Setup 34</b>
<b>Video</b>	<b>Survey Date</b> 2021/01/05
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\



**Video Index** **Count** 11.0 Ft  
**Code** Surface Aggregate Missing  
**Remarks** REBAR VISIBLE IN JOINT  
**File Name** 238.jpg



**Video Index** **Count** 19.3 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 239.jpg



**Video Index** **Count** 34.1 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 240.jpg



**Video Index** **Count** 34.2 Ft  
**Code** Surface Aggregate Missing  
**Remarks** REBAR EXPOSED  
**File Name** 241.jpg



**Video Index** **Count** 35.6 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 242.jpg



**Video Index** **Count** 218.9 Ft  
**Code** Obstacle Other  
**Remarks** TARP IN PIPE  
**File Name** 243.jpg

<b>Work Order</b>			<b>Setup 34</b>
<b>Video</b>	<b>Survey Date</b>	2021/01/05	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR SHELL D A for HDR**

<b>Setup</b> 34	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/01/05	<b>Time</b> 15:00	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL D	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Down</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Down	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean J</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 221.1 <b>Ft</b>
<b>Purpose</b>	<b>Cat</b>	<b>Weather</b>	<b>Pressure</b>
<b>Additional info</b> SET UP AT TITLE LOAN OFFICE	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Eastings</b>		
<b>Coordinate System</b>	<b>GPS Accuracy</b>		

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							SHELL D
0.0			MWL Water Level			10				
11.0			SAM Surface Aggregate Missing				J	02	04	REBAR VISIBLE IN JOINT
19.3			CL Crack Longitudinal				J	02		
27.4			CC Crack Circumferential				J	12	02	
34.1			CL Crack Longitudinal					12		
34.2			SAM Surface Aggregate Missing					12		REBAR EXPOSED
35.6			CL Crack Longitudinal				J	12		
218.9			OBZ Obstacle Other			100		12	12	TARP IN PIPE
221.1			MSA Abandoned Survey							TARP IN PIPE

221.1 Ft Total Length Surveyed

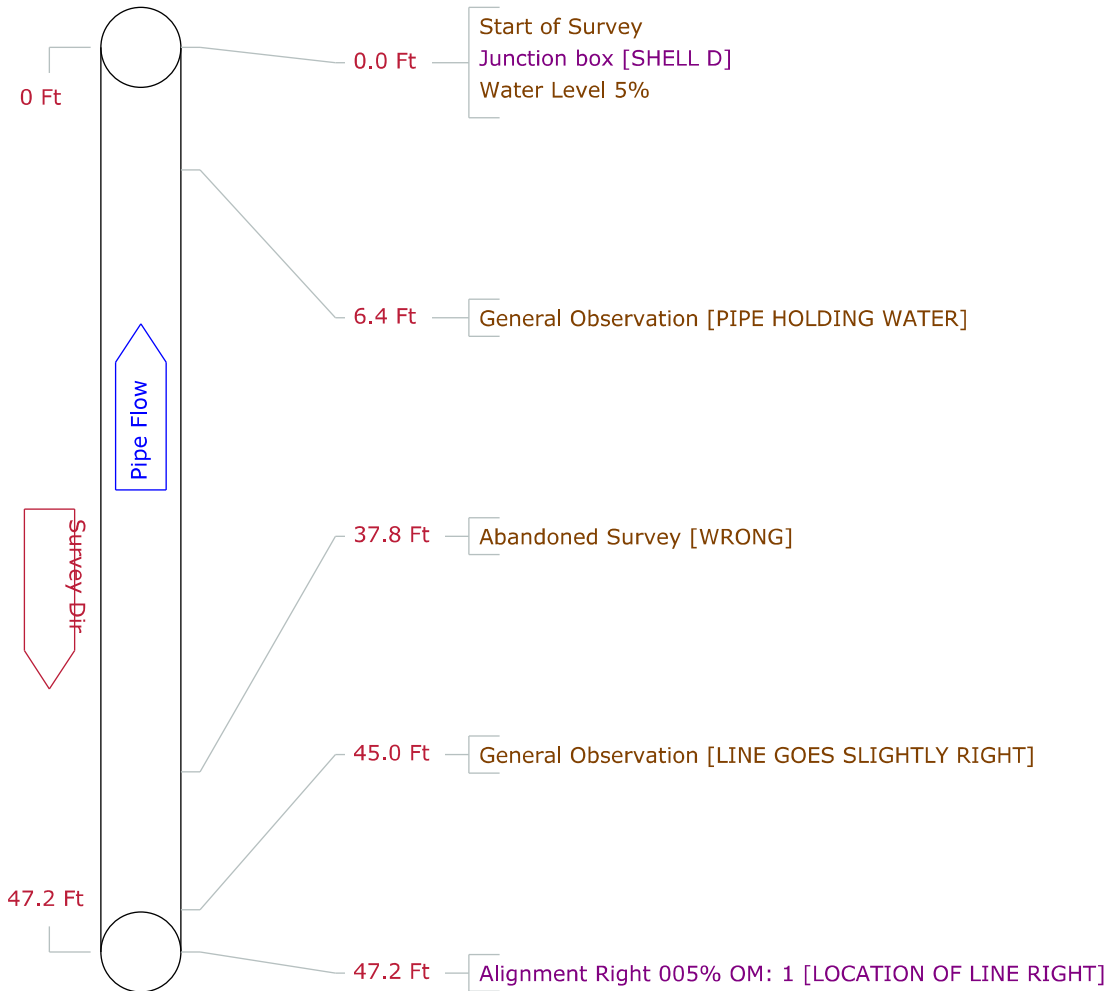
<b>Scores</b>	<b>Structural:</b> Pipe Rating 15	Pipe Ratings Index 2.5	Quick Rating 4223
	<b>O&amp;M:</b> Pipe Rating 5	Pipe Ratings Index 5	Quick Rating 5100
	<b>Overall</b> Pipe Rating 20	Pipe Ratings Index 7.5	Quick Rating 5142



Pipe Graphic Report of PSR MARLEY JB A for HDR

EP-4222

<b>Setup</b> 45	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/02/17	<b>Time</b> 14:25	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL D	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 37.80 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP AT TITLE LOAN OFFICE	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



SCA Underground  
 Phone: (803) 730-3568  
 Address: PO box Suite 102, West Columbia, SC

<b>Work Order</b>			<b>Setup 45</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/17	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 6.4 Ft  
**Code** General Observation  
**Remarks** PIPE HOLDING WATER  
**File Name** 314.jpg



**Video Index** **Count** 45.0 Ft  
**Code** General Observation  
**Remarks** LINE GOES SLIGHTLY RIGHT  
**File Name** 315.jpg



<b>Work Order</b>			<b>Setup 45</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/17	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR MARLEY JB A for HDR**

<b>Setup</b> 45	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2021/02/17	<b>Time</b> 14:25	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> MARLEY JB	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL D	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Up	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean J</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Length Surveyed</b> 37.8 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b> SET UP AT TITLE LOAN OFFICE	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			AJB Junction box							SHELL D
0.0			MWL Water Level			5				
6.4			MGO General Observation							PIPE HOLDING WATER
37.8			MSA Abandoned Survey							WRONG
45.0			MGO General Observation							LINE GOES SLIGHTLY RIGHT
47.2			LR Alignment Right			5				LOCATION OF LINE RIGHT

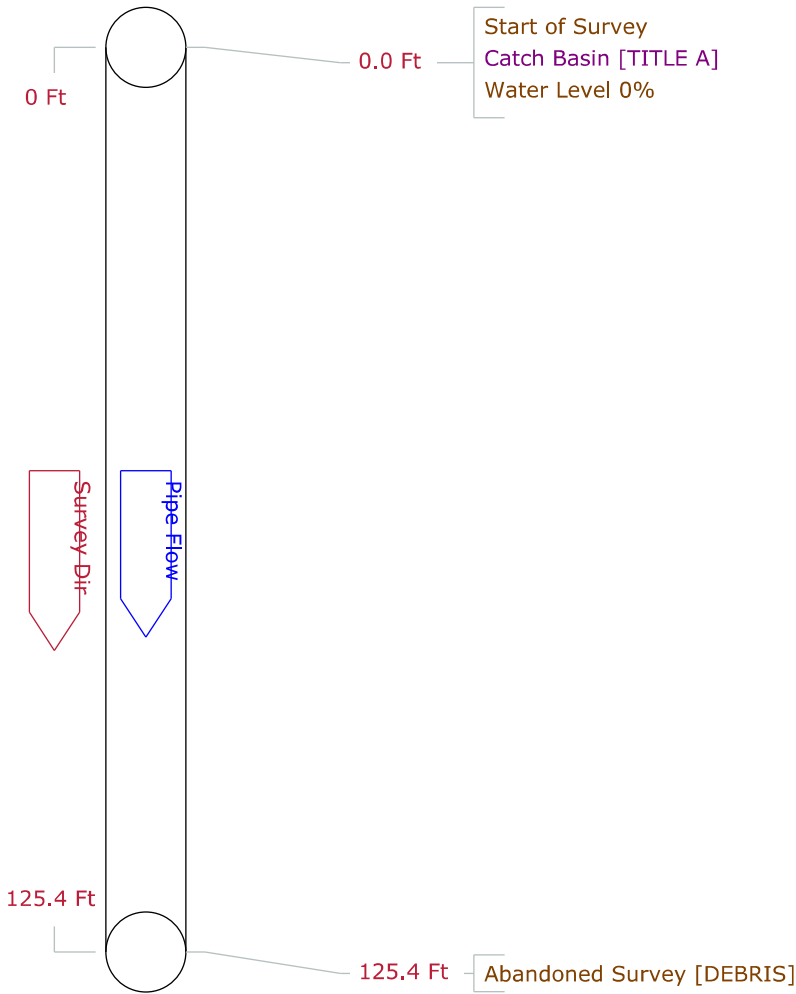
47.2 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>O&amp;M:</b> Pipe Rating 1	Pipe Ratings Index 1	Quick Rating 1100
	<b>Overall</b> Pipe Rating 1	Pipe Ratings Index 1	Quick Rating 1100



Pipe Graphic Report of PSR TITLE A B for HDR

<b>Setup</b> 27	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT		
<b>Drainage</b>		<b>Survey Customer</b>			
<b>P/O #</b>	<b>Date</b> 2020/12/15	<b>Time</b> 15:28	<b>Street</b> BROAD RIVER RD		
<b>City</b> COLUMBIA	<b>Further location details</b>				
<b>Up</b> TITLE A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Down</b> B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>		<b>Media No</b>	
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b>	<b>ins</b>	<b>Preclean Z</b>	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b>	<b>Total length</b>	<b>Ft</b>	<b>Length Surveyed</b> 125.40 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>		
<b>Purpose</b>	<b>Cat</b>				
<b>Additional info</b>			<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>			<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads			<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>		<b>Elevation</b>		
<b>Coordinate System</b>			<b>GPS Accuracy</b>		



**Tabular Report of PSR TITLE A B for HDR**

<b>Setup</b> 27	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2020/12/15	<b>Time</b> 15:28	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> TITLE A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Down</b> B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Down	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean Z</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Length Surveyed</b> 125.4 <b>Ft</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b>		<b>Structural</b>	<b>O &amp; M</b>
<b>Location</b>		<b>Constructional</b>	
<b>Project</b> Carolina Crossroads		<b>Miscellaneous</b>	
<b>Northing</b>		<b>Work Order</b>	<b>Elevation</b>
<b>Coordinate System</b>		<b>Easting</b>	<b>GPS Accuracy</b>

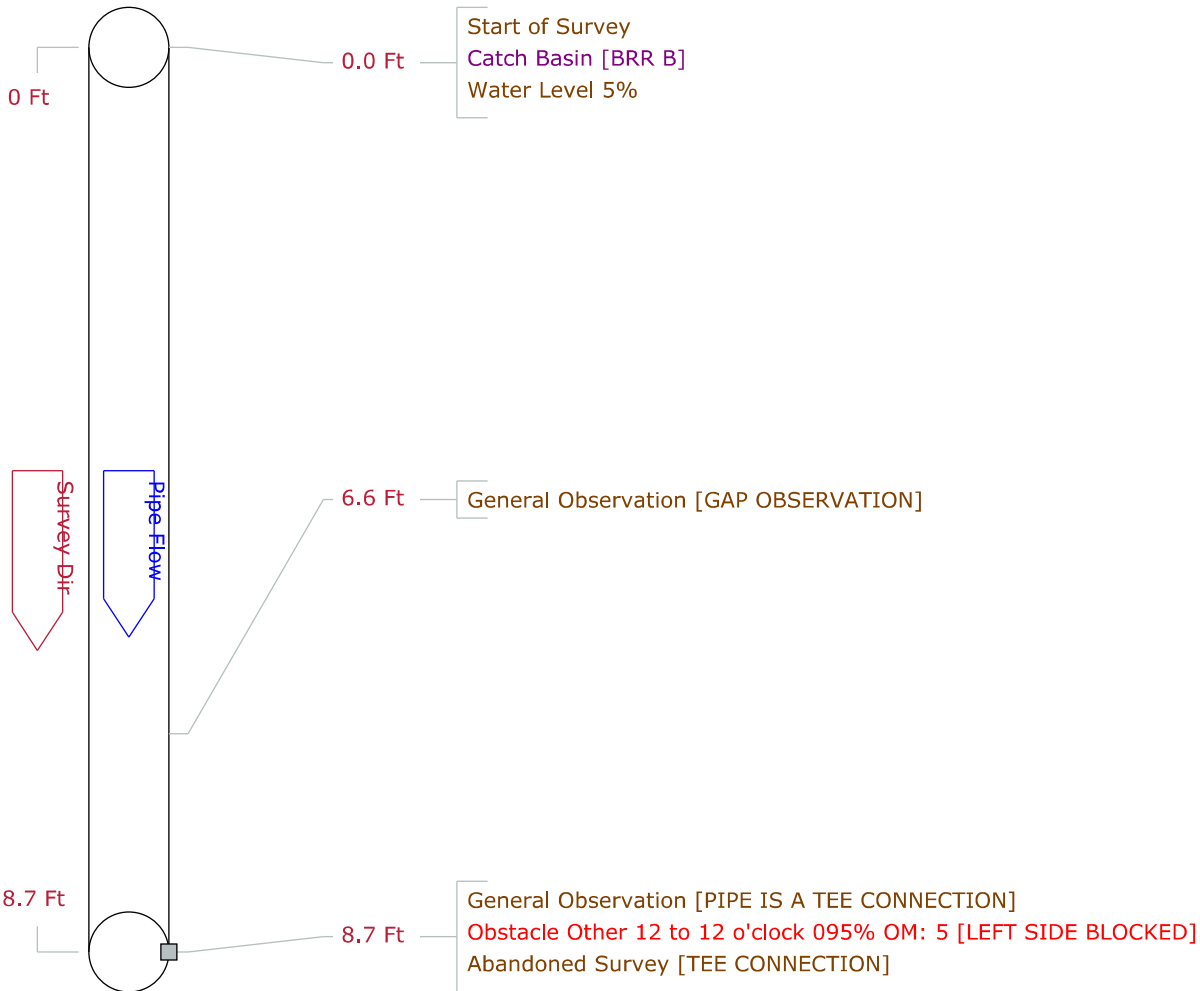
Count	Video	CD Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0		ST							Start of Survey
0.0		ACB							Catch Basin
0.0		MWL			0				Water Level
125.4		MSA							Abandoned Survey

125.4 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>O&amp;M:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>Overall</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000

Pipe Graphic Report of PSR BRR B A for HDR

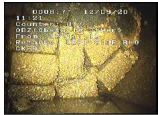
<b>Setup</b> 23	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT		
<b>Drainage</b>		<b>Survey Customer</b>			
<b>P/O #</b>	<b>Date</b> 2020/12/09	<b>Time</b> 11:14	<b>Street</b> BROAD RIVER RD		
<b>City</b> COLUMBIA	<b>Further location details</b>				
<b>Up</b> BRR B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Down</b> BRR C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>		<b>Media No</b>	
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b>	ins	Preclean J	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b>	<b>Total length</b>	<b>Ft</b>	<b>Length Surveyed</b> 08.70 <b>Ft</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>		
<b>Purpose</b>	<b>Cat</b>				
<b>Additional info</b>	SET UP AT ABANDONED ECONOMY INN		<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>			<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads			<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>		<b>Elevation</b>		
<b>Coordinate System</b>			<b>GPS Accuracy</b>		



<b>Work Order</b>		<b>Setup 23</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/09
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snapshots\CAROLNA CROSSROADS\	
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\	
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\	



**Video Index** **Count** 6.6 Ft  
**Code** General Observation  
**Remarks** GAP OBSERVATION  
**File Name** 197.jpg



**Video Index** **Count** 8.7 Ft  
**Code** Obstacle Other  
**Remarks** LEFT SIDE BLOCKED  
**File Name** 198.jpg



<b>Work Order</b>			<b>Setup 23</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/09	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR BRR B A for HDR**

<b>Setup</b> 23	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2020/12/09	<b>Time</b> 11:14	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> BRR B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> BRR C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Down	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean J</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 8.7 Ft
<b>Purpose</b>	<b>Cat</b>	<b>Weather</b>	<b>Pressure</b>
<b>Additional info</b> SET UP AT ABANDONED ECONOMY INN	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							BRR B
0.0			MWL Water Level			5				
6.6			MGO General Observation							GAP OBSERVATION
8.7			MGO General Observation							PIPE IS A TEE CONNECTION
8.7			OBZ Obstacle Other			95	12	12		LEFT SIDE BLOCKED
8.7			MSA Abandoned Survey							TEE CONNECTION

8.7 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>O&amp;M:</b> Pipe Rating 5	Pipe Ratings Index 5	Quick Rating 5100
	<b>Overall</b> Pipe Rating 5	Pipe Ratings Index 5	Quick Rating 5100



Pipe Graphic Report of PSR BRR B B for HDR

<b>Setup</b> 24	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT		
<b>Drainage</b>		<b>Survey Customer</b>			
<b>P/O #</b>	<b>Date</b> 2020/12/09	<b>Time</b> 11:24	<b>Street</b> BROAD RIVER RD		
<b>City</b> COLUMBIA	<b>Further location details</b>				
<b>Up</b> BRR B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Down</b> BRR A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>		<b>Media No</b>	
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b>	<b>ins</b>	<b>Preclean Z</b>	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b>	<b>Total length</b>	<b>Ft</b>	<b>Length Surveyed</b> 03.70 <b>Ft</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>		
<b>Purpose</b>	<b>Cat</b>				
<b>Additional info</b>	SET UP AT ABANDONED ECONOMY INN		<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>			<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads			<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>		<b>Elevation</b>		
<b>Coordinate System</b>			<b>GPS Accuracy</b>		



<b>Work Order</b>			<b>Setup 24</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/09	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 0.0 Ft  
**Code** Broken Void Visible  
**Remarks** BROKEN WIRE VISIBLE  
**File Name** 200.jpg



**Video Index** **Count** 3.7 Ft  
**Code** Obstacle Other  
**Remarks** METAL OR PLASTIC COVER  
**File Name** 203.jpg



**Video Index** **Count** 3.7 Ft  
**Code** Obstacle Other  
**Remarks** BLOCKAGE AHEAD POSSIBLE JUNCTION  
**File Name** 201.jpg



**Video Index** **Count** 3.7 Ft  
**Code** Obstacle Other  
**Remarks** BLOCKAGE AHEAD POSSIBLE JUNCTION  
**File Name** 202.jpg

<b>Work Order</b>			<b>Setup 24</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/09	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR BRR B B for HDR**

<b>Setup</b> 24	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2020/12/09	<b>Time</b> 11:24	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> BRR B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> BRR A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Down	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean Z</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Length Surveyed</b> 3.7 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b> SET UP AT ABANDONED ECONOMY INN	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							BRR B
0.0			MWL Water Level			0				
0.0			BVV Broken Void Visible				12			BROKEN WIRE VISIBLE
3.7			OBZ Obstacle Other			10	05	07		METAL OR PLASTIC COVER
3.7			OBZ Obstacle Other			100	12	12		BLOCKAGE AHEAD POSSIBLE JU
3.7			MSA Abandoned Survey							OBJECT BLOCKED CAMERA

3.7 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 5	Pipe Ratings Index 5	Quick Rating 5100
	<b>O&amp;M:</b> Pipe Rating 7	Pipe Ratings Index 3.5	Quick Rating 5121
	<b>Overall</b> Pipe Rating 12	Pipe Ratings Index 8.5	Quick Rating 5221

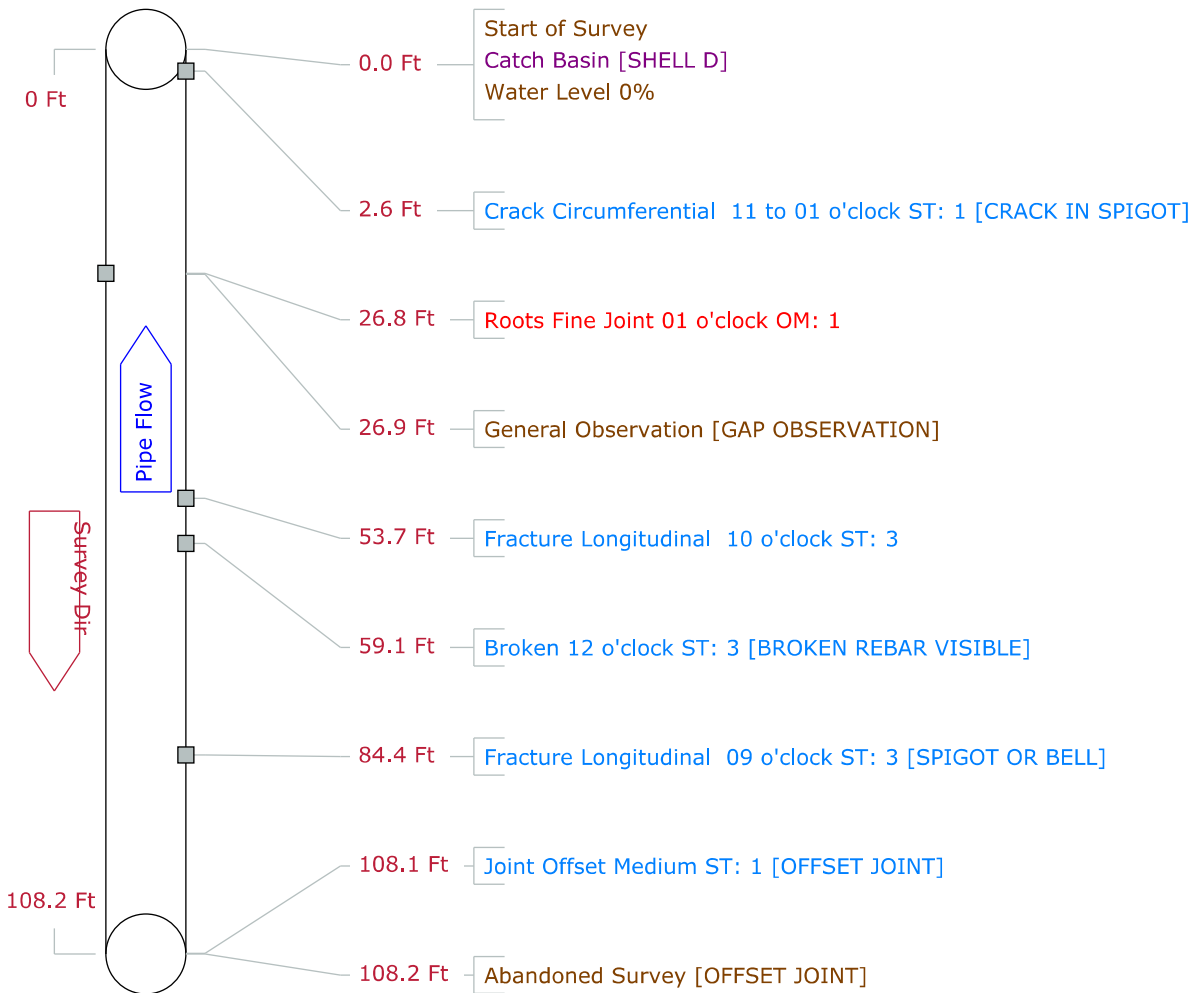




Pipe Graphic Report of PSR SHELL C A for HDR

EP-4226

<b>Setup</b> 28	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2020/12/15	<b>Time</b> 16:14	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL GRATE C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL D	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean J</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 108.20 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP AT TITLE LOAN OFFICE	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



<b>Work Order</b>			<b>Setup 28</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/15	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 2.6 Ft  
**Code** Crack Circumferential  
**Remarks** CRACK IN SPIGOT  
**File Name** 215.jpg



**Video Index** **Count** 26.8 Ft  
**Code** Roots Fine Joint  
**Remarks**  
**File Name** 216.jpg



**Video Index** **Count** 26.9 Ft  
**Code** General Observation  
**Remarks** GAP OBSERVATION  
**File Name** 217.jpg



**Video Index** **Count** 53.7 Ft  
**Code** Fracture Longitudinal  
**Remarks**  
**File Name** 218.jpg



**Video Index** **Count** 59.1 Ft  
**Code** Broken  
**Remarks** BROKEN REBAR VISIBLE  
**File Name** 219.jpg



**Video Index** **Count** 84.4 Ft  
**Code** Fracture Longitudinal  
**Remarks** SPIGOT OR BELL  
**File Name** 220.jpg



**Video Index** **Count** 108.1 Ft  
**Code** Joint Offset Medium  
**Remarks** OFFSET JOINT  
**File Name** 221.jpg

<b>Work Order</b>			<b>Setup 28</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/15	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

Tabular Report of PSR SHELL C A for HDR

EP-4226

Setup	28	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT
Drainage	Survey Customer						
P/O #	Date	2020/12/15	Time	16:14	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details					
Up	SHELL GRATE C	Rim to invert	Grade to invert	Rim to grade	Ft		
Down	SHELL D	Rim to invert	Grade to invert	Rim to grade	Ft		
Use	Stormwater	Direction	Up	Flow control	Media No		
Shape	Circular	Height	15	Width	ins	Preclean	J
Material	Reinforced Concrete Pipe	Joint length	Ft	Total length	Ft	Length Surveyed	108.2 Ft
Lining		Year laid		Year rehabilitated		Weather	
Purpose		Cat				Pressure	
Additional info	SET UP AT TITLE LOAN OFFICE				Structural	O & M	Constructional
Location					Miscellaneous		
Project	Carolina Crossroads			Work Order			
Northing	Easting			Elevation			
Coordinate System				GPS Accuracy			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							SHELL D
0.0			MWL Water Level			0				
2.6			CC Crack Circumferential				J	11	01	CRACK IN SPIGOT
26.8			RFJ Roots Fine Joint				J	01		
26.9			MGO General Observation							GAP OBSERVATION
53.7			FL Fracture Longitudinal				J	10		
59.1			B Broken				J	12		BROKEN REBAR VISIBLE
84.4			FL Fracture Longitudinal				J	09		SPIGOT OR BELL
108.1			JOM Joint Offset Medium							OFFSET JOINT
108.2			MSA Abandoned Survey							OFFSET JOINT

108.2 Ft Total Length Surveyed

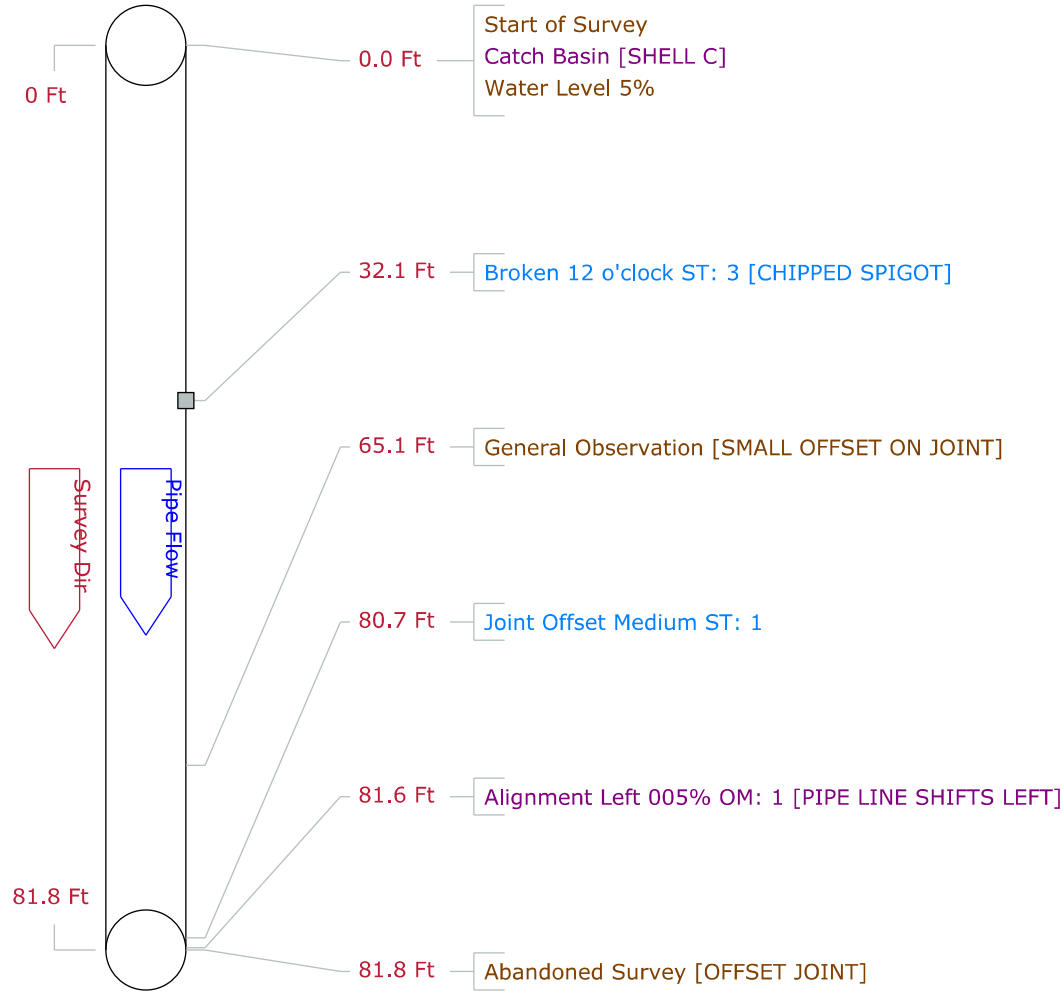
Scores	Structural:	Pipe Rating	11	Pipe Ratings Index	2.2	Quick Rating	3312
	O&M:	Pipe Rating	1	Pipe Ratings Index	1	Quick Rating	1100
	Overall	Pipe Rating	12	Pipe Ratings Index	3.2	Quick Rating	3313



SCA Underground  
Phone:(803)730-3568

Pipe Graphic Report of PSR SHELL C B for HDR

<b>Setup</b> 25	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2020/12/09	<b>Time</b> 12:56	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL GRATE C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL D	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 81.80 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP AT SHELL STATION EXIT	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



<b>Work Order</b>	<b>Setup 25</b>
<b>Video</b>	<b>Survey Date</b> 2020/12/09
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\



**Video Index** **Count** 32.1 Ft  
**Code** Broken  
**Remarks** CHIPPED SPIGOT  
**File Name** 205.jpg



**Video Index** **Count** 65.1 Ft  
**Code** General Observation  
**Remarks** SMALL OFFSET ON JOINT  
**File Name** 206.jpg



**Video Index** **Count** 80.7 Ft  
**Code** Joint Offset Medium  
**Remarks**  
**File Name** 207.jpg

<b>Work Order</b>			<b>Setup 25</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/09	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



Tabular Report of PSR SHELL C B for HDR

EP-4226

Setup	25	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT
Drainage	Survey Customer						
P/O #	Date	2020/12/09	Time	12:56	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details					
Up	SHELL GRATE C	Rim to invert	Grade to invert	Rim to grade	Ft		
Down	SHELL D	Rim to invert	Grade to invert	Rim to grade	Ft		
Use	Stormwater	Direction	Down	Flow control	Media No		
Shape	Circular	Height	15	Width	ins	Preclean J	Date Cleaned
Material	Reinforced Concrete Pipe	Joint length	Ft	Total length	Ft	Length Surveyed	81.8 Ft
Lining		Year laid		Year rehabilitated		Weather	
Purpose		Cat				Pressure	
Additional info	SET UP AT SHELL STATION EXIT				Structural	O & M	Constructional
Location					Miscellaneous		
Project	Carolina Crossroads			Work Order			
Northing				Elevation			
Coordinate System				GPS Accuracy			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							SHELL C
0.0			MWL Water Level			5				
32.1			B Broken				J 12			CHIPPED SPIGOT
65.1			MGO General Observation							SMALL OFFSET ON JOINT
80.7			JOM Joint Offset Medium							
81.6			LL Alignment Left			5				PIPE LINE SHIFTS LEFT
81.8			MSA Abandoned Survey							OFFSET JOINT

81.8 Ft Total Length Surveyed

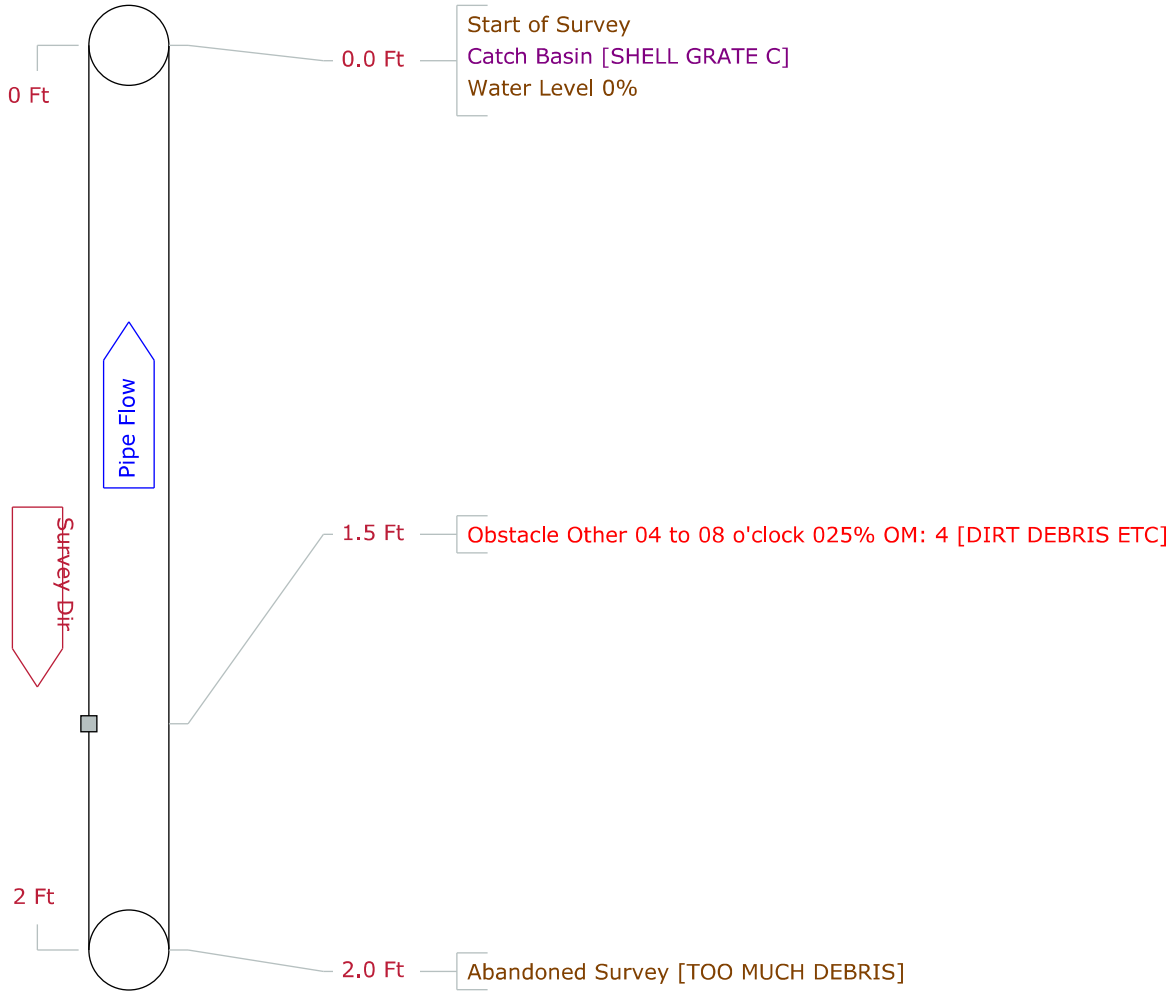
Scores	Structural:	Pipe Rating 4	Pipe Ratings Index 2	Quick Rating 3111
	O&M:	Pipe Rating 1	Pipe Ratings Index 1	Quick Rating 1100
	Overall	Pipe Rating 5	Pipe Ratings Index 3	Quick Rating 3112



SCA Underground  
Phone:(803)730-3568

Pipe Graphic Report of PSR SHELL GRATE J B for HDR

<b>Setup</b> 31	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2020/12/21	<b>Time</b> 15:42	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL GRATE J	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL GRATE C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean Z</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 02.00 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP AT SHELL STATION EXIT	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



<b>Work Order</b>			<b>Setup 31</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/21	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snapshots\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index**                      **Count** 1.5 Ft  
**Code** Obstacle Other  
**Remarks** DIRT DEBRIS ETC  
**File Name** 227.jpg

<b>Work Order</b>			<b>Setup 31</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/21	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR SHELL GRATE J B for HDR**

<b>Setup</b> 31	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2020/12/21	<b>Time</b> 15:42	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL GRATE J	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Down</b> SHELL GRATE C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Up	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean Z</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 2.0 <b>Ft</b>
<b>Purpose</b>	<b>Cat</b>	<b>Weather</b>	<b>Pressure</b>
<b>Additional info</b> SET UP AT SHELL STATION EXIT	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

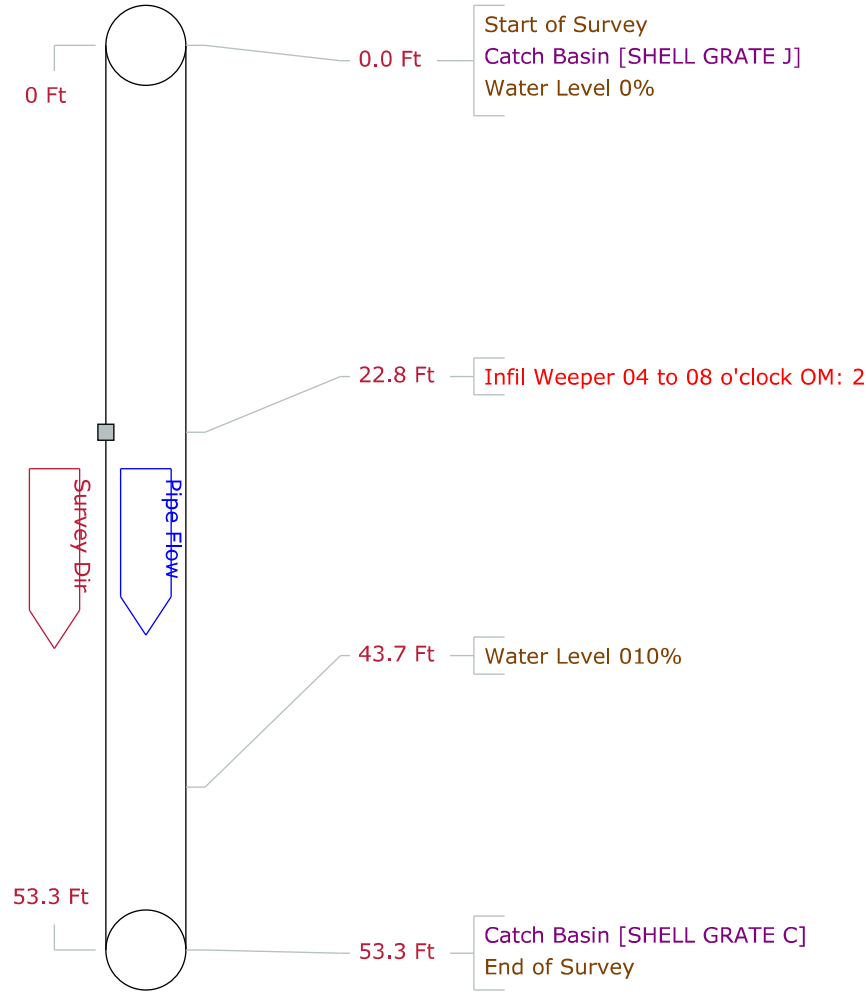
Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							SHELL GRATE C
0.0			MWL Water Level			0				
1.5			OBZ Obstacle Other			25	04	08		DIRT DEBRIS ETC
2.0			MSA Abandoned Survey							TOO MUCH DEBRIS

2.0 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>O&amp;M:</b> Pipe Rating 4	Pipe Ratings Index 4	Quick Rating 4100
	<b>Overall</b> Pipe Rating 4	Pipe Ratings Index 4	Quick Rating 4100

Pipe Graphic Report of PSR SHELL GRATE J A for HDR

<b>Setup</b> 50	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2021/02/24	<b>Time</b> 15:10	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL GRATE J	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> SHELL GRATE C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>PreClean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 53.3 Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 53.30 Ft
<b>Purpose</b>	<b>Weather</b>		
<b>Additional info</b>	SET UP AT SHELL STATION		<b>Cat</b>
<b>Location</b>			Structural O & M Constructional Miscellaneous Hydraulic
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



<b>Work Order</b>			<b>Setup 50</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/24	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index**                      **Count** 22.8 Ft  
**Code** Infil Weeper  
**Remarks**  
**File Name** 338.jpg



<b>Work Order</b>			<b>Setup 50</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/24	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR SHELL GRATE J A for HDR**

<b>Setup</b> 50	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2021/02/24	<b>Time</b> 15:10	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> SHELL GRATE J	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Down</b> SHELL GRATE C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Down	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean</b> J
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 53.3 Ft	<b>Length Surveyed</b> 53.3 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b> SET UP AT SHELL STATION	<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>		<span style="color: brown;">Miscellaneous</span>
<b>Location</b>	<b>Work Order</b>		
<b>Project</b> Carolina Crossroads	<b>Elevation</b>		
<b>Northing</b>	<b>Easting</b>	<b>GPS Accuracy</b>	
<b>Coordinate System</b>			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							SHELL GRATE J
0.0			MWL Water Level			0				
22.8			IW Infil Weeper				J	04	08	
43.7			MWL Water Level			10				
53.3			ACB Catch Basin							SHELL GRATE C
53.3			FH End of Survey							

53.3 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>O&amp;M:</b> Pipe Rating 2	Pipe Ratings Index 2	Quick Rating 2100
	<b>Overall</b> Pipe Rating 2	Pipe Ratings Index 2	Quick Rating 2100





EP-4228

### Project Information

<b>Surveyor Name</b>	GCS	<b>Certificate Number</b>	U-0917-07009391
<b>Owner</b>	SCDOT	<b>Customer</b>	HDR
<b>Drainage Area</b>		<b>PO Number</b>	
<b>Pipe Segment Reference</b>		<b>Date</b>	12/28/2020 13:46
<b>Street</b>	BROAD RIVER RD	<b>City</b>	COLUMBIA
<b>Comments</b>			

### Manhole

<b>Upstream MH</b>	SHELL INLET	<b>Rim to Invert (U)</b>	
<b>Grade to Invert (U)</b>		<b>Rim to Grade (U)</b>	
<b>Downstream MH</b>	SHELL GRATE J	<b>Rim to Invert (D)</b>	
<b>Grade to Invert (D)</b>		<b>Rim to Grade (D)</b>	
<b>Pipe Use</b>	Stormwater Pipe	<b>Direction of Survey</b>	Downstream

### Pipe

<b>Height (Diameter)</b>	15	<b>Width</b>	
<b>Shape</b>	Circular	<b>Material</b>	Reinforced Concrete Pipe
<b>Lining Method</b>		<b>Pipe Joint Length</b>	
<b>Total Length</b>	26.3	<b>Length Surveyed</b>	26.3
<b>Year Constructed</b>		<b>Year Renewed</b>	

### Misc

<b>Flow Control</b>		<b>Media Label</b>	DVD
<b>Purpose</b>		<b>Consequence of Failure</b>	
<b>Pre-Cleaning</b>	No Pre-Cleaning	<b>Date Cleaned</b>	
<b>Weather</b>		<b>Location Code</b>	
<b>Additional Info</b>		<b>Location Details</b>	SET UP IN SHELL PARKING LOT

### Custom

<b>Custom 1</b>		<b>Custom 2</b>	
<b>Custom 3</b>		<b>Custom 4</b>	
<b>Custom 5</b>		<b>Custom 6</b>	
<b>Custom 7</b>		<b>Custom 8</b>	
<b>Custom 9</b>		<b>Custom 10</b>	

### Project

<b>Reverse Setup ID</b>		<b>Sheet (Group) Number</b>	
<b>Imperial Units (US)</b>	True	<b>Pressure Value</b>	
<b>Work Order</b>		<b>Project</b>	CAROLINA CROSSROADS
<b>Coating Method</b>		<b>Completed</b>	No

## Insp Tech Used

<b>CCTV</b>	Yes	<b>Laser</b>	No
<b>Sidewall</b>	No	<b>Sonar</b>	No
<b>Zoom</b>	No	<b>Other</b>	No

EP-4228

## Inspection

**Inspection Status** Complete Inspection

**Reviewed By**

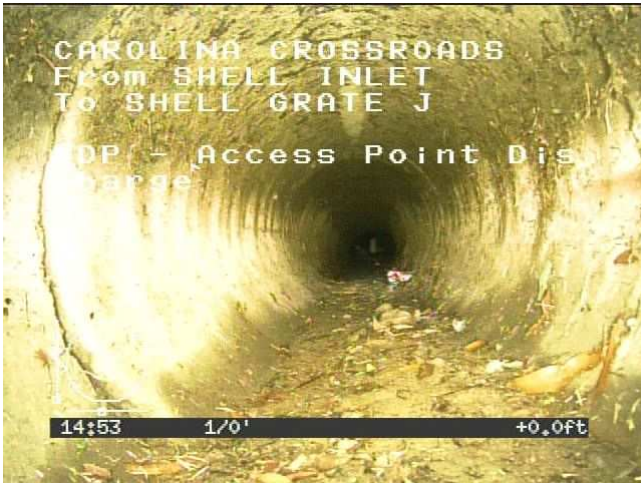


**Reviewer Certificate  
Number**

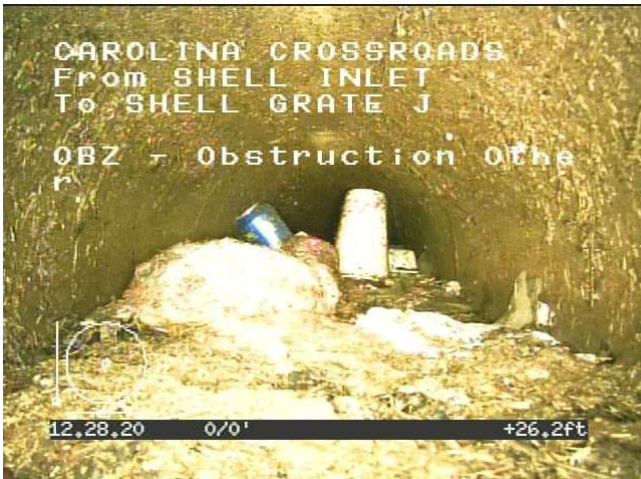
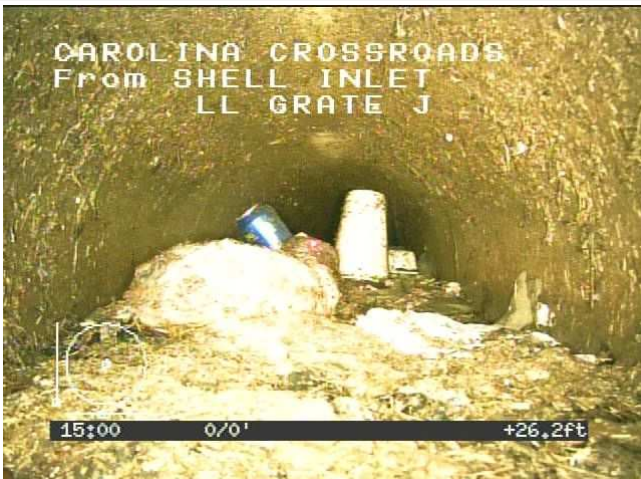
## Count Groups

<b>Taps</b>	0	<b>Roots</b>	0
<b>Cracks / Fractures</b>	0	<b>Broken / Holes / Collapse</b>	0
<b>Deposits</b>	0	<b>Obstruction</b>	1
<b>Abandoned Survey</b>	1		

Created with the  report generator

<b>Project: CAROLINA CROSSROADS</b>	
<b>Date:</b> 12/28/2020 1:46:00 PM	<b>Pipe Segment Reference:</b>
<b>Street:</b> BROAD RIVER RD	<b>Upstream MH:</b> SHELL INLET
<b>Length Surveyed:</b> 26.3	<b>Downstream MH:</b> SHELL GRATE J
<b>Run Number:</b>	<b>Direction of Survey:</b> Downstream
<b>Height (Diameter):</b> 15	<b>Material:</b> Reinforced Concrete Pipe

Distance	Fault Observation	Time	Picture
0.0	<p><b>EP-4228</b></p> <p><b>Access Point Discharge Point</b> Severity: None</p>	22	
0.0	<p><b>Miscellaneous Water Level</b> Severity: None Percent: 0</p>	42	
15.9	<p><b>Miscellaneous General Observation</b> Severity: None Remarks: GAP OBSERVATION 0.961</p>	04:11	

Distance	Fault Observation	Time	Picture
26.3	<p><b>Obstruction Other</b>  <b>Position: 4 To 8</b>  <b>Severity: None</b>  <b>Percent: 40</b>  <b>Remarks: DIRT AND DEBRIS IN PIPE</b>  <b>Maint Weight: 5</b></p>	06:28	
26.3	<p><b>Miscellaneous</b>  <b>Abandoned Survey</b>  <b>Severity: None</b>  <b>Remarks: DEBRIS IN PIPE</b></p>	06:49	

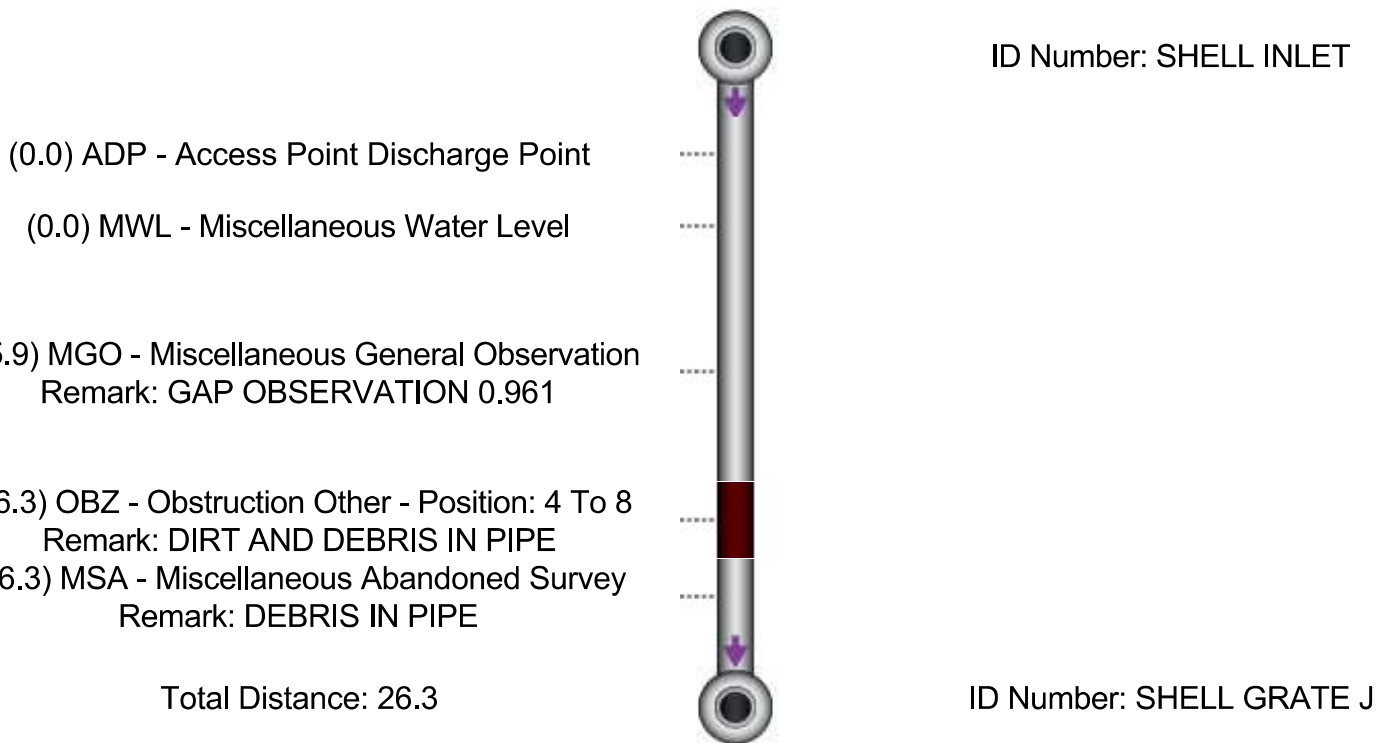
Created with the  report generator

EP-4228



Project: CAROLINA CROSSROADS	
<b>Date:</b> 12/28/2020 1:46:00 PM	<b>Pipe Segment Reference:</b>
<b>Street:</b> BROAD RIVER RD	<b>Upstream MH:</b> SHELL INLET
<b>Length Surveyed:</b> 26.3	<b>Downstream MH:</b> SHELL GRATE J
<b>Run Number:</b>	<b>Direction of Survey:</b> Downstream
<b>Height (Diameter):</b> 15	<b>Material:</b> Reinforced Concrete Pipe

Severity
Light-1
Moderate-2
Average-3
Heavy-4
Severe-5





# Nassco C.C.T.V. Defect Code Information

EP-4228

Grade	Structural	O&M	Overall
5	0	5	5
4	0	0	0
3	0	0	0
2	0	0	0
1	0	0	0
Overall	0	5	5
Number of Defects	0	1	1
Pipe Rating	0000	5100	5100
Pipe Ratings Index	0	5	5

# Nassco C.C.T.V. Defect Code Information

Distance	Video Ref	Code	Cont Defect	Value			Joint	Circumferential Location	
				Dimension		%		At / From	To
				1st	2nd				
0	22	ADP - Access Point Discharge Point							
0	42	MWL - Miscellaneous Water Level			0				
15.9	251	MGO - Miscellaneous General Observation							
		GAP OBSERVATION 0.961							
26.3	388	OBZ - Obstruction Other			40		4	8	
		DIRT AND DEBRIS IN PIPE							
26.3	409	MSA - Miscellaneous Abandoned Survey							
		DEBRIS IN PIPE							

# Videos Created for Session CAROLINA CROSSROADS

SHELL INLET\_SHELL GRATE J\_20201228\_27566.mp4 Size: 157 MB

Your browser does not support the video tag.

EP-4228

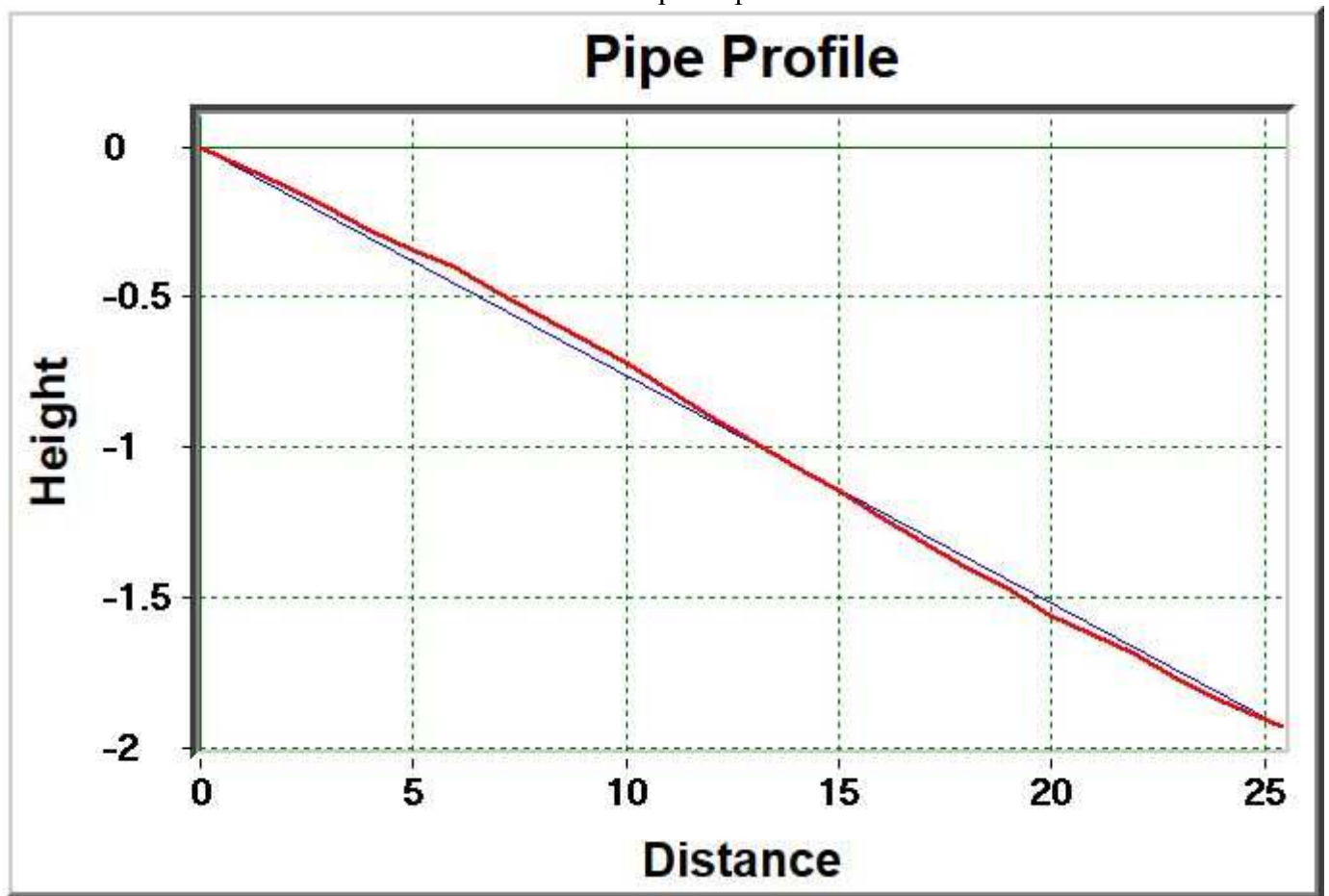
Created with the  report generator

# Project: CAROLINA CROSSROADS

Date: 12/28/2020 1:46:00 PM	Pipe Segment Reference:
Street: BROAD RIVER RD	Upstream MH: SHELL INLET
Length Surveyed: 26.3	Downstream MH: SHELL GRATE J
Run Number:	Direction of Survey: Downstream
Height (Diameter): 15	Material: Reinforced Concrete Pipe

EP-4228

Percent Grade Mean: -7.61  
Plot Distance From: 0 To 27  
Max Percent Difference: 3  
Number of Window Values: 1  
Percent Difference Max for Windows Values: 60  
Number of Feet to Average: 1  
Final number of points plotted: 25



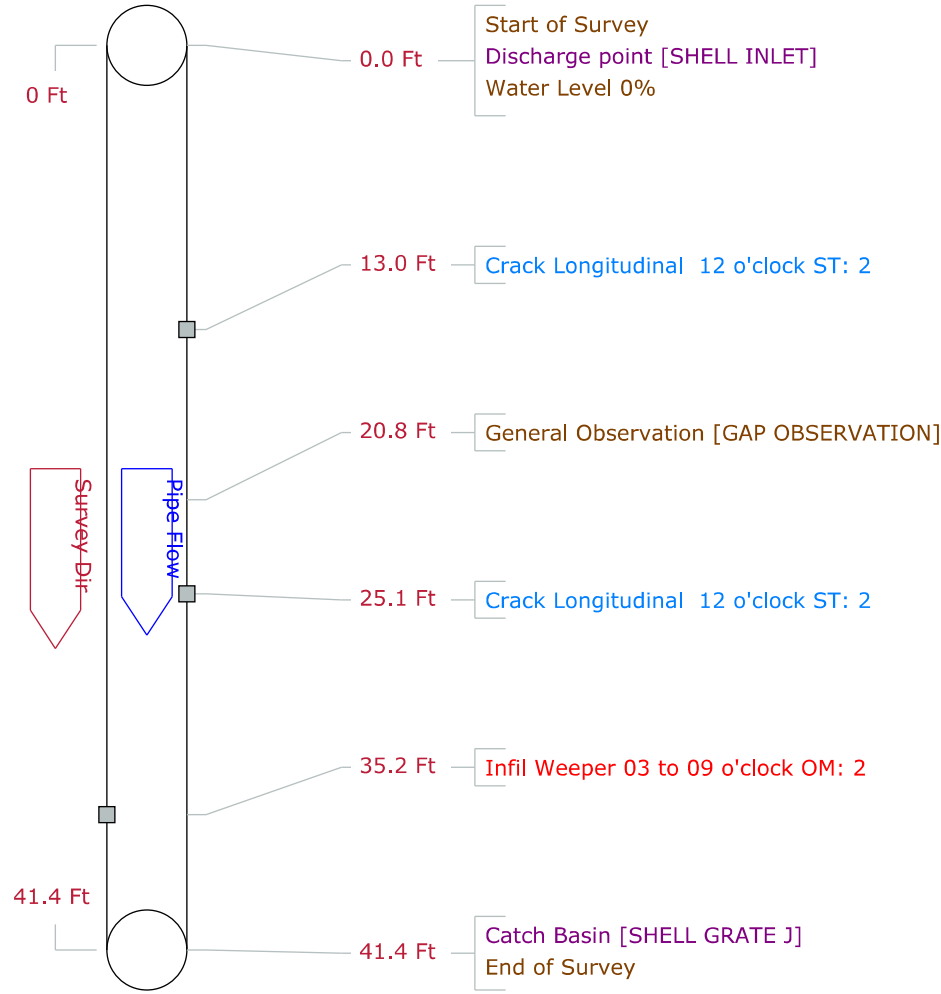
# Additional Reports for Session CAROLINA CROSSROADS

EP-4228

Created with the  report generator

Pipe Graphic Report of PSR SHELL INLET A for HDR

<b>Setup</b> 49	<b>Surveyor</b> GCS	<b>Certificate #</b> A	<b>U-0917-07009391</b>	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2021/02/24	<b>Time</b> 14:56	<b>Street</b> BROAD RIVER RD	
<b>City</b> COLUMBIA	<b>Further location details</b>			
<b>Up</b> SHELL INLET	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>
<b>Down</b> SHELL GRATE J	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>		<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 15	<b>Width</b> ins	<b>Preclean</b> J	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 41.4 Ft	<b>Length Surveyed</b> 41.40 Ft	
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>	
<b>Purpose</b>	<b>Cat</b>			
<b>Additional info</b>	SET UP AT SHELL STATION		<b>Structural</b>	<b>O &amp; M</b>
<b>Location</b>			<b>Miscellaneous</b>	<b>Hydraulic</b>
<b>Project</b> Carolina Crossroads			<b>Work Order</b>	
<b>Northing</b>	<b>Easting</b>		<b>Elevation</b>	
<b>Coordinate System</b>			<b>GPS Accuracy</b>	



<b>Work Order</b>			<b>Setup 49</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/24	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 13.0 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 333.jpg



**Video Index** **Count** 20.8 Ft  
**Code** General Observation  
**Remarks** GAP OBSERVATION  
**File Name** 334.jpg



**Video Index** **Count** 25.1 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 335.jpg



**Video Index** **Count** 35.2 Ft  
**Code** Infil Weeper  
**Remarks**  
**File Name** 336.jpg



<b>Work Order</b>			<b>Setup 49</b>
<b>Video</b>	<b>Survey Date</b>	2021/02/24	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

Tabular Report of PSR SHELL INLET A for HDR

Setup	49	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT
Drainage	Survey Customer						
P/O #	Date	2021/02/24	Time	14:56	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details					
Up	SHELL INLET	Rim to invert	Grade to invert	Rim to grade	Ft		
Down	SHELL GRATE J	Rim to invert	Grade to invert	Rim to grade	Ft		
Use	Stormwater	Direction	Down	Flow control	Media No		
Shape	Circular	Height	15	Width	ins	Preclean	J
Material	Reinforced Concrete Pipe	Joint length	Ft	Total length	41.4	Ft	Length Surveyed
Lining		Year laid		Year rehabilitated			Weather
Purpose		Cat					Pressure
Additional info	SET UP AT SHELL STATION				Structural	O & M	Constructional
Location					Miscellaneous		
Project	Carolina Crossroads			Work Order			
Northing	Easting			Elevation			
Coordinate System				GPS Accuracy			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ADP Discharge point							SHELL INLET
0.0			MWL Water Level			0				
13.0			CL Crack Longitudinal				J	12		
20.8			MGO General Observation							GAP OBSERVATION
25.1			CL Crack Longitudinal				J	12		
35.2			IW Infil Weeper				J	03 09		
41.4			ACB Catch Basin							SHELL GRATE J
41.4			FH End of Survey							

41.4 Ft Total Length Surveyed

Scores	Structural:	Pipe Rating	4	Pipe Ratings Index	2	Quick Rating	2200
	O&M:	Pipe Rating	2	Pipe Ratings Index	2	Quick Rating	2100
	Overall	Pipe Rating	6	Pipe Ratings Index	4	Quick Rating	2300





EP-4240

### Project Information

<b>Surveyor Name</b>	GCS	<b>Certificate Number</b>	U-0917-07009391
<b>Owner</b>	SCDOT	<b>Customer</b>	HDR
<b>Drainage Area</b>		<b>PO Number</b>	
<b>Pipe Segment Reference</b>		<b>Date</b>	12/28/2020 17:05
<b>Street</b>	BROAD RIVER RD	<b>City</b>	COLUMBIA
<b>Comments</b>			

### Manhole

<b>Upstream MH</b>	KFC GRATE	<b>Rim to Invert (U)</b>	
<b>Grade to Invert (U)</b>		<b>Rim to Grade (U)</b>	
<b>Downstream MH</b>	DENTIST B	<b>Rim to Invert (D)</b>	
<b>Grade to Invert (D)</b>		<b>Rim to Grade (D)</b>	
<b>Pipe Use</b>	Stormwater Pipe	<b>Direction of Survey</b>	Upstream

### Pipe

<b>Height (Diameter)</b>	18	<b>Width</b>	
<b>Shape</b>	Circular	<b>Material</b>	Reinforced Concrete Pipe
<b>Lining Method</b>		<b>Pipe Joint Length</b>	
<b>Total Length</b>	65	<b>Length Surveyed</b>	65
<b>Year Constructed</b>		<b>Year Renewed</b>	

### Misc

<b>Flow Control</b>		<b>Media Label</b>	DVD
<b>Purpose</b>		<b>Consequence of Failure</b>	
<b>Pre-Cleaning</b>	No Pre-Cleaning	<b>Date Cleaned</b>	
<b>Weather</b>		<b>Location Code</b>	
<b>Additional Info</b>		<b>Location Details</b>	SET UP IN DENTIST PARKING LOT

### Custom

<b>Custom 1</b>		<b>Custom 2</b>	
<b>Custom 3</b>		<b>Custom 4</b>	
<b>Custom 5</b>		<b>Custom 6</b>	
<b>Custom 7</b>		<b>Custom 8</b>	
<b>Custom 9</b>		<b>Custom 10</b>	

### Project

<b>Reverse Setup ID</b>		<b>Sheet (Group) Number</b>	
<b>Imperial Units (US)</b>	True	<b>Pressure Value</b>	
<b>Work Order</b>		<b>Project</b>	CAROLINA CROSSROADS
<b>Coating Method</b>		<b>Completed</b>	Yes

## Insp Tech Used

<b>CCTV</b>	Yes	<b>Laser</b>	No
<b>Sidewall</b>	No	<b>Sonar</b>	No
<b>Zoom</b>	No	<b>Other</b>	No

EP-4240

## Inspection

**Inspection Status** Complete Inspection

**Reviewed By**

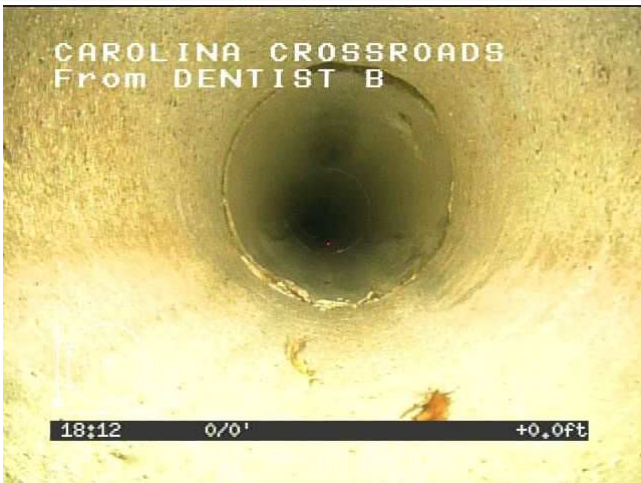
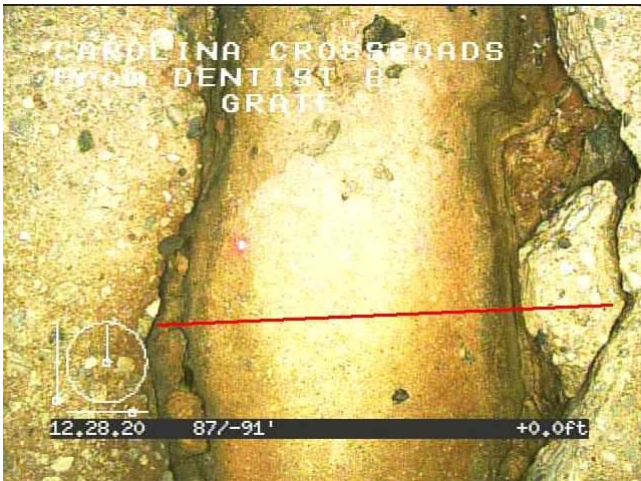
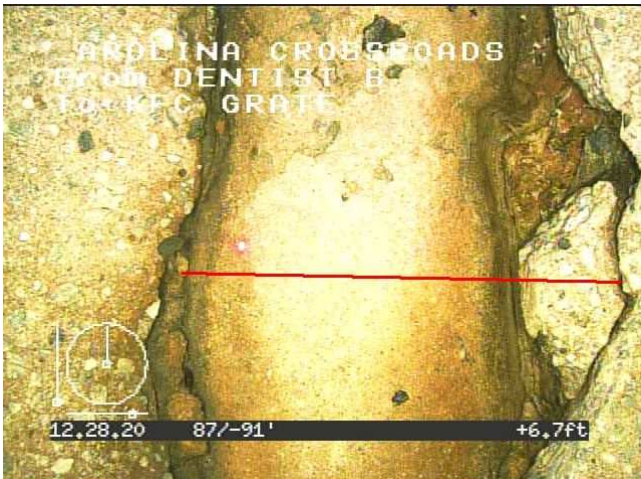
**Reviewer Certificate  
Number**

## Count Groups

<b>Taps</b>	0	<b>Roots</b>	0
<b>Cracks / Fractures</b>	1	<b>Broken / Holes / Collapse</b>	3
<b>Deposits</b>	0	<b>Obstruction</b>	0
<b>Abandoned Survey</b>	0		

Created with the  report generator

Project: CAROLINA CROSSROADS	
Date: 12/28/2020 5:05:00 PM	Pipe Segment Reference:
Street: BROAD RIVER RD	Upstream MH: KFC GRATE
Length Surveyed: 65	Downstream MH: DENTIST B
Run Number:	Direction of Survey: Upstream
Height (Diameter): 18	Material: Reinforced Concrete Pipe

Distance	Fault Observation	Time	Picture
0.0	<p>EP-4240</p> <p>Access Point Catch Basin Severity: None Remarks: DENTIST B</p>	24	
0.0	<p>Miscellaneous Water Level Severity: None Percent: 0</p>	02:14	
6.7	<p>Broken Position: 12 Severity: None Joint Remarks: BROKEN SPIGOT 6.208 Struct Weight: 4</p>	02:57	



Distance	Fault Observation	Time	Picture
31.0	<p style="text-align: center;"><b>EP-4240</b></p> <p><b>Crack Longitudinal</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Struct Weight: 2</b></p>	05:00	 <p>CAROLINA CROSSROADS  From DENTIST B  To KFC GRATE</p> <p>CL - Crack Longitudinal</p> <p>12.28.20 87/-82' +31.0ft</p>
59.4	<p><b>Broken</b>  <b>Position: 11</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Remarks: SPIGOT</b>  <b>Struct Weight: 4</b></p>	07:38	 <p>om DENTIST B  From DENTIST B  To KFC GRATE</p> <p>12.28.20 134/-68' +59.4ft</p>
62.7	<p><b>Hole Soil Visible</b>  <b>Position: 2</b>  <b>Severity: None</b>  <b>Struct Weight: 5</b></p>	08:27	 <p>CAROLINA CROSSROADS  DENTIST B  To KFC GRATE</p> <p>12.28.20 34/-91' +62.7ft</p>

Distance	Fault Observation	Time	Picture
65.0	<p style="text-align: center;"><b>EP-4240</b></p> <p><b>Access Point Catch Basin</b>  <b>Severity: None</b>  <b>Remarks: KFC GRATE</b></p>	08:44	

Created with the  report generator





EP-4240

Project: CAROLINA CROSSROADS	
Date: 12/28/2020 5:05:00 PM	Pipe Segment Reference:
Street: BROAD RIVER RD	Upstream MH: KFC GRATE
Length Surveyed: 65	Downstream MH: DENTIST B
Run Number:	Direction of Survey: Upstream
Height (Diameter): 18	Material: Reinforced Concrete Pipe

Severity
Light-1
Moderate-2
Average-3
Heavy-4
Severe-5

ID Number: DENTIST B

EP-4240

(0.0) ACB - Access Point Catch Basin Remark: DENTIST B

(0.0) MWL - Miscellaneous Water Level

(6.7) B - Broken - Position: 12 Remark: BROKEN SPIGOT 6.208

(31.0) CL - Crack Longitudinal - Position: 12

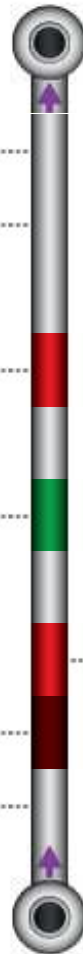
(59.4) B - Broken - Position: 11 Remark: SPIGOT

(62.7) HSV - Hole Soil Visible - Position: 2

(65.0) ACB - Access Point Catch Basin Remark: KFC GRATE

Total Distance: 65

ID Number: KFC GRATE



# Nassco C.C.T.V. Defect Code Information

EP-4240

Grade	Structural	O&M	Overall
5	5	0	5
4	8	0	8
3	0	0	0
2	2	0	2
1	0	0	0
Overall	15	0	15
Number of Defects	4	0	4
Pipe Rating	5142	0000	5142
Pipe Ratings Index	3.8	0	3.8

# Nassco C.C.T.V. Defect Code Information

Distance	Video Ref	Code	Cont Defect	Value			Joint	Circumferential Location	
				Dimension		%		At / From	To
				1st	2nd				
0	24	ACB - Access Point Catch Basin							
DENTIST B									
0	134	MWL - Miscellaneous Water Level				0			
6.7	177	B - Broken					X	12	
BROKEN SPIGOT 6.208									
31	300	CL - Crack Longitudinal					X	12	
59.4	458	B - Broken					X	11	
SPIGOT									
62.7	507	HSV - Hole Soil Visible						2	
65	524	ACB - Access Point Catch Basin							
KFC GRATE									

# Videos Created for Session CAROLINA CROSSROADS

DENTIST B\_KFC GRATE\_20201228\_24169.mp4 Size: 203 MB

Your browser does not support the video tag.

EP-4240

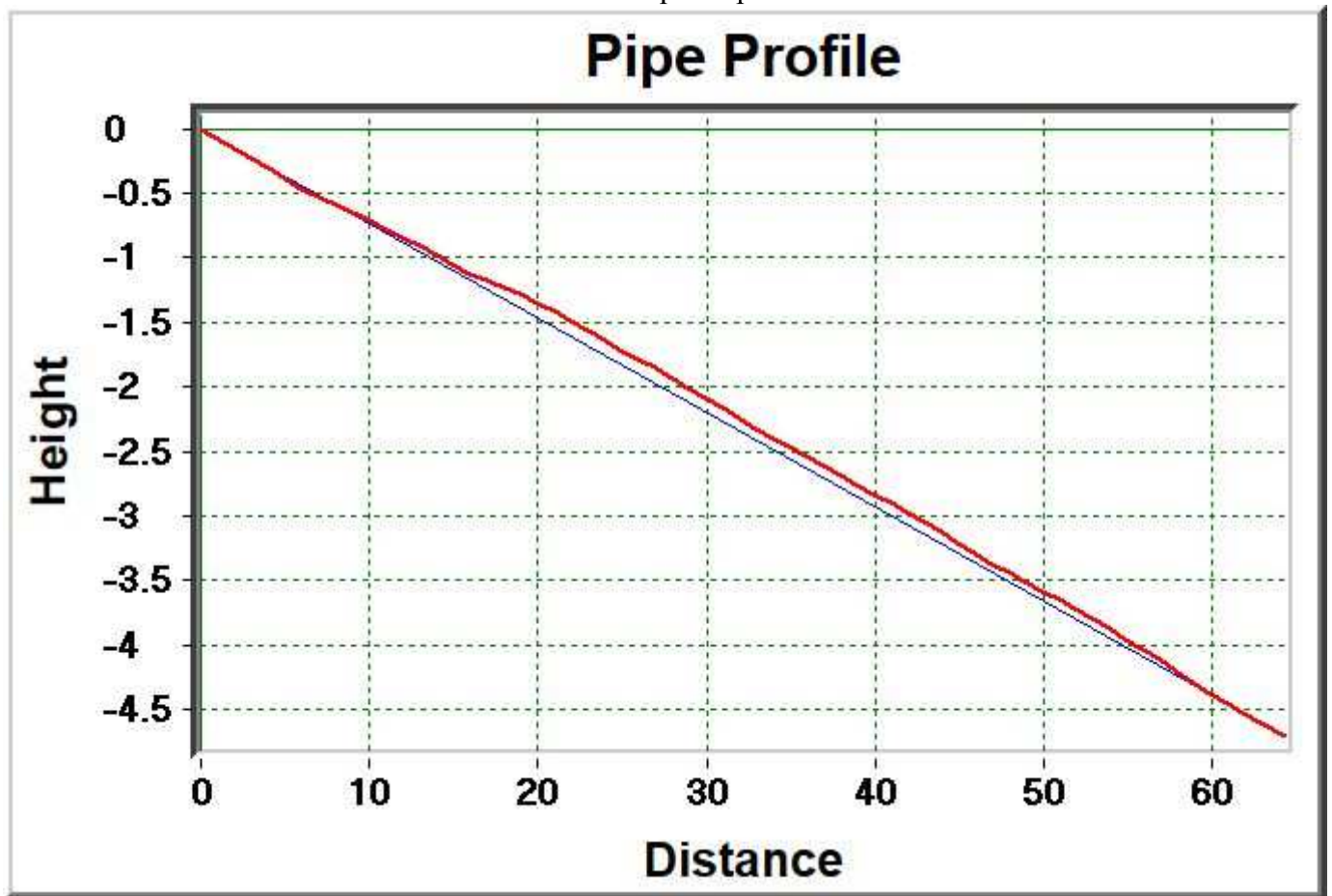
Created with the  report generator

# Project: CAROLINA CROSSROADS

Date: 12/28/2020 5:05:00 PM	Pipe Segment Reference:
Street: BROAD RIVER RD	Upstream MH: KFC GRATE
Length Surveyed: 65	Downstream MH: DENTIST B
Run Number:	Direction of Survey: Upstream
Height (Diameter): 18	Material: Reinforced Concrete Pipe

EP-4240

Percent Grade Mean: -7.35  
Plot Distance From: 0 To 66  
Max Percent Difference: 3  
Number of Window Values: 1  
Percent Difference Max for Windows Values: 60  
Number of Feet to Average: 1  
Final number of points plotted: 62



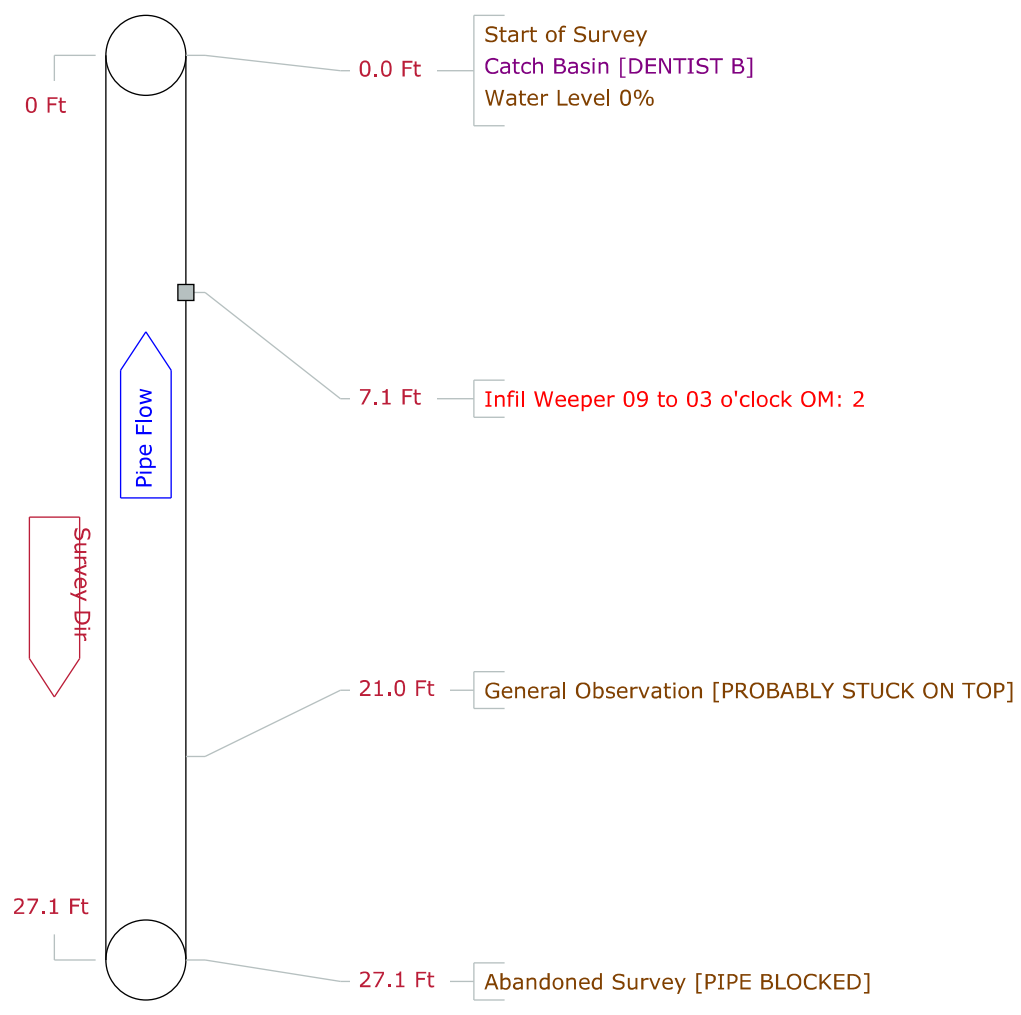
# Additional Reports for Session CAROLINA CROSSROADS

EP-4240

Created with the  report generator

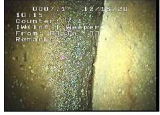
Pipe Graphic Report of PSR KFC GRATE B for HDR

<b>Setup</b> 29	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT		
<b>Drainage</b>		<b>Survey Customer</b>			
<b>P/O #</b>	<b>Date</b> 2020/12/16	<b>Time</b> 10:13	<b>Street</b> BROAD RIVER RD		
<b>City</b> COLUMBIA	<b>Further location details</b>				
<b>Up</b> KFC GRATE	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Down</b> DENTIST B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>		<b>Media No</b>	
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b>	<b>ins</b>	<b>Preclean Z</b>	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b>	<b>Total length</b>	<b>Ft</b>	<b>Length Surveyed</b> 27.10 <b>Ft</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>		
<b>Purpose</b>	<b>Cat</b>				
<b>Additional info</b>	SET UP DENTIST PARKING LOT		<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>			<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads			<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>		<b>Elevation</b>		
<b>Coordinate System</b>			<b>GPS Accuracy</b>		





<b>Work Order</b>			<b>Setup 29</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/16	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** Count 7.1 Ft  
**Code** Infil Weeper  
**Remarks**  
**File Name** 223.jpg



**Video Index** Count 21.0 Ft  
**Code** General Observation  
**Remarks** PROBABLY STUCK ON TOP  
**File Name** 224.jpg

<b>Work Order</b>			<b>Setup 29</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/16	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

Tabular Report of PSR KFC GRATE B for HDR

Setup	29	Surveyor	GCS	Certificate #	U-0917-07009391	System Owner	SCDOT
Drainage	Survey Customer						
P/O #	Date	2020/12/16	Time	10:13	Street	BROAD RIVER RD	
City	COLUMBIA	Further location details					
Up	KFC GRATE	Rim to invert	Grade to invert	Rim to grade	Ft		
Down	DENTIST B	Rim to invert	Grade to invert	Rim to grade	Ft		
Use	Stormwater	Direction	Up	Flow control	Media No		
Shape	Circular	Height	18	Width	ins	Preclean	Z
Material	Reinforced Concrete Pipe	Joint length	Ft	Total length	Ft	Length Surveyed	27.1 Ft
Lining		Year laid		Year rehabilitated		Weather	
Purpose		Cat				Pressure	
Additional info	SET UP DENTIST PARKING LOT				Structural	O & M	Constructional
Location					Miscellaneous		
Project	Carolina Crossroads			Work Order			
Northing	Easting			Elevation			
Coordinate System				GPS Accuracy			

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							DENTIST B
0.0			MWL Water Level			0				
7.1			IW Infil Weeper				J	09	03	
21.0			MGO General Observation							PROBABLY STUCK ON TOP
27.1			MSA Abandoned Survey							PIPE BLOCKED

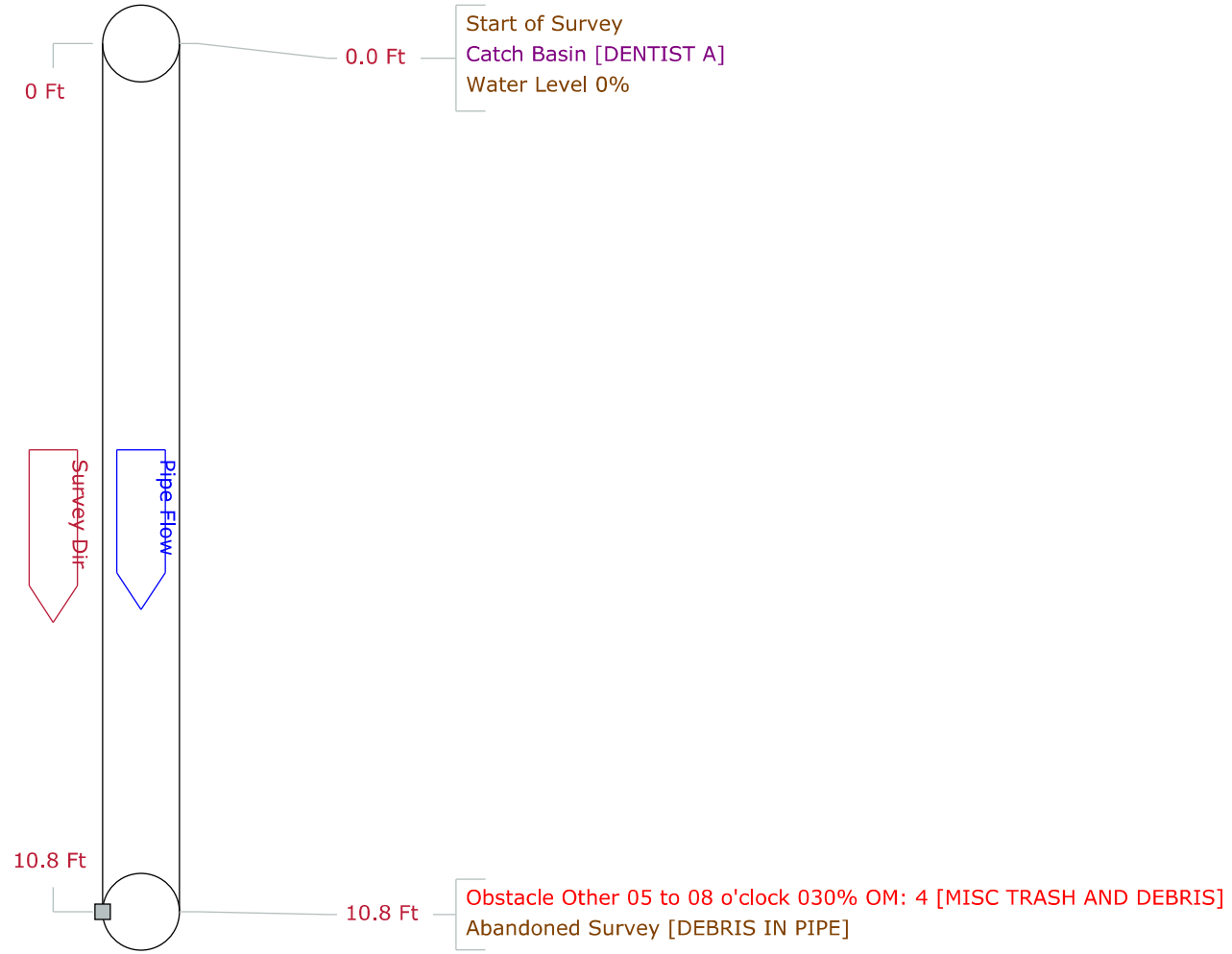
27.1 Ft Total Length Surveyed

Scores	Structural:	Pipe Rating	0	Pipe Ratings Index	0	Quick Rating	0000
	O&M:	Pipe Rating	2	Pipe Ratings Index	2	Quick Rating	2100
	Overall	Pipe Rating	2	Pipe Ratings Index	2	Quick Rating	2100



Pipe Graphic Report of PSR DENTIST A B for HDR

<b>Setup</b> 26	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT		
<b>Drainage</b>		<b>Survey Customer</b>			
<b>P/O #</b>	<b>Date</b> 2020/12/10	<b>Time</b> 9:20	<b>Street</b> BROAD RIVER RD		
<b>City</b> COLUMBIA	<b>Further location details</b>				
<b>Up</b> DENTIST A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Down</b> DENTIST B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>		<b>Media No</b>	
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b>	<b>ins</b>	<b>Preclean</b> Z	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b>	<b>Total length</b>	<b>Ft</b>	<b>Length Surveyed</b> 10.80 <b>Ft</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>		
<b>Purpose</b>	<b>Cat</b>				
<b>Additional info</b>	SET UP DENTIST PARKING LOT		<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>			<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads			<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>		<b>Elevation</b>		
<b>Coordinate System</b>			<b>GPS Accuracy</b>		



CCTV Picture List of DENTIST A B for HDR

<b>Work Order</b>			<b>Setup 26</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/10	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** Count 10.8 Ft  
**Code** Obstacle Other  
**Remarks** MISC TRASH AND DEBRIS  
**File Name** 209.jpg



**Video Index** Count 10.8 Ft  
**Code** Obstacle Other  
**Remarks** MISC TRASH AND DEBRIS  
**File Name** 210.jpg

CCTV Picture List of DENTIST A B for HDR

<b>Work Order</b>			<b>Setup 26</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/10	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**Tabular Report of PSR DENTIST A B for HDR**

<b>Setup</b> 26	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2020/12/10	<b>Time</b> 9:20	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> DENTIST A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Down</b> DENTIST B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Down	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean Z</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 10.8 <b>Ft</b>
<b>Purpose</b>	<b>Cat</b>	<b>Weather</b>	<b>Pressure</b>
<b>Additional info</b> SET UP DENTIST PARKING LOT	<b>Structural</b>		<b>O &amp; M</b> <b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>		
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		

Count	Video	CD	Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0			ST Start of Survey							
0.0			ACB Catch Basin							DENTIST A
0.0			MWL Water Level			0				
10.8			OBZ Obstacle Other			30	05	08		MISC TRASH AND DEBRIS
10.8			MSA Abandoned Survey							DEBRIS IN PIPE

10.8 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>O&amp;M:</b> Pipe Rating 4	Pipe Ratings Index 4	Quick Rating 4100
	<b>Overall</b> Pipe Rating 4	Pipe Ratings Index 4	Quick Rating 4100







EP-4242

### Project Information

<b>Surveyor Name</b>	GCS	<b>Certificate Number</b>	U-0917-07009391
<b>Owner</b>	SCDOT	<b>Customer</b>	HDR
<b>Drainage Area</b>		<b>PO Number</b>	
<b>Pipe Segment Reference</b>		<b>Date</b>	12/28/2020 16:37
<b>Street</b>	BROAD RIVER RD	<b>City</b>	COLUMBIA
<b>Comments</b>			

### Manhole

<b>Upstream MH</b>	DENTIST B	<b>Rim to Invert (U)</b>	
<b>Grade to Invert (U)</b>		<b>Rim to Grade (U)</b>	
<b>Downstream MH</b>	DENTIST C	<b>Rim to Invert (D)</b>	
<b>Grade to Invert (D)</b>		<b>Rim to Grade (D)</b>	
<b>Pipe Use</b>	Stormwater Pipe	<b>Direction of Survey</b>	Downstream

### Pipe

<b>Height (Diameter)</b>	18	<b>Width</b>	
<b>Shape</b>	Circular	<b>Material</b>	Reinforced Concrete Pipe
<b>Lining Method</b>		<b>Pipe Joint Length</b>	
<b>Total Length</b>	72.5	<b>Length Surveyed</b>	72.5
<b>Year Constructed</b>		<b>Year Renewed</b>	

### Misc

<b>Flow Control</b>		<b>Media Label</b>	DVD
<b>Purpose</b>		<b>Consequence of Failure</b>	
<b>Pre-Cleaning</b>	No Pre-Cleaning	<b>Date Cleaned</b>	
<b>Weather</b>		<b>Location Code</b>	
<b>Additional Info</b>		<b>Location Details</b>	SET UP IN DENTIST PARKING LOT

### Custom

<b>Custom 1</b>		<b>Custom 2</b>	
<b>Custom 3</b>		<b>Custom 4</b>	
<b>Custom 5</b>		<b>Custom 6</b>	
<b>Custom 7</b>		<b>Custom 8</b>	
<b>Custom 9</b>		<b>Custom 10</b>	

### Project

<b>Reverse Setup ID</b>		<b>Sheet (Group) Number</b>	
<b>Imperial Units (US)</b>	True	<b>Pressure Value</b>	
<b>Work Order</b>		<b>Project</b>	CAROLINA CROSSROADS
<b>Coating Method</b>		<b>Completed</b>	No

## Insp Tech Used

<b>CCTV</b>	Yes	<b>Laser</b>	No
<b>Sidewall</b>	No	<b>Sonar</b>	No
<b>Zoom</b>	No	<b>Other</b>	No

EP-4242

## Inspection

**Inspection Status** Complete Inspection

**Reviewed By**


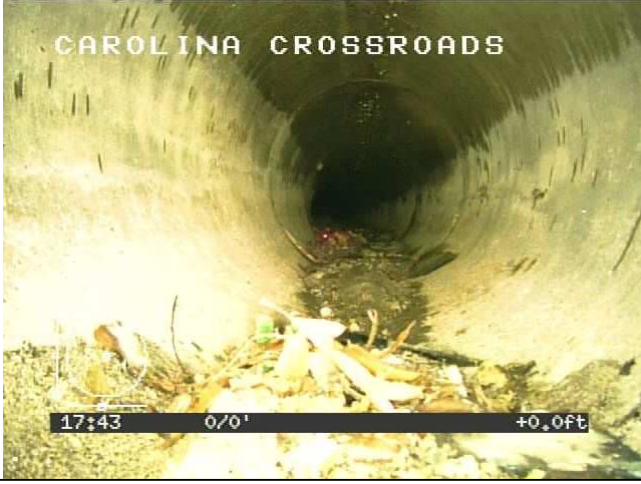

**Reviewer Certificate  
Number**




## Count Groups

<b>Taps</b>	0	<b>Roots</b>	0
<b>Cracks / Fractures</b>	0	<b>Broken / Holes / Collapse</b>	0
<b>Deposits</b>	0	<b>Obstruction</b>	3
<b>Abandoned Survey</b>	1		



Created with the  report generator

<b>Project: CAROLINA CROSSROADS</b>	
<b>Date:</b> 12/28/2020 4:37:00 PM	<b>Pipe Segment Reference:</b>
<b>Street:</b> BROAD RIVER RD	<b>Upstream MH:</b> DENTIST B
<b>Length Surveyed:</b> 72.5	<b>Downstream MH:</b> DENTIST C
<b>Run Number:</b>	<b>Direction of Survey:</b> Downstream
<b>Height (Diameter):</b> 18	<b>Material:</b> Reinforced Concrete Pipe

Distance	Fault Observation	Time	Picture
0.0	<p><b>EP-4242</b></p> <p><b>Access Point Catch Basin</b> Severity: None Remarks: DENTIST B</p>	23	
0.0	<p><b>Miscellaneous Water Level</b> Severity: None Percent: 0</p>	53	 <p>CAROLINA CROSSROADS</p> <p>17:43 0/0' +0.0ft</p>
7.1	<p><b>Obstruction Other</b> Position: 5 To 7 Severity: None Cont Defect: S01 Percent: 15 Remarks: GRAVEL DIRT ETC IN PIPE Maint Weight: 3</p>	01:57	 <p>CAROLINA CROSSROADS From DENTIST B To DENTIST C</p> <p>082 - Obstruction Other</p> <p>17:44 0/0' +7.1ft</p>

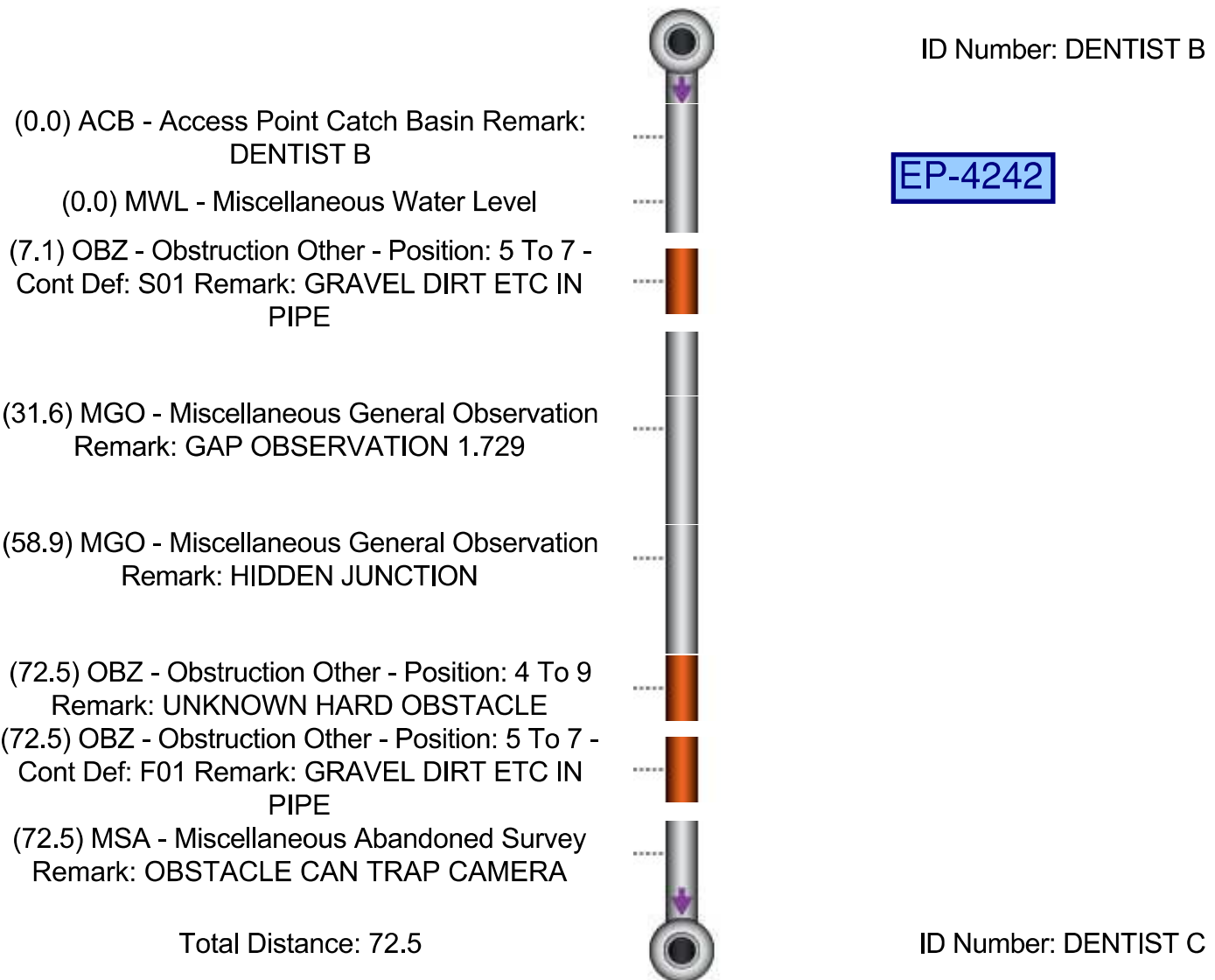
Distance	Fault Observation	Time	Picture
31.6	<p style="text-align: center;"><b>EP-4242</b></p> <p><b>Miscellaneous General Observation</b>  Severity: None  Remarks: GAP  <b>OBSERVATION 1.729</b></p>	06:12	
58.9	<p><b>Miscellaneous General Observation</b>  Severity: None  Remarks: HIDDEN  <b>JUNCTION</b></p>	10:41	
72.5	<p><b>Obstruction Other</b>  Position: 4 To 9  Severity: None  Percent: 20  Joint  Remarks: UNKNOWN  <b>HARD OBSTACLE</b>  Maint Weight: 3</p>	14:50	



Distance	Fault Observation	Time	Picture
72.5	<p data-bbox="339 98 523 147"><b>EP-4242</b></p> <p data-bbox="308 181 584 495"><b>Obstruction Other</b>  <b>Position: 5 To 7</b>  <b>Severity: None</b>  <b>Cont Defect: F01</b>  <b>Percent: 15</b>  <b>Remarks: GRAVEL DIRT</b>  <b>ETC IN PIPE</b>  <b>Maint Weight: 3</b></p>	15:45	 <p data-bbox="906 129 1366 208">CAROLINA CROSSROADS From DENTIST B To DENTIST C</p> <p data-bbox="906 232 1433 286">OBZ - Obstruction Other</p> <p data-bbox="906 510 1449 533">12:28:20 0/0' +72.5ft</p>
72.5	<p data-bbox="276 725 616 920"><b>Miscellaneous</b>  <b>Abandoned Survey</b>  <b>Severity: None</b>  <b>Remarks: OBSTACLE</b>  <b>CAN TRAP CAMERA</b></p>	17:27	 <p data-bbox="906 611 1366 689">CAROLINA CROSSROADS From DENTIST B To DENTIST C</p> <p data-bbox="906 714 1433 768">MSA - Miscellaneous Abandoned</p> <p data-bbox="906 992 1449 1014">18:00 0/0' +72.5ft</p>

Project: CAROLINA CROSSROADS	
Date: 12/28/2020 4:37:00 PM	Pipe Segment Reference:
Street: BROAD RIVER RD	Upstream MH: DENTIST B
Length Surveyed: 72.5	Downstream MH: DENTIST C
Run Number:	Direction of Survey: Downstream
Height (Diameter): 18	Material: Reinforced Concrete Pipe

Severity
Light-1
Moderate-2
Average-3
Heavy-4
Severe-5



# Nassco C.C.T.V. Defect Code Information

EP-4242

Grade	Structural	O&M	Overall
5	0	0	0
4	0	0	0
3	0	42	42
2	0	0	0
1	0	0	0
Overall	0	42	42
Number of Defects	0	14	14
Pipe Rating	0000	3A00	3A00
Pipe Ratings Index	0	3	3

# Nassco C.C.T.V. Defect Code Information



Distance	Video Ref	Code	Cont Defect	Value			Joint	Circumferential Location	
				Dimension		%		At / From	To
				1st	2nd				
0	23	ACB - Access Point Catch Basin							
		DENTIST B							
0	53	MWL - Miscellaneous Water Level			0				
7.1	117	OBZ - Obstruction Other	S01		15		5	7	
		GRAVEL DIRT ETC IN PIPE							
31.6	372	MGO - Miscellaneous General Observation							
		GAP OBSERVATION 1.729							
58.9	641	MGO - Miscellaneous General Observation							
		HIDDEN JUNCTION							
72.5	890	OBZ - Obstruction Other			20	X	4	9	
		UNKNOWN HARD OBSTACLE							
72.5	945	OBZ - Obstruction Other	F01		15		5	7	
		GRAVEL DIRT ETC IN PIPE							
72.5	1047	MSA - Miscellaneous Abandoned Survey							
		OBSTACLE CAN TRAP CAMERA							

# Videos Created for Session CAROLINA CROSSROADS

DENTIST B\_DENTIST C\_20201228\_18505.mp4 Size: 396 MB

Your browser does not support the video tag.

EP-4242

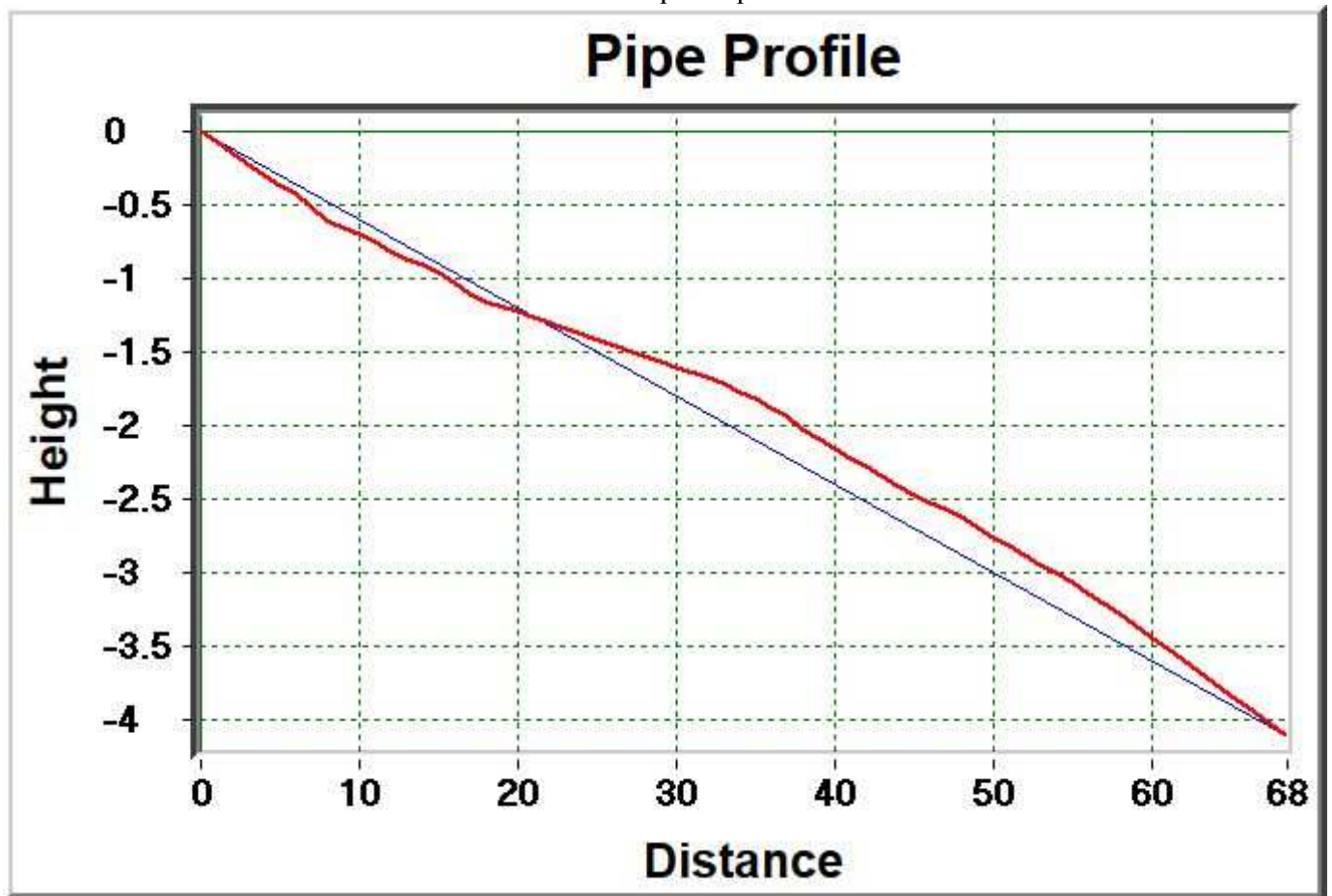
Created with the  report generator

# Project: CAROLINA CROSSROADS

Date: 12/28/2020 4:37:00 PM	Pipe Segment Reference:
Street: BROAD RIVER RD	Upstream MH: DENTIST B
Length Surveyed: 72.5	Downstream MH: DENTIST C
Run Number:	Direction of Survey: Downstream
Height (Diameter): 18	Material: Reinforced Concrete Pipe

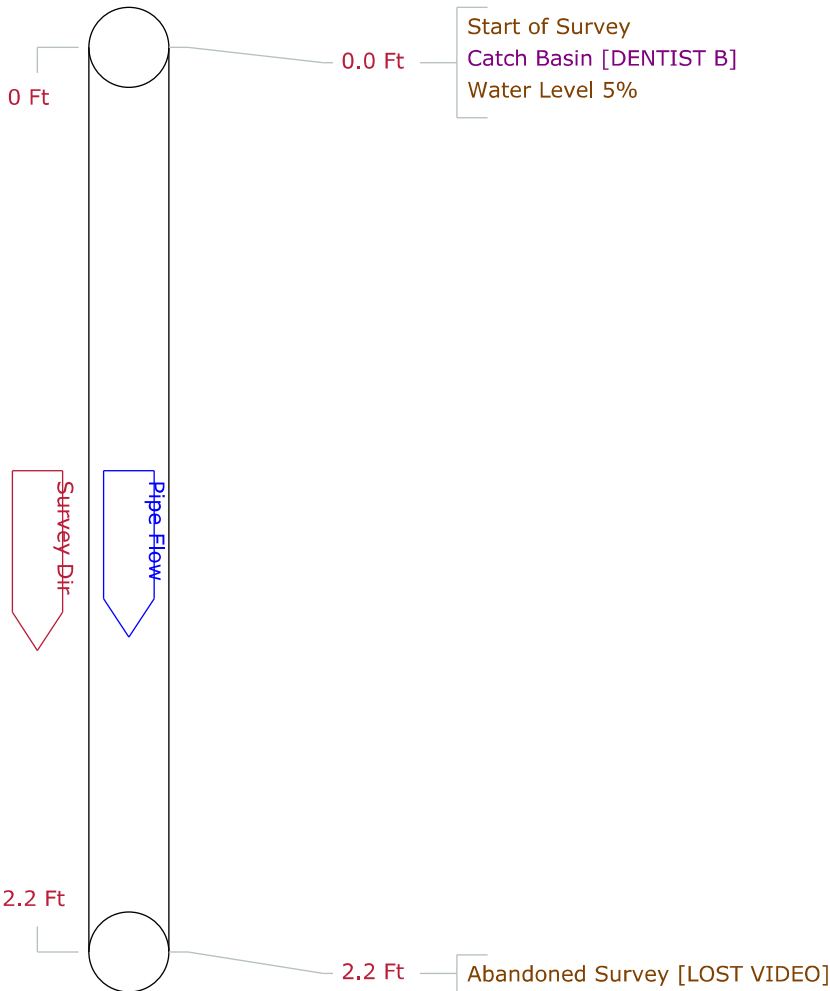
EP-4242

Percent Grade Mean: -6.29  
Plot Distance From: 0 To 73  
Max Percent Difference: 3  
Number of Window Values: 1  
Percent Difference Max for Windows Values: 60  
Number of Feet to Average: 1  
Final number of points plotted: 60



Pipe Graphic Report of PSR DENTIST B B for HDR

<b>Setup</b> 30	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>		<b>Survey Customer</b>	
<b>P/O #</b>	<b>Date</b> 2020/12/16	<b>Time</b> 10:29	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> DENTIST B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> DENTIST C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Downstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean</b> Z
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 02.20 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b> SET UP DENTIST PARKING LOT	<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>	<b>Hydraulic</b>	
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



**Tabular Report of PSR DENTIST B B for HDR**

<b>Setup</b> 30	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b>		
<b>P/O #</b>	<b>Date</b> 2020/12/16	<b>Time</b> 10:29	<b>Street</b> BROAD RIVER RD
<b>City</b> COLUMBIA	<b>Further location details</b>		
<b>Up</b> DENTIST B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Down</b> DENTIST C	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> <b>Ft</b>
<b>Use</b> Stormwater	<b>Direction</b> Down	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 18	<b>Width</b> ins	<b>Preclean Z</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 2.2 <b>Ft</b>
<b>Purpose</b>	<b>Cat</b>	<b>Weather</b>	<b>Pressure</b>
<b>Additional info</b> SET UP DENTIST PARKING LOT	<b>Structural</b>		<b>O &amp; M</b> <b>Constructional</b>
<b>Location</b>	<b>Miscellaneous</b>		
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		

Count	Video	CD Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0		ST							Start of Survey
0.0		ACB							Catch Basin
0.0		MWL			5				Water Level
2.2		MSA							Abandoned Survey

2.2 Ft Total Length Surveyed

<b>Scores</b>	<b>Structural:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>O&amp;M:</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000
	<b>Overall</b> Pipe Rating 0	Pipe Ratings Index 0	Quick Rating 0000

# I-20/26/126 Corridor Improvement Project

EP-4301

Station 210+00

24-inch RCP

Client: SCDOT

Mead & Hunt Project Number: 114295.02

Phase: Drainage

Video Pipe Inspections

## **Summary:**

Mead & Hunt, Inc. assessed the overall condition of a 24-inch reinforced concrete pipe as illustrated on sheet number 31 of the provided plan sheets for I-20.

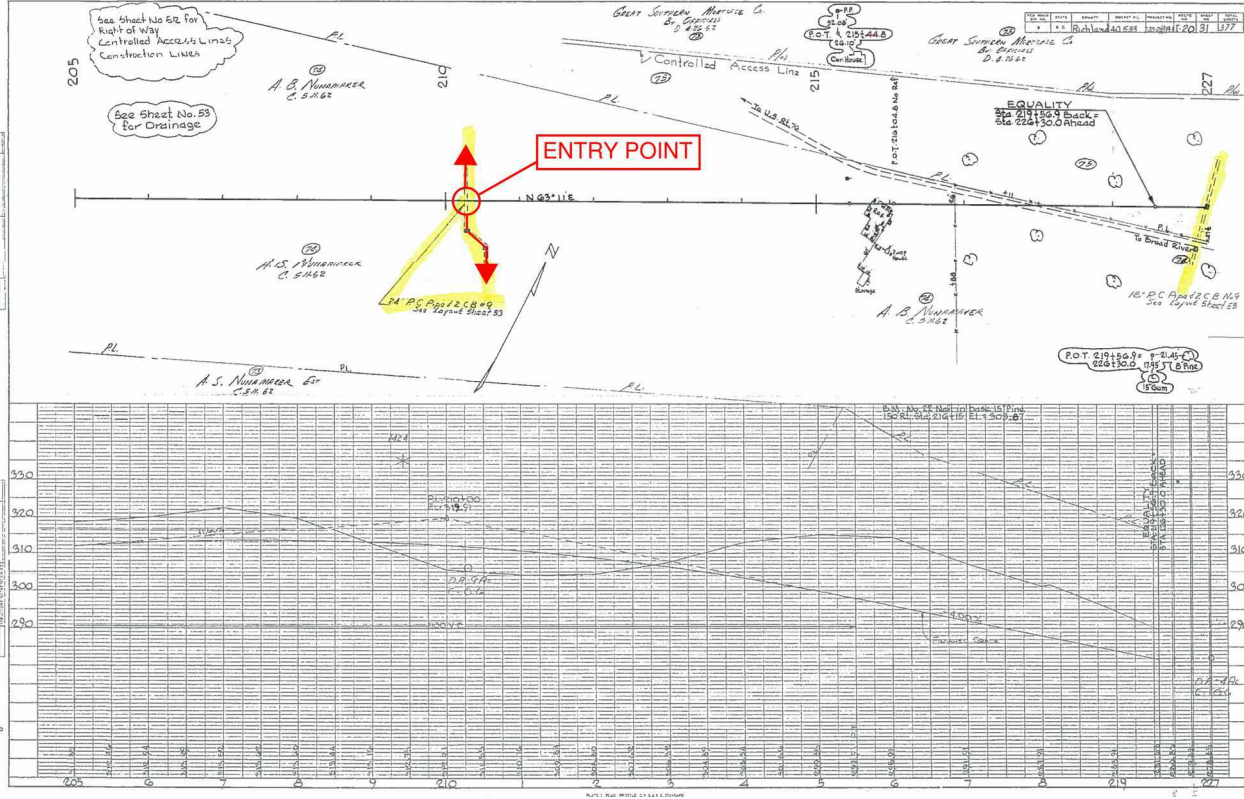
## **Objective:**

The inspections are to assess the overall condition of each box culvert. Each culverts dimension will be measured for comparison to the current plans. Deficiencies to be noted include cracks, spalling, cave-ins, debris build-up, sediment build-up, etc. Each box culvert is to be recorded on video, from end to end, to display any deficiencies within the culvert.

## **I-20 Station 210+00**

- Dimensions: Verified 24-inch RCP, Approximately 200 LF
- Observations
  1. South entrance is blocked by vegetation.
  2. Both directions need to be cleaned.
- Recommendations
  1. Clean both directions.

# EP-4301



1.





2.

EP-4301



# I-20/26/126 Corridor Improvement Project

EP-4401

Station 237+50

18-inch RCP

Client: SCDOT

Mead & Hunt Project Number: 114295.02

Phase: Drainage

Video Pipe Inspections

## Summary:

Mead & Hunt, Inc. assessed the overall condition of an 18-inch reinforced concrete pipe as illustrated on sheet number 32 of the provided plan sheets for I-20.

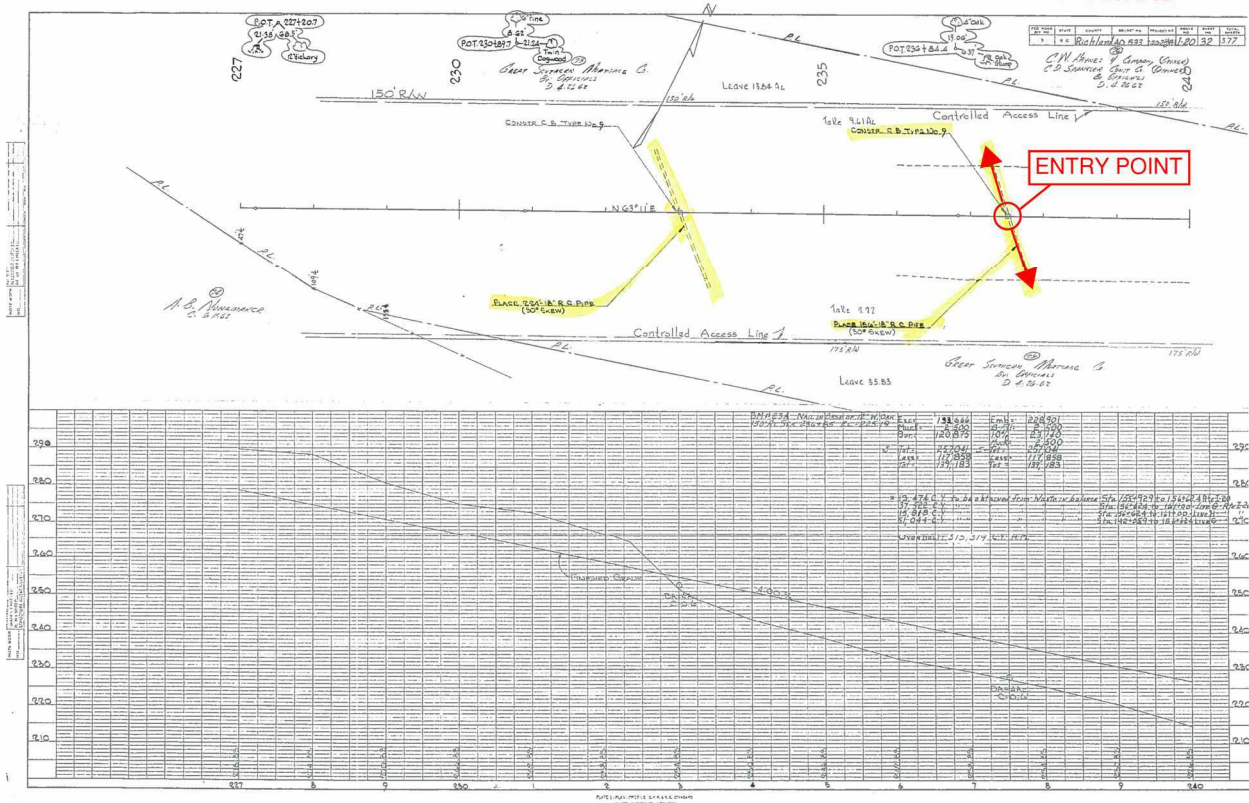
## Objective:

The inspections are to assess the overall condition of each box culvert. Each culverts dimension will be measured for comparison to the current plans. Deficiencies to be noted include cracks, spalling, cave-ins, debris build-up, sediment build-up, etc. Each box culvert is to be recorded on video, from end to end, to display any deficiencies within the culvert.

## I-20 Station 237+50

- Dimensions: Verified 18-inch RCP, Approximately 225 LF
- Observations
  1. Joint at approximately 98-feet (South of entry)-severe joint separation, soil is visible, unable to continue inspecting.
  2. Joint at approximately 82-feet and 86-feet (South of entry)-roots growing through the joint, not properly sealed.
  3. Joint at approximately 5-feet (South of entry)-moderate joint separation, appears to be groundwater entering/exiting at the bottom of the joint.
  4. Joint at approximately 9-feet (South of entry)-roots growing through the joint, not properly sealed.
- Recommendations
  1. Slipline or replace existing pipe.
  2. Determine if new backfill is needed under pipe where water is exiting through joint.

# EP-4401



1.



EP-4401

2.





EP-4401

3.



4.



# I-20/I-26/I-126 Corridor Improvement Project

Alignment I20000X, Station 252+85

Structure EP-4501

30" RCP

## **Summary:**

F&ME assessed the overall condition of a 30" RCP designated as EP-4501.

## **Observations:**

- Dimensions – Verified 30" RCP. Measured length of 222 LF; plan length of 223 LF.
- Scan direction – Inlet to outfall.
- General notes – None.
- Observations:
  - 1) 5.0 feet – 3.28" gap in joint with visible soil; root intrusion in joint.
  - 2) 11.0 feet – 0.87" gap in joint; longitudinal crack in pipe; fine root intrusion in joint.
  - 3) 23.1 feet – 0.50" gap in joint.
  - 4) 29.6 feet – 0.47" gap in joint; intrusion weeping; fine root intrusion in joint.
  - 5) 37.3 feet – 0.82" gap in joint; longitudinal crack in pipe; intrusion weeping; fine root intrusion in joint.
  - 6) 43.3 feet – Longitudinal crack in pipe.
  - 7) 55.3 feet – 0.99" gap in joint; longitudinal crack in pipe; intrusion weeping; fine root intrusion in joint.
  - 8) 61.3 feet – 0.47" gap in joint; infiltration staining.
  - 9) 67.3 feet – 0.62" gap in joint; longitudinal crack in pipe; infiltration staining.
  - 10) 73.2 feet – 0.83" gap in joint; intrusion weeping; fine root intrusion in joint.
  - 11) 79.2 feet – 0.82" gap in joint; intrusion staining; fine root intrusion in joint.
  - 12) 91.2 feet – 0.71" gap in joint.
  - 13) 97.5 feet – Longitudinal crack in pipe.
  - 14) 103.5 feet – 0.72" gap in joint; longitudinal crack in pipe; intrusion weeping; fine root intrusion in joint.
  - 15) 109.5 feet – Longitudinal crack in pipe.
  - 16) 111.3 feet – Circumferential crack in pipe.
  - 17) 112.8 feet – Circumferential crack in pipe.
  - 18) 139.5 feet – 0.59" gap in joint; longitudinal crack in pipe; infiltration staining.
  - 19) 145.2 feet – 0.43" gap in joint; longitudinal crack in pipe; infiltration staining.
  - 20) 157.3 feet – Longitudinal crack in pipe; infiltration weeping; fine root intrusion in pipe.
  - 21) 161.9 feet – Circumferential crack in pipe.
  - 22) 163.4 feet – Longitudinal crack in pipe; infiltration weeping; fine root intrusion in pipe.
  - 23) 169.1 feet – Spider web cracking in pipe; infiltration staining.
  - 24) 172.7 feet – Spider web cracking in pipe; infiltration staining.
  - 25) 174.4 feet – Longitudinal cracks in pipe.
  - 26) 177.8 feet – Spider web cracking in pipe.

EP-4501

# I-20/I-26/I-126 Corridor Improvement Project

Alignment I20000X, Station 252+85

Structure EP-4501

30" RCP

## **Summary:**

F&ME assessed the overall condition of a 30" RCP designated as EP-4501.

## **Observations:**

- Dimensions – Verified 30" RCP. Measured length of 222 LF; plan length of 223 LF.
- Scan direction – Inlet to outfall.
- General notes – None.
- Observations:
  - 27) 180.8 feet – Spider web cracking in pipe.
  - 28) 182.7 feet – Spider web cracking in pipe.
  - 29) 193.1 feet – 1.53" gap in joint; chipped spigot; fine root intrusion in pipe.
  - 30) 198.9 feet – Infiltration weeping.
  - 31) 205.2 feet – 0.59" gap in joint; infiltration weeping; fine root intrusion in pipe.



### Project Information

<b>Surveyor Name</b>	GCS	<b>Certificate Number</b>	U-0917-07009391
<b>Owner</b>	SCDOT	<b>Customer</b>	F&ME
<b>Drainage Area</b>		<b>PO Number</b>	
<b>Pipe Segment Reference</b>		<b>Date</b>	4/1/2019 14:59
<b>Street</b>	I-26	<b>City</b>	COLUMBIA
<b>Comments</b>			

### Manhole

<b>Upstream MH</b>	EP 4501 INLET	<b>Rim to Invert (U)</b>	
<b>Grade to Invert (U)</b>		<b>Rim to Grade (U)</b>	
<b>Downstream MH</b>	EP 4501 OUTLET	<b>Rim to Invert (D)</b>	
<b>Grade to Invert (D)</b>		<b>Rim to Grade (D)</b>	
<b>Sewer Use</b>		<b>Direction of Survey</b>	Downstream

### Pipe

<b>Height (Diameter)</b>	30	<b>Width</b>	
<b>Shape</b>	Circular	<b>Material</b>	Reinforced Concrete Pipe
<b>Lining Method</b>		<b>Pipe Joint Length</b>	
<b>Total Length</b>		<b>Length Surveyed</b>	221.9
<b>Year Laid</b>		<b>Year Renewed</b>	

### Misc

<b>Flow Control</b>		<b>Media Label</b>	DVD
<b>Purpose</b>		<b>Sewer Category</b>	
<b>Pre-Cleaning</b>	Not Known	<b>Date Cleaned</b>	
<b>Weather</b>		<b>Location Code</b>	
<b>Additional Info</b>		<b>Location Details</b>	

### Custom

<b>Number of Taps</b>	0	<b>Number of Roots</b>	27
<b>Num Cracks / Fractures</b>	21	<b>Number of Broken / Holes / Collapse</b>	1
<b>Number of Deposits</b>	0	<b>Custom6</b>	
<b>Custom7</b>		<b>Struct Grade</b>	
<b>OM Grade</b>		<b>Overall Grade</b>	

### Pacp 6

<b>Reverse Setup ID</b>		<b>Sheet (Group) Number</b>	
<b>Imperial Units (US)</b>	True	<b>Pressure Value</b>	
<b>Work Order</b>		<b>Project</b>	CCR PIPE
		<b>Completed</b>	Yes

# Project: CCR PIPE

Date: 4/1/2019 2:59:00 PM

Street: I-26

Length Surveyed: 221.9

Pacp Quick Overall Rating:

Height (Diameter): 30

Street: I-26

Pipe Segment Reference:

Upstream MH: EP 4501 INLET

Downstream MH: EP 4501

OUTLET

Direction of Survey:

Downstream

Material: Reinforced Concrete

Pipe

EP-4501

Distance	Fault Observation	Time	Picture
0.0	<p>Discharge Point Severity: None Remarks: EP 4501 INLET</p>	32	<p>CCR PIPE EP 4501 INLET</p>
0.0	<p>Water Level Severity: None Percent: 5</p>	47	
5.0	<p>Joint Separated Large Severity: None Remarks: 3.276 Struct Weight: 2</p>	02:17	<p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p>

Distance	Fault Observation	Time	Picture
5.0	<b>Roots Fine Joint</b> <b>Position: 7</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	02:52	
11.1	<b>Roots Fine Joint</b> <b>Position: 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	04:08	
11.1	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	04:46	

EP-4501

Distance	Fault Observation	Time	Picture
11.1	<p style="text-align: center;"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: 0.873</b></p>	05:17	
23.1	<p style="text-align: center;"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: 0.496</b></p>	07:46	
26.8	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 3 To 9</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Remarks: NEXT</b>  <b>JOINT WEEPING</b>  <b>Maint Weight: 2</b></p>	08:52	

EP-4501



Distance	Fault Observation	Time	Picture
29.6	<b>Roots Fine Joint</b> <b>Position: 3 To 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	10:03	
29.6	<b>General Observation</b> <b>Severity: None</b> <b>Remarks: 0.472</b>	10:54	
33.2	<b>Infil Stain</b> <b>Position: 8 To 10</b> <b>Severity: None</b> <b>Joint</b>	12:14	

EP-4501

Distance	Fault Observation	Time	Picture
37.3	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	13:18	<p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>14:21 91/-76' +2.6% +37.3ft</p>
37.3	<b>Roots Fine Joint</b> <b>Position: 8 To 9</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	14:03	<p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>14:21 -159/-96' +2.7% +37.3ft</p>
37.3	<b>Infil Stain</b> <b>Position: 7 To 9</b> <b>Severity: None</b>	14:28	<p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 -165/-96' +2.6% +37.3ft</p>

EP-4501


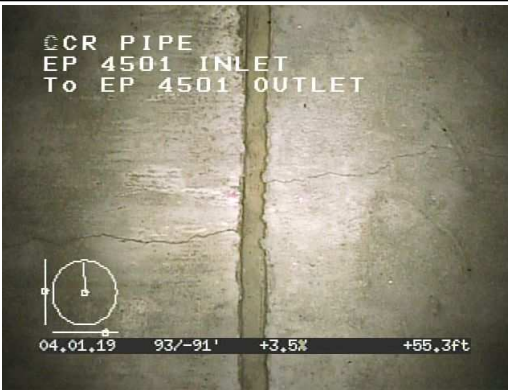

Distance	Fault Observation	Time	Picture
37.3	<b>Infil Weeper</b> <b>Position: 3 To 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 2</b>	14:56	
37.3	<b>General Observation</b> <b>Severity: None</b> <b>Remarks: 0.824</b>	15:44	
43.3	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	16:16	

EP-4501






Distance	Fault Observation	Time	Picture
43.3	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Joint</b></p>	17:00	
43.3	<p style="text-align: center;"><b>Roots Fine Joint</b>  <b>Position: 7</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	17:17	
43.3	<p style="text-align: center;"><b>Roots Fine Joint</b>  <b>Position: 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	17:34	

EP-4501

Distance	Fault Observation	Time	Picture
49.3	<b>Roots Fine Joint</b> <b>Position: 7</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	18:48	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 -122/-91' +1.7% +49.2ft</p>
55.3	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	19:55	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 93/-91' +3.5% +55.3ft</p>
55.3	<b>Infil Stain</b> <b>Position: 7 To 9</b> <b>Severity: None</b> <b>Joint</b>	20:40	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 -167/-90' +3.5% +55.3ft</p>

EP-4501

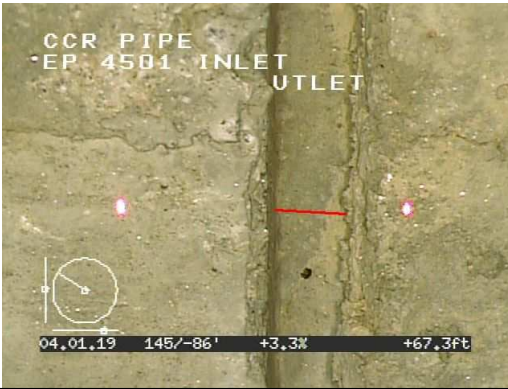


Distance	Fault Observation	Time	Picture
55.3	<b>Roots Fine Joint</b> <b>Position: 7</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	20:53	
55.3	<b>General Observation</b> <b>Severity: None</b> <b>Remarks: 0.987</b>	21:43	
61.2	<b>Infil Stain</b> <b>Position: 7 To 9</b> <b>Severity: None</b> <b>Joint</b> <b>Remarks: STAIN NOT WEEPER</b>	23:36	

EP-4501



Distance	Fault Observation	Time	Picture
61.3	<p style="text-align: center;"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: 0.469</b></p>	25:35	
67.3	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 7 To 9</b>  <b>Severity: None</b>  <b>Joint</b></p>	26:44	
67.3	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b></p>	27:17	




EP-4501

Distance	Fault Observation	Time	Picture
67.3	<p style="text-align: center;"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: 0.617</b></p>	27:54	
67.4	<p style="text-align: center;"><b>Crack Longitudinal</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Struct Weight: 2</b></p>	28:26	
73.2	<p style="text-align: center;"><b>Infil Weeper</b>  <b>Position: 7 To 8</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b></p>	29:37	

EP-4501

Distance	Fault Observation	Time	Picture
73.2	<b>Roots Fine Joint</b> <b>Position: 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	29:53	
73.2	<b>General Observation</b> <b>Severity: None</b> <b>Remarks: 0.825</b>	30:48	
79.2	<b>Infil Stain</b> <b>Position: 7 To 9</b> <b>Severity: None</b> <b>Joint</b>	31:39	

EP-4501

Distance	Fault Observation	Time	Picture
79.2	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b></p>	32:08	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>14:42 -11/-81' +2.6% +79.2ft</p>
79.2	<p style="text-align: center;"><b>General Observation</b>  <b>Severity: None</b>  <b>Remarks: 0.82</b></p>	32:38	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>14:43 32/-81' +2.6% +79.2ft</p>
85.3	<p style="text-align: center;"><b>Roots Fine Joint</b>  <b>Position: 7</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	33:36	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04:01.19 -105/-85' +2.7% +85.2ft</p>

EP-4501



Distance	Fault Observation	Time	Picture
85.3	<b>Roots Fine Joint</b> <b>Position: 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	33:51	
91.2	<b>General Observation</b> <b>Severity: None</b> <b>Remarks: 0.707</b>	35:27	
97.5	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	36:13	

EP-4501

Distance	Fault Observation	Time	Picture
97.5	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 7 To 9</b>  <b>Severity: None</b>  <b>Joint</b></p>	36:56	
97.5	<p style="text-align: center;"><b>Roots Fine Joint</b>  <b>Position: 7</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	38:00	
97.5	<p style="text-align: center;"><b>Roots Fine Joint</b>  <b>Position: 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	38:16	

EP-4501

Distance	Fault Observation	Time	Picture
103.5	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	38:17	
103.5	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	38:31	
103.5	<b>Roots Fine Joint</b> <b>Position: 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	38:58	

EP-4501




Distance	Fault Observation	Time	Picture
103.5	<p style="text-align: center;"><b>General Observation</b>  Severity: None  Remarks: 0.717</p>	39:41	
109.5	<p style="text-align: center;"><b>Crack Longitudinal</b>  Position: 12  Severity: None  Joint  Struct Weight: 2</p>	40:23	
111.3	<p style="text-align: center;"><b>Crack Circumferential</b>  Position: 3 To 4  Severity: None  Struct Weight: 1</p>	42:41	

EP-4501



Distance	Fault Observation	Time	Picture
112.8	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 8 To 9</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	42:27	
115.6	<p align="center"><b>Infil Stain</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b></p>	43:43	
121.6	<p align="center"><b>Infil Stain</b>  <b>Position: 7 To 8</b>  <b>Severity: None</b>  <b>Joint</b></p>	45:06	

EP-4501

Distance	Fault Observation	Time	Picture
127.6	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b></p>	46:41	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>14:58 9/-92' +2.5% +127.5ft</p>
133.6	<p style="text-align: center;"><b>Roots Fine Joint</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	48:11	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>14:59 -5/-90' +1.7% +133.5ft</p>
133.6	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b></p>	48:32	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>Roots Fine Joint</p> <p>04,01,19 -20/-90' +1.6% +133.5ft</p>

EP-4501


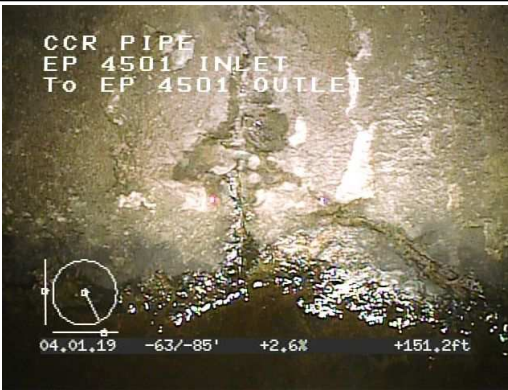
Distance	Fault Observation	Time	Picture
139.5	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	49:30	
139.6	<b>Infil Stain</b> <b>Position: 7 To 9</b> <b>Severity: None</b>	50:07	
145.2	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	51:05	

EP-4501


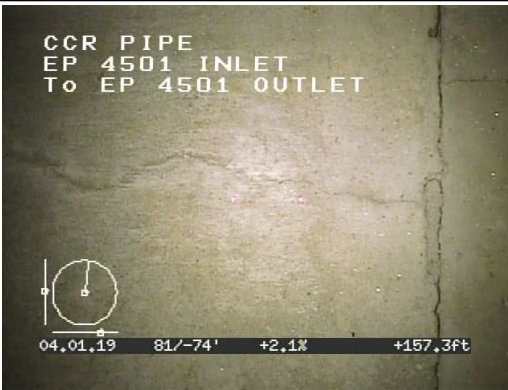



Distance	Fault Observation	Time	Picture
145.2	<b>Picture Number: 2</b> <b>Crack Longitudinal</b> <b>Position: 12</b>	0	
145.2	<b>Infil Stain</b> <b>Position: 7 To 8</b> <b>Severity: None</b>	53:33	
145.3	<b>Infil Stain</b> <b>Position: 1 To 5</b> <b>Severity: None</b> <b>Joint</b>	52:37	

EP-4501

Distance	Fault Observation	Time	Picture
151.3	<b>Roots Fine Joint</b> <b>Position: 7</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	53:39	 <p>CCr PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 -108/-85' +2.6% +151.2ft</p>
151.3	<b>Roots Fine Joint</b> <b>Position: 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	55:40	 <p>CCr PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 -63/-85' +2.6% +151.2ft</p>
151.3	<b>Infil Stain</b> <b>Position: 7 To 5</b> <b>Severity: None</b> <b>Joint</b>	54:22	 <p>CCr PIPE EP 4501 INLET UTLET</p> <p>04,01,19 -23/-85' +2.5% +151.2ft</p>

EP-4501

Distance	Fault Observation	Time	Picture
157.3	<b>Crack Longitudinal</b> <b>Position: 12</b> <b>Severity: None</b> <b>Joint</b> <b>Struct Weight: 2</b>	55:12	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 93/-116' +2,1% +157,2ft</p>
157.3	<b>Picture Number: 2</b> <b>Crack Longitudinal</b> <b>Position: 12</b>	0	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 81/-74' +2,1% +157,3ft</p>
157.3	<b>Infil Stain</b> <b>Position: 7 To 9</b> <b>Severity: None</b> <b>Joint</b>	56:01	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 -155/-91' +2,1% +157,3ft</p>

EP-4501

Distance	Fault Observation	Time	Picture
157.3	<p><b>Roots Fine Joint</b>  <b>Position: 7</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	56:18	
157.3	<p><b>Roots Fine Joint</b>  <b>Position: 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	56:31	
157.3	<p><b>Infil Stain</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b></p>	58:56	

EP-4501



Distance	Fault Observation	Time	Picture
161.9	<p align="center"><b>Crack</b>  <b>Circumferential</b>  <b>Position: 8 To 9</b>  <b>Severity: None</b>  <b>Struct Weight: 1</b></p>	57:30	
163.3	<p align="center"><b>Crack Longitudinal</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Struct Weight: 2</b></p>	58:25	
163.4	<p align="center"><b>Crack Longitudinal</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Struct Weight: 2</b></p>	1:00:51	

EP-4501

Distance	Fault Observation	Time	Picture
163.4	<p align="center"> <b>Infil Stain</b>  <b>Position: 7 To 10</b>  <b>Severity: None</b>  <b>Joint</b> </p>	59:20	
163.4	<p align="center"> <b>Infil Weeper</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b> </p>	59:50	
169.1	<p align="center"> <b>Crack Longitudinal</b>  <b>Position: 12</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Struct Weight: 2</b> </p>	1:00:58	

EP-4501

Distance	Fault Observation	Time	Picture
169.1	<p><b>Crack Multiple</b>  <b>Position: 11 To 1</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Remarks: SPIDER</b>  <b>LIKE CRACKING</b>  <b>Struct Weight: 3</b></p>	1:01:54	<p>CCR PIPE  EP 4501 INLET  To EP 4501 OUTLET</p> <p>15:14 106/-134' +2.9% +169.0ft</p>
169.1	<p><b>Picture Number: 2</b>  <b>Crack Multiple</b>  <b>Position: 11 To 1</b></p>	0	<p>CCR PIPE  EP 4501 INLET  To EP 4501 OUTLET</p> <p>15:14 106/-45' +3.0% +169.0ft</p>
169.1	<p><b>Infil Stain</b>  <b>Position: 7 To 9</b>  <b>Severity: None</b>  <b>Joint</b></p>	1:05:15	<p>CCR PIPE  EP 4501 INLET  To EP 4501 OUTLET</p> <p>04,01,19 -152/-87' +2.9% +169.0ft</p>

EP-4501



Distance	Fault Observation	Time	Picture
169.1	<p align="center"> <b>Infil Stain</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b> </p>	1:05:45	<p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>15:15 -12/-87' +2.9% +169.0ft</p>
172.7	<p align="center"> <b>Crack Multiple</b>  <b>Position: 9 To 3</b>  <b>Severity: None</b>  <b>Cont Defect: S01</b>  <b>Joint</b>  <b>Remarks: SPIDER</b>  <b>LIKE CRACKING</b>  <b>Struct Weight: 3</b> </p>	1:04:12	<p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 62/-80' +1.7% +172.6ft</p>
174.4	<p align="center"> <b>Picture Number: 2</b>  <b>Crack Multiple</b>  <b>Position: 9 To 3</b> </p>	0	<p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 67/-39' +1.6% +174.4ft</p>


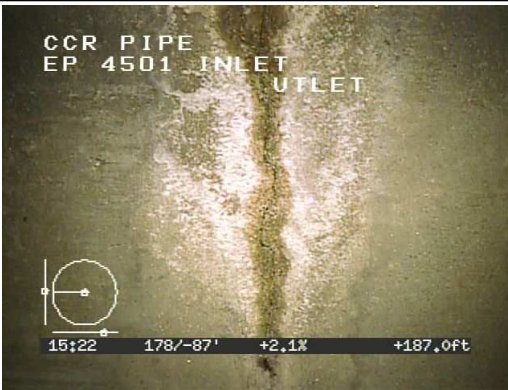

EP-4501

Distance	Fault Observation	Time	Picture
177.8	Picture Number: 3 Crack Multiple Position: 9 To 3	0	
180.8	Picture Number: 4 Crack Multiple Position: 9 To 3 Remarks: SPIDER LIKE CRACKING	0	
174.9	Infil Stain Position: 7 To 9 Severity: None Joint	1:05:18	

EP-4501

Distance	Fault Observation	Time	Picture
174.9	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 9 To 5</b>  <b>Severity: None</b>  <b>Joint</b></p>	1:05:45	
180.9	<p style="text-align: center;"><b>Roots Fine Joint</b>  <b>Position: 5 To 9</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	1:07:31	
180.9	<p style="text-align: center;"><b>Infil Stain</b>  <b>Position: 9 To 3</b>  <b>Severity: None</b>  <b>Joint</b></p>	1:07:54	

EP-4501




Distance	Fault Observation	Time	Picture
182.7	<p><b>Crack Multiple</b>  <b>Position: 9 To 3</b>  <b>Severity: None</b>  <b>Cont Defect: F01</b>  <b>Joint</b>  <b>Remarks: SPIDER</b>  <b>LIKE CRACKING</b>  <b>Struct Weight: 3</b></p>	1:08:32	 <p>CCR PIPE EP 4501 INLET UTLET</p> <p>04,01,19 -92/117' +1.8% +182.7ft</p>
187.1	<p><b>Roots Fine Joint</b>  <b>Position: 7 To 9</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	1:09:30	 <p>CCR PIPE EP 4501 INLET UTLET</p> <p>15:22 178/-87' +2.1% +187.0ft</p>
187.1	<p><b>Roots Fine Joint</b>  <b>Position: 4 To 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	1:09:54	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>Roots Fine Joint</p> <p>04,01,19 -49/-87' +2.1% +187.0ft</p>

EP-4501



Distance	Fault Observation	Time	Picture
187.1	<b>Infil Stain</b> <b>Position: 8 To 4</b> <b>Severity: None</b> <b>Joint</b>	1:10:19	
193.0	<b>Roots Fine Joint</b> <b>Position: 7</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	1:11:33	
193.1	<b>Broken</b> <b>Position: 1 To 2</b> <b>Severity: None</b> <b>Joint</b> <b>Remarks: CHIPPED SPIGOT</b> <b>Struct Weight: 4</b>	1:12:40	

EP-4501

Distance	Fault Observation	Time	Picture
196.8	<p align="center"><b>Infil Weeper</b>  <b>Position: 3 To 5</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 2</b></p>	1:13:15	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>15:26 -1/-26' +0.9% +196.7ft</p>
198.9	<p align="center"><b>Infil Stain</b>  <b>Position: 7 To 9</b>  <b>Severity: None</b>  <b>Joint</b></p>	1:14:05	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>15:27 -154/-80' +0.9% +198.8ft</p>
205.2	<p align="center"><b>Roots Fine Joint</b>  <b>Position: 7</b>  <b>Severity: None</b>  <b>Joint</b>  <b>Maint Weight: 1</b></p>	1:15:37	 <p>CCR PIPE EP 4501 INLET To EP 4501 OUTLET</p> <p>04,01,19 -128/-87' +1.7% +205.1ft</p>

EP-4501



Distance	Fault Observation	Time	Picture
205.2	<b>Roots Fine Joint</b> <b>Position: 5</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	1:15:50	
205.2	<b>Infil Stain</b> <b>Position: 2 To 5</b> <b>Severity: None</b> <b>Joint</b>	1:19:35	
205.2	<b>General Observation</b> <b>Severity: None</b> <b>Remarks: 0.591</b>	1:16:47	

EP-4501

Distance	Fault Observation	Time	Picture
211.1	<b>Roots Fine Joint</b> <b>Position: 5 To 7</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	1:18:01	
211.1	<b>Infil Stain</b> <b>Position: 7 To 4</b> <b>Severity: None</b> <b>Joint</b>	1:18:25	
217.0	<b>Roots Fine Joint</b> <b>Position: 4 To 6</b> <b>Severity: None</b> <b>Joint</b> <b>Maint Weight: 1</b>	1:19:34	

EP-4501

Distance	Fault Observation	Time	Picture
221.9	Discharge Point Severity: None Remarks: EP 4501 OUTLET	1:20:09	

Created with the  report generator

EP-4501

# Project: CCR PIPE

Date: 4/1/2019 2:59:00 PM

Street: I-26

Length Surveyed: 221.9

Pacp Quick Overall Rating:

Height (Diameter): 30

Street: I-26

Pipe Segment Reference:

Upstream MH: EP 4501 INLET

Downstream MH: EP 4501

OUTLET

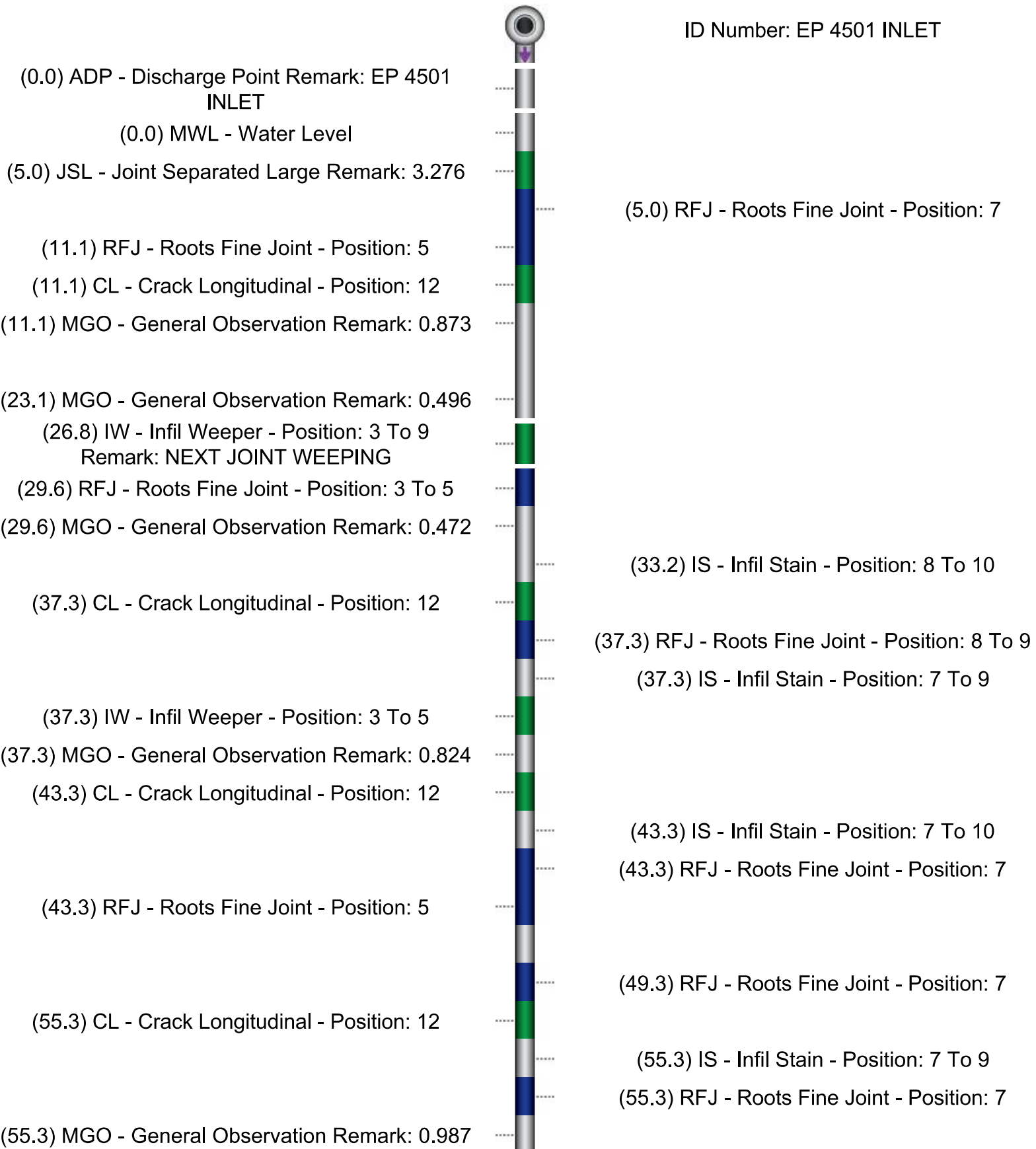
Direction of Survey:

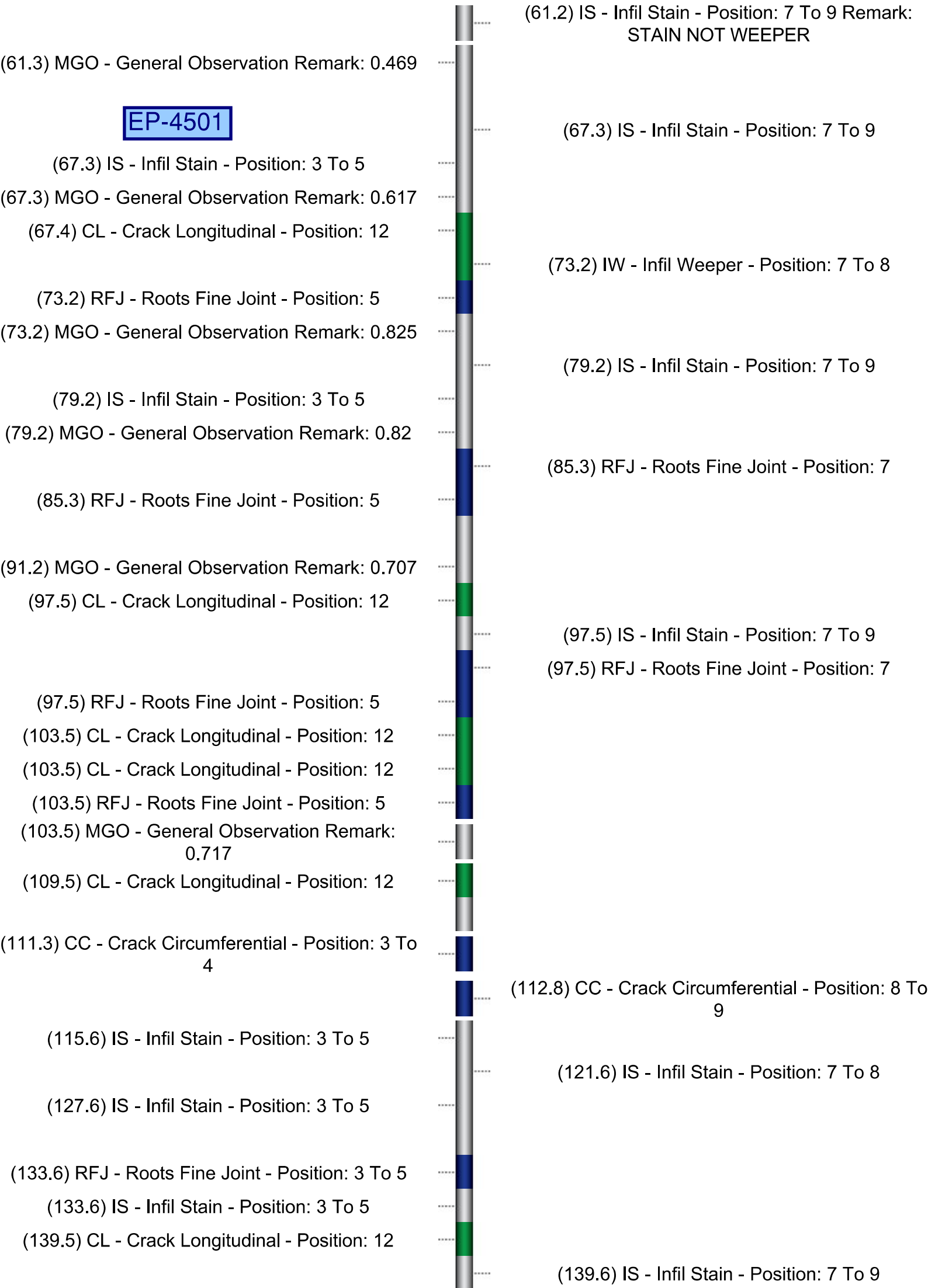
Downstream

Material: Reinforced Concrete

Pipe

EP-4501





(145.2) CL - Crack Longitudinal - Position: 12  
Photo Num: 2 (145.2) CL - Crack Longitudinal - Position: 12

EP-4501

(145.3) IS - Infil Stain - Position: 1 To 5

(145.2) IS - Infil Stain - Position: 7 To 8

(151.3) RFJ - Roots Fine Joint - Position: 5

(151.3) RFJ - Roots Fine Joint - Position: 7

(157.3) CL - Crack Longitudinal - Position: 12  
Photo Num: 2 (157.3) CL - Crack Longitudinal - Position: 12

(151.3) IS - Infil Stain - Position: 7 To 5

(157.3) RFJ - Roots Fine Joint - Position: 5

(157.3) IS - Infil Stain - Position: 7 To 9

(157.3) RFJ - Roots Fine Joint - Position: 7

(157.3) IS - Infil Stain - Position: 3 To 5

(161.9) CC - Crack Circumferential - Position: 8 To 9

(163.3) CL - Crack Longitudinal - Position: 12

(163.4) CL - Crack Longitudinal - Position: 12

(163.4) IS - Infil Stain - Position: 7 To 10

(163.4) IW - Infil Weeper - Position: 3 To 5

(169.1) CL - Crack Longitudinal - Position: 12

(169.1) CM - Crack Multiple - Position: 11 To 1  
Remark: SPIDER LIKE CRACKING  
Photo Num: 2 (169.1) CM - Crack Multiple - Position: 11 To 1 Remark: SPIDER LIKE CRACKING

(169.1) IS - Infil Stain - Position: 3 To 5

(169.1) IS - Infil Stain - Position: 7 To 9

(172.7) CM - Crack Multiple - Position: 9 To 3 - Cont Def: S01 Remark: SPIDER LIKE CRACKING  
Photo Num: 2 (172.7) CM - Crack Multiple - Position: 9 To 3 - Cont Def: S01 Remark: SPIDER LIKE CRACKING  
Photo Num: 3 (172.7) CM - Crack Multiple - Position: 9 To 3 - Cont Def: S01 Remark: SPIDER LIKE CRACKING  
Photo Num: 4 (172.7) CM - Crack Multiple - Position: 9 To 3 - Cont Def: S01 Remark: SPIDER LIKE CRACKING

(174.9) IS - Infil Stain - Position: 7 To 9

(174.9) IS - Infil Stain - Position: 9 To 5

(180.9) RFJ - Roots Fine Joint - Position: 5 To 9

(180.9) IS - Infil Stain - Position: 9 To 3



**EP-4501**

(182.7) CM - Crack Multiple - Position: 9 To 3 -  
Cont Def: F01 Remark: SPIDER LIKE CRACKING  
(187.1) RFJ - Roots Fine Joint - Position: 7 To 9

(187.1) RFJ - Roots Fine Joint - Position: 4 To 5

(187.1) IS - Infil Stain - Position: 8 To 4

(193.1) B - Broken - Position: 1 To 2 Remark:  
CHIPPED SPIGOT

(193.0) RFJ - Roots Fine Joint - Position: 7

(196.8) IW - Infil Weeper - Position: 3 To 5

(198.9) IS - Infil Stain - Position: 7 To 9

(205.2) RFJ - Roots Fine Joint - Position: 5

(205.2) RFJ - Roots Fine Joint - Position: 7

(205.2) IS - Infil Stain - Position: 2 To 5

(205.2) MGO - General Observation Remark:  
0.591

(211.1) RFJ - Roots Fine Joint - Position: 5 To 7

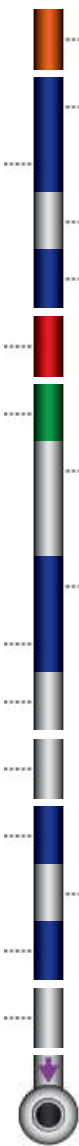
(211.1) IS - Infil Stain - Position: 7 To 4

(217.0) RFJ - Roots Fine Joint - Position: 4 To 6

(221.9) ADP - Discharge Point Remark: EP 4501  
OUTLET

Total Distance: 221.9

ID Number: EP 4501 OUTLET



# Project: CCR PIPE

Date: 4/1/2019 2:59:00 PM

Street: I-26

Length Surveyed: 221.9

Pacp Quick Overall Rating:

Height (Diameter): 30

Street: I-26

Pipe Segment Reference:

Upstream MH: EP 4501 INLET

Downstream MH: EP 4501  
OUTLET

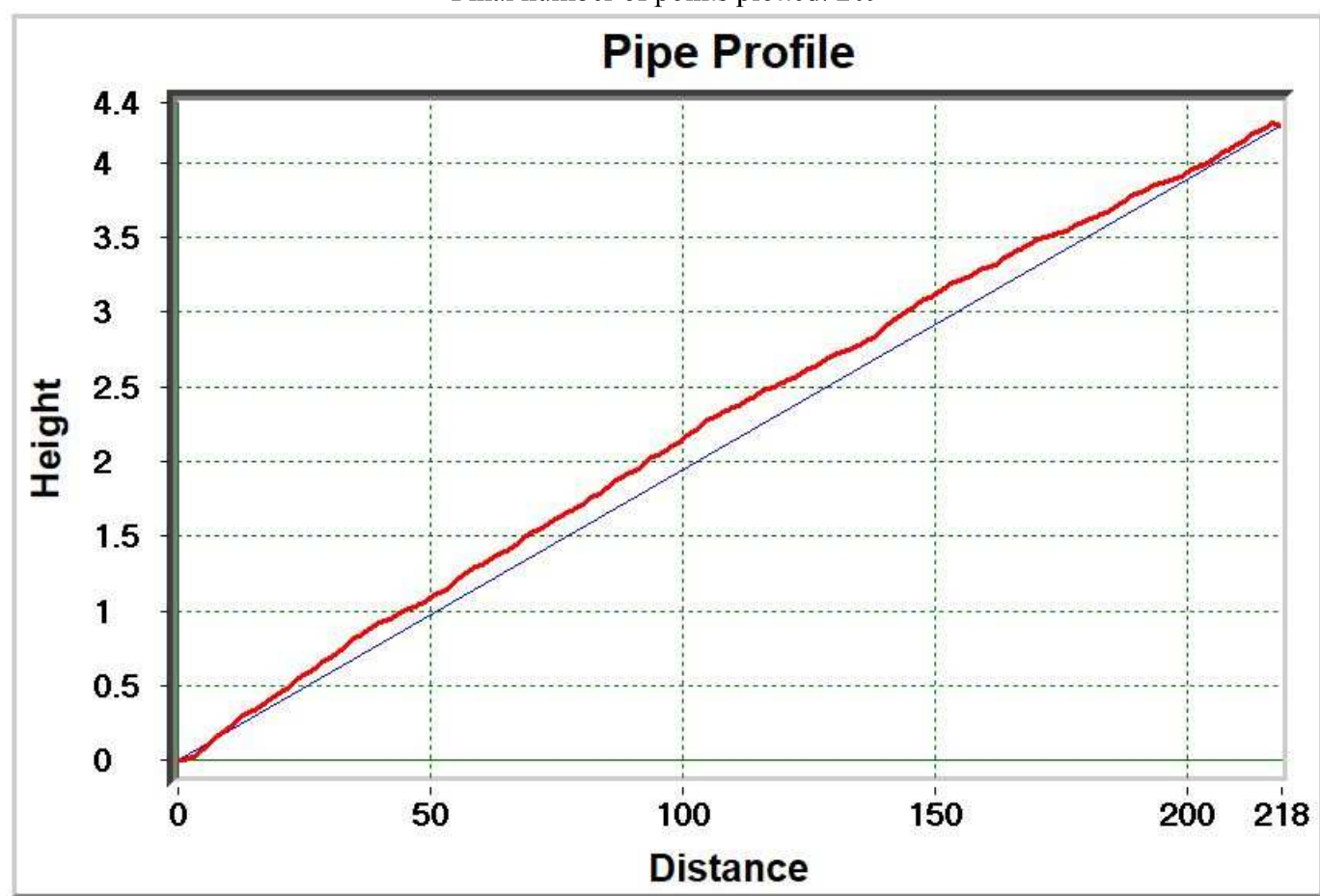
Direction of Survey:

Downstream

Material: Reinforced Concrete  
Pipe

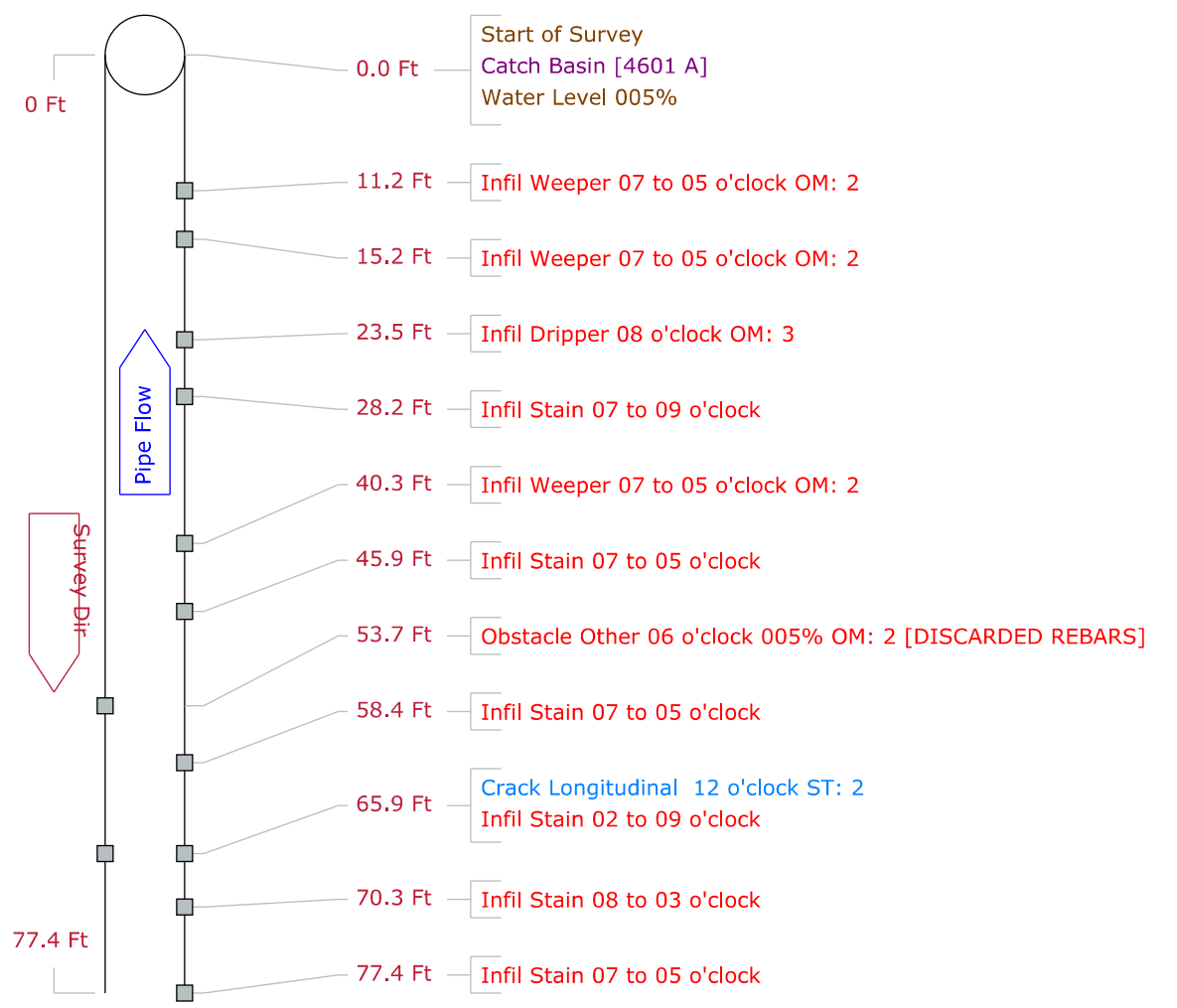
EP-4501

Percent Grade Mean: 1.92  
Plot Distance From: 0 To 223  
Max Percent Difference: 3  
Number of Window Values: 1  
Percent Difference Max for Windows Values: 60  
Number of Feet to Average: 1  
Final number of points plotted: 209



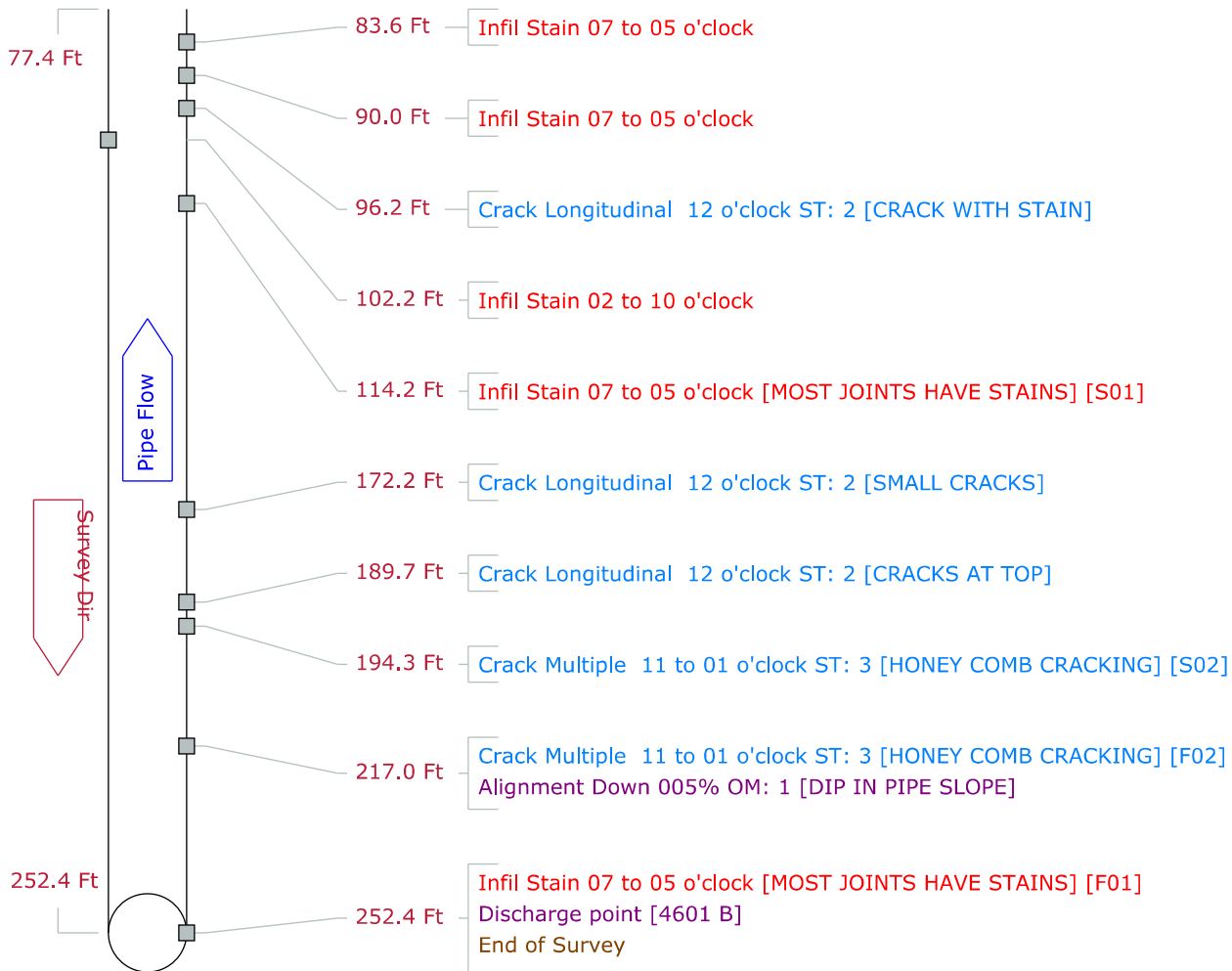
Pipe Graphic Report of PSR 4601 B X for HDR

<b>Setup</b> 18	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b> HDR		
<b>P/O #</b>	<b>Date</b> 2020/12/03	<b>Time</b> 15:03	<b>Street</b> I-20 GARNER LANE
<b>City</b> WEST COLUMBIA	<b>Further location details</b>		
<b>Up</b> 4601 B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> 4601 A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 24	<b>Width</b> ins	<b>Preclean</b> Z
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 252.4 Ft	<b>Date Cleaned</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Length Surveyed</b> 252.40 Ft
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b>	SURVEYED FROM GARNER LANE		<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span> <span style="color: brown;">Miscellaneous</span> <span style="color: green;">Hydraulic</span>
<b>Location</b>			
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



Pipe Graphic Report of PSR 4601 B X for HDR

<b>Setup</b> 18	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b> HDR		
<b>P/O #</b>	<b>Date</b> 2020/12/03	<b>Time</b> 15:03	<b>Street</b> I-20 GARNER LANE
<b>City</b> WEST COLUMBIA	<b>Further location details</b>		
<b>Up</b> 4601 B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> 4601 A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Upstream	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 24	<b>Width</b> ins	<b>Preclean</b> Z
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 252.4 Ft	<b>Length Surveyed</b> 252.4 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>		
<b>Additional info</b>	SURVEYED FROM GARNER LANE		<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span> <span style="color: orange;">Miscellaneous</span> <span style="color: green;">Hydraulic</span>
<b>Location</b>			
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		



CCTV Picture List of 4601 B X for HDR

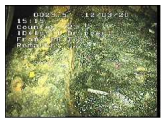
<b>Work Order</b>			<b>Setup 18</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/03	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** Count 11.2 Ft  
**Code** Infil Weeper  
**Remarks**  
**File Name** 146.jpg



**Video Index** Count 15.2 Ft  
**Code** Infil Weeper  
**Remarks**  
**File Name** 147.jpg



**Video Index** Count 23.5 Ft  
**Code** Infil Dripper  
**Remarks**  
**File Name** 148.jpg



**Video Index** Count 28.2 Ft  
**Code** Infil Stain  
**Remarks**  
**File Name** 149.jpg



**Video Index** Count 40.3 Ft  
**Code** Infil Weeper  
**Remarks**  
**File Name** 150.jpg



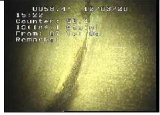
**Video Index** Count 45.9 Ft  
**Code** Infil Stain  
**Remarks**  
**File Name** 151.jpg



**Video Index** Count 53.7 Ft  
**Code** Obstacle Other  
**Remarks** DISCARDED REBARS  
**File Name** 152.jpg

CCTV Picture List of 4601 B X for HDR

<b>Work Order</b>		<b>Setup 18</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/03
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snapshots\CAROLNA CROSSROADS\	
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\	
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\	



**Video Index** **Count** 58.4 Ft

**Code** Infil Stain

**Remarks**

**File Name** 153.jpg



<b>Work Order</b>			<b>Setup 18</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/03	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



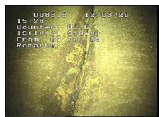
**Video Index** Count 65.9 Ft  
**Code** Crack Longitudinal  
**Remarks**  
**File Name** 154.jpg



**Video Index** Count 65.9 Ft  
**Code** Infil Stain  
**Remarks**  
**File Name** 155.jpg



**Video Index** Count 70.3 Ft  
**Code** Infil Stain  
**Remarks**  
**File Name** 156.jpg



**Video Index** Count 83.6 Ft  
**Code** Infil Stain  
**Remarks**  
**File Name** 157.jpg



**Video Index** Count 90.0 Ft  
**Code** Infil Stain  
**Remarks**  
**File Name** 158.jpg

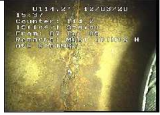


**Video Index** Count 96.2 Ft  
**Code** Crack Longitudinal  
**Remarks** CRACK WITH STAIN  
**File Name** 159.jpg



**Video Index** Count 102.2 Ft  
**Code** Infil Stain  
**Remarks**  
**File Name** 160.jpg

<b>Work Order</b>			<b>Setup 18</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/03	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** **Count** 114.2 Ft

**Code** Infil Stain

**Remarks** MOST JOINTS HAVE STAINS

**File Name** 161.jpg

<b>Work Order</b>			<b>Setup 18</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/03	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



**Video Index** Count 114.2 Ft  
**Code** Infil Stain  
**Remarks** MOST JOINTS HAVE STAINS  
**File Name** 162.jpg



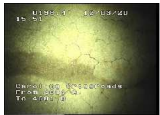
**Video Index** Count 172.2 Ft  
**Code** Crack Longitudinal  
**Remarks** SMALL CRACKS  
**File Name** 163.jpg



**Video Index** Count 189.7 Ft  
**Code** Crack Longitudinal  
**Remarks** CRACKS AT TOP  
**File Name** 164.jpg



**Video Index** Count 194.3 Ft  
**Code** Crack Multiple  
**Remarks** HONEY COMB CRACKING  
**File Name** 165.jpg



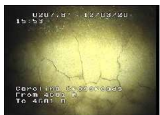
**Video Index** Count 194.3 Ft  
**Code** Crack Multiple  
**Remarks** HONEY COMB CRACKING  
**File Name** 166.jpg



**Video Index** Count 194.3 Ft  
**Code** Crack Multiple  
**Remarks** HONEY COMB CRACKING  
**File Name** 167.jpg



**Video Index** Count 194.3 Ft  
**Code** Crack Multiple  
**Remarks** HONEY COMB CRACKING  
**File Name** 168.jpg



**Video Index** Count 194.3 Ft  
**Code** Crack Multiple  
**Remarks** HONEY COMB CRACKING

<b>Work Order</b>			<b>Setup 18</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/03	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		

**File Name** 169.jpg

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<b>Work Order</b>		<b>Setup 18</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/03
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\	
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\	
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\	



**Video Index** Count 194.3 Ft  
**Code** Crack Multiple  
**Remarks** HONEY COMB CRACKING  
**File Name** 170.jpg



**Video Index** Count 217.0 Ft  
**Code** Alignment Down  
**Remarks** DIP IN PIPE SLOPE  
**File Name** 171.jpg

<b>Work Order</b>			<b>Setup 18</b>
<b>Video</b>	<b>Survey Date</b>	2020/12/03	
<b>Path to picture files</b>	F:\CAMERA WORK DATABASE\Snaps\CAROLNA CROSSROADS\		
<b>Path to video files</b>	F:\CAMERA WORK DATABASE\Movies\CAROLNA CROSSROADS\		
<b>Path to media files</b>	F:\CAMERA WORK DATABASE\Media\CAROLNA CROSSROADS\		



Tabular Report of PSR 4601 B X for HDR

<b>Setup</b> 18	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT
<b>Drainage</b>	<b>Survey Customer</b> HDR		
<b>P/O #</b>	<b>Date</b> 2020/12/03	<b>Time</b> 15:03	<b>Street</b> I-20 GARNER LANE
<b>City</b> WEST COLUMBIA	<b>Further location details</b>		
<b>Up</b> 4601 B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Down</b> 4601 A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b> Ft
<b>Use</b> Stormwater	<b>Direction</b> Up	<b>Flow control</b>	<b>Media No</b>
<b>Shape</b> Circular	<b>Height</b> 24	<b>Width</b> ins	<b>Preclean</b> Z
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b> Ft	<b>Total length</b> 252.4 Ft	<b>Length Surveyed</b> 252.4 Ft
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>	<b>Weather</b>
<b>Purpose</b>	<b>Cat</b>	<b>Pressure</b>	
<b>Additional info</b>	SURVEYED FROM GARNER LANE		<span style="color: blue;">Structural</span> <span style="color: red;">O &amp; M</span> <span style="color: purple;">Constructional</span>
<b>Location</b>	Miscellaneous		
<b>Project</b> Carolina Crossroads	<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>	<b>Elevation</b>	
<b>Coordinate System</b>	<b>GPS Accuracy</b>		

Count	Video	CD Code	In1	In2	%	JntFr	To	ImRef	Remarks
0.0		ST	Start of Survey						
0.0		ACB	Catch Basin						4601 A
0.0		MWL	Water Level		5				
11.2		IW	Infil Weeper			J	07	05	
15.2		IW	Infil Weeper			J	07	05	
23.5		ID	Infil Dripper			J	08		
28.2		IS	Infil Stain			J	07	09	
40.3		IW	Infil Weeper			J	07	05	
45.9		IS	Infil Stain			J	07	05	
53.7		OBZ	Obstacle Other		5	06			DISCARDED REBARS
58.4		IS	Infil Stain			J	07	05	
65.9		CL	Crack Longitudinal			J	12		
65.9		IS	Infil Stain			J	02	09	
70.3		IS	Infil Stain			J	08	03	
77.4		IS	Infil Stain			J	07	05	
83.6		IS	Infil Stain			J	07	05	
90.0		IS	Infil Stain			J	07	05	
96.2		CL	Crack Longitudinal			J	12		CRACK WITH STAIN
102.2		IS	Infil Stain			J	02	10	
114.2		S01	IS Infil Stain			J	07	05	MOST JOINTS HAVE STAINS
172.2		CL	Crack Longitudinal			J	12		SMALL CRACKS
189.7		CL	Crack Longitudinal			J	12		CRACKS AT TOP
194.3		S02	CM Crack Multiple			J	11	01	HONEY COMB CRACKING
217.0		F02	CM Crack Multiple			J	11	01	HONEY COMB CRACKING
217.0		LD	Alignment Down		5				DIP IN PIPE SLOPE
252.4		F01	IS Infil Stain			J	07	05	MOST JOINTS HAVE STAINS
252.4		ADP	Discharge point						4601 B
252.4		FH	End of Survey						

252.4 Ft Total Length Surveyed



Tabular Report of PSR 4601 B X for HDR

<b>Setup</b> 18	<b>Surveyor</b> GCS	<b>Certificate #</b> U-0917-07009391	<b>System Owner</b> SCDOT		
<b>Drainage</b>		<b>Survey Customer</b> HDR			
<b>P/O #</b>	<b>Date</b> 2020/12/03	<b>Time</b> 15:03	<b>Street</b> I-20 GARNER LANE		
<b>City</b> WEST COLUMBIA	<b>Further location details</b>				
<b>Up</b> 4601 B	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Down</b> 4601 A	<b>Rim to invert</b>	<b>Grade to invert</b>	<b>Rim to grade</b>	<b>Ft</b>	
<b>Use</b> Stormwater	<b>Direction</b> Up	<b>Flow control</b>		<b>Media No</b>	
<b>Shape</b> Circular	<b>Height</b> 24	<b>Width</b>	<b>ins</b>	<b>Preclean</b> Z	<b>Date Cleaned</b>
<b>Material</b> Reinforced Concrete Pipe	<b>Joint length</b>	<b>Ft</b>	<b>Total length</b> 252.4	<b>Ft</b>	<b>Length Surveyed</b> 252.4 <b>Ft</b>
<b>Lining</b>	<b>Year laid</b>	<b>Year rehabilitated</b>		<b>Weather</b>	
<b>Purpose</b>	<b>Cat</b>		<b>Pressure</b>		
<b>Additional info</b>	SURVEYED FROM GARNER LANE		<b>Structural</b>	<b>O &amp; M</b>	<b>Constructional</b>
<b>Location</b>			<b>Miscellaneous</b>		
<b>Project</b> Carolina Crossroads			<b>Work Order</b>		
<b>Northing</b>	<b>Easting</b>			<b>Elevation</b>	
<b>Coordinate System</b>			<b>GPS Accuracy</b>		

<b>Scores</b>	<b>Structural:</b>	<b>Pipe Rating</b> 23	<b>Pipe Ratings Index</b> 2.6	<b>Quick Rating</b> 3524
	<b>O&amp;M:</b>	<b>Pipe Rating</b> 12	<b>Pipe Ratings Index</b> 2	<b>Quick Rating</b> 3124
	<b>Overall</b>	<b>Pipe Rating</b> 35	<b>Pipe Ratings Index</b> 4.6	<b>Quick Rating</b> 3628