

***CORRECTIVE ACTION
(QUARTERLY PROGRESS REPORT)***

FOR

SANITARY SEWER COLLECTION SYSTEM

TO SERVE THE

***CITY OF YELLVILLE
MARION COUNTY, ARKANSAS***

DECEMBER 2019



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MARION COUNTY, ARKANSAS

DECEMBER 2019

ENGINEERING SERVICES, INC.

1207 SOUTH OLD MISSOURI ROAD • P. O. BOX 282 • SPRINGDALE, ARKANSAS 72765

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1. GENERAL OVERVIEW

INTRODUCTION

In February of 2019, Engineering Services, Inc. prepared a Corrective Action Plan (CAP) on behalf of The City of Yellville. The purpose of the CAP was to create a plan for evaluating the sanitary sewer system with the ultimate goal of the evaluation being recommendations for improvements to the existing sanitary sewer collection system to mitigate system defects that result in sanitary sewer overflows (SSOs). The CAP was prepared at the request of the Water Division Enforcement Branch of the Arkansas Department of Environmental Quality (ADEQ). This request was made by ADEQ due to a series of SSOs as documented in its letter dated January 23, 2019. A copy of this letter was previously included under Appendix A of the CAP.

The CAP provided an assessment of the likely causes of the effluent violations, set out detailed corrective actions for the City to perform in order to evaluate the sanitary sewer collection system, and established a milestone schedule for the evaluation of the system with a reasonable expected date of final compliance.

This Quarterly Report serves to provide ADEQ with an update regarding progress made toward the goals set out in the CAP.

2. MILESTONE SCHEDULE

RECOMMENDED SCHEDULE

The recommended milestone schedule as set out in the CAP is shown in the following table.

Table 4.1
Original Milestone Schedule

Task	Target Completion Date
Visual Inspection of Manholes in Select Locations	March 2019
Smoke Testing	June 2019
Closed Circuit Televising	August 2019
Develop Mitigation Plan	October 2019
Prepare/Submit Preliminary Engineering Report to WWAC	November 2019
Prepare/Submit Environmental Report	January 2020
Prepare/Submit Funding Application	January 2020
Prepare/Submit Draft Plans and Specifications	February 2020
Prepare/Submit Final Plans and Specifications	March 2020
Advertise for Bids	April 2020
Open Bids	May 2020
Award Contract	June 2020
Start of Construction	June 2020
End of Construction	March 2021

Due to funding program deadlines (CDBG Funding Applications will not be processed until after submittal deadline of March 2020), the original milestone schedule has been modified as shown below in Table 4.2.

**Table 4.2
Revised Milestone Schedule**

Task	Target Completion Date
Visual Inspection of Manholes in Select Locations	March 2019
Smoke Testing	June 2019
Closed Circuit Televising	August 2019
Develop Mitigation Plan	October 2019
Prepare/Submit Preliminary Engineering Report to WWAC	November 2019
Prepare/Submit Environmental Report	January 2020
Prepare/Submit Funding Application	March 2020
Prepare/Submit Draft Plans and Specifications	April 2020
Prepare/Submit Final Plans and Specifications	May 2020
Advertise for Bids	June 2020
Open Bids	July 2020
Award Contract	August 2020
Start of Construction	August 2020
End of Construction	May 2021

PROGRESS REPORT SCHEDULE

The quarterly progress reports shall be submitted to ADEQ in accordance with the schedule set forth below.

**Table 4.3
Progress Report Schedule**

Quarterly Report	Submittal Date
1 st Quarter	December 15, 2019
2 nd Quarter	March 15, 2020
3 rd Quarter	June 15, 2020
4 th Quarter	September 15, 2020

Additional reports, as required, will be submitted by the 15th of the subsequent months of December, March, June, and September.

3. CORRECTIVE ACTION PROGRESS

VISUAL INSPECTION OF MANHOLES IN SELECT LOCATIONS

Representatives from Engineering Services, Inc. (ESI) met with City of Yellville operations staff on February 14, 2019 and made preliminary visual inspections of a few select manholes in areas where sanitary sewer overflows (SSOs) were known to have occurred. The preliminary investigations confirmed the need for additional inspection of these areas of the collection system. ESI prepared a map of the collection system highlighting the areas of the collection system that should be evaluated further. A copy of this map is included under Appendix A of this report.

The City of Yellville enlisted the assistance of the Arkansas Rural Water Association (ARWA) to perform a sanitary sewer inspection of the portion of its collection system recommended by ESI. ARWA representatives performed this work in April of 2019. As a part of their work, ARWA representatives performed visual inspection of manholes.

SMOKE TESTING

As a part of its work evaluating the condition of the City's sanitary sewer collection system, ARWA also performed smoke testing over the portions of the system which were known to experience SSOs. Smoke testing only provides limited information regarding the nature of defects in the collection system, e.g. it can identify homes whose gutters are connected to the sanitary sewer or homes whose caps are missing from their sanitary sewer service line cleanouts. However, smoke testing is very effective at identifying the location of collection system defects. Through smoke testing, ARWA representatives were able to identify specific areas of the collection system that exhibited signs of defects and, therefore, warranted more detailed inspection.

CLOSED CIRCUIT TELEVISIONING

In addition to visual inspection of manholes and smoke testing, ARWA representatives also performed closed circuit televising of portions of the Yellville sanitary sewer collection system. Areas in which the presence of defects had been identified through the use of smoke testing were scheduled to be televised. Over the course of three days, ARWA collected data on the collection system through the use of a camera with full telemetry capabilities mounted to a remote operated vehicle. After some time to analyze the data that was collected, ARWA produced a brief summary report detailing the findings of their work, and delivered this report to ESI on April 30, 2019. A copy of this report is included under Appendix B of this report. ESI updated the Yellville sanitary sewer collection system map to show, graphically, the findings of the ARWA

investigation. A copy of this map is included under Appendix C of this report.

It should be noted that in many locations scheduled for closed circuit televising, root intrusion was so severe that the camera could not pass. Therefore, ARWA used a root saw to remove areas of heavy root intrusion prior to televising the sewer mains. This work has provided the additional benefit of mitigating some of the SSOs in the system which were clearly a result of blockages due to the root intrusion.

DEVELOPMENT OF MITIGATION PLAN

From the information in the report created by ARWA, ESI was able to develop a preliminary mitigation plan. Areas of the collection system exhibiting the greatest density of defects will be prioritized for rehabilitation. A determination was made to break the overall project into two separate phases in order to facilitate rehabilitation of the most critical areas more quickly. ESI is proposing the most critical areas to be rehabilitated under Phase I of the project utilizing funding through the Community Development Block Grant (CDBG) Program administered by the Arkansas Economic Development Commission (AEDC). Phase II of the project, which covers a larger area of the collection system, will be funded through the United States Department of Agriculture Rural Development (USDA RD) Water and Sewer Program.

PREPARE/SUBMIT PRELIMINARY ENGINEERING REPORT TO WWAC

Upon development of the preliminary mitigation plan, ESI was able to begin work on the Preliminary Engineering Report (PER) for submittal to the Water and Wastewater Advisory Committee (WWAC). The WWAC is an interagency committee whose primary purpose is to recommend funding alternatives for proposed water and sewer infrastructure projects. The PER discusses the need for the project as well as setting forth several alternatives for the mitigation efforts. Each alternative is then evaluated financially, and then a recommendation is made based on the most economical and most feasible options. The PER was submitted, along with a preliminary application to the WWAC on October 15, 2019. A copy of the PER is included under Appendix D of this report.

The WWAC considered the application and the report at its November 6, 2019 meeting, and recommended that funding for Phase I of the project be pursued through the CDBG program administered by AEDC. The Committee also recommended funding of Phase II to be pursued through USDA RD. A letter of approval and funding recommendations was issued by the WWAC on September 12, 2019. A copy of the WWAC approval letter is included under Appendix E of this report.

PREPARE/SUBMIT ENVIRONMENTAL REPORT

Preparation of the Environmental Report has begun. Once completed, this report will be submitted as a part of the funding application for the proposed project.

PREPARE/SUBMIT FUNDING APPLICATION

Preparation of the funding application has begun. The funding application will not be complete until the Environmental Report is completed.

PREPARE/SUBMIT DRAFT PLANS AND SPECIFICATIONS

Preparation of Draft Plans and Specifications has not yet begun. This task will begin once project funding has been procured.

PREPARE/SUBMIT FINAL PLANS AND SPECIFICATIONS

Preparation of Final Plans and Specifications has not yet begun. This task will begin once agency review of the Draft Plans and Specifications has been completed.

ADVERTISE FOR BIDS

Advertisement for Bids for the proposed project has not yet occurred. This task will be initiated once agency approval of the Final Plans and Specifications has been issued.

OPEN BIDS

Bids for the project will be opened approximately 30 days after the Advertisement for Bids has been published.

AWARD CONSTRUCTION CONTRACT

The Construction Contract will be awarded approximately 30 days after the Bids have been opened.

START OF CONSTRUCTION

Construction will begin near the time the Contract has been awarded.

END OF CONSTRUCTION

Construction will be completed approximately nine months after the beginning of construction.

APPENDIX A

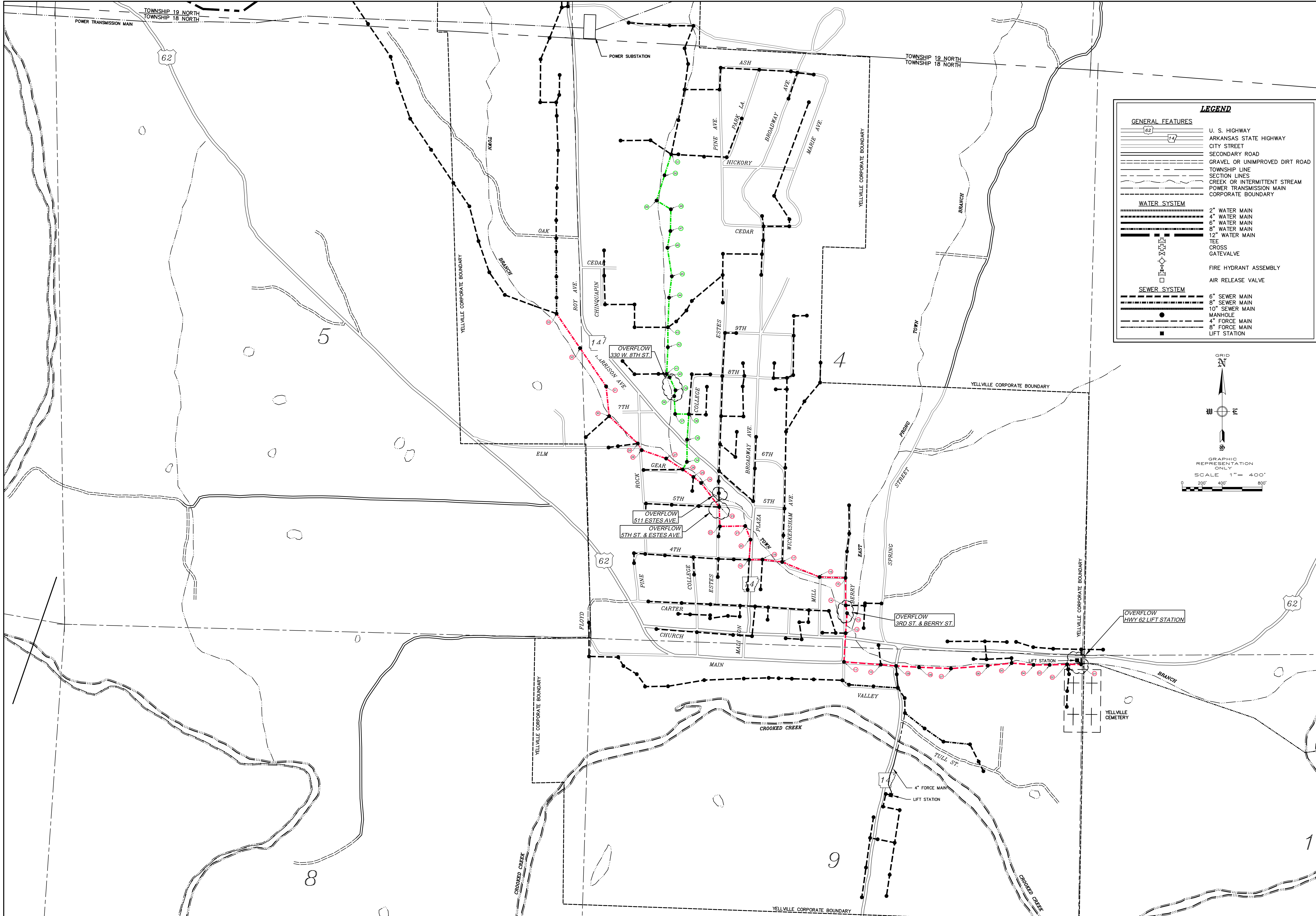
Collection System Areas to be Evaluated Map

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**SANITARY SEWER COLLECTION SYSTEM
 CITY OF YELLVILLE
 MARION COUNTY, ARKANSAS**



LEGEND

GENERAL FEATURES

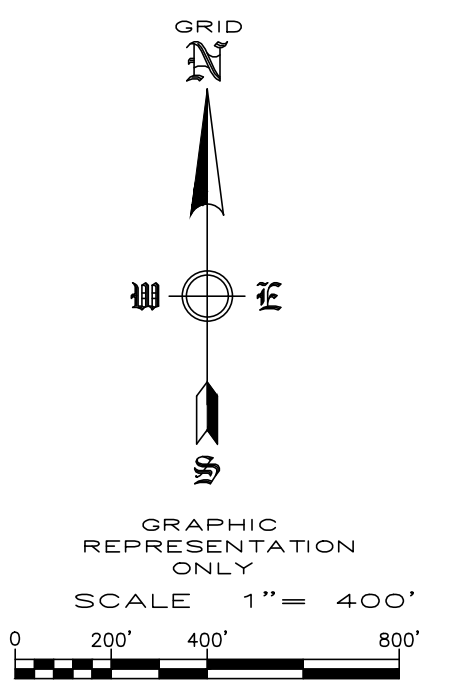
- U. S. HIGHWAY
- ARKANSAS STATE HIGHWAY
- CITY STREET
- SECONDARY ROAD
- GRAVEL OR UNIMPROVED DIRT ROAD
- TOWNSHIP LINE
- SECTION LINES
- CREEK OR INTERMITTENT STREAM
- POWER TRANSMISSION MAIN
- CORPORATE BOUNDARY

WATER SYSTEM

- 2" WATER MAIN
- 4" WATER MAIN
- 6" WATER MAIN
- 8" WATER MAIN
- 12" WATER MAIN
- TEE
- CROSS
- GATEVALVE
- FIRE HYDRANT ASSEMBLY
- AIR RELEASE VALVE

SEWER SYSTEM

- 6" SEWER MAIN
- 8" SEWER MAIN
- 10" SEWER MAIN
- MANHOLE
- 4" FORCE MAIN
- 8" FORCE MAIN
- LIFT STATION



REVISION	DATE	DESCRIPTION

SCALE: 1"=400'
 DATE: Apr 23, 2019
 ENGINEER: JAL
 DRAWN BY: JAL
 W.O. #: 19804

APPENDIX B

ARWA Collection System Evaluation Report

ENGINEERING SERVICES, INC.

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Yellville Sewer Collection System Evaluation

On April 23rd thru April 25th ARWA Cleaned and inspected with CCTV Equipment approximately 4,328 feet of sewer main for Yellville Waste Water System to identify possible problems that are causing sewer overflows at various identified points in the system collection system.

On April 23rd before Camera Inspection was started system Operator requested that another problem with discharge line from a secondary clarifier unit at the waste water treatment plant that was plugged be jetted with ARWA's Vac Cleaner truck in order to unstop the line. After several attempts of this was not a success.

In order to inspect the sewer mains with camera unit it was necessary to plug flow at each section as it was videoed due to excessive flow at every section of main. This flow was presumed and I feel confident after videoing mostly from Inflow. Areas identified by system and Engineer to be inspected was not all accessible due to being located in remote areas that could not be accessed by our cleaning and camera equipment (No access Roads). However areas that could be accessed were from Manhole #26 to Manhole #43 and from Manhole # 10 to Manhole # 26. The findings on this area are provided on recorded videos as well as included PDF reports. Type of findings and number of include

Blocked laterals – 6

Cracked Mains – 34

Roots in Joints – 162

Broken Main – 18

Roots in Laterals – 1

Debris – 1

Surface erosion of lining of Ductile Line 51.8 feet

Inflow – 62

Attempt to camera a section between Manhole #30 and Manhole #31 due to observing a high flow of nearly $\frac{3}{4}$ full pipe of an 8 inch pipe at Manhole 30 with Manhole 31 plugged which was obvious inflow into this section either from a creek crossing or from joints along section, was no success due to line not being accessible with cleaning equipment. Also area from Manhole 43 to 51 has heavy flow suspected to be mostly inflow that none of this could be videoed due to not being able to access it with equipment.

Most of the inflow problem observed was from clay tile pipe joints which are every 2.5 feet apart due to failure of sealing ability of joint gaskets. And high ground water level that mains are laying in.

Also there were sections that had heavy Roots and debris found this along with a very high amount of inflow is the contributing factors to system overflows in my opinion. And the possible fix to the problem is removal of the roots and debris and stopping the inflow by either lining the mains or replacement of the mains with leak tight jointed mains and taps.

Even though the amount of line inspected on this trip is only a small portion of the total collection system I feel from observing the amount of flow in all manholes and other laterals not on highlighted map to inspect has the same issue with and clay line joints or other unsealed breaks or taps throughout the whole collection system.

If there are any questions about these findings or videos and report please contact me.

Terry Fortenberry

ARWA Circuit Rider

501-676-2255



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 Fax: 407-425-1569

Main Inspections

Mainline ID: Yellville MH 36 to MH 35	City: Yellville	Address:	Project name: Yelleville
Upstream node: Yellville MH 36	Downstream node: Yellville MH 35	Start date/time: 4/23/2019 11:47 AM	End date/time: 4/23/2019 12:06 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 231.0 ft.	Surveyed distance: 230.7 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
78.1 ft.	D		10 /	Lateral	Live Connection	
96.4 ft.	D		12 /	Lateral Connection Problem	Lateral Blocked	
105.2 ft.	D		/	Crack	Longitudinal - Narrow	
114.9 ft.	D		/	Crack	Longitudinal - Narrow	
119.8 ft.	D		/	Crack	Longitudinal - Narrow	
125.4 ft.	D		/	Infiltration	Medium	
160.9 ft.	D		/	Root-in-Joint	Heavy	
230.7 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 41 to MH 40	City: Yellville	Address:	Project name: Yellville
Upstream node: Yelleville MH 41	Downstream node: Yellville MH 40	Start date/time: 4/23/2019 2:13 PM	End date/time: 4/23/2019 2:30 PM
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 62.5 ft.	Surveyed distance: 62.2 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

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

Main Inspections

Mainline ID: Yellville MH 40 to MH 39	City: Yellville	Address:	Project name: Yelleville
Upstream node: Yellville MH 40	Downstream node: Yellville MH 39	Start date/time: 4/23/2019 2:43 PM	End date/time: 4/23/2019 3:00 PM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 138.0 ft.	Surveyed distance: 117.3 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
3.7 ft.	D		12 /	Root-in-Joint	Heavy	
9.4 ft.	D		/	Crack	Longitudinal - Narrow	
28.6 ft.	D		12 /	Root-in-Joint	Heavy	
33.6 ft.	D		/	Root-in-Joint	Heavy	
54.8 ft.	D		/	Crack	Longitudinal - Narrow	
54.8 ft.	D		/	Root-in-Joint	Light	
59.7 ft.	D		/	Root-in-Joint	Medium	
70.0 ft.	D		/	Root-in-Joint	Heavy	
75.0 ft.	D		/	Root-in-Joint	Light	
75.0 ft.	D		/	Crack		
85.2 ft.	D		/	Root-in-Joint	Light	
90.8 ft.	D		/	Root-in-Joint	Medium	
90.8 ft.	D		/	Infiltration	Light	
95.2 ft.	D		/	Root-in-Joint	Light	
100.6 ft.	D		/	Root-in-Joint	Heavy	
100.6 ft.	D		/	Infiltration	Light	
101.3 ft.	D		/	Broken		
105.6 ft.	D		/	Root-in-Joint	Medium	
105.6 ft.	D		/	Infiltration	Light	
109.3 ft.	D		9 /	Lateral	Live Connection	
109.3 ft.	D		/	Crack		
110.4 ft.	D		/	Root-in-Joint	Medium	
115.6 ft.	D		/	Root-in-Joint	Medium	

Main Inspections

Mainline ID: Yellville MH 42 to MH 41	City: Yellville	Address:	Project name: Yelleville
Upstream node: Yellville MH 42	Downstream node: Yellville MH 41	Start date/time: 4/23/2019 3:38 PM	End date/time: 4/23/2019 3:58 PM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 272.0 ft.	Surveyed distance: 271.4 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments: not cleaned due to no access			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
9.0 ft.	D		/	Root-in-Joint	Medium	
14.3 ft.	D		/	Root-in-Joint	Medium	
19.3 ft.	D		/	Root-in-Joint	Heavy	
24.5 ft.	D		/	Root-in-Joint	Medium	
35.2 ft.	D		/	Root-in-Joint	Medium	
40.4 ft.	D		/	Root-in-Joint	Medium	
50.3 ft.	D		/	Root-in-Joint	Light	
55.7 ft.	D		/	Root-in-Joint	Light	
71.0 ft.	D		/	Root-in-Joint	Medium	
81.3 ft.	D		/	Root-in-Joint	Medium	
86.4 ft.	D		/	Root-in-Joint	Medium	
111.4 ft.	D		/	Root-in-Joint	Medium	
116.4 ft.	D		/	Root-in-Joint	Medium	
121.7 ft.	D		/	Root-in-Joint	Medium	
126.7 ft.	D		/	Root-in-Joint	Medium	
142.4 ft.	D		/	Root-in-Joint	Heavy	
147.0 ft.	D		/	Root-in-Joint	Medium	
152.5 ft.	D		/	Root-in-Joint	Light	
162.2 ft.	D		/	Root-in-Joint	Medium	
167.3 ft.	D		/	Root-in-Joint	Medium	
182.8 ft.	D		/	Root-in-Joint	Heavy	
182.8 ft.	D		/	Infiltration	Light	
188.2 ft.	D		/	Root-in-Joint	Heavy	
188.2 ft.	D		/	Infiltration	Light	
198.8 ft.	D		/	Root-in-Joint	Medium	
203.2 ft.	D		/	Root-in-Joint	Light	
208.3 ft.	D		/	Root-in-Joint	Medium	
208.3 ft.	D		/	Infiltration	Medium	
212.9 ft.	D		/	Root-in-Joint	Light	
212.9 ft.	D		/	Infiltration	Light	
218.8 ft.	D		/	Root-in-Joint	Light	

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
223.8 ft.	D		/	Root-in-Joint		Light
230.0 ft.	D		/	Root-in-Joint		Light
230.0 ft.	D		/	Infiltration		Light
243.9 ft.	D		/	Root-in-Joint		Medium
243.9 ft.	D		/	Infiltration		Medium
248.8 ft.	D		/	Infiltration		Medium
254.6 ft.	D		/	Root-in-Joint		Medium
254.6 ft.	D		/	Infiltration		Light
259.3 ft.	D		/	Root-in-Joint		Light
259.3 ft.	D		/	Infiltration		Light
265.1 ft.	D		/	Broken		
271.4 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 43 to MH 42	City: Yellville	Address:	Project name: Yelleville
Upstream node: Yellville MH 43	Downstream node: Yellville MH 42	Start date/time: 4/23/2019 4:26 PM	End date/time: 4/23/2019 4:45 PM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 305.0 ft.	Surveyed distance: 304.3 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	

Comments:

Not Cleaned due to No Access

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
15.2 ft.	D		/	Infiltration	Medium	
20.1 ft.	D		/	Infiltration	Medium	
20.1 ft.	D		/	Crack	Longitudinal - Narrow	
30.8 ft.	D		/	Infiltration	Light	
30.8 ft.	D		/	Broken		
35.1 ft.	D		/	Infiltration	Medium	
39.8 ft.	D		/	Infiltration	Medium	
61.6 ft.	D		/	Infiltration	Medium	
101.9 ft.	D		/	Infiltration	Medium	
112.5 ft.	D		/	Infiltration	Medium	
122.9 ft.	D		/	Root-in-Joint	Medium	
143.2 ft.	D		/	Root-in-Joint	Medium	
148.8 ft.	D		/	Root-in-Joint	Light	
178.9 ft.	D		/	Root-in-Joint	Medium	
194.4 ft.	D		/	Root-in-Joint	Light	
199.7 ft.	D		/	Root-in-Joint	Medium	
204.8 ft.	D		/	Root-in-Joint	Medium	
215.2 ft.	D		/	Root-in-Joint	Light	
220.7 ft.	D		/	Root-in-Joint	Medium	
220.7 ft.	D		/	Broken		
225.4 ft.	D		/	Root-in-Joint	Medium	
230.8 ft.	D		/	Root-in-Joint	Medium	
235.9 ft.	D		/	Root-in-Joint	Medium	
240.8 ft.	D		/	Root-in-Joint	Heavy	
245.9 ft.	D		/	Root-in-Joint	Medium	
251.1 ft.	D		/	Root-in-Joint	Heavy	
256.6 ft.	D		/	Root-in-Joint	Heavy	
261.3 ft.	D		/	Root-in-Joint	Heavy	
266.4 ft.	D		/	Root-in-Joint	Medium	
271.7 ft.	D		/	Root-in-Joint	Heavy	
276.5 ft.	D		/	Root-in-Joint	Medium	

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
286.9 ft.	D		/	Root-in-Joint	Medium	
286.9 ft.	D		/	Infiltration	Light	
291.9 ft.	D		/	Root-in-Joint	Medium	
304.3 ft.	D		/	End of Pipe		
304.3 ft.	D		/	Infiltration	Medium	

Main Inspections

Mainline ID: Yelleville MH 40 to 39 attempt	City: 2nd Yelleville	Address:	Project name: Yelleville
Upstream node: Yelleville MH 40	Downstream node: Yelleville MH 39	Start date/time: 4/24/2019 9:05 AM	End date/time: 4/24/2019 9:39 AM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 138.0 ft.	Surveyed distance: 137.7 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
9.4 ft.	D		/	Crack	Longitudinal - Narrow	
28.8 ft.	D		/	Root-in-Joint	Heavy	
34.0 ft.	D		/	Root-in-Joint	Heavy	
55.3 ft.	D		/	Root-in-Joint	Light	
60.3 ft.	D		/	Root-in-Joint	Light	
70.7 ft.	D		/	Root-in-Joint	Heavy	
75.7 ft.	D		/	Broken		
75.7 ft.	D		/	Root-in-Joint	Light	
85.8 ft.	D		/	Root-in-Joint	Light	
91.7 ft.	D		/	Root-in-Joint	Medium	
96.5 ft.	D		/	Root-in-Joint	Light	
101.1 ft.	D		/	Root-in-Joint	Heavy	
106.5 ft.	D		/	Root-in-Joint	Medium	
106.5 ft.	D		/	Infiltration	Light	
110.5 ft.	D		/	Root-in-Joint	Medium	
115.4 ft.	D		/	Root-in-Joint	Medium	
137.7 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 39 to MH 38.	City: Yellville	Address:	Project name: Yelleville
Upstream node: Yellville MH 39	Downstream node: Yellville MH 38	Start date/time: 4/24/2019 9:44 AM	End date/time: 4/24/2019 10:05 AM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 64.0 ft.	Surveyed distance: 63.5 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
16.5 ft.	D		/	Root-in-Joint	Heavy	
21.8 ft.	D		/	Crack	Longitudinal - Narrow	
26.9 ft.	D		/	Root-in-Joint	Light	
33.4 ft.	D		/	Crack	Longitudinal - Narrow	
42.4 ft.	D		/	Root-in-Joint	Medium	
47.2 ft.	D		/	Root-in-Joint	Heavy	
47.6 ft.	D		/	Crack	Longitudinal - Narrow	
53.0 ft.	D		/	Root-in-Joint	Heavy	
55.2 ft.	D		/	Crack		
57.0 ft.	D		/	Root	Heavy	
57.0 ft.	D		/	Unknown Node		
57.4 ft.	D		/	Root	Heavy	
63.5 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 38 to MH 37	City: Yellville	Address:	Project name: Yelleville
Upstream node: Yellville MH 38	Downstream node: Yellville MH 37	Start date/time: 4/24/2019 10:08 AM	End date/time: 4/24/2019 10:25 AM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 179.0 ft.	Surveyed distance: 178.4 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
8.7 ft.	D		/	Root-in-Joint	Light	
8.7 ft.	D		/	Crack	Longitudinal - Narrow	
11.2 ft.	D		/	Crack	Circular - Narrow	
18.5 ft.	D		/	Root-in-Joint	Heavy	
23.7 ft.	D		/	Root-in-Joint	Light	
34.2 ft.	D		/	Root-in-Joint	Light	
50.5 ft.	D		2 /	Lateral	Live Connection	
51.8 ft.	D		/	Crack	Longitudinal - Narrow	
51.8 ft.	D		/	Root-in-Joint	Medium	
57.0 ft.	D		/	Root-in-Joint	Medium	
66.7 ft.	D		/	Root	Heavy	
66.7 ft.	D		/	Broken		
76.8 ft.	D		/	Root-in-Joint	Light	
82.3 ft.	D		/	Root-in-Joint	Heavy	
92.7 ft.	D		/	Root-in-Joint	Medium	
97.8 ft.	D		/	Root-in-Joint	Medium	
97.8 ft.	D		/	Crack		
100.5 ft.	D		/	Crack	Circular - Narrow	
112.9 ft.	D		/	Root-in-Joint	Medium	
114.2 ft.	D		/	Crack	Circular - Narrow	
122.8 ft.	D		/	Root-in-Joint	Heavy	
128.5 ft.	D		/	Root-in-Joint	Medium	
133.7 ft.	D		/	Root-in-Joint	Light	
139.6 ft.	D		/	Root-in-Lateral	Heavy	
139.6 ft.	D		12 /	Lateral	Live Connection	
141.0 ft.	D		/	Root-in-Joint	Heavy	
143.8 ft.	D		/	Unknown Node		
143.8 ft.	D		/	Root	Heavy	
145.9 ft.	D		10 /	Lateral Connection Problem	Lateral Blocked	
178.4 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 37 to MH 36	City: Yellville	Address:	Project name: Yelleville
Upstream node: Yellville MH 37	Downstream node: Yellville MH 36	Start date/time: 4/24/2019 11:07 AM	End date/time: 4/24/2019 11:15 AM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 113.0 ft.	Surveyed distance: 47.5 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
8.9 ft.	D		/	Root-in-Joint	Heavy	
29.9 ft.	D		/	Root-in-Joint	Medium	
30.5 ft.	D		2 /	Lateral	Live Connection	
31.8 ft.	D		/	Root-in-Joint	Medium	
36.4 ft.	D		/	Root-in-Joint	Heavy	
46.8 ft.	D		/	Broken	Void Visible - Large	
47.5 ft.	D		/	Root	Heavy	

Main Inspections

Mainline ID: Yellville MH 37 to MH 36, 2nd attempt	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 37	Downstream node: Yellville MH 36	Start date/time: 4/24/2019 11:28 AM	End date/time: 4/24/2019 11:36 AM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 113.0 ft.	Surveyed distance: 19.0 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

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

Main Inspections

Mainline ID: Yelleville MH 37 MH 36, 3 rd attempt	City: Yelleville	Address:	Project name: Yelleville
Upstream node: Yelleville MH 37	Downstream node: Yelleville MH 36	Start date/time: 4/24/2019 11:39 AM	End date/time: 4/24/2019 11:54 AM
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 113.0 ft.	Surveyed distance: 50.6 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

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

Main Inspections

Mainline ID: Yellville MH 35 to MH 34	City: Yellville	Address:	Project name: Yelleville
Upstream node: Yelleville MH 35	Downstream node: Yellville MH 34	Start date/time: 4/24/2019 1:59 PM	End date/time: 4/24/2019 2:22 PM
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 270.0 ft.	Surveyed distance: 269.0 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
40.1 ft.	D	2.6 ft.	5 / 7	Surface Damage	Severe Material Damage - Chemical Problem	
79.2 ft.	D	189.8 ft.	/	Pipe Type		
84.3 ft.	D		/	Root-in-Joint	Light	
89.3 ft.	D		/	Root-in-Joint	Medium	
94.7 ft.	D		/	Root-in-Joint	Light	
99.9 ft.	D		/	Crack		
104.9 ft.	D		/	Root-in-Joint	Light	
110.1 ft.	D		/	Root-in-Joint	Heavy	
120.8 ft.	D		/	Root-in-Joint	Heavy	
127.0 ft.	D		2 /	Lateral Connection Problem	Lateral Blocked	
130.5 ft.	D		/	Root-in-Joint	Light	
140.3 ft.	D		/	Root-in-Joint	Heavy	
146.2 ft.	D		/	Crack		
146.2 ft.	D		/	Root-in-Joint	Light	
167.5 ft.	D		/	Lateral Connection Problem	Lateral Blocked	
174.1 ft.	D		/	Root-in-Joint	Medium	
179.4 ft.	D		/	Root-in-Joint	Light	
184.6 ft.	D		/	Root-in-Joint	Light	
189.8 ft.	D		/	Root-in-Joint	Medium	
204.7 ft.	D		/	Root-in-Joint	Medium	
210.1 ft.	D		/	Root-in-Joint	Heavy	
215.5 ft.	D		/	Root-in-Joint	Heavy	
217.5 ft.	D		/	Root-in-Joint	Light	
222.4 ft.	D		/	Root-in-Joint	Light	
225.1 ft.	D		12 /	Lateral	Live Connection	
242.5 ft.	D		/	Root-in-Joint	Heavy	
242.5 ft.	D		/	Infiltration	Light	
244.6 ft.	D		/	Crack		
247.7 ft.	D		/	Root-in-Joint	Heavy	

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
257.7 ft.	D		/	Root-in-Joint	Heavy	
262.9 ft.	D		/	Root-in-Joint	Heavy	
268.7 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 34 to MH 26	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 34	Downstream node: Yellville MH 26	Start date/time: 4/24/2019 2:24 PM	End date/time: 4/24/2019 2:28 PM
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 100.0 ft.	Surveyed distance: 6.0 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
5.4 ft.	D		/	Debris		

Main Inspections

Mainline ID: Yellville MH 26 to MH 25	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 26	Downstream node: Yellville MH 25	Start date/time: 4/24/2019 3:55 PM	End date/time: 4/24/2019 4:05 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 139.0 ft.	Surveyed distance: 138.9 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
9.9 ft.	D		/	Infiltration	Severe	
19.8 ft.	D		/	Infiltration	Light	
35.2 ft.	D		/	Infiltration	Medium	
56.2 ft.	D		/	Infiltration	Medium	
86.2 ft.	D		/	Infiltration	Light	
96.2 ft.	D		/	Infiltration	Light	
114.9 ft.	D		/	Lateral Connection Problem	Lateral Blocked	
138.9 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 25 to 23	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 25	Downstream node: Yellville MH 23	Start date/time: 4/24/2019 4:08 PM	End date/time: 4/24/2019 4:29 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 339.0 ft.	Surveyed distance: 338.2 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	

Comments:

MH 24 is not there like map shows

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
15.1 ft.	D	284.8 ft.	/	Pipe Type		
187.3 ft.	D		2 /	Lateral	Live Connection	
308.8 ft.	D		/	Root-in-Joint	Medium	
338.2 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 31 to MH 30	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 31	Downstream node: Yellville MH 30	Start date/time: 4/25/2019 8:36 AM	End date/time: 4/25/2019 8:45 AM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 300.0 ft.	Surveyed distance: 46.0 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Light Rain	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
8.9 ft.	D		/	Root-in-Joint	Heavy	
12.6 ft.	D		10 /	Lateral	Live Connection	
14.5 ft.	D		/	Root-in-Joint	Heavy	
19.2 ft.	D		/	Root-in-Joint	Medium	
24.8 ft.	D		/	Root-in-Joint	Medium	
29.5 ft.	D		/	Root-in-Joint	Medium	
34.5 ft.	D		/	Root-in-Joint	Heavy	
39.7 ft.	D		/	Root-in-Joint	Heavy	
46.0 ft.	D		/	Debris		

Main Inspections

Mainline ID: Yellville MH 20 to MH 19	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 20	Downstream node: Yellville MH 19	Start date/time: 4/25/2019 10:18 AM	End date/time: 4/25/2019 10:39 AM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 205.5 ft.	Surveyed distance: 205.1 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
9.0 ft.	D		/	Root-in-Joint	Light	
15.2 ft.	D		/	Crack		
26.0 ft.	D		2 /	Lateral	Live Connection	
73.4 ft.	D		/	Root-in-Joint	Light	
78.9 ft.	D		/	Crack		
87.7 ft.	D		12 /	Lateral	Live Connection	
89.4 ft.	D		/	Broken		
89.8 ft.	D		12 /	Lateral	Capped	
89.8 ft.	D		/	Crack	Longitudinal - Narrow	
91.5 ft.	D		/	Crack		
102.1 ft.	D		/	Crack		
122.4 ft.	D		/	Infiltration	Medium	
137.6 ft.	D		/	Broken		
143.2 ft.	D		/	Infiltration	Medium	
148.6 ft.	D		/	Infiltration	Medium	
153.6 ft.	D		/	Infiltration	Light	
153.7 ft.	D		/	Infiltration		
163.9 ft.	D		/	Infiltration	Medium	
169.4 ft.	D		/	Crack		
179.4 ft.	D		/	Infiltration	Light	
194.7 ft.	D		/	Broken		
195.1 ft.	D		/	Infiltration	Light	
200.0 ft.	D		/	Infiltration	Medium	
205.1 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 19 to MH 18	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 19	Downstream node: Yellville MH 18	Start date/time: 4/25/2019 11:00 AM	End date/time: 4/25/2019 11:15 AM
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 189.0 ft.	Surveyed distance: 188.2 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
6.0 ft.	D	49.2 ft.	4 / 8	Surface Damage	Light Material Damage - Chemical Problem	
55.2 ft.	D	133.0 ft.	/	Pipe Type		
56.4 ft.	D		/	Crack	Circular - Narrow	
56.4 ft.	D		/	Infiltration	Medium	
60.2 ft.	D		/	Crack		
60.2 ft.	D		/	Infiltration	Light	
64.8 ft.	D		/	Root-in-Joint	Medium	
64.8 ft.	D		/	Infiltration	Light	
86.1 ft.	D		/	Root-in-Joint	Light	
96.1 ft.	D		/	Root-in-Joint	Light	
96.1 ft.	D		/	Infiltration	Light	
106.7 ft.	D		/	Root-in-Joint	Light	
106.7 ft.	D		/	Infiltration	Medium	
114.3 ft.	D		/	Crack	Circular - Narrow	
121.3 ft.	D		10 /	Lateral	Live Connection	
121.5 ft.	D		/	Crack	Longitudinal - Narrow	
121.8 ft.	D		/	Infiltration	Medium	
133.1 ft.	D		12 /	Lateral	Live Connection	
139.2 ft.	D		/	Infiltration	Medium	
149.5 ft.	D		/	Infiltration	Medium	
165.3 ft.	D		/	Infiltration	Medium	
175.3 ft.	D		/	Root-in-Joint	Light	
180.5 ft.	D		/	Root-in-Joint	Light	
185.9 ft.	D		/	Infiltration	Medium	
185.9 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 18 to MH 17	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 18	Downstream node: Yellville MH 17	Start date/time: 4/25/2019 11:16 AM	End date/time: 4/25/2019 11:22 AM
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 168.0 ft.	Surveyed distance: 167.8 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

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

Main Inspections

Mainline ID: Yellville 15 to MH 16	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 16	Downstream node: Yellville MH 15	Start date/time: 4/25/2019 12:15 PM	End date/time: 4/25/2019 12:28 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 339.0 ft.	Surveyed distance: 338.6 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
192.8 ft.	U		12 /	Lateral	Live Connection	
192.8 ft.	U		/	Infiltration	Medium	
221.8 ft.	U		12 /	Lateral	Live Connection	
270.5 ft.	U		12 /	Lateral	Live Connection	
322.2 ft.	U		/	Crack		
333.2 ft.	U		/	Infiltration	Medium	
338.5 ft.	U		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 15 to MH 14	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 15	Downstream node: Yellville MH 14	Start date/time: 4/25/2019 12:45 PM	End date/time: 4/25/2019 12:58 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 276.0 ft.	Surveyed distance: 275.9 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
25.3 ft.	D		/	Infiltration	Light	
39.7 ft.	D		/	Root-in-Joint	Medium	
55.5 ft.	D		/	Infiltration	Light	
60.9 ft.	D		/	Infiltration	Light	
80.7 ft.	D		/	Root-in-Joint	Light	
80.7 ft.	D		/	Infiltration	Light	
148.7 ft.	D		/	Crack		
164.4 ft.	D		12 /	Lateral	Live Connection	
166.5 ft.	D		12 /	Lateral	Live Connection	
238.7 ft.	D		/	Root-in-Joint	Light	
249.0 ft.	D		/	Root-in-Joint	Light	
254.0 ft.	D		/	Root-in-Joint	Light	
259.8 ft.	D		/	Root-in-Joint	Light	
264.4 ft.	D		/	Root-in-Joint	Light	
269.3 ft.	D		/	Root-in-Joint	Light	
275.9 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 14 to MH 13	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 14	Downstream node: Yellville MH 13	Start date/time: 4/25/2019 12:59 PM	End date/time: 4/25/2019 1:03 PM
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 76.0 ft.	Surveyed distance: 75.9 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

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

Main Inspections

Mainline ID: Yellville MH 13 to MH 12	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 13	Downstream node: Yellville MH 12	Start date/time: 4/25/2019 1:05 PM	End date/time: 4/25/2019 1:11 PM
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 131.0 ft.	Surveyed distance: 131.0 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

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

Main Inspections

Mainline ID: Yellville MH 12 to MH 11	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 12	Downstream node: Yellville MH 11	Start date/time: 4/25/2019 1:46 PM	End date/time: 4/25/2019 1:59 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Asset length: 330.0 ft.	Surveyed distance: 329.8 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
25.1 ft.	D		12 /	Lateral	Live Connection	
82.9 ft.	D	74.3 ft.	/	Pipe Type		
178.1 ft.	D		/	Infiltration	Medium	
178.1 ft.	D		12 /	Lateral	Live Connection	
205.7 ft.	D		12 /	Lateral	Live Connection	
329.8 ft.	D		/	End of Pipe		

Main Inspections

Mainline ID: Yellville MH 11 to MH 11A	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 11	Downstream node: Yellville MH 11A	Start date/time: 4/25/2019 3:25 PM	End date/time: 4/25/2019 3:37 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 10.0 in.	Pipe width: 10.0 in.
Asset length: 200.0 ft.	Surveyed distance: 170.6 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
107.6 ft.	D		/	Lateral	Live Connection	
165.5 ft.	D		12 /	Lateral Connection Problem	Lateral Blocked	
167.9 ft.	D		12 /	Lateral	Live Connection	
169.1 ft.	D		/	Broken		
170.5 ft.	D		/	Broken		

Main Inspections

Mainline ID: Yellville MH 10 to MH 11a	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 11A	Downstream node: Yellville MH 10	Start date/time: 4/25/2019 3:53 PM	End date/time: 4/25/2019 3:57 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 10.0 in.	Pipe width: 10.0 in.
Asset length: 61.0 ft.	Surveyed distance: 60.4 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
54.6 ft.	U		/	Infiltration	Medium	
60.4 ft.	U		/	End of Pipe		

Main Inspections

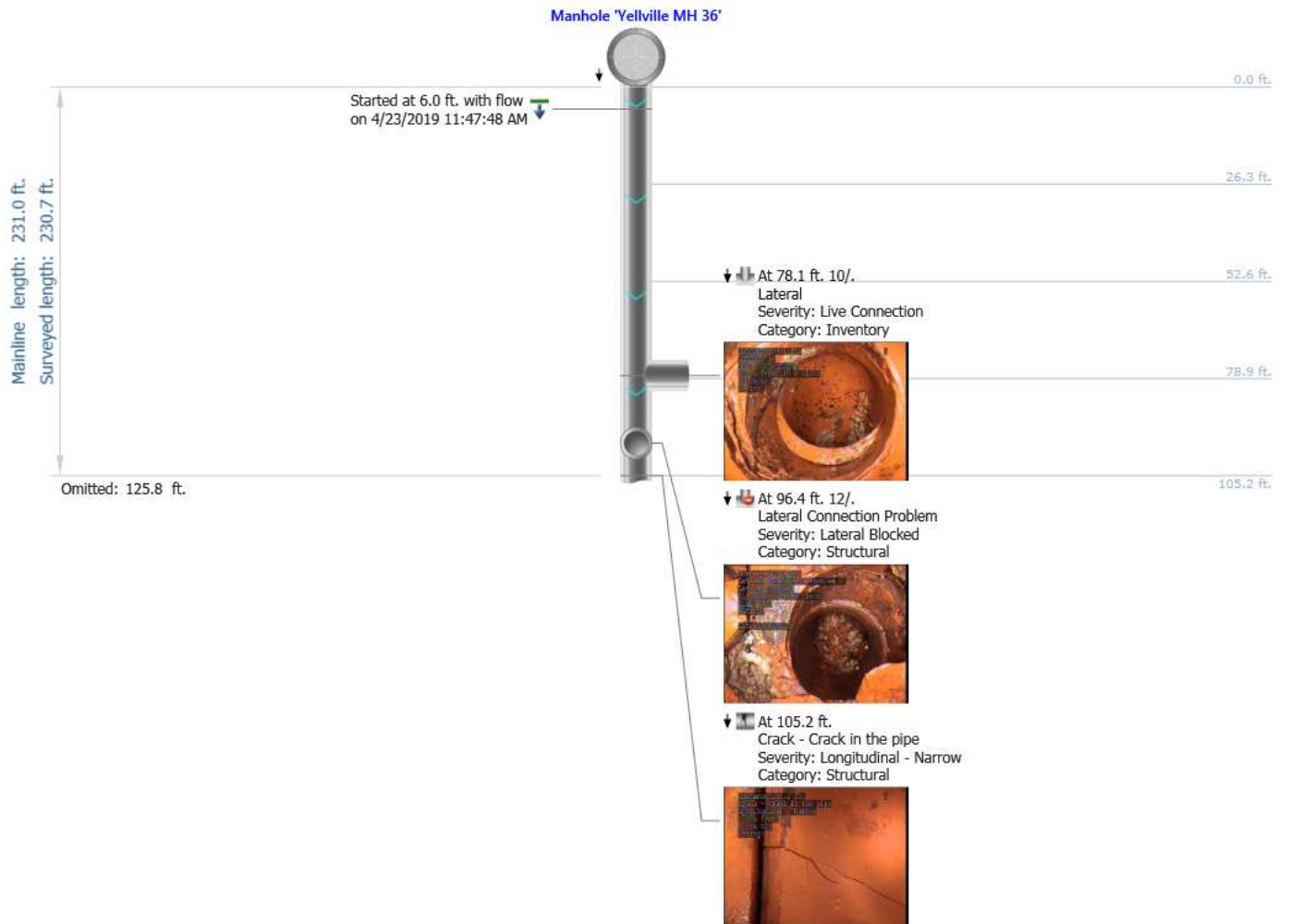
Mainline ID: Yellville MH 11A to MH 11	City: Yellville	Address:	Project name: Yellville
Upstream node: Yellville MH 11	Downstream node: Yellville MH 11A	Start date/time: 4/25/2019 3:59 PM	End date/time: 4/25/2019 4:09 PM
Pipe shape: Circular	Pipe material: Clay	Pipe height: 10.0 in.	Pipe width: 10.0 in.
Asset length: 200.0 ft.	Surveyed distance: 103.7 ft.	Reason: Assessment	Work order no.:
Operator: Terry	Weather: Dry	Status: Completed	
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating
4.0 ft.	U		/	Infiltration	Medium	
9.5 ft.	U		/	Infiltration	Light	
18.8 ft.	U		/	Root-in-Joint	Light	
34.4 ft.	U		/	Root-in-Joint	Light	
39.5 ft.	U		/	Root-in-Joint	Light	
44.8 ft.	U		/	Root-in-Joint	Medium	
49.7 ft.	U		/	Root-in-Joint	Light	
49.7 ft.	U		/	Infiltration	Light	
58.9 ft.	U		/	Root-in-Joint	Light	
58.9 ft.	U		/	Infiltration	Light	
69.7 ft.	U		/	Root-in-Joint	Light	
74.8 ft.	U		/	Root-in-Joint	Medium	
79.7 ft.	U		/	Root-in-Joint	Light	
89.6 ft.	U		/	Root-in-Joint		
103.7 ft.	U		/	Root-in-Joint	Heavy	

Main Inspections Pipe Run with Images

Project name:	Mainline ID:	City:	Address:
Yellville	Yellville MH 36 to MH 35	Yellville	
Start date/time:	Direction:	Weather:	Surface condition:
4/23/2019 11:47 AM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay	8.0 in.	8.0 in.

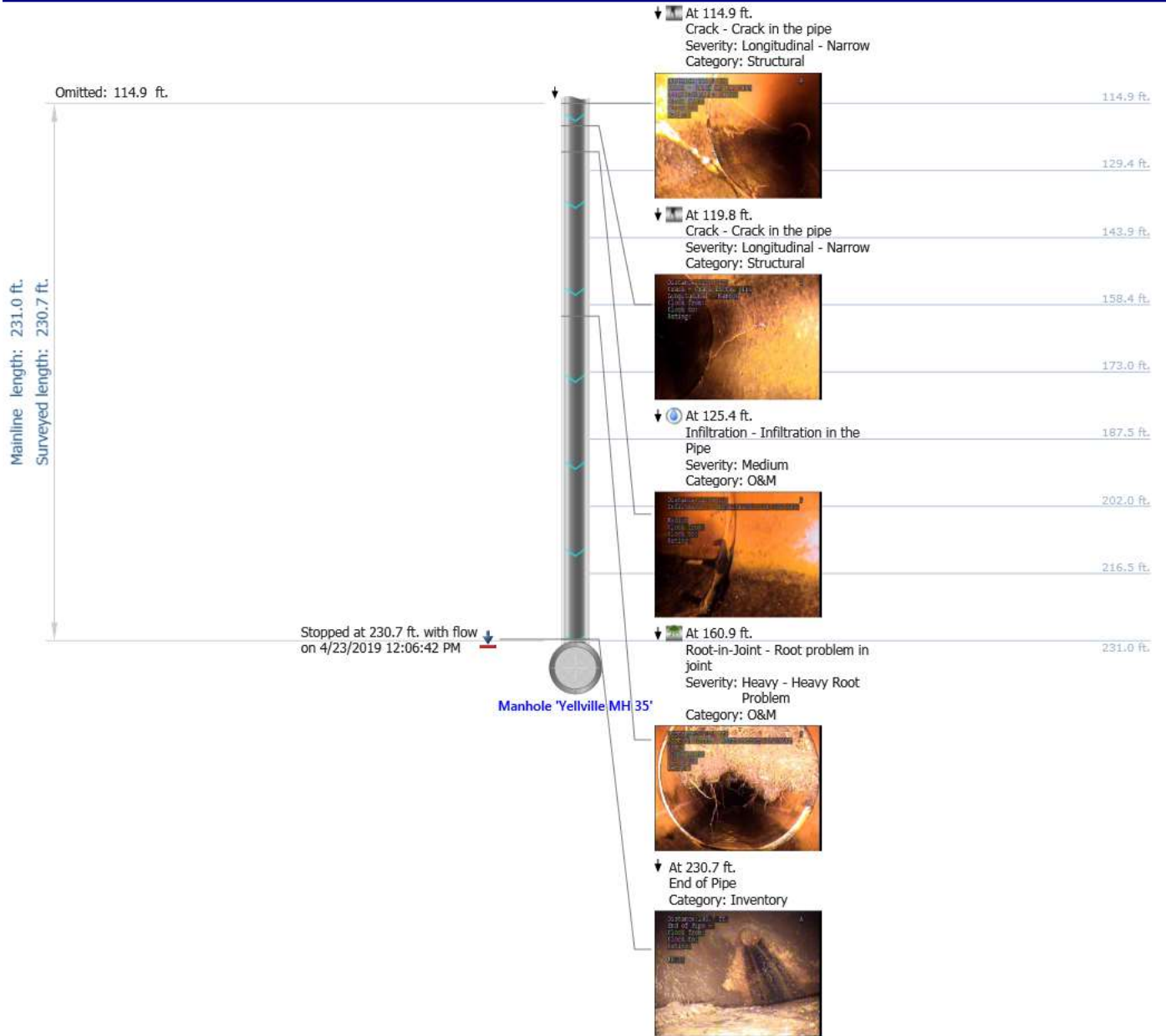


Project name:
Yelleville
Weather:
Dry

Mainline ID:
Yelleville MH 36 to MH 35

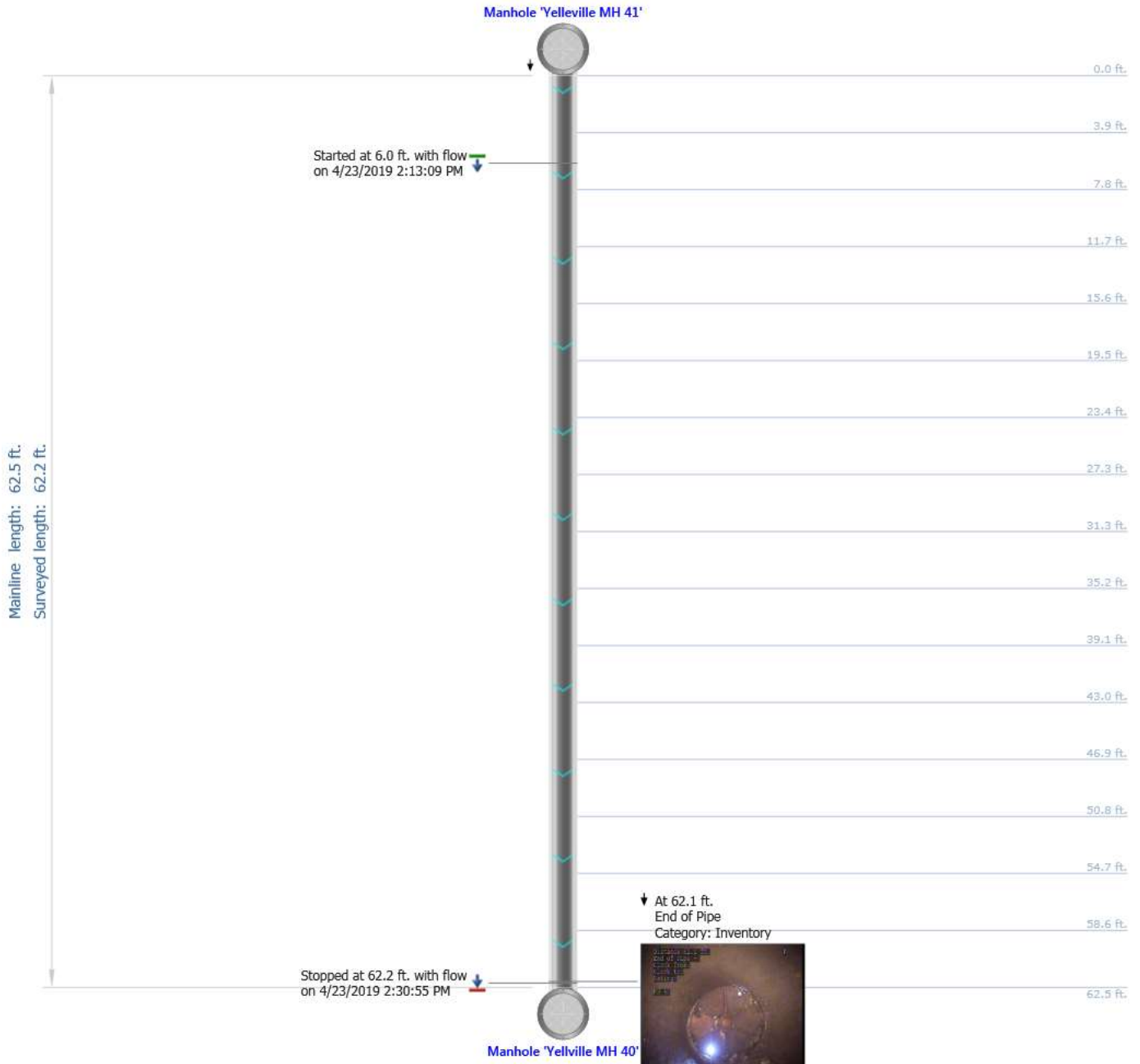
Start date/time:
4/23/2019 11:47 AM

Direction:
With the flow



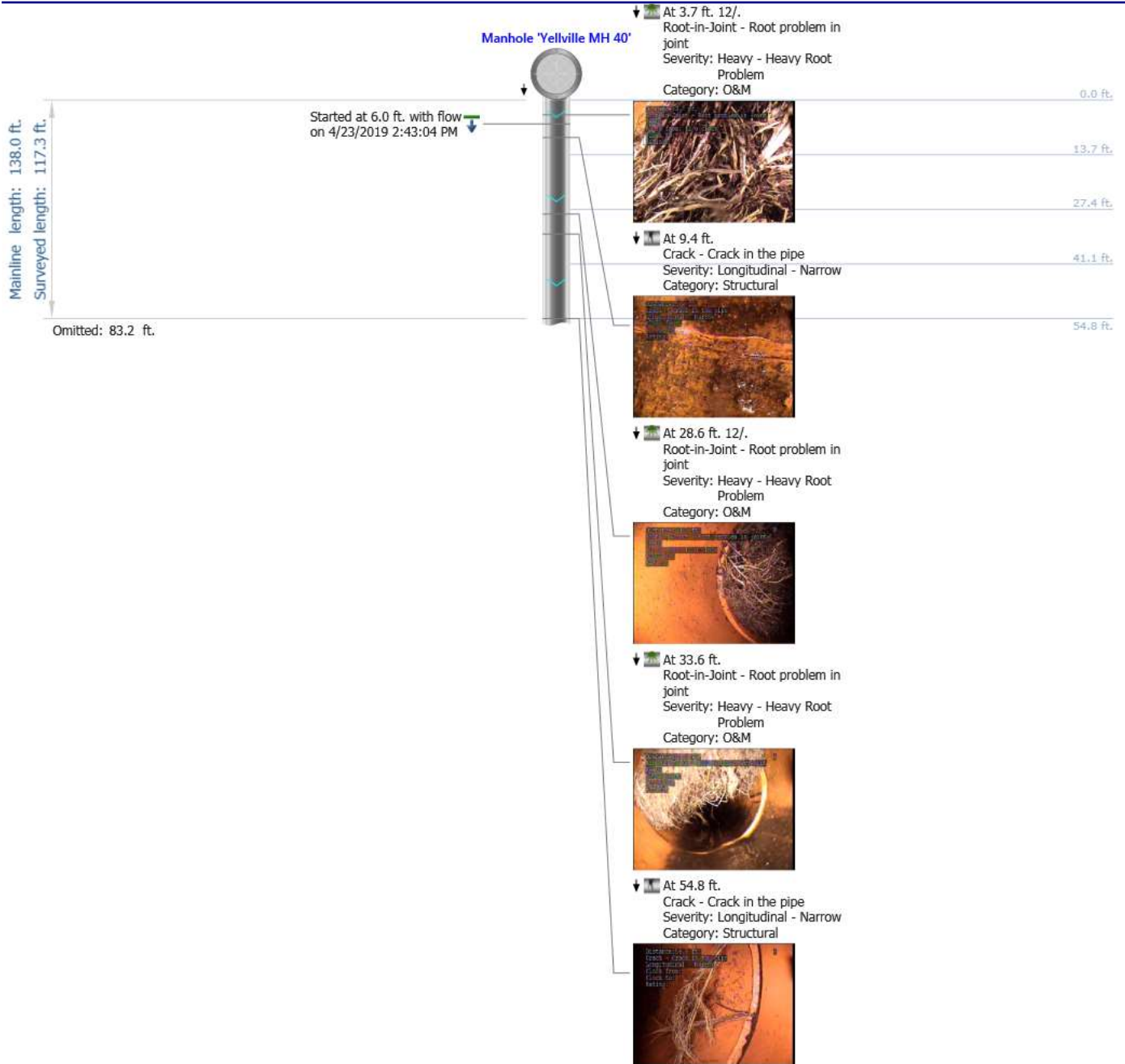
Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 41 to MH 40	City: Yelleville	Address:
Start date/time: 4/23/2019 2:13 PM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Main Inspections Pipe Run with Images

Project name:	Mainline ID:	City:	Address:
Yelleville	Yelleville MH 40 to MH 39	Yelleville	
Start date/time:	Direction:	Weather:	Surface condition:
4/23/2019 2:43 PM	With the flow	Dry	Woodland
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay Tile	8.0 in.	8.0 in.



Project name:

Yelleville

Mainline ID:

Yelleville MH 40 to MH 39

Start date/time:

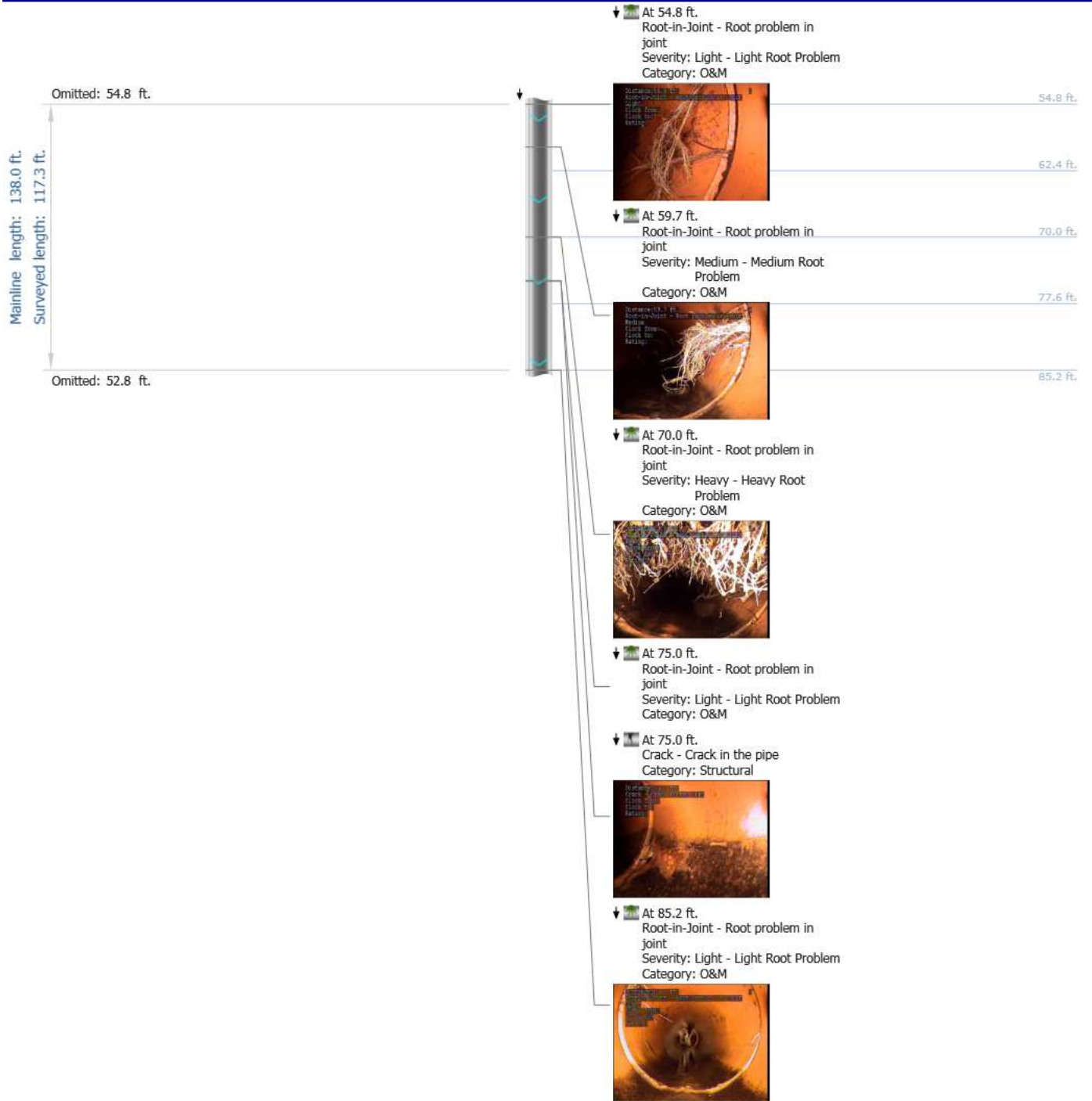
4/23/2019 2:43 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 40 to MH 39

Start date/time:

4/23/2019 2:43 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 40 to MH 39

Start date/time:

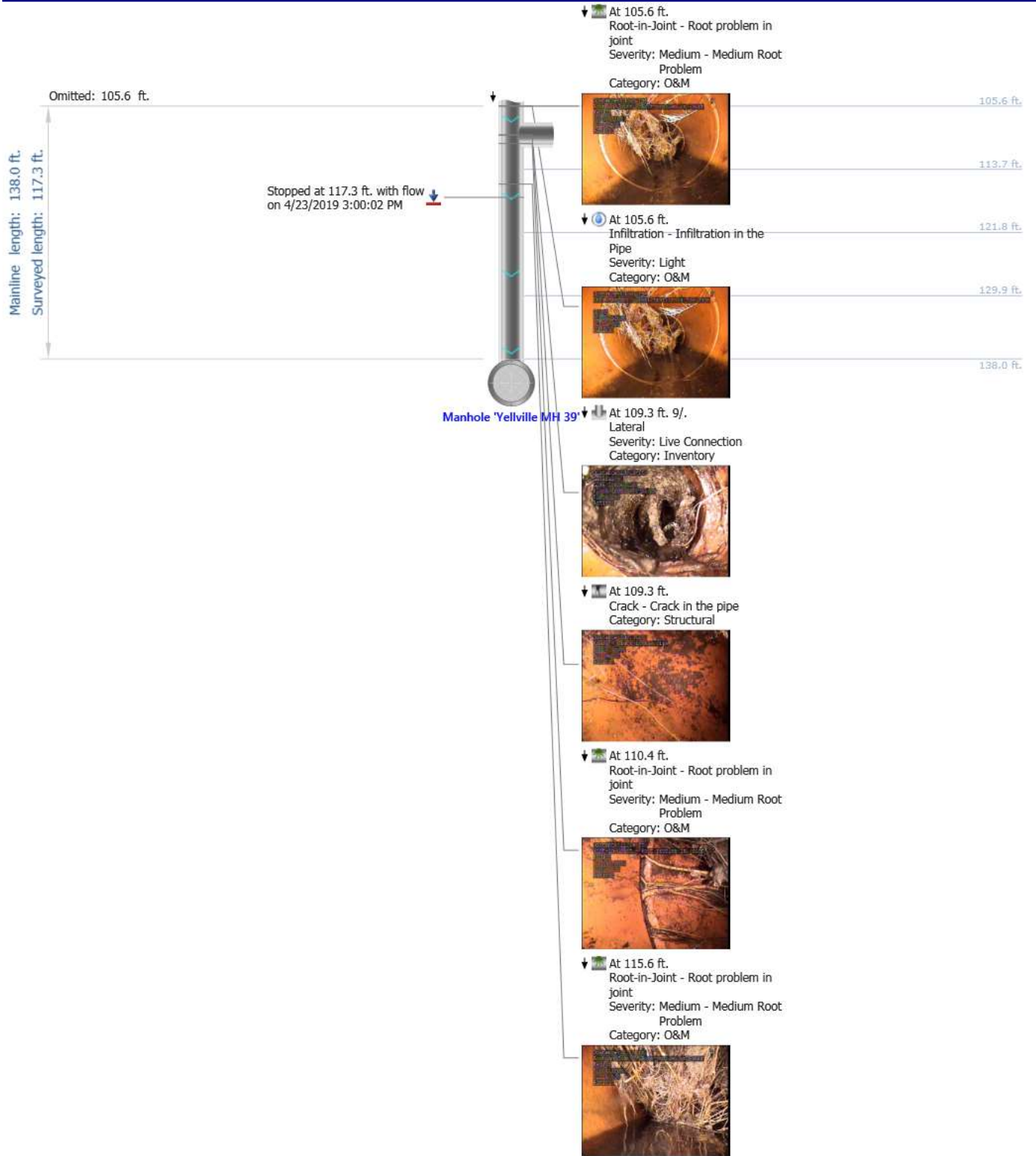
4/23/2019 2:43 PM

Direction:

With the flow

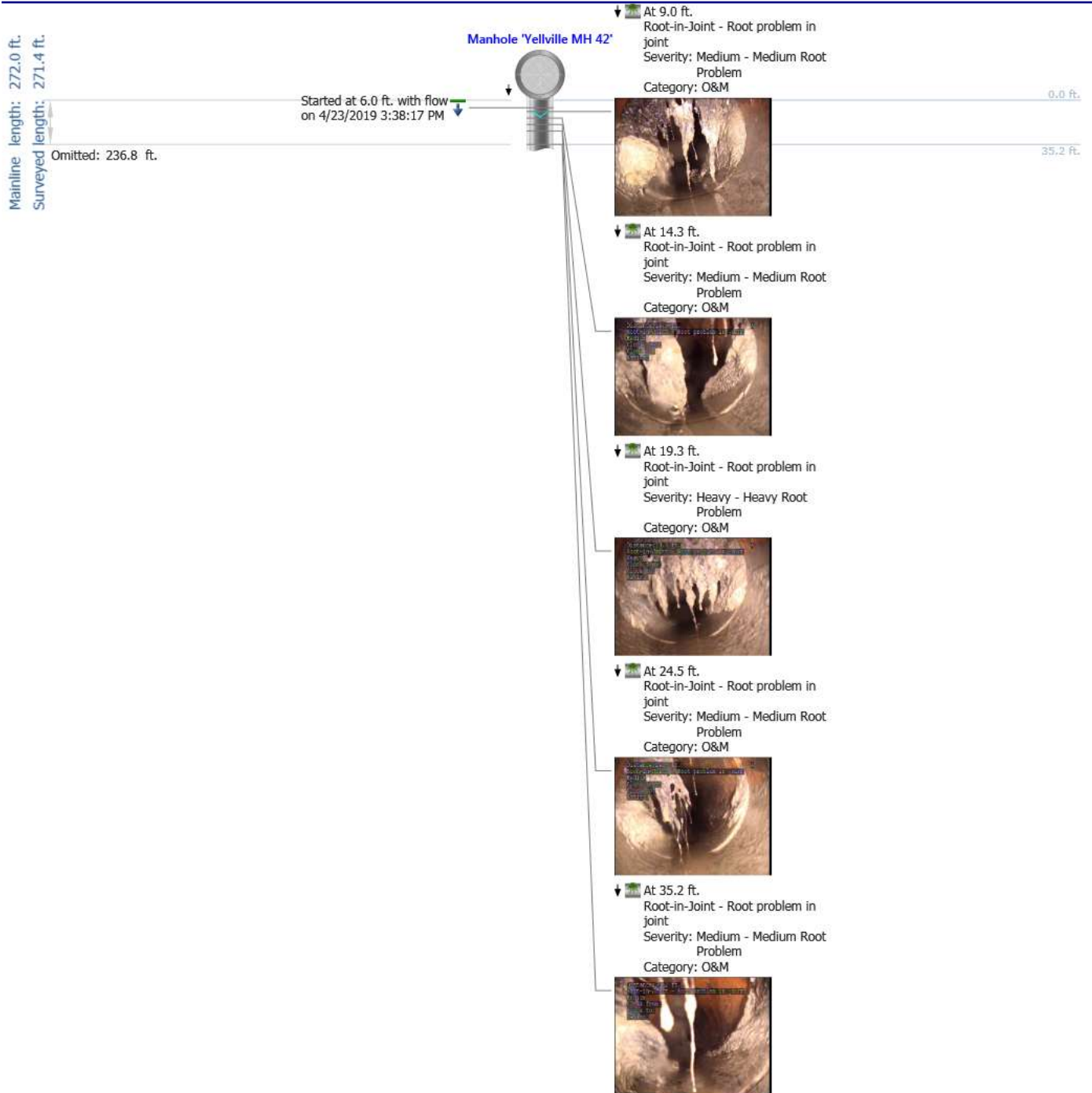
Weather:

Dry



Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 42 to MH 41	City: Yelleville	Address:
Start date/time: 4/23/2019 3:38 PM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Project name:

Yelleville

Mainline ID:

Yelleville MH 42 to MH 41

Start date/time:

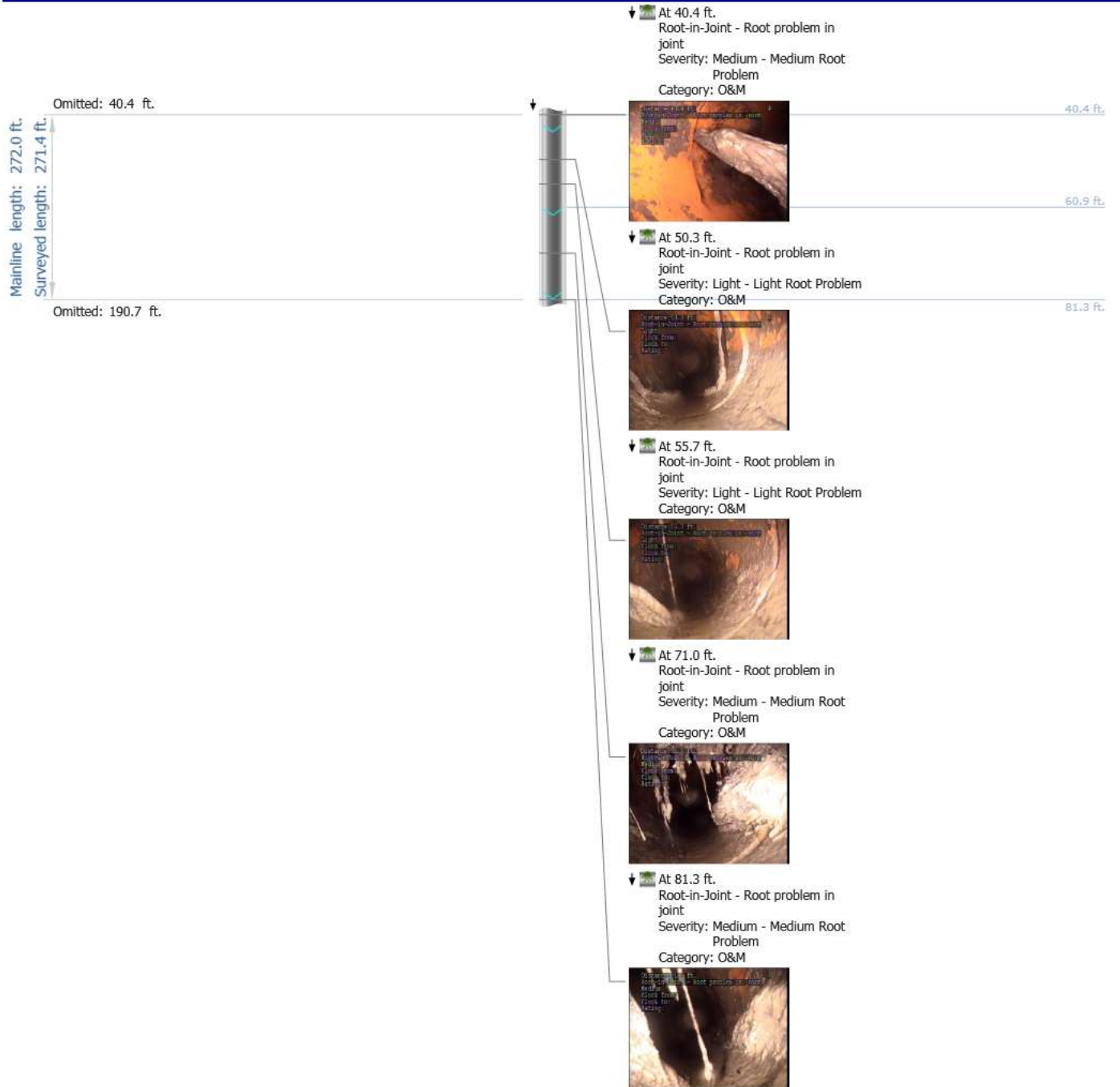
4/23/2019 3:38 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 42 to MH 41

Start date/time:

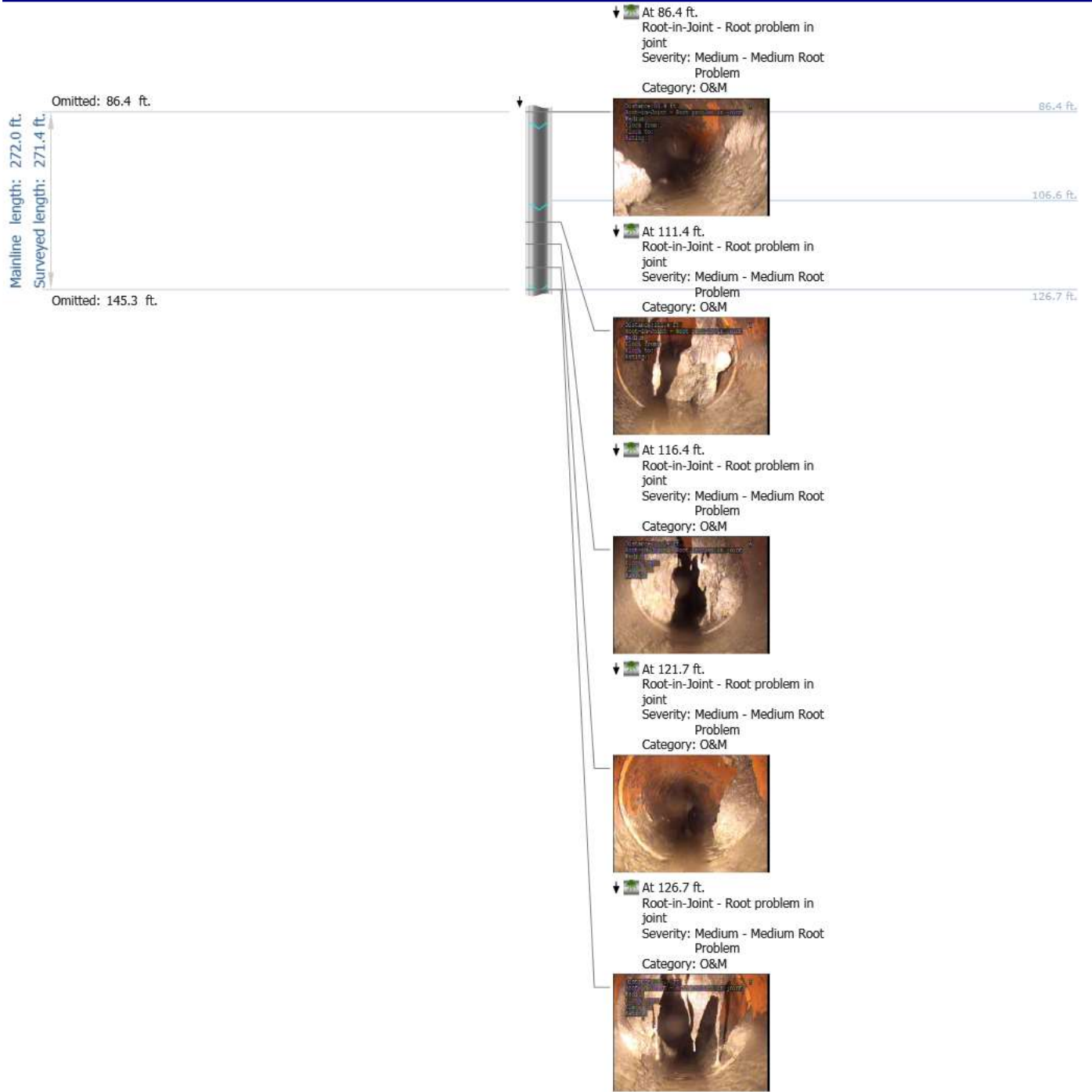
4/23/2019 3:38 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 42 to MH 41

Start date/time:

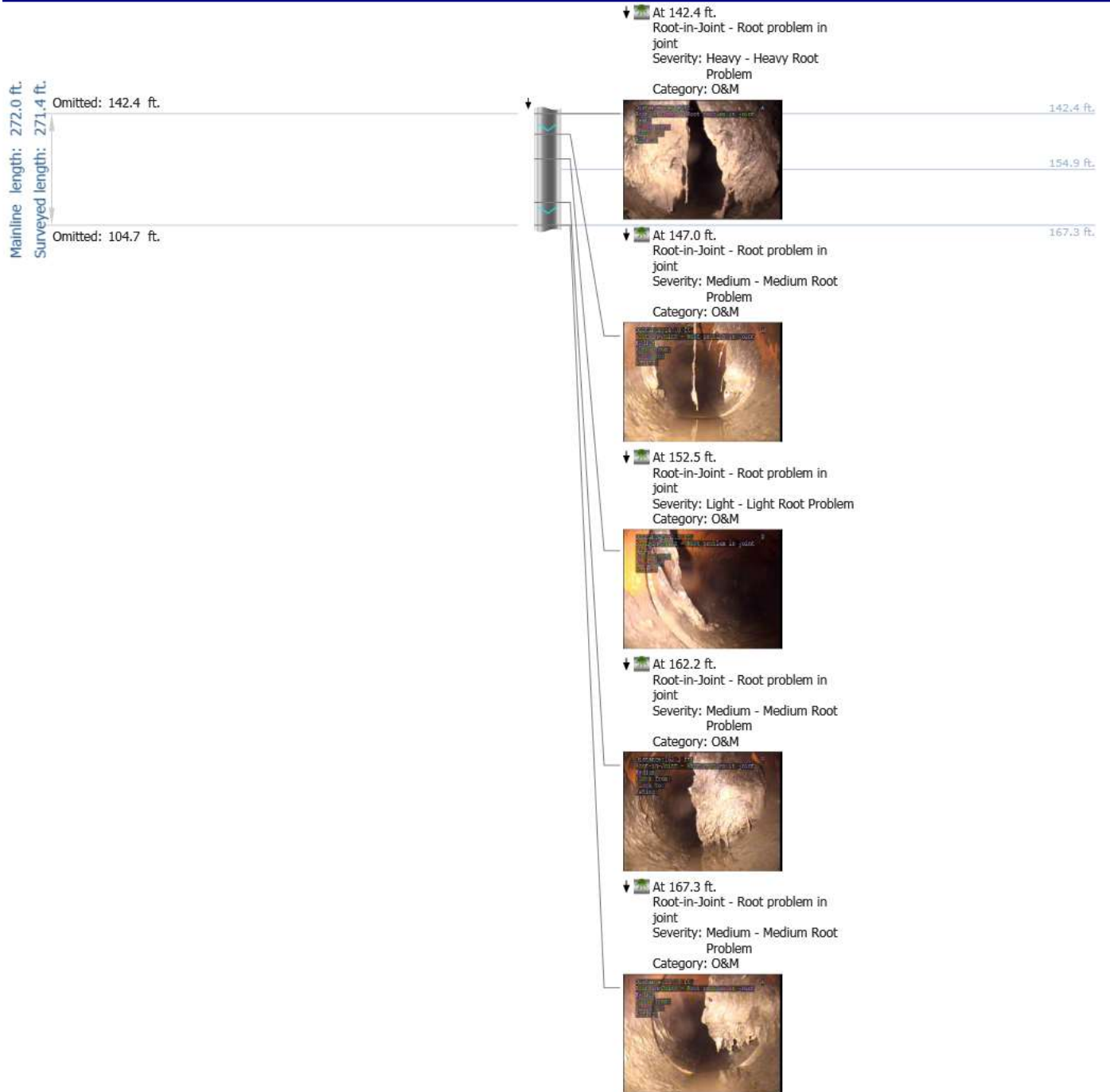
4/23/2019 3:38 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yellville

Mainline ID:

Yellville MH 42 to MH 41

Start date/time:

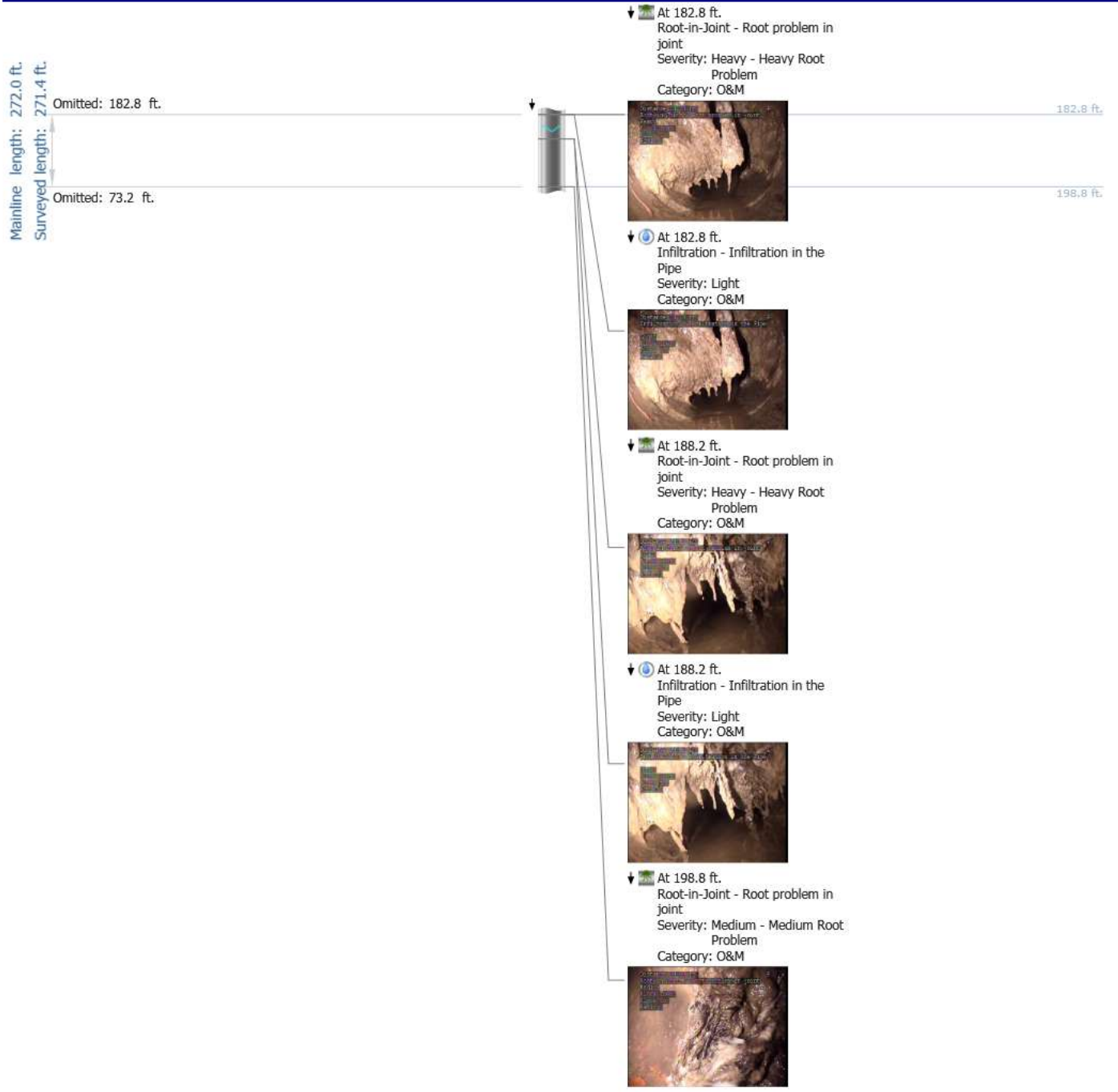
4/23/2019 3:38 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 42 to MH 41

Start date/time:

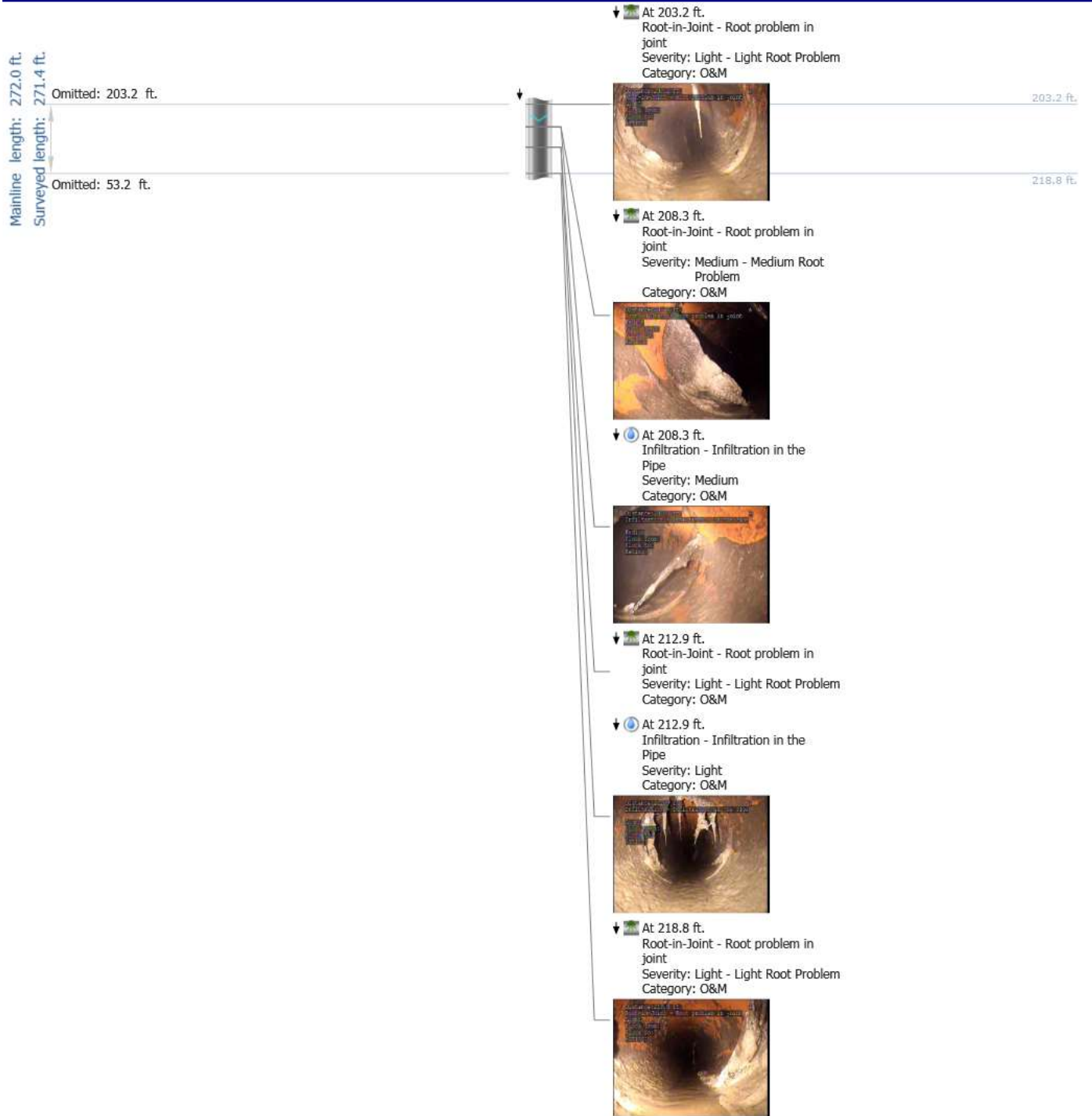
4/23/2019 3:38 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 42 to MH 41

Start date/time:

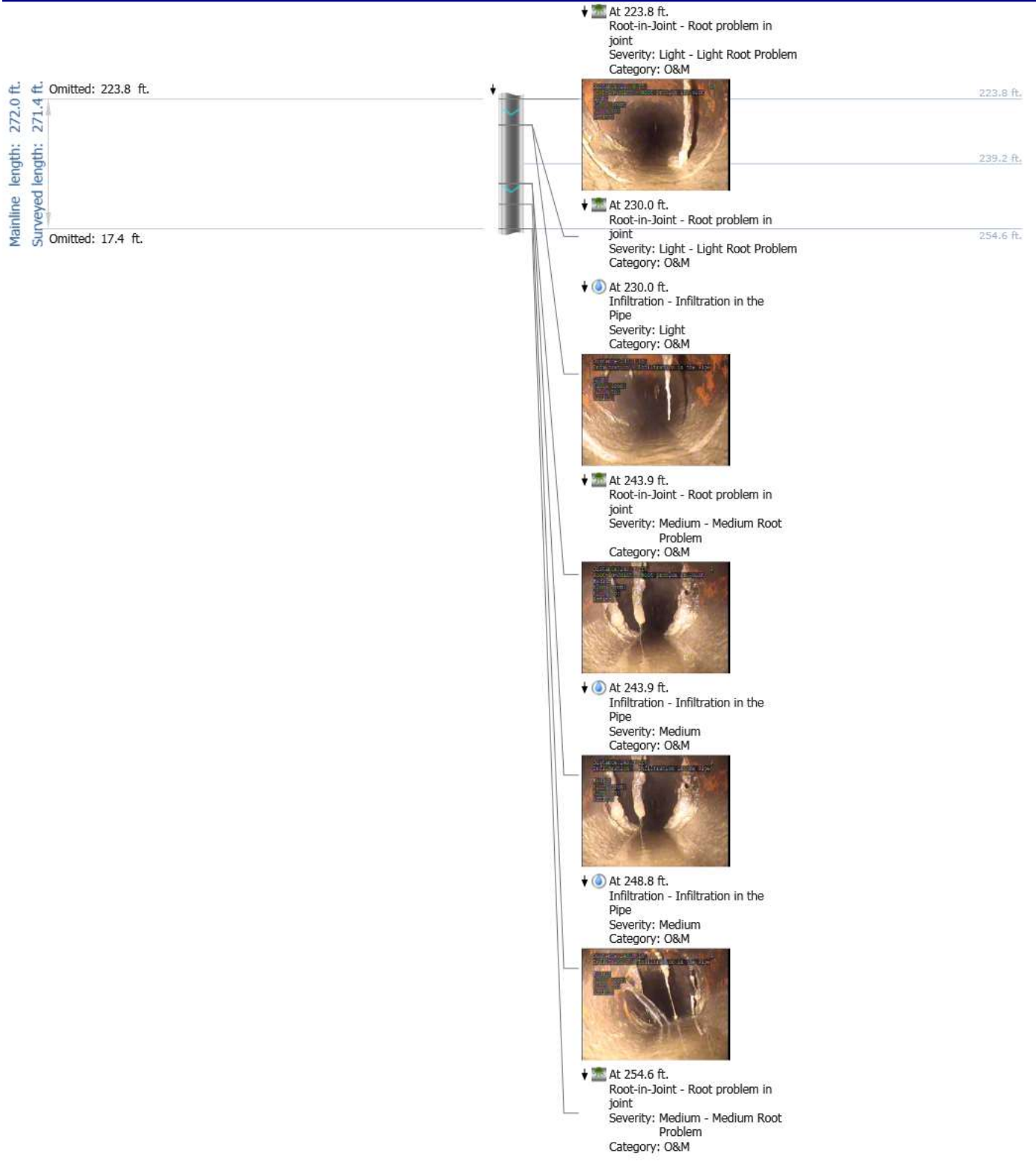
4/23/2019 3:38 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yellville

Mainline ID:

Yellville MH 42 to MH 41

Start date/time:

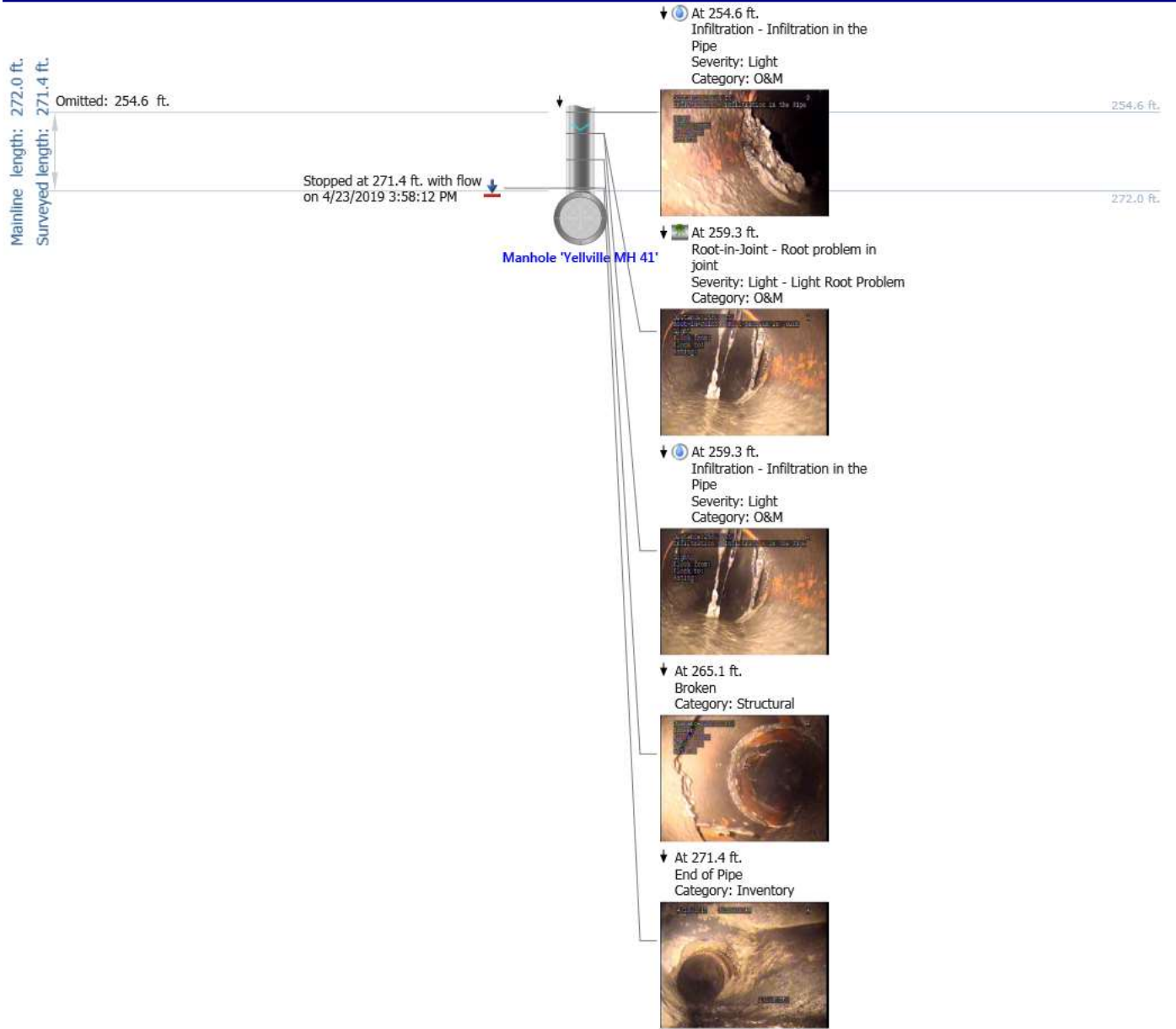
4/23/2019 3:38 PM

Direction:

With the flow

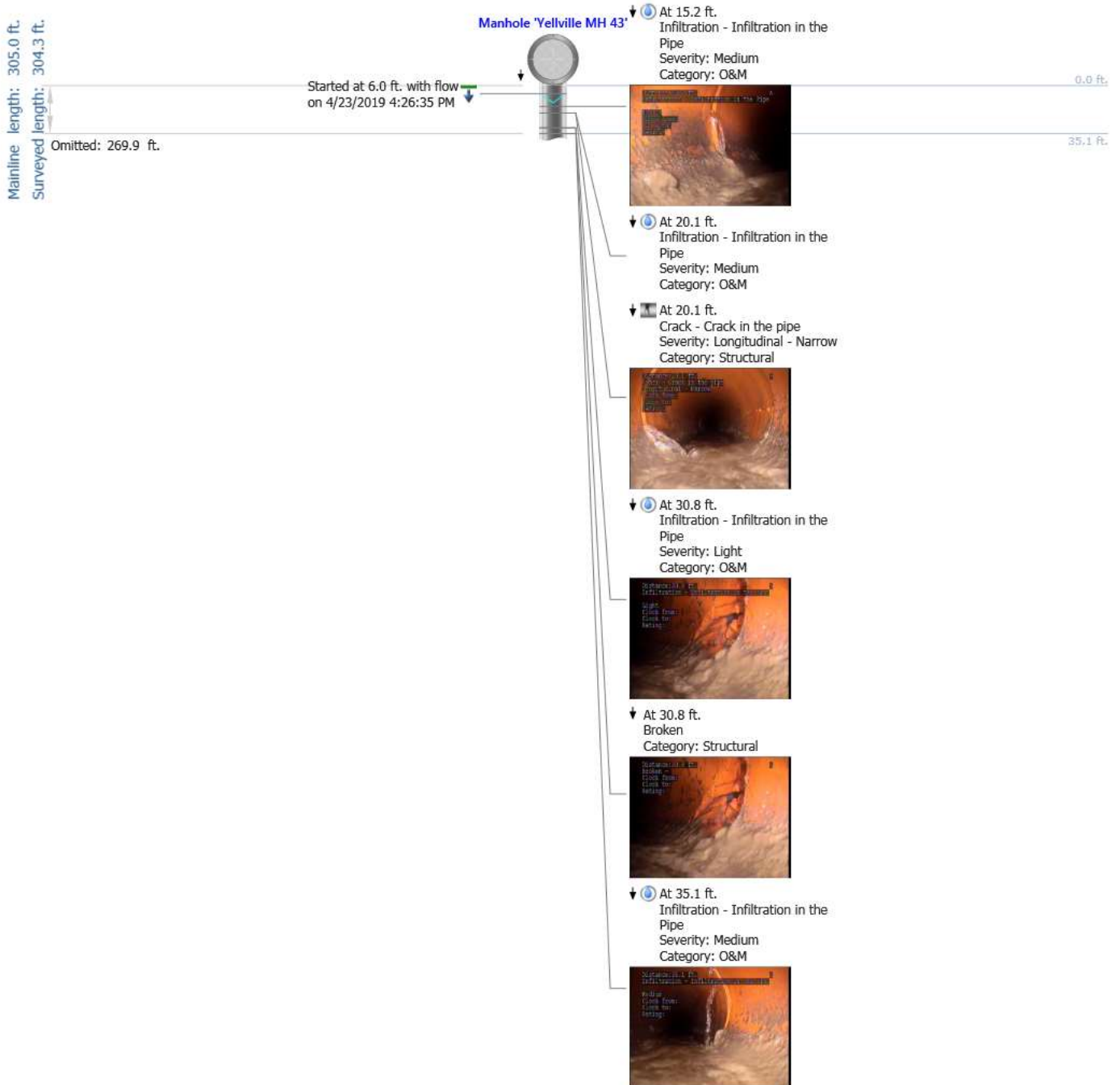
Weather:

Dry



Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 43 to MH 42	City: Yelleville	Address:
Start date/time: 4/23/2019 4:26 PM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Project name:

Yelleville

Mainline ID:

Yelleville MH 43 to MH 42

Start date/time:

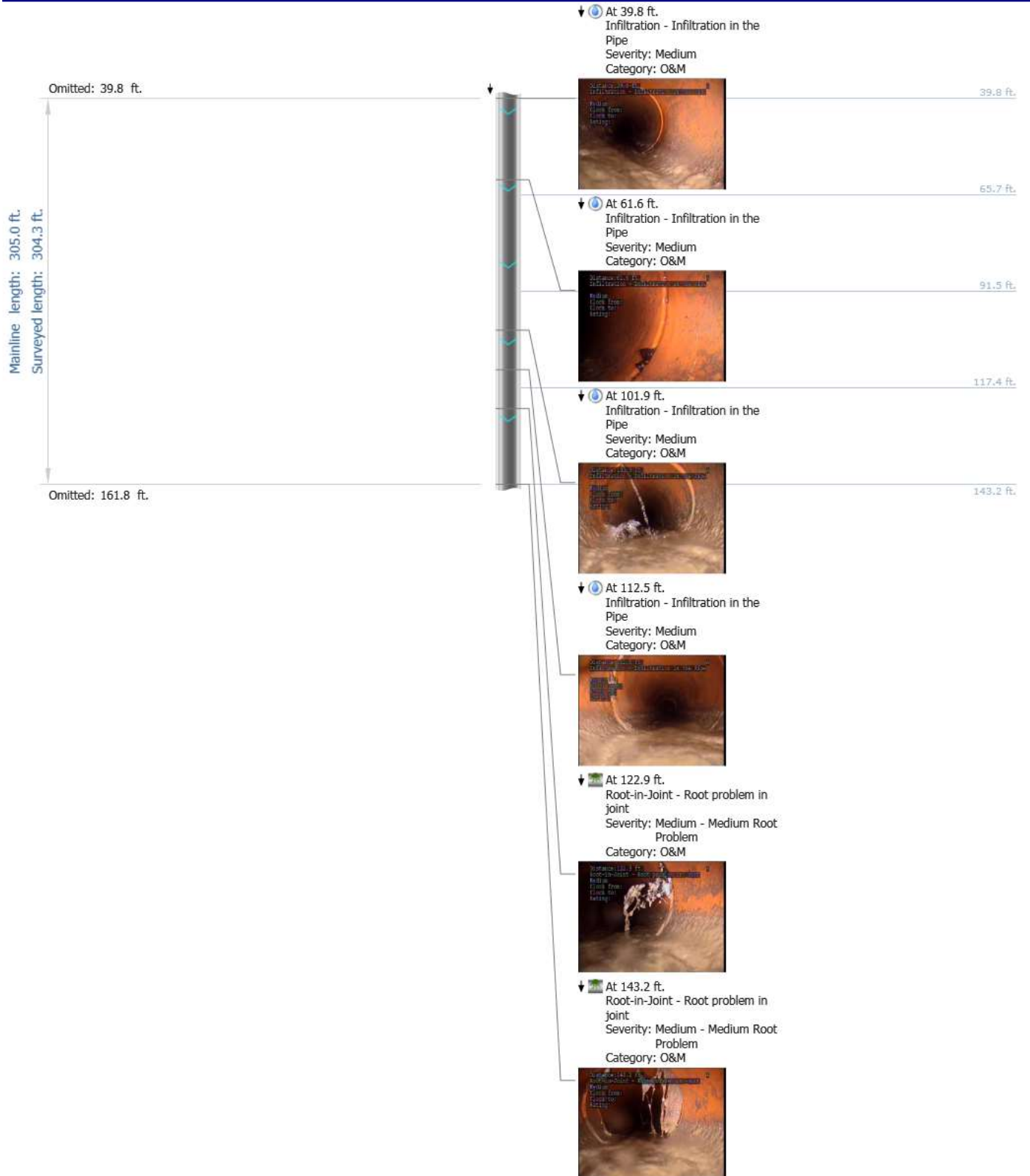
4/23/2019 4:26 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 43 to MH 42

Start date/time:

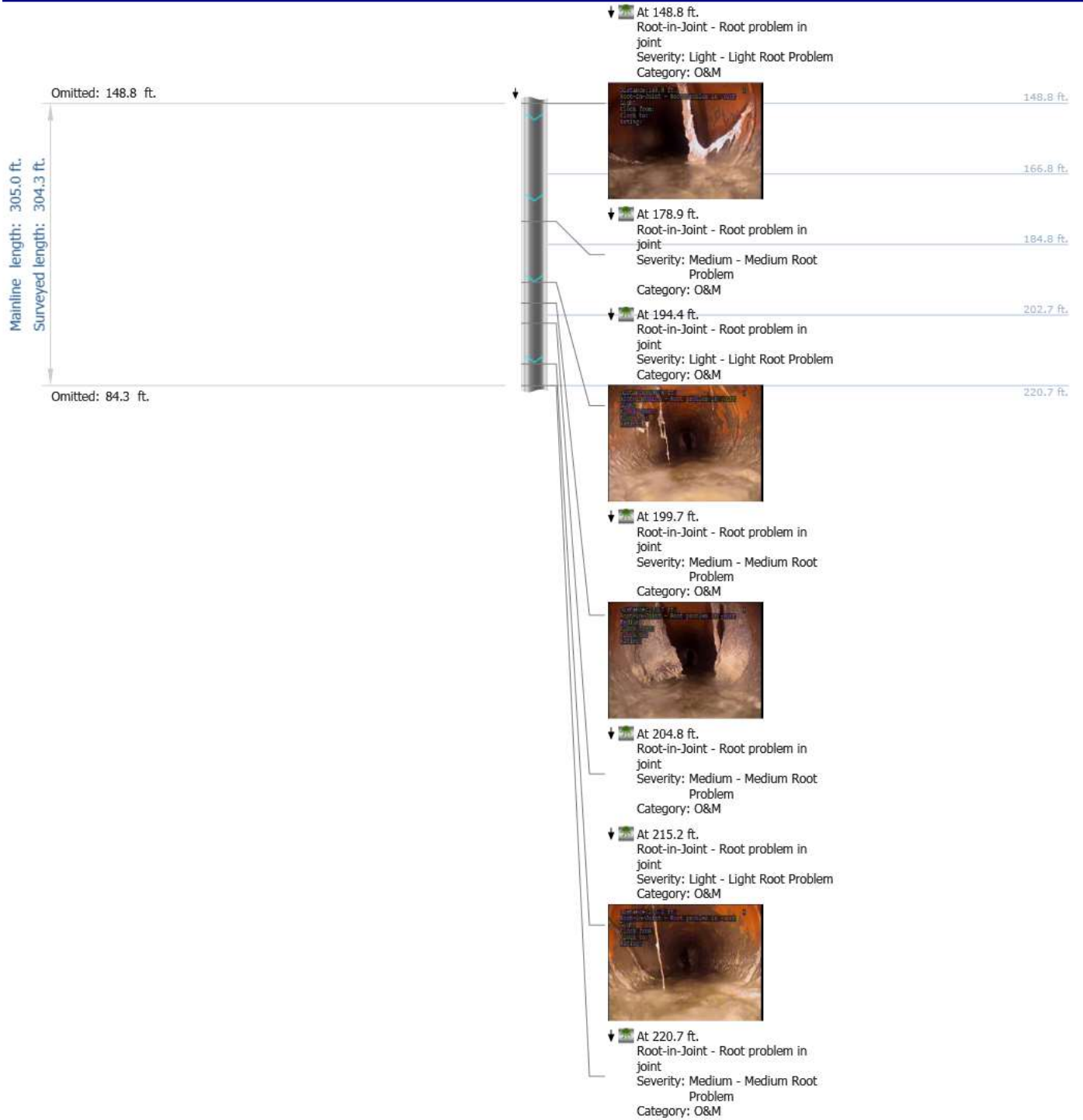
4/23/2019 4:26 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yellville

Mainline ID:

Yellville MH 43 to MH 42

Start date/time:

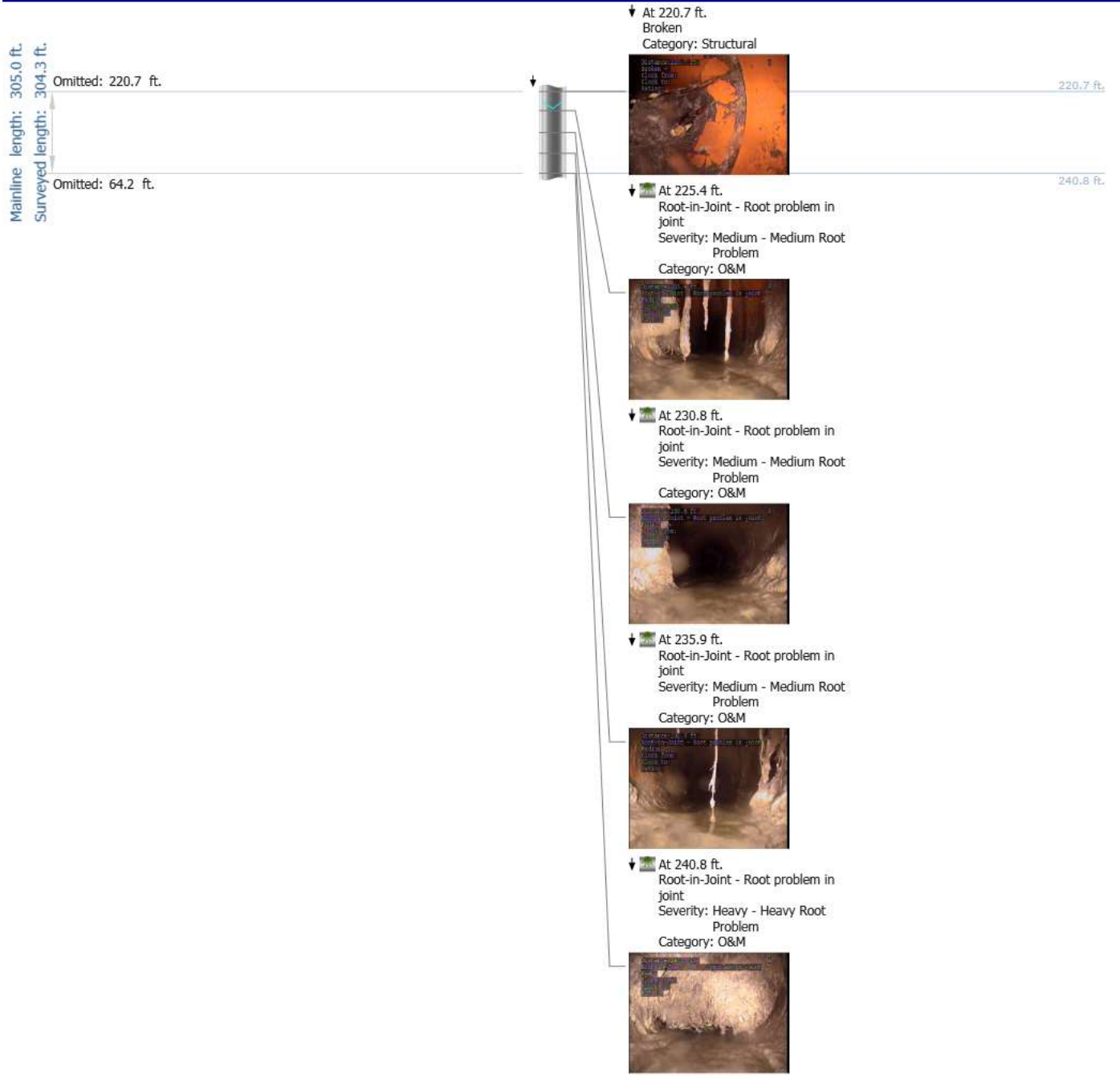
4/23/2019 4:26 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 43 to MH 42

Start date/time:

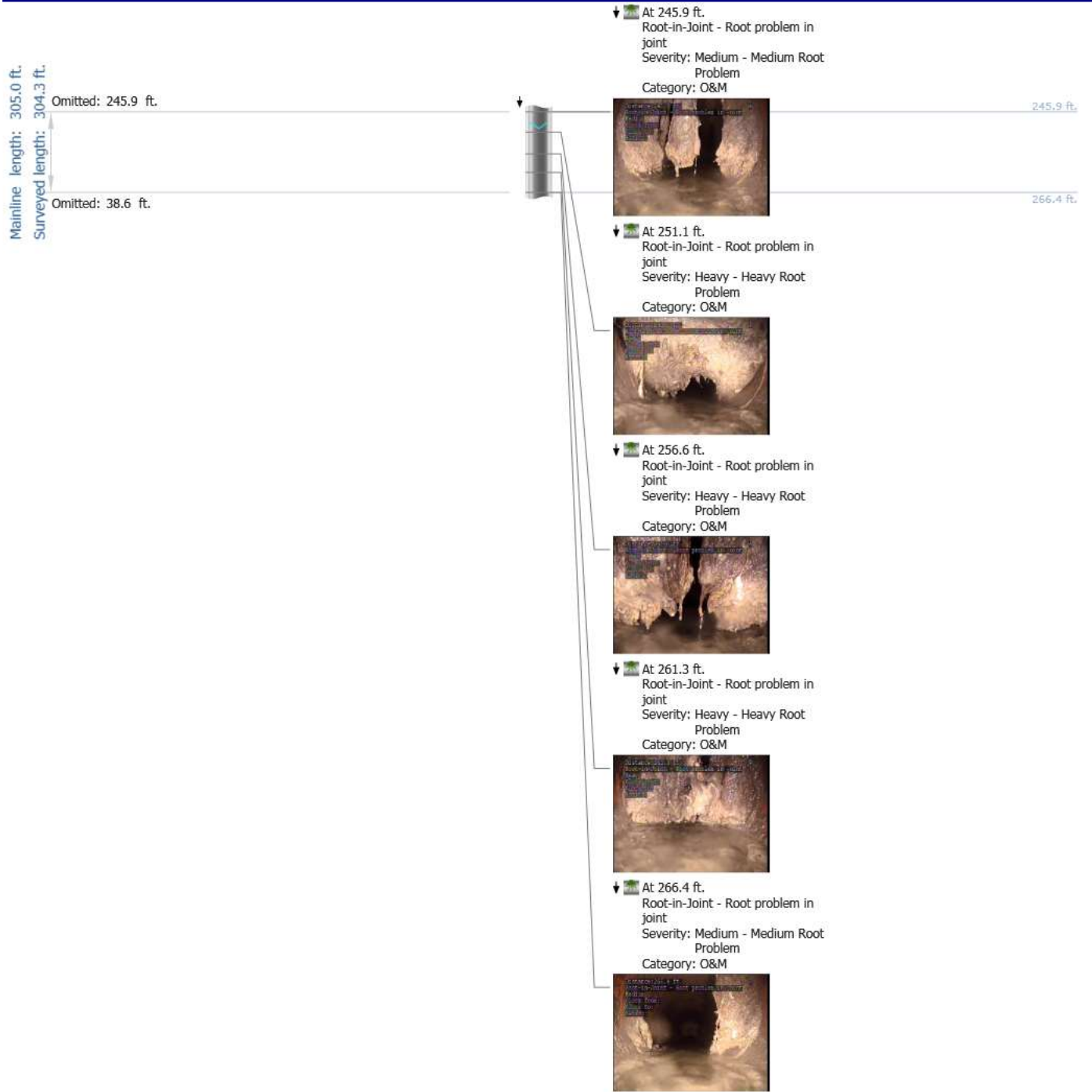
4/23/2019 4:26 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 43 to MH 42

Start date/time:

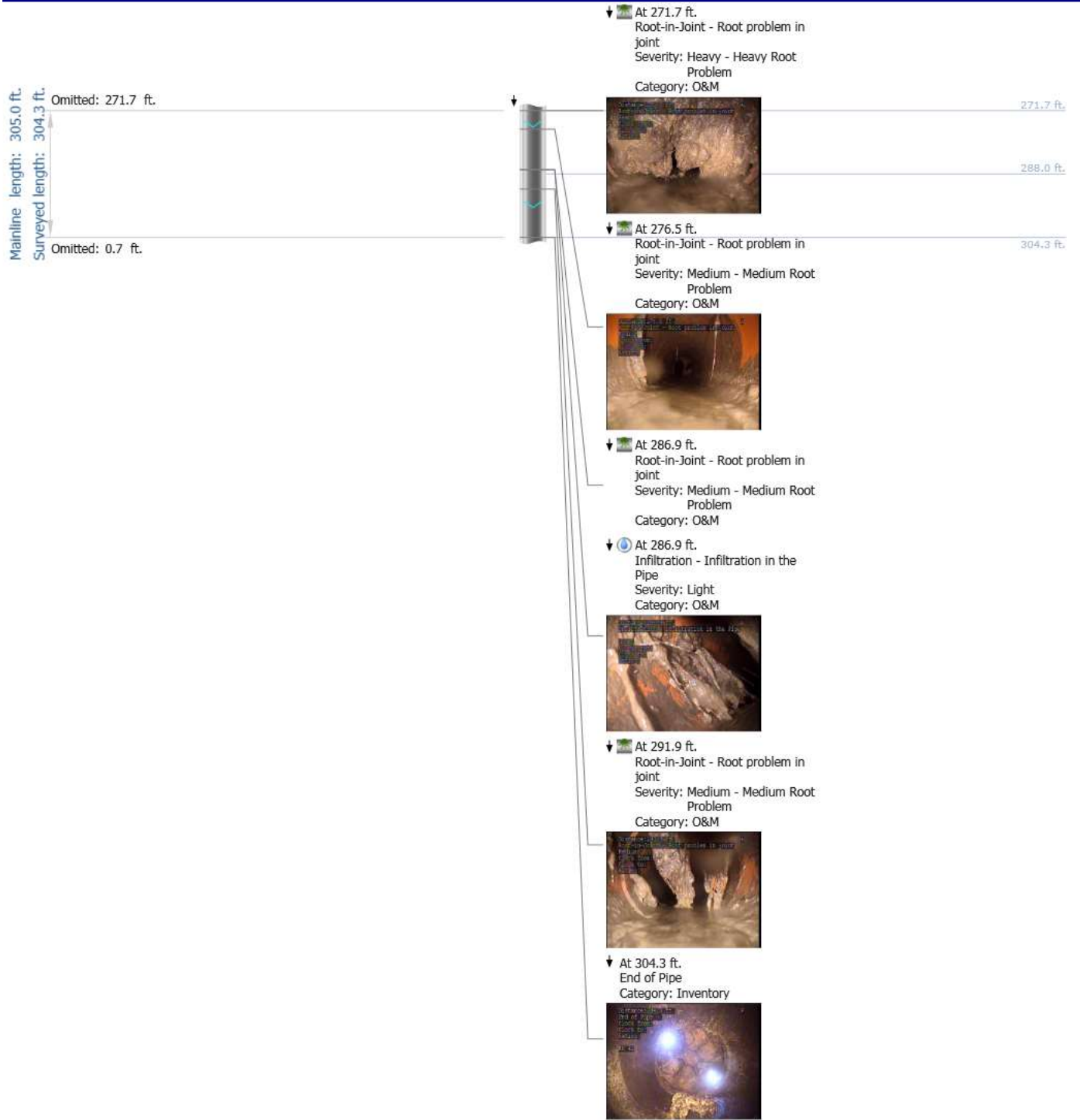
4/23/2019 4:26 PM

Direction:

With the flow

Weather:

Dry



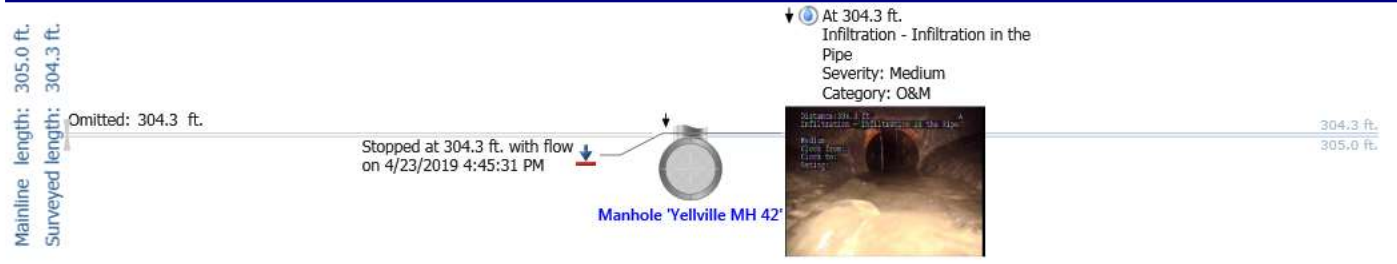
Project name:
Yellville

Mainline ID:
Yellville MH 43 to MH 42

Start date/time:
4/23/2019 4:26 PM

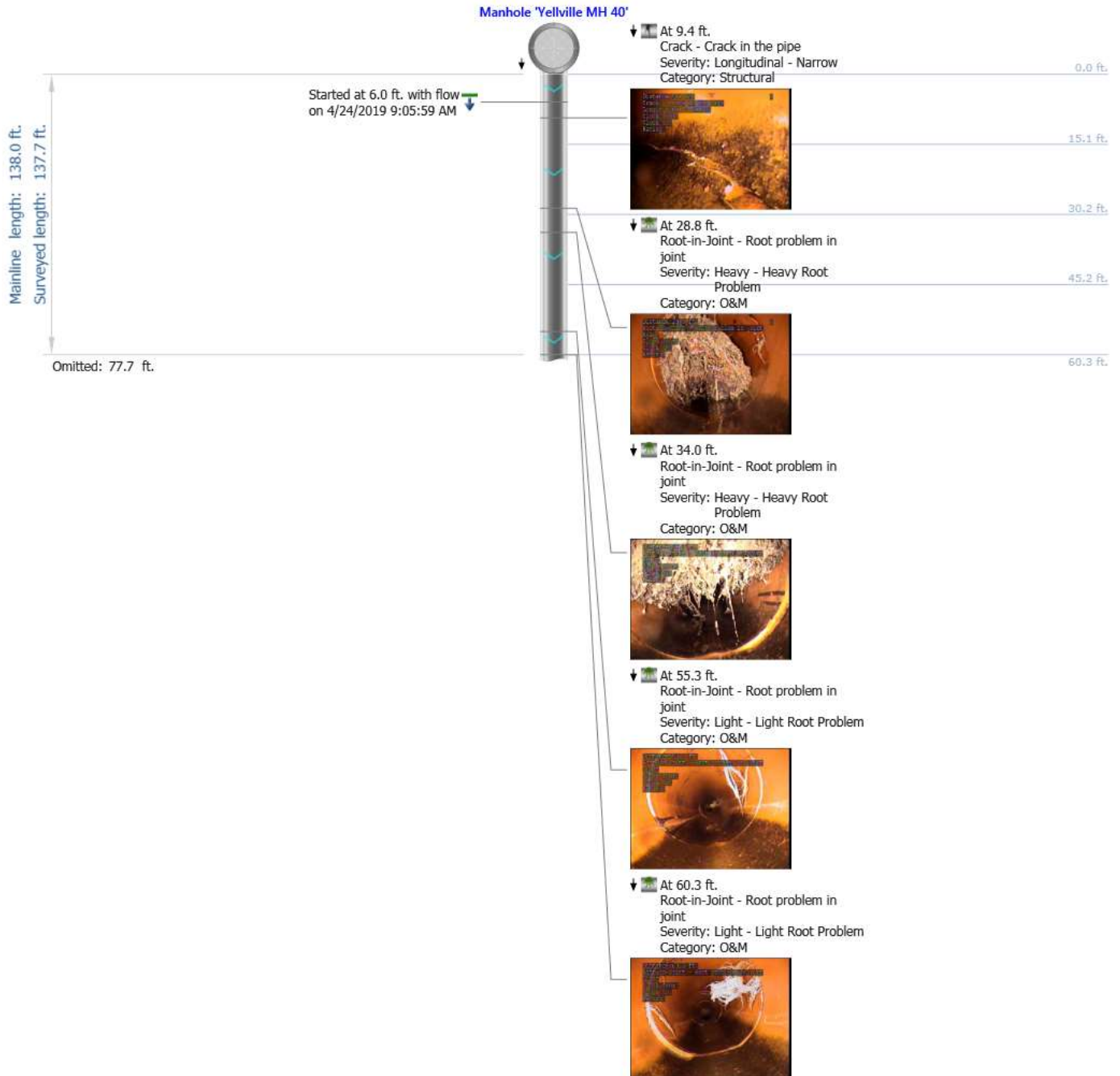
Direction:
With the flow

Weather:
Dry



Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 40 to 39 attempt	City: 2nd Yelleville	Address:
Start date/time: 4/24/2019 9:05 AM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



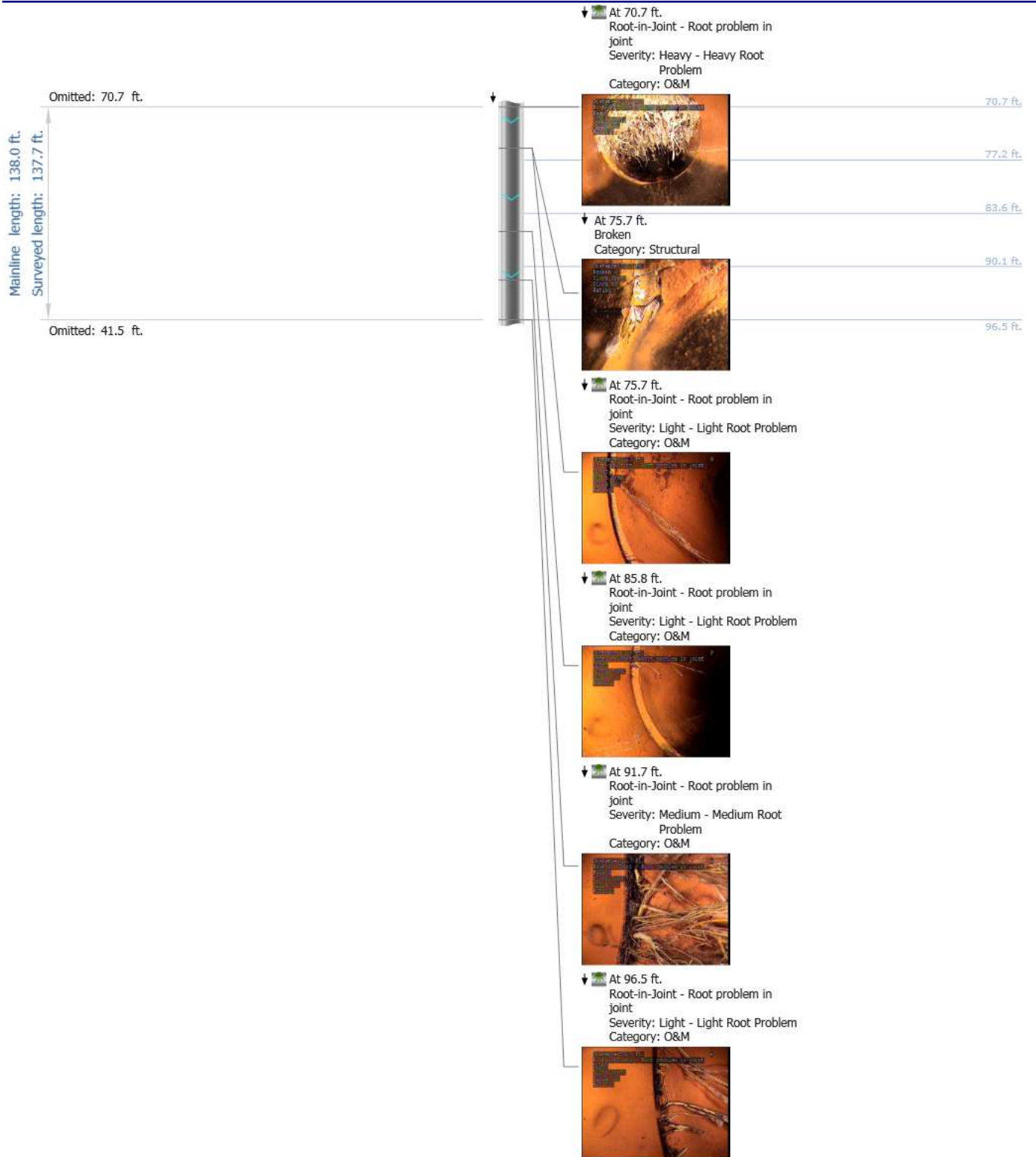
Project name:
Yelleville

Mainline ID:
Yelleville MH 40 to 39 2nd
attempt

Start date/time:
4/24/2019 9:05 AM

Direction:
With the flow

Weather:
Dry



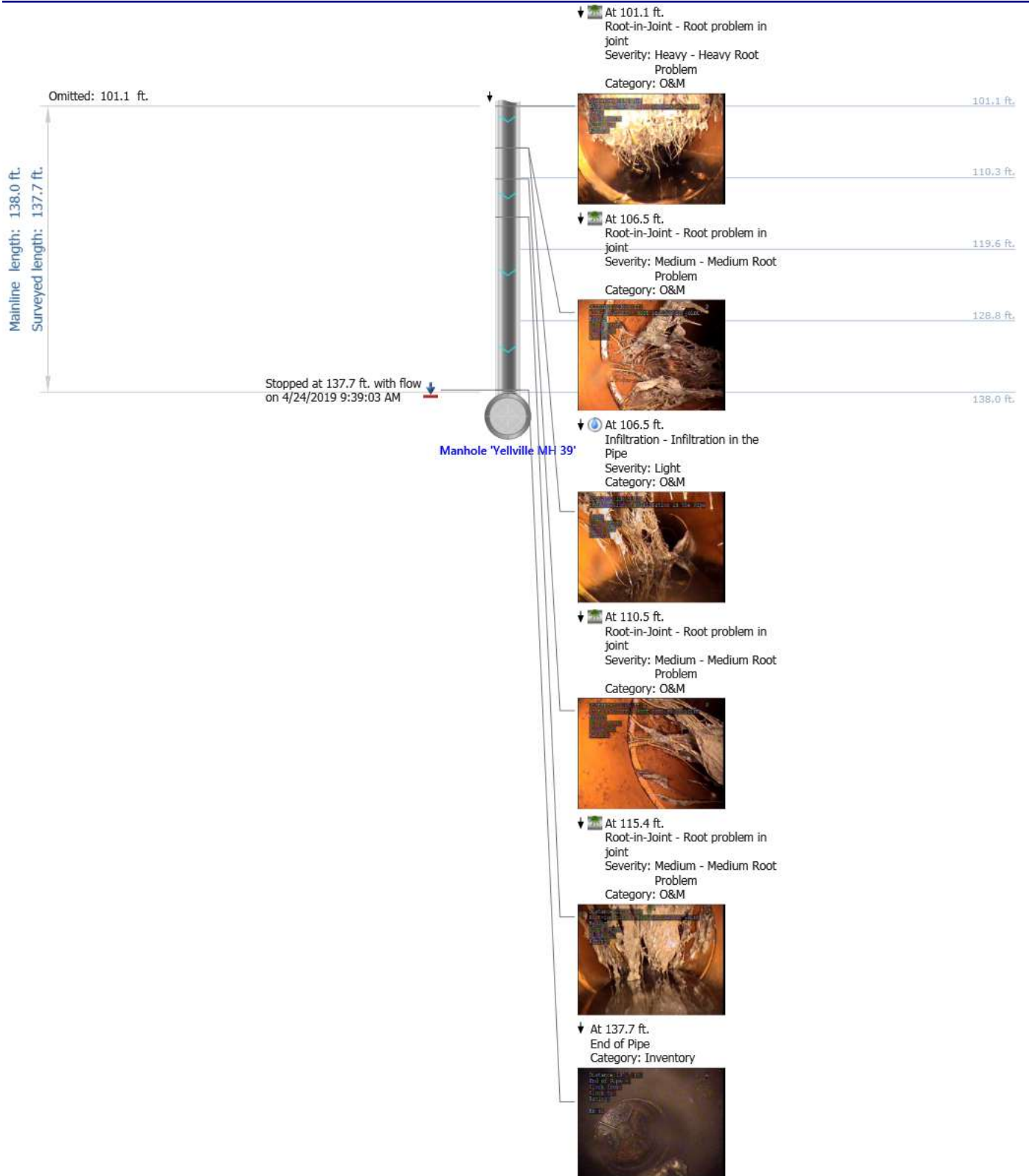
Project name:
Yelleville

Mainline ID:
Yelleville MH 40 to 39 2nd
attempt

Start date/time:
4/24/2019 9:05 AM

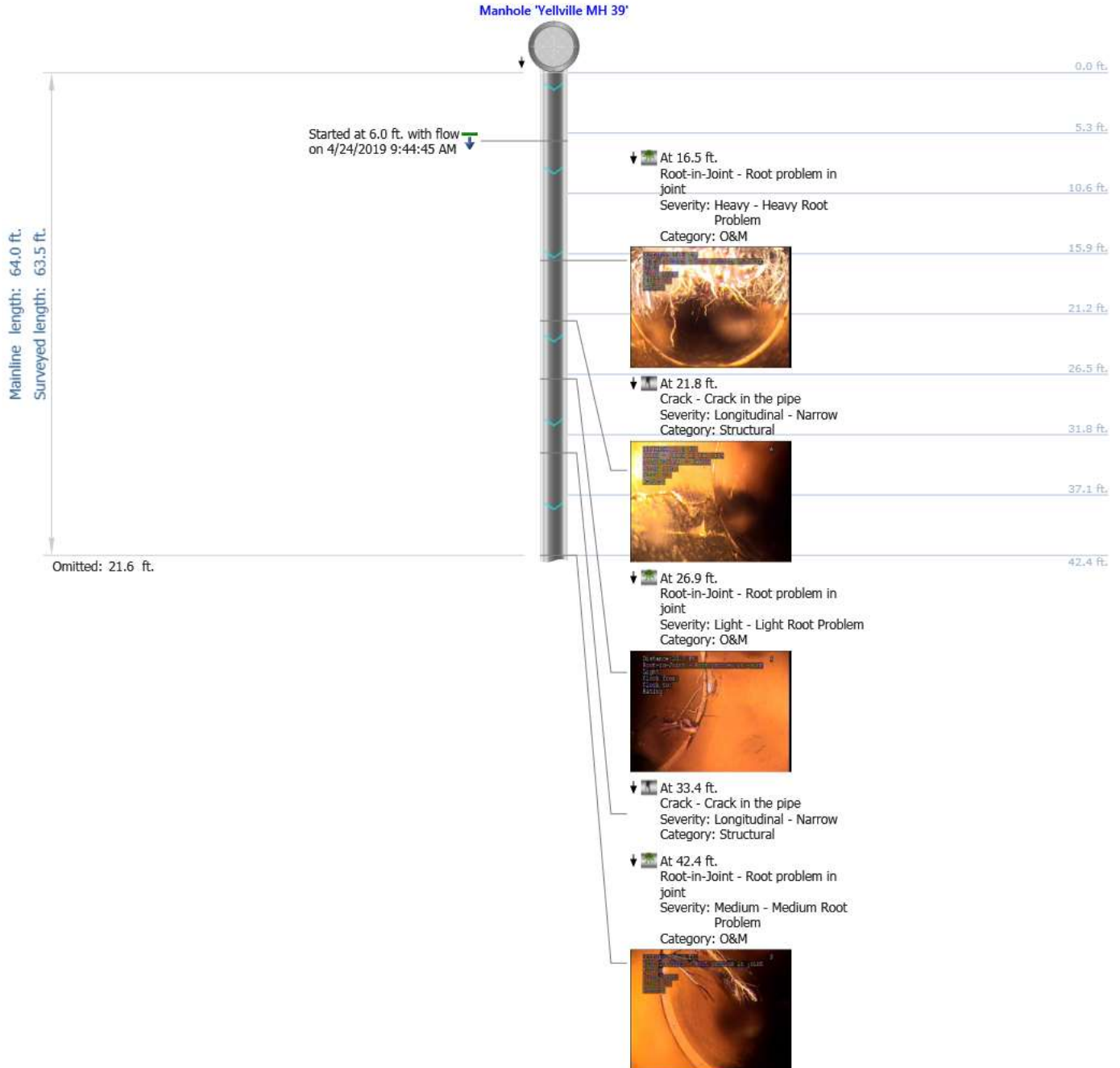
Direction:
With the flow

Weather:
Dry



Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 39 to MH 38.	City: Yelleville	Address:
Start date/time: 4/24/2019 9:44 AM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Project name:

Yelleville

Mainline ID:

Yelleville MH 39 to MH 38.

Start date/time:

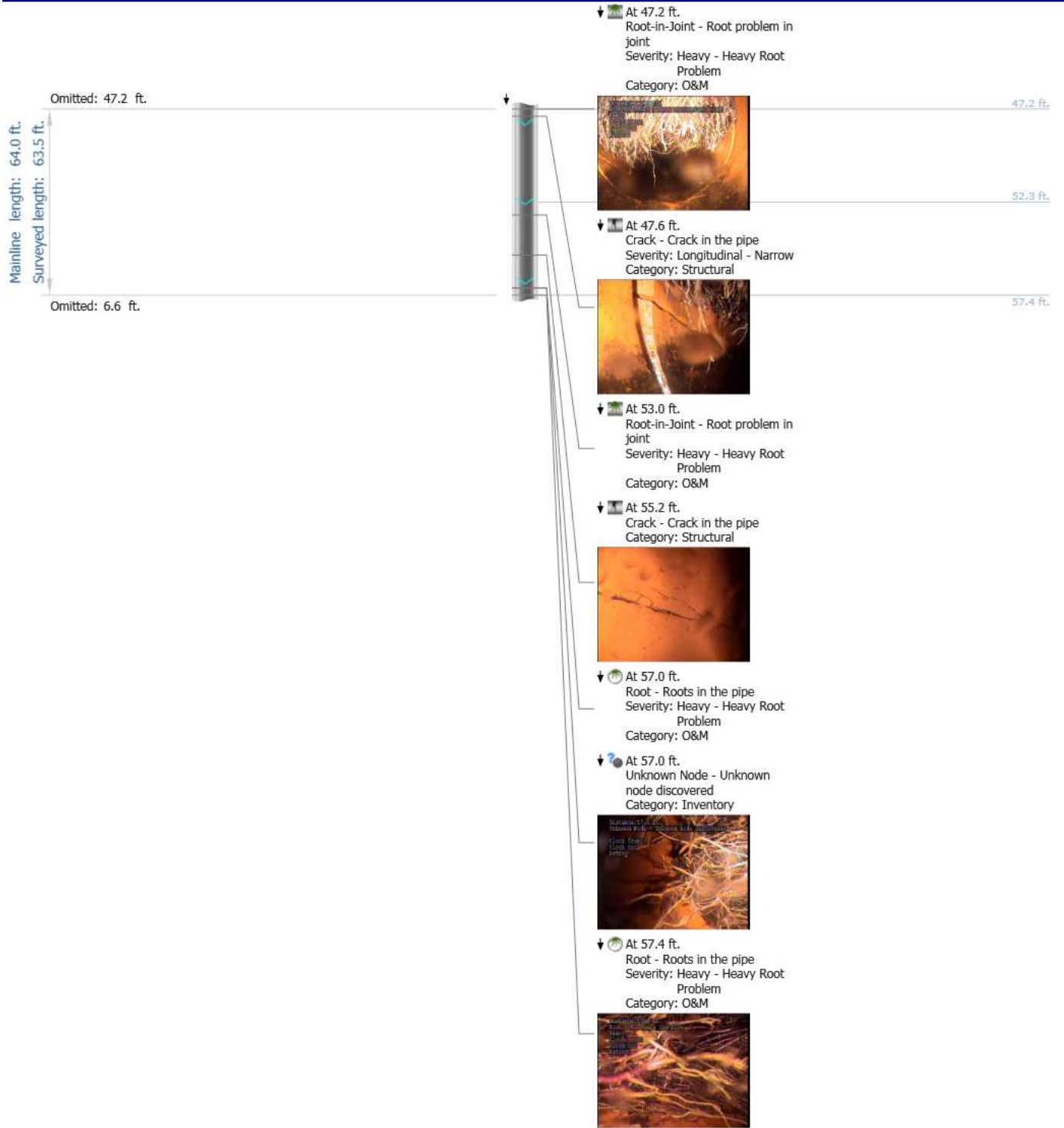
4/24/2019 9:44 AM

Direction:

With the flow

Weather:

Dry



Project name:
Yellville

Mainline ID:
Yellville MH 39 to MH 38.

Start date/time:
4/24/2019 9:44 AM

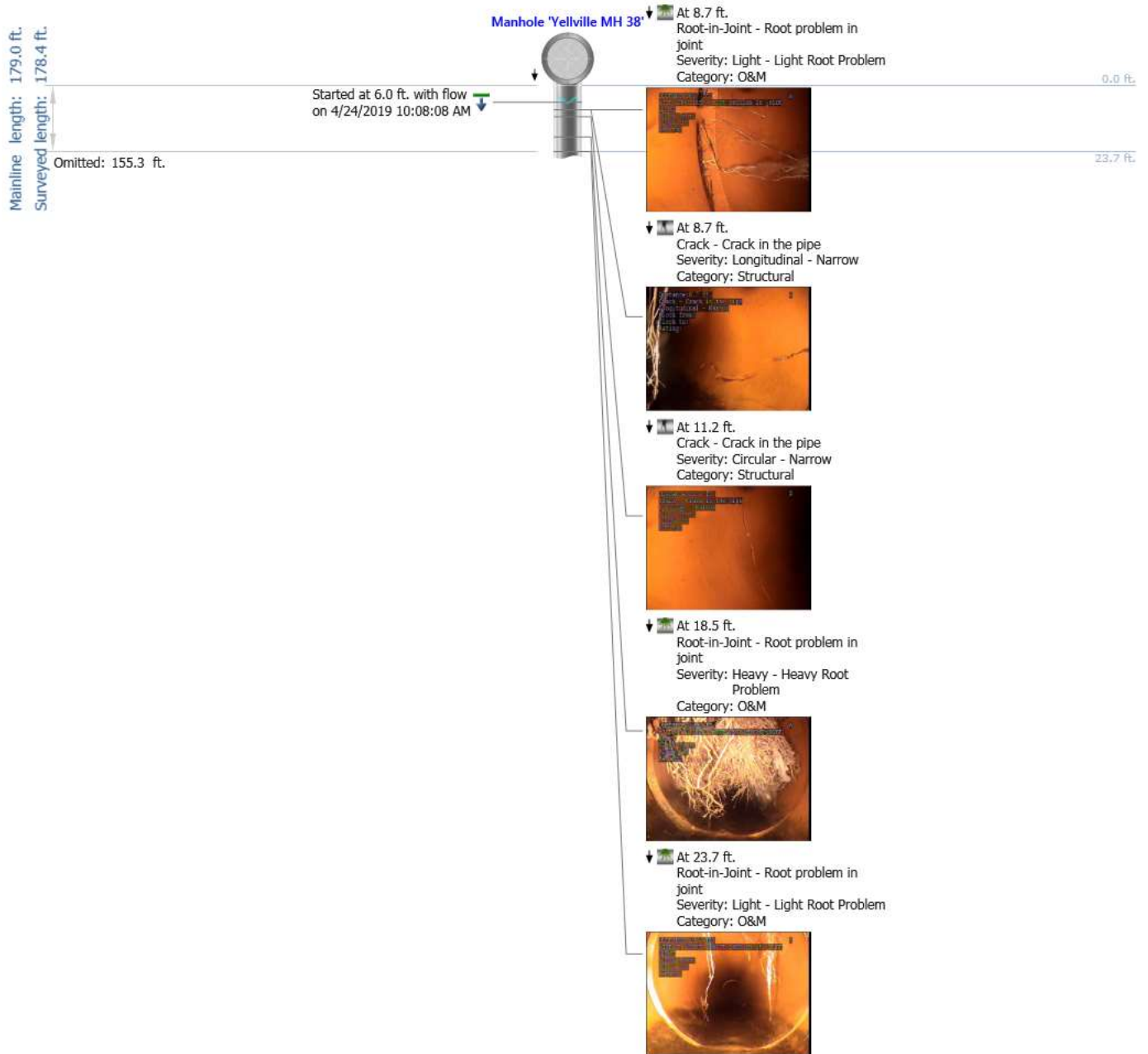
Direction:
With the flow

Weather:
Dry



Main Inspections Pipe Run with Images

Project name:	Mainline ID:	City:	Address:
Yellville	Yellville MH 38 to MH 37	Yellville	
Start date/time:	Direction:	Weather:	Surface condition:
4/24/2019 10:08 AM	With the flow	Dry	Woodland
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay Tile	8.0 in.	8.0 in.



Project name:

Yelleville

Mainline ID:

Yelleville MH 38 to MH 37

Start date/time:

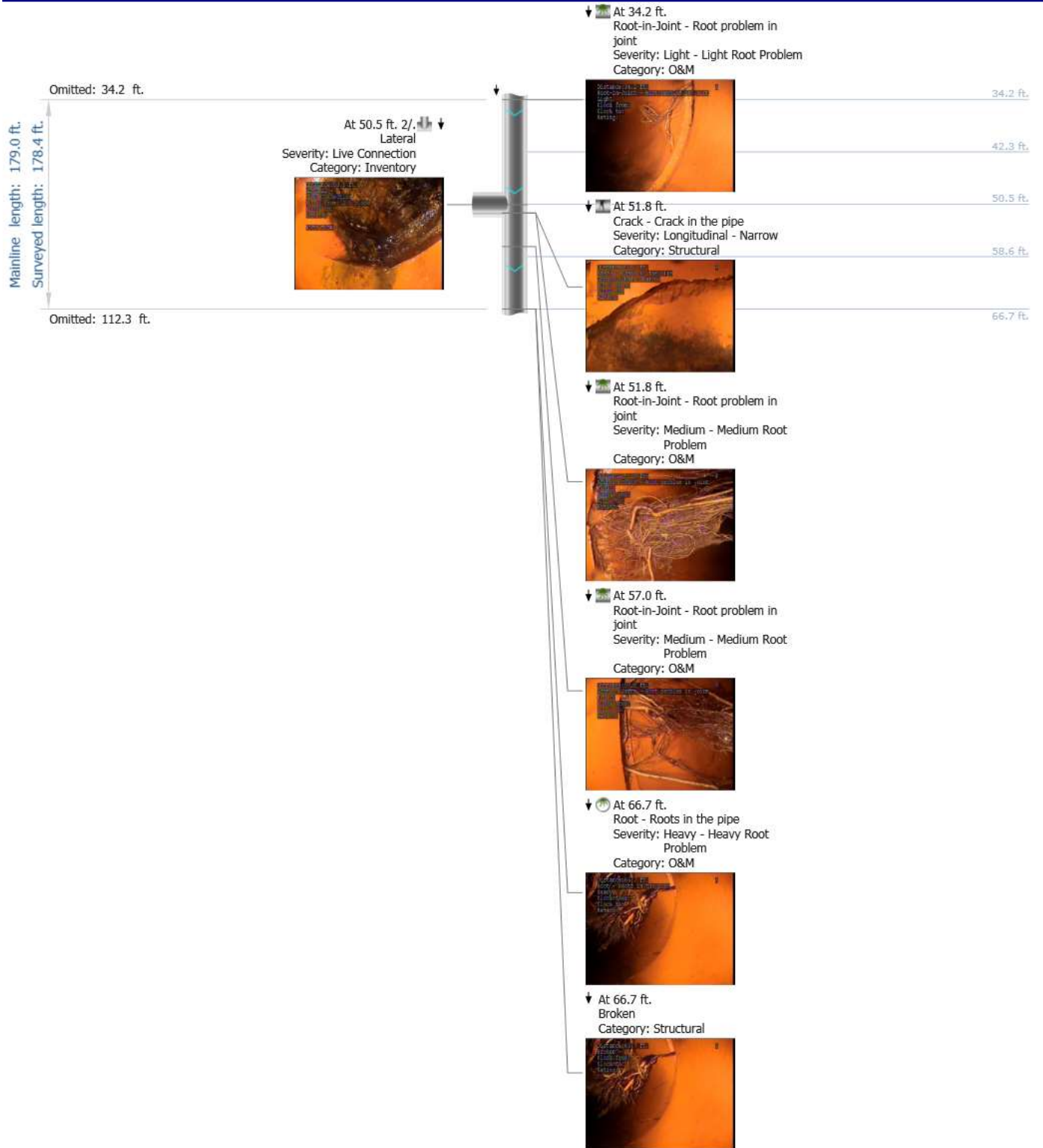
4/24/2019 10:08 AM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 38 to MH 37

Start date/time:

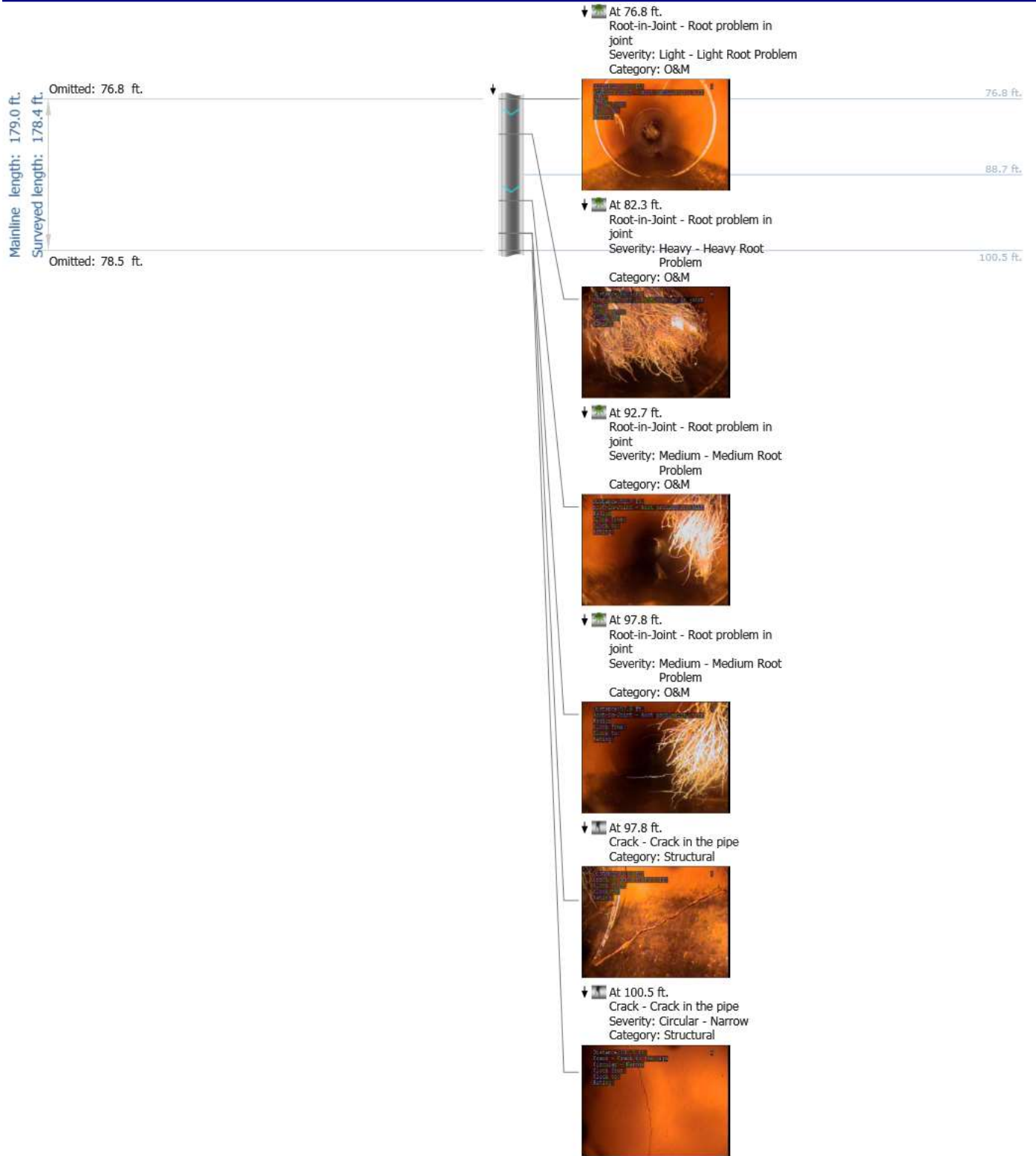
4/24/2019 10:08 AM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 38 to MH 37

Start date/time:

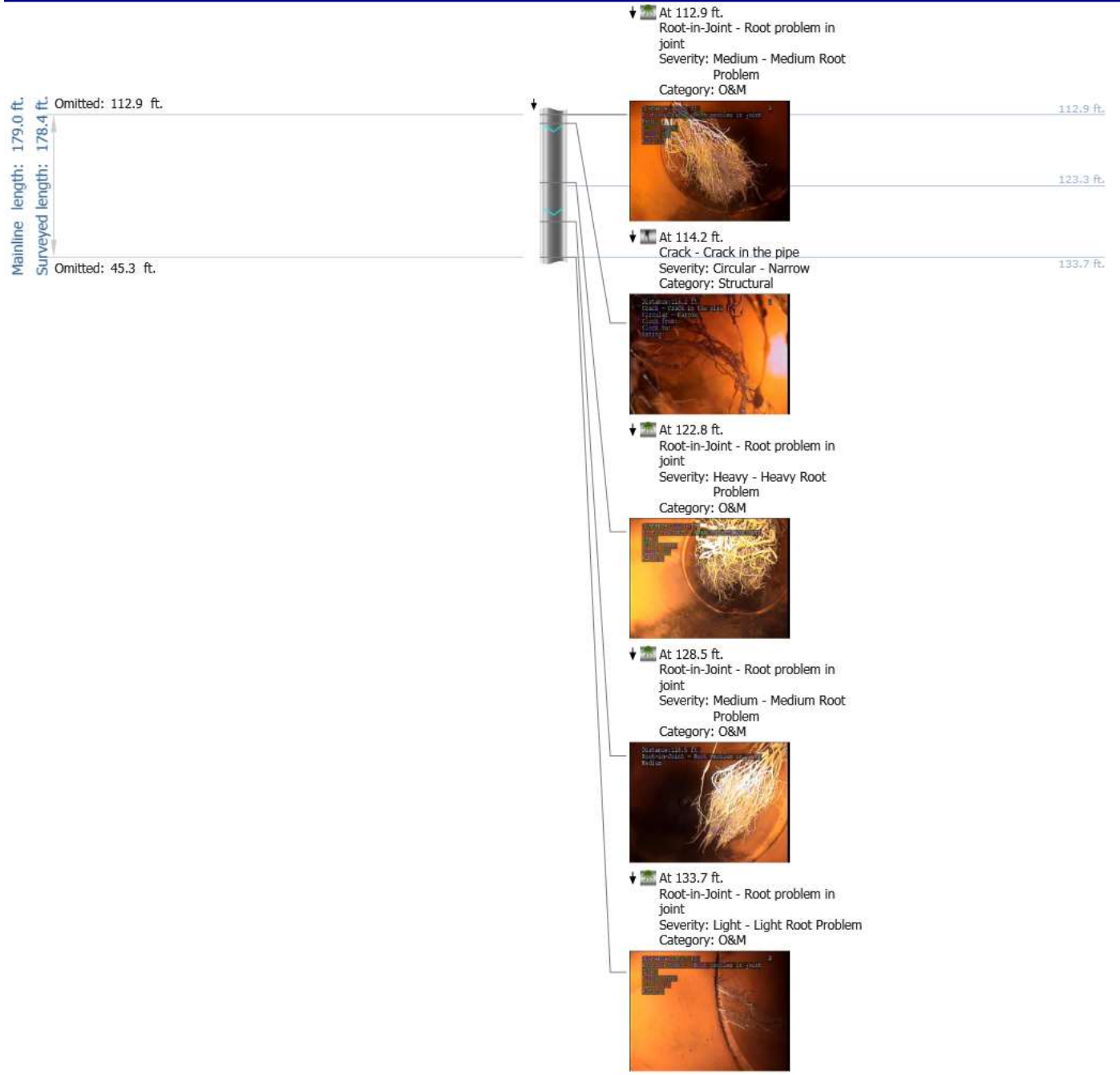
4/24/2019 10:08 AM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 38 to MH 37

Start date/time:

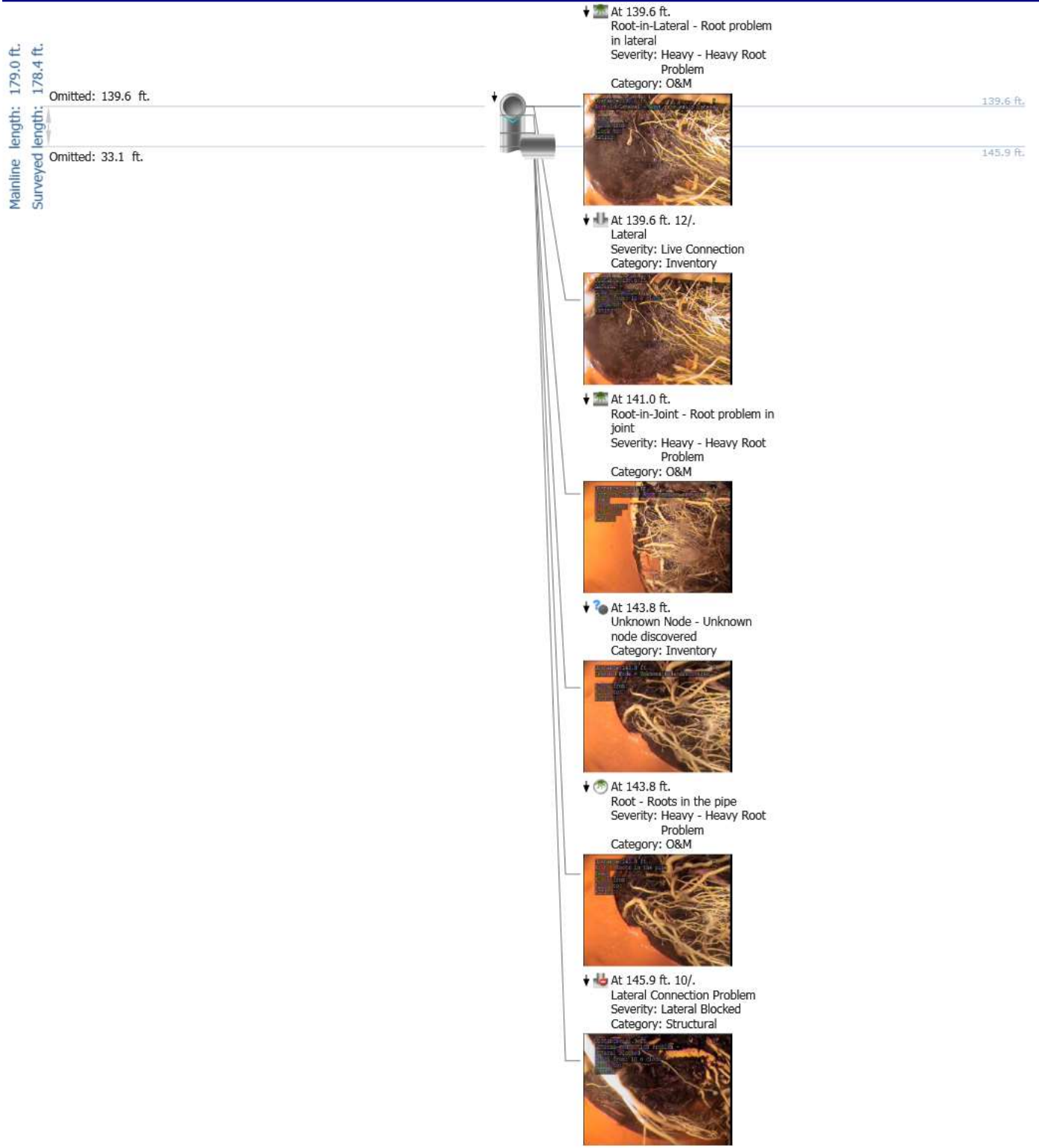
4/24/2019 10:08 AM

Direction:

With the flow

Weather:

Dry



Project name:
Yelleville

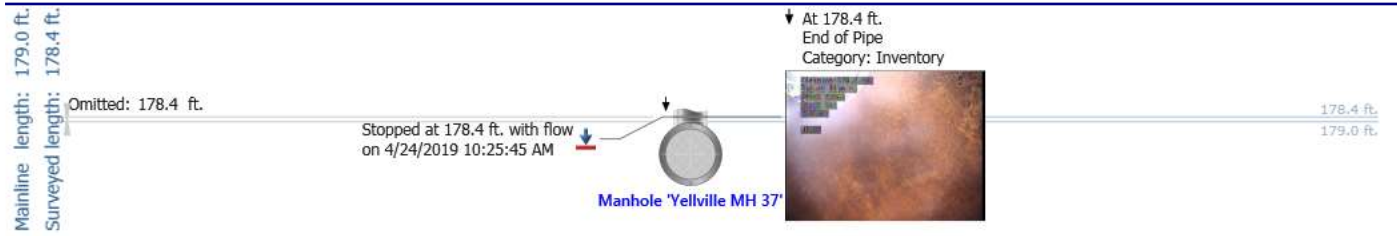
Mainline ID:
Yelleville MH 38 to MH 37

Start date/time:
4/24/2019 10:08 AM

Direction:
With the flow

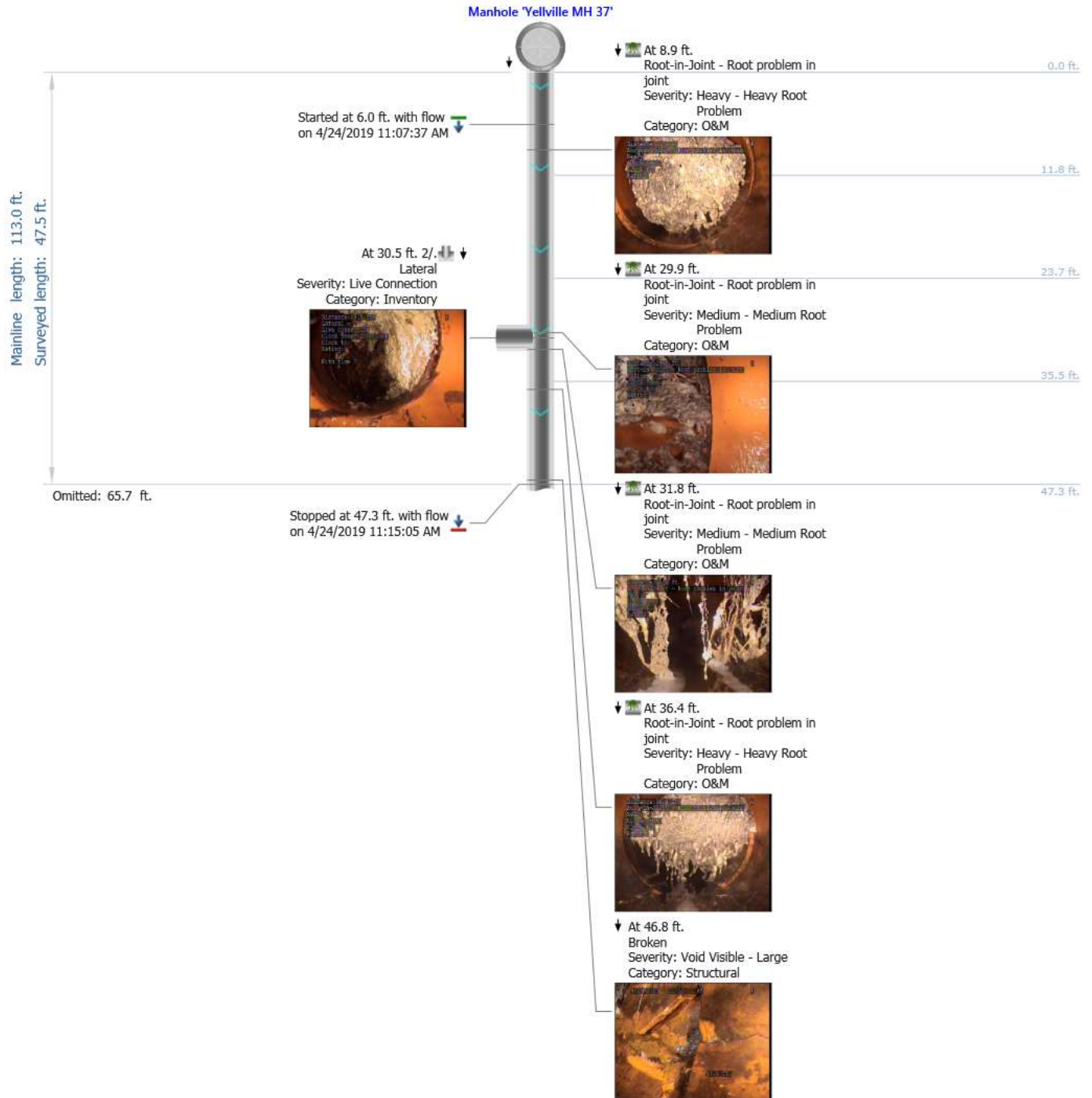
Weather:

Dry



Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 37 to MH 36	City: Yelleville	Address:
Start date/time: 4/24/2019 11:07 AM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.

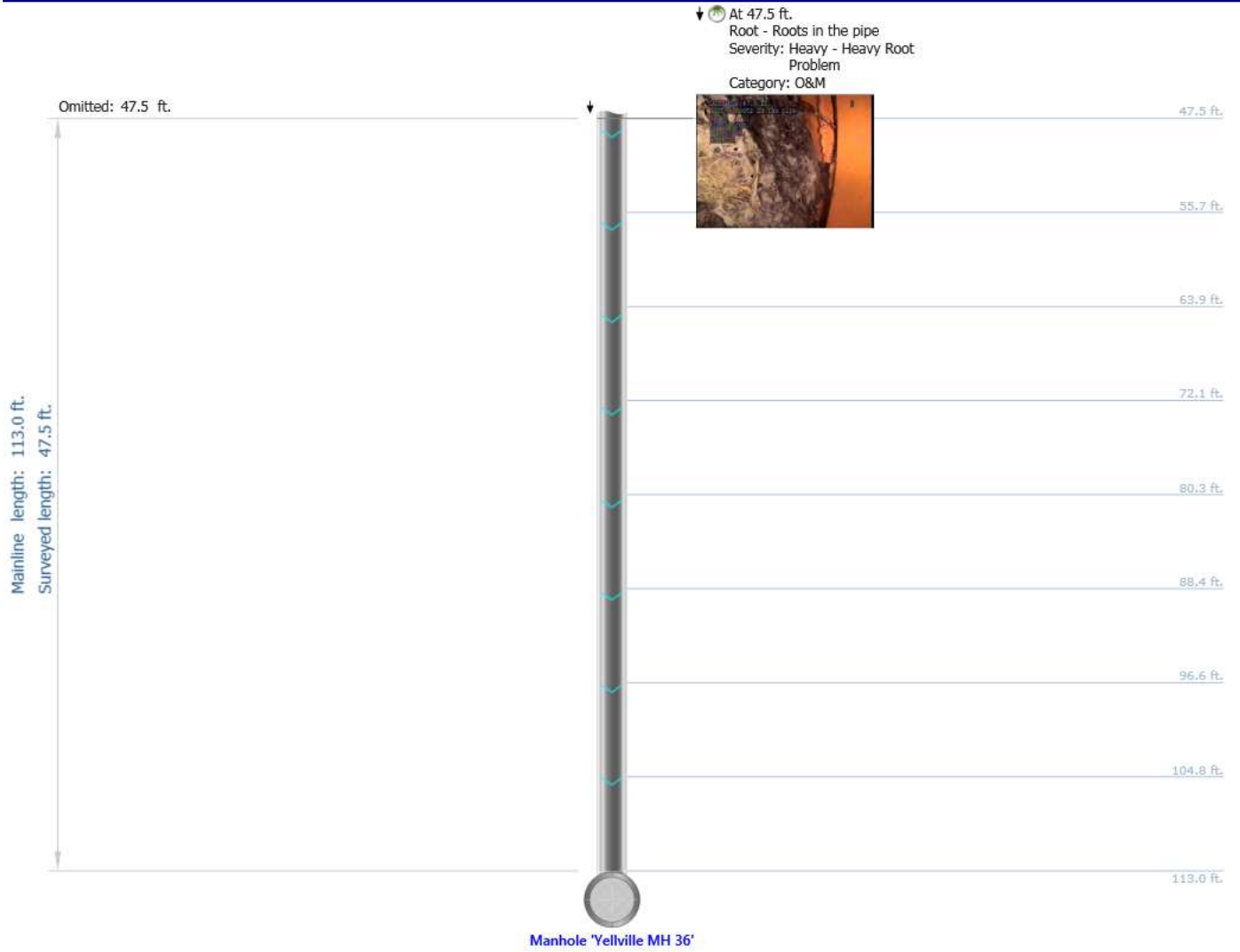


Project name:
Yelleville
Weather:
Dry

Mainline ID:
Yelleville MH 37 to MH 36

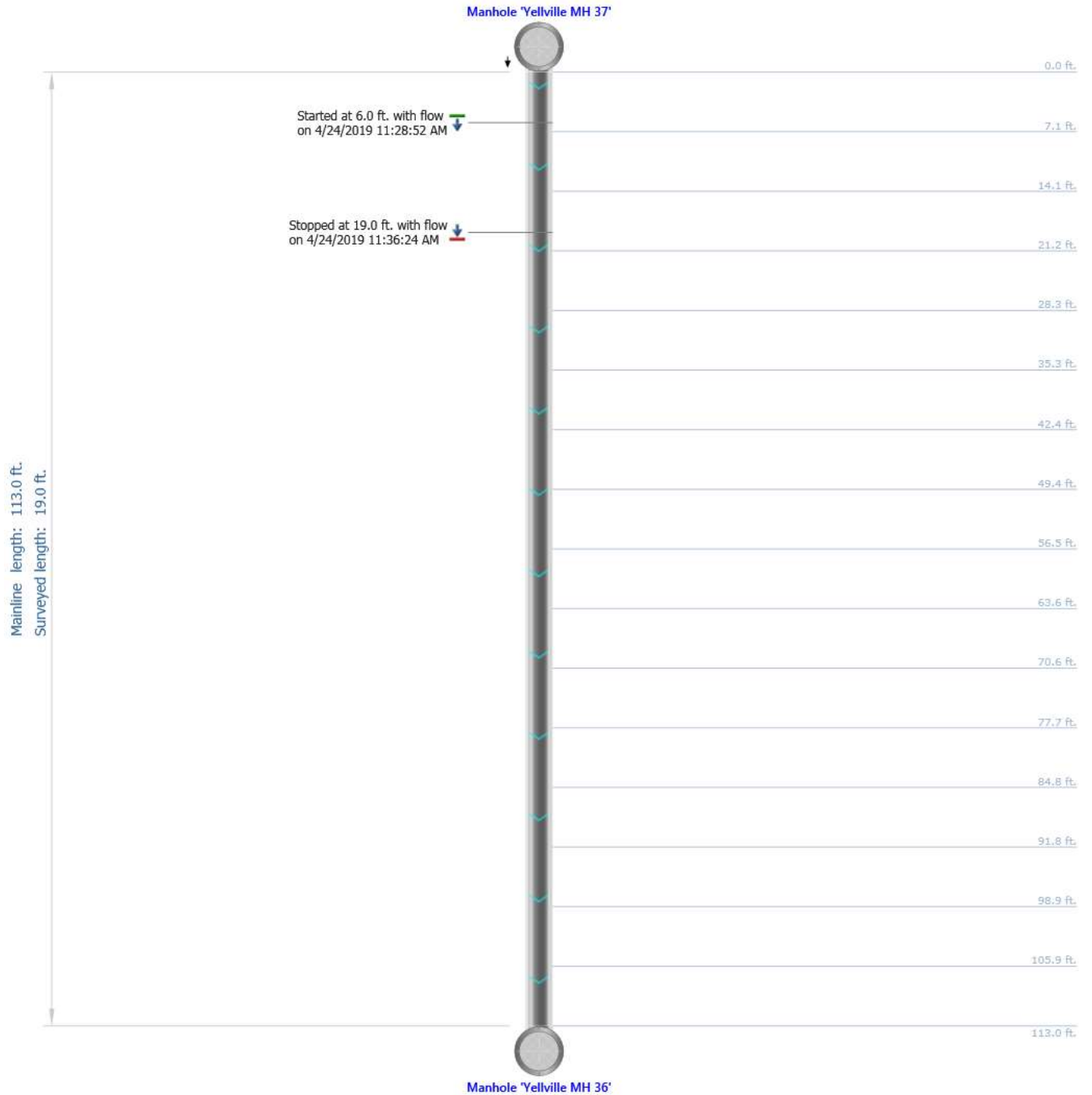
Start date/time:
4/24/2019 11:07 AM

Direction:
With the flow



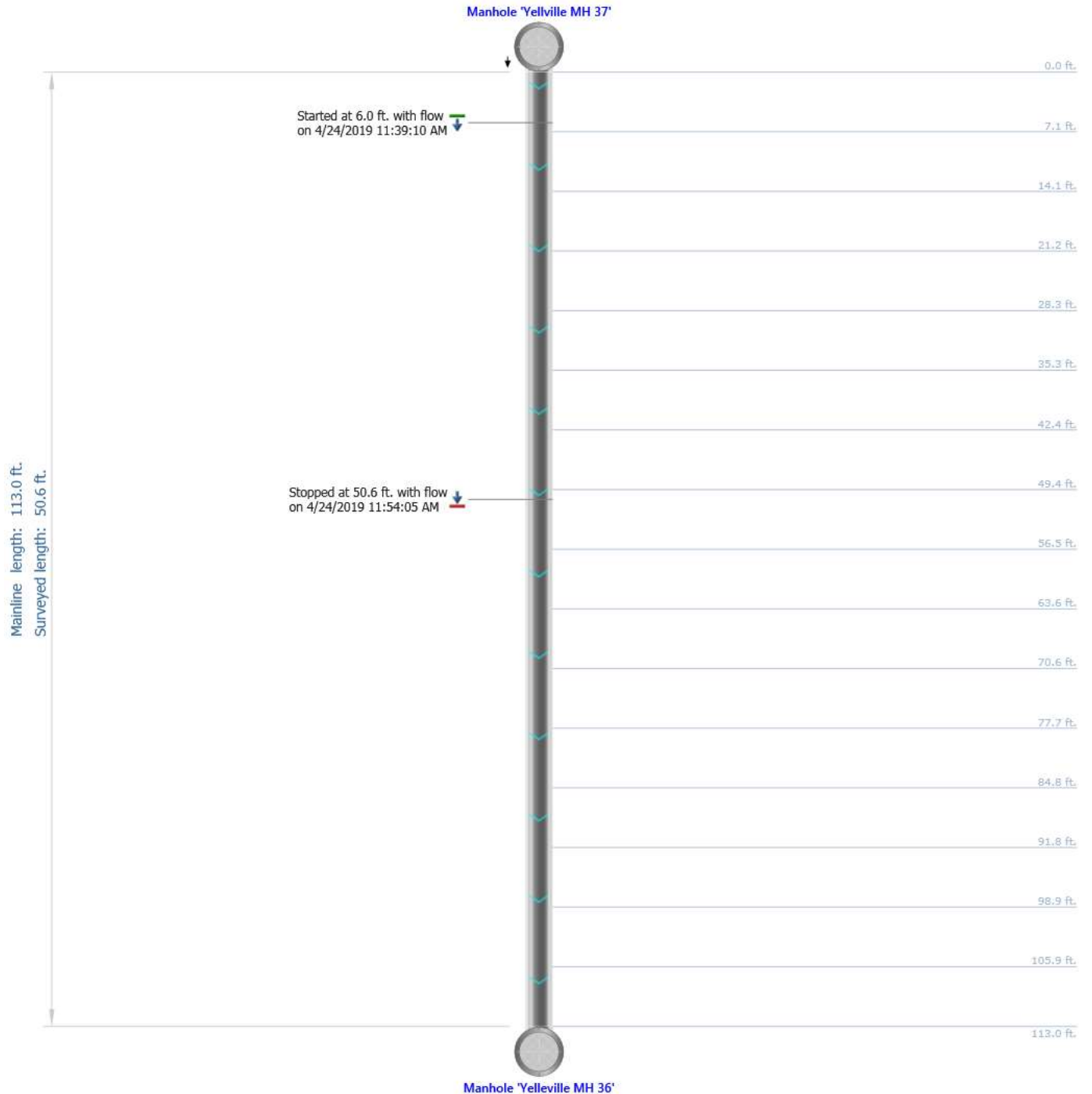
Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 37 to MH 36, 2nd attempt	City: Yelleville	Address:
Start date/time: 4/24/2019 11:28 AM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



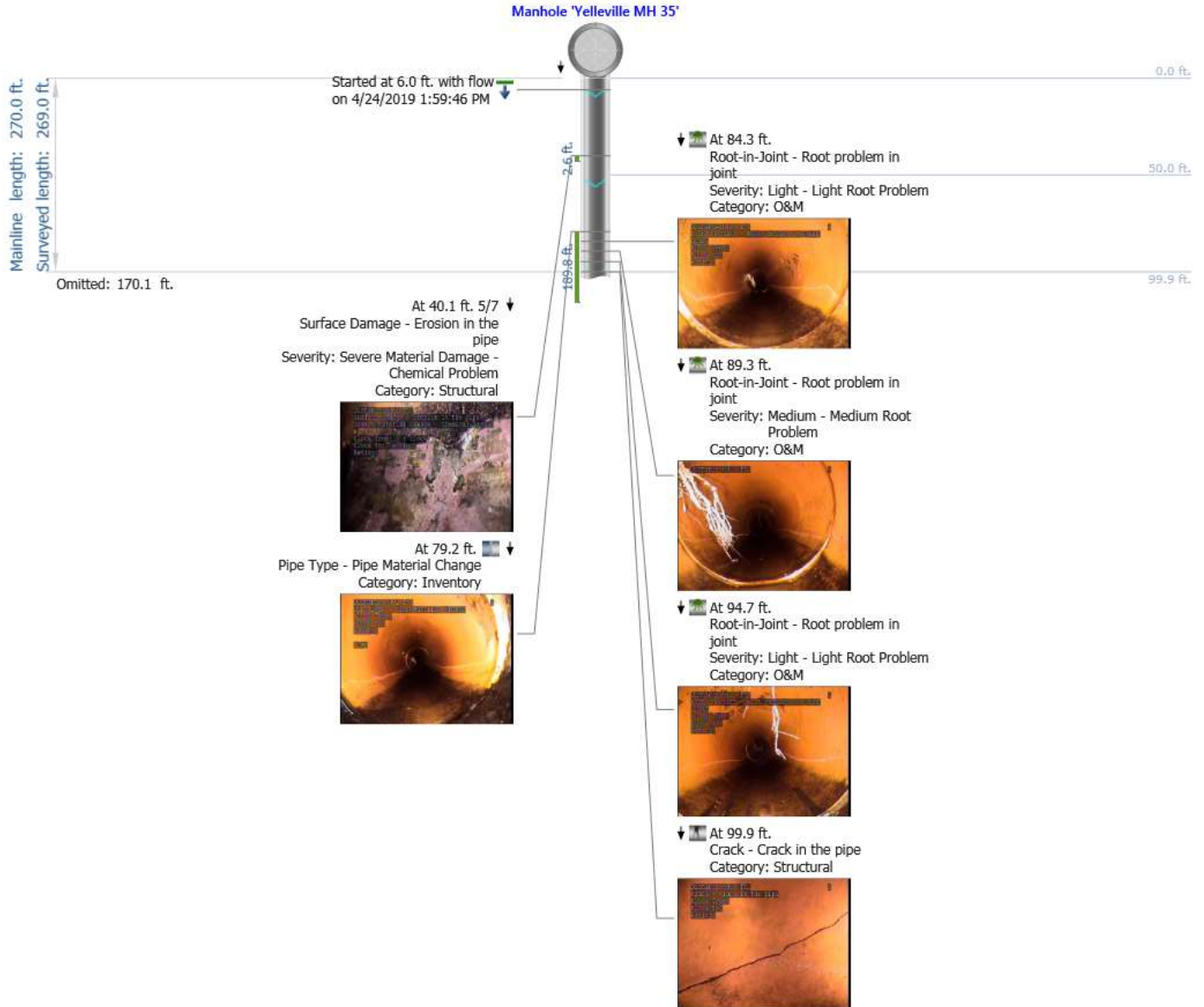
Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 37 MH 36, 3 rd attempt	City: Yellville	Address:
Start date/time: 4/24/2019 11:39 AM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Main Inspections Pipe Run with Images

Project name: Yelleville	Mainline ID: Yelleville MH 35 to MH 34	City: Yelleville	Address:
Start date/time: 4/24/2019 1:59 PM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Project name:

Yelleville

Mainline ID:

Yelleville MH 35 to MH 34

Start date/time:

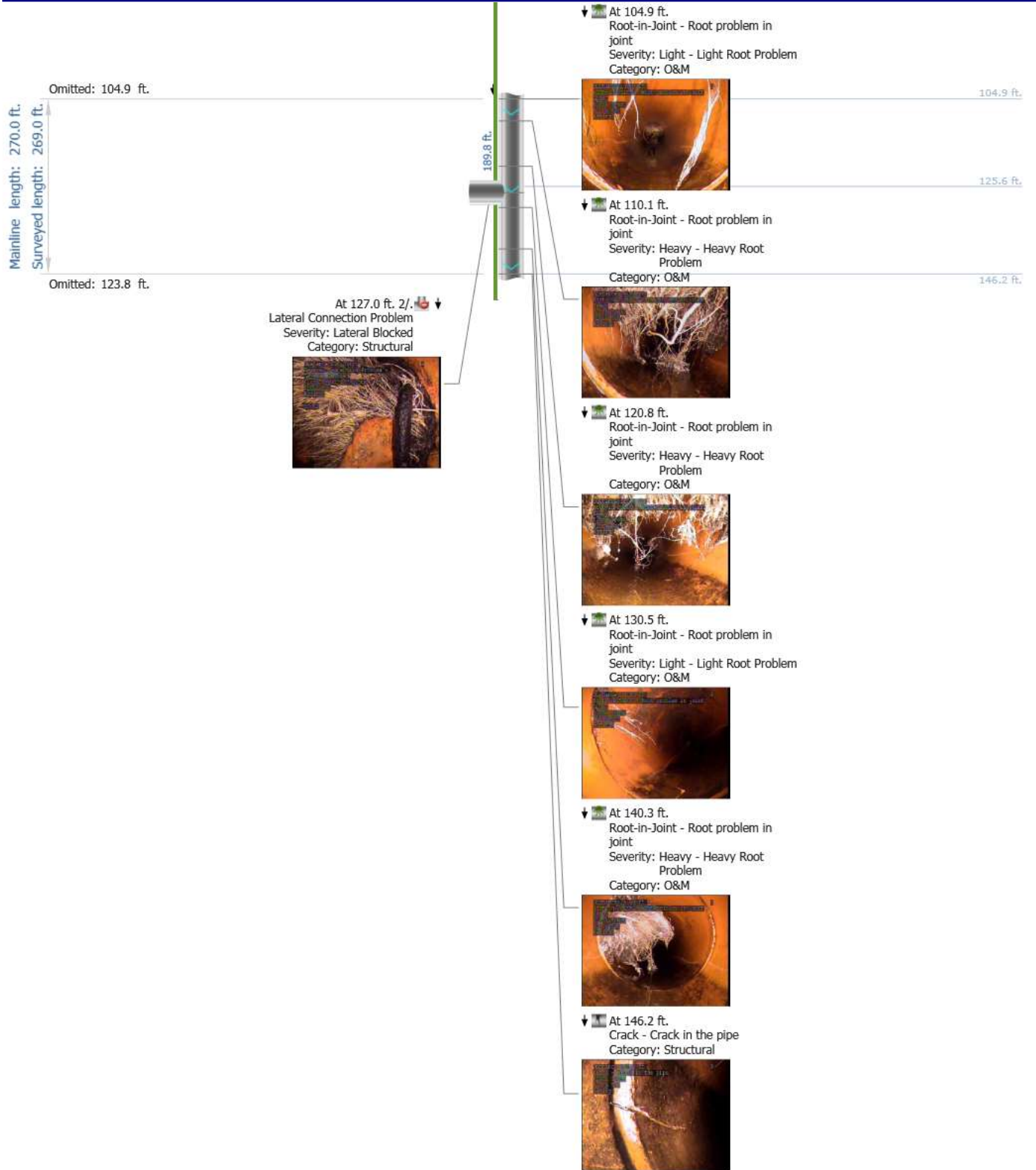
4/24/2019 1:59 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 35 to MH 34

Start date/time:

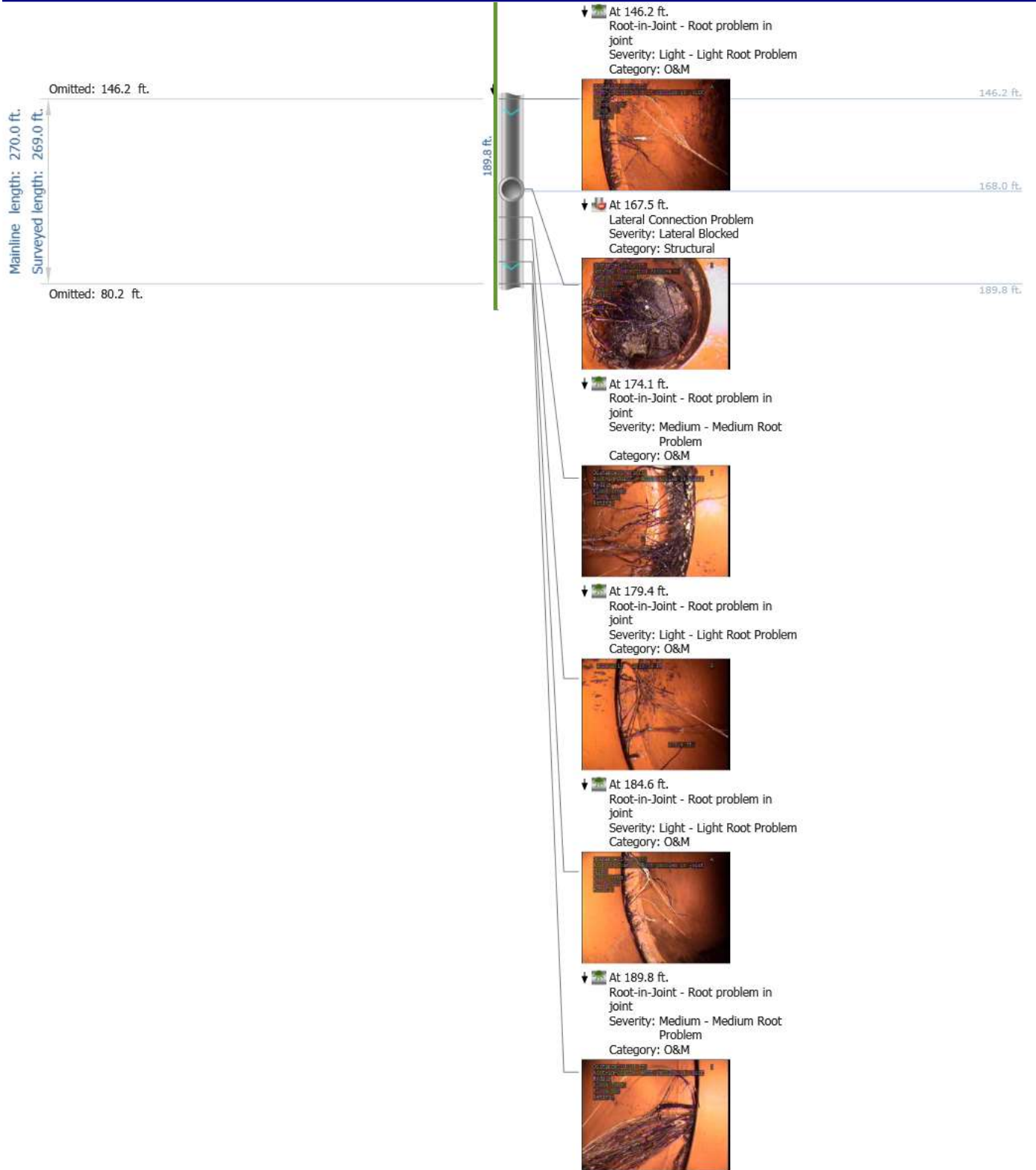
4/24/2019 1:59 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 35 to MH 34

Start date/time:

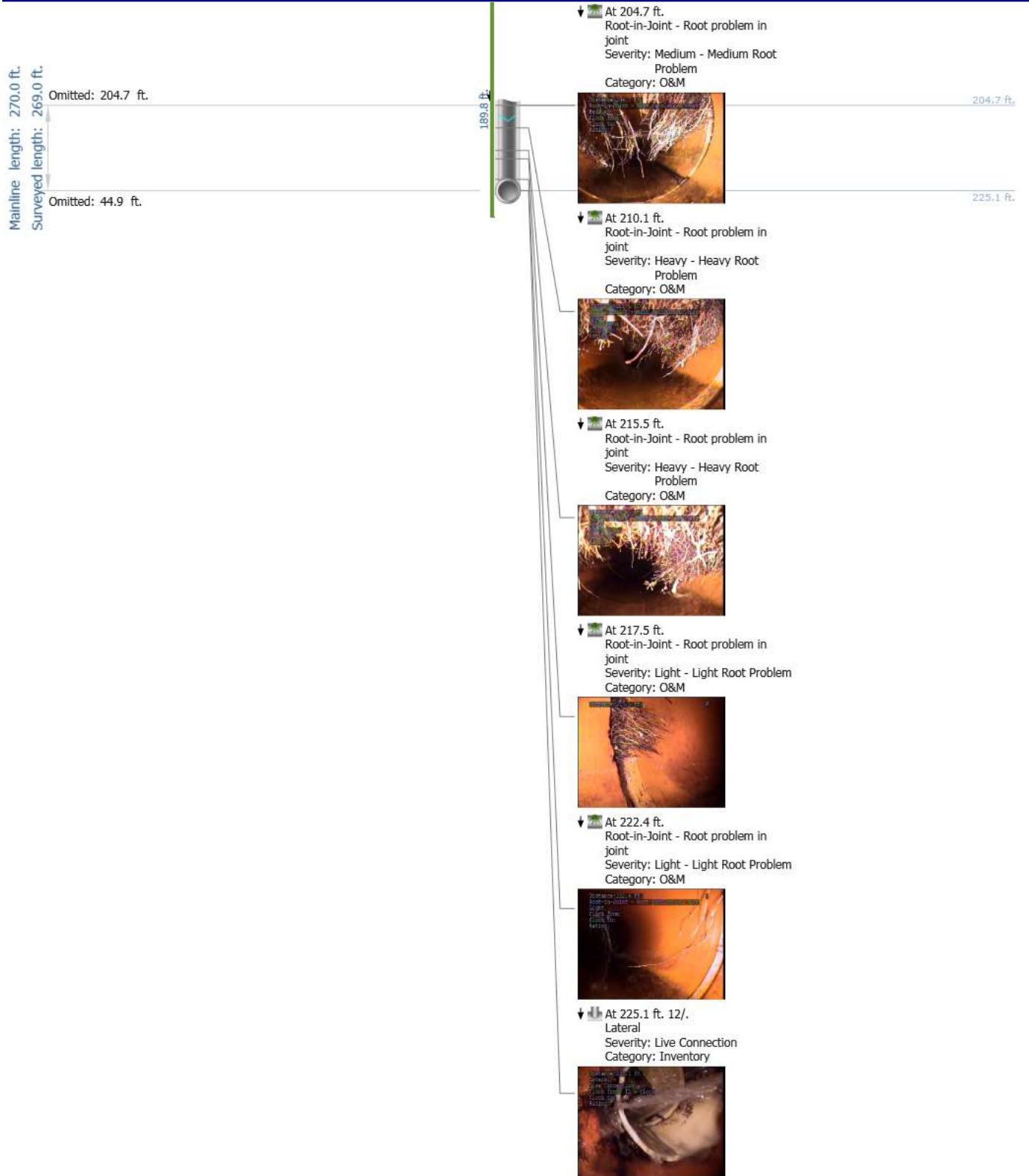
4/24/2019 1:59 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 35 to MH 34

Start date/time:

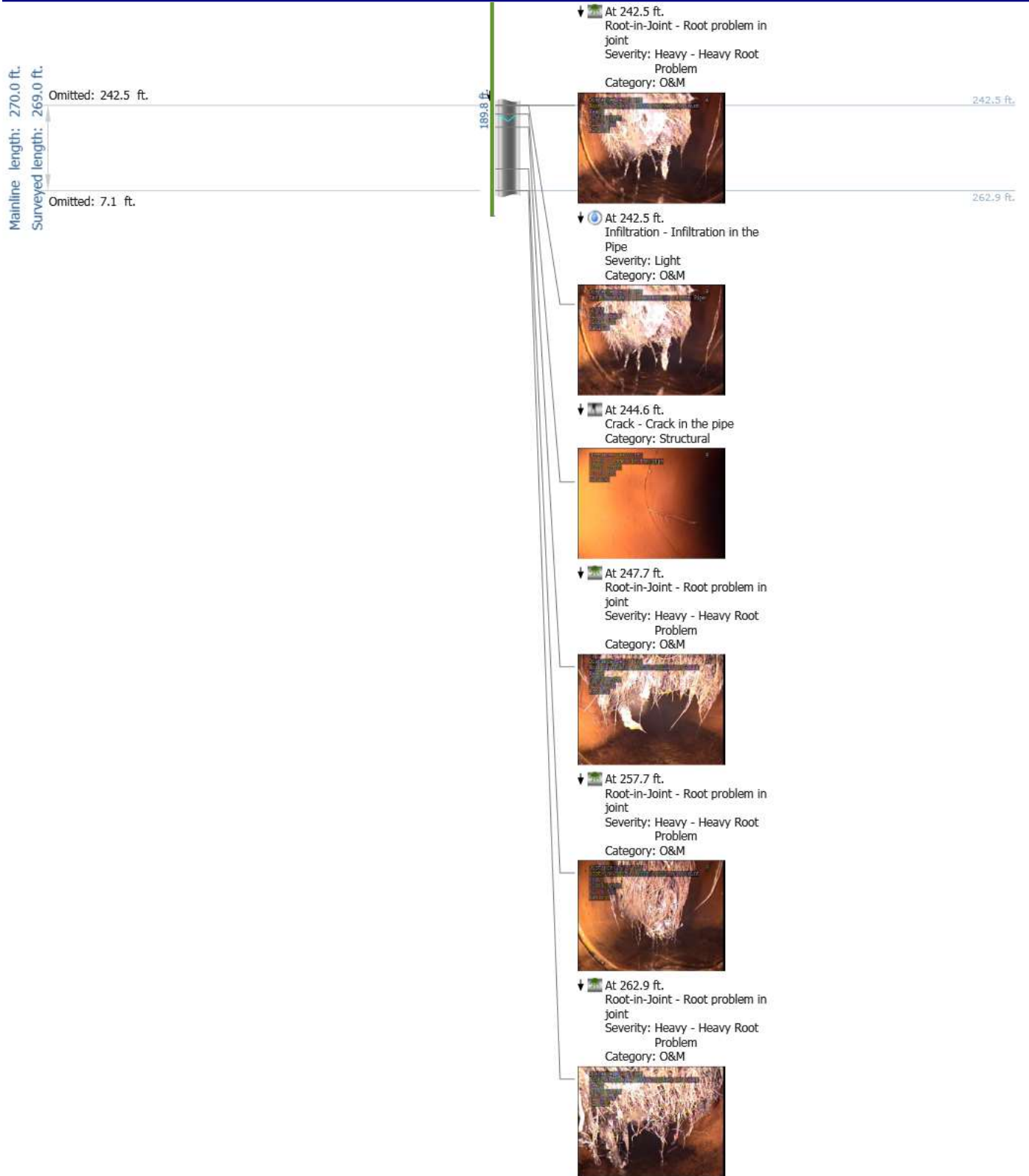
4/24/2019 1:59 PM

Direction:

With the flow

Weather:

Dry



Project name:

Yelleville

Mainline ID:

Yelleville MH 35 to MH 34

Start date/time:

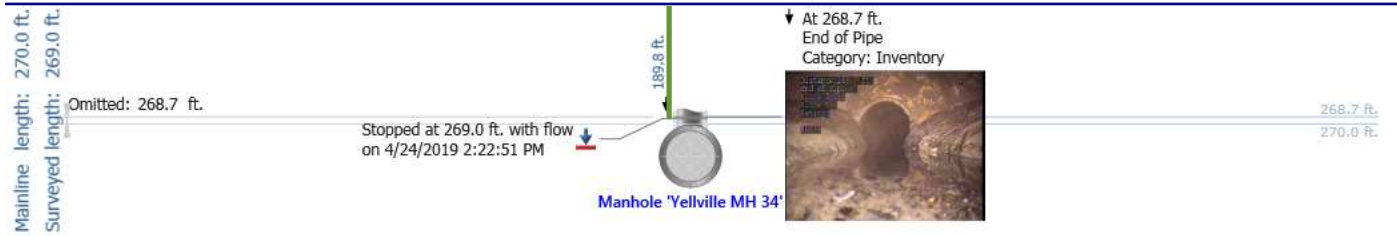
4/24/2019 1:59 PM

Direction:

With the flow

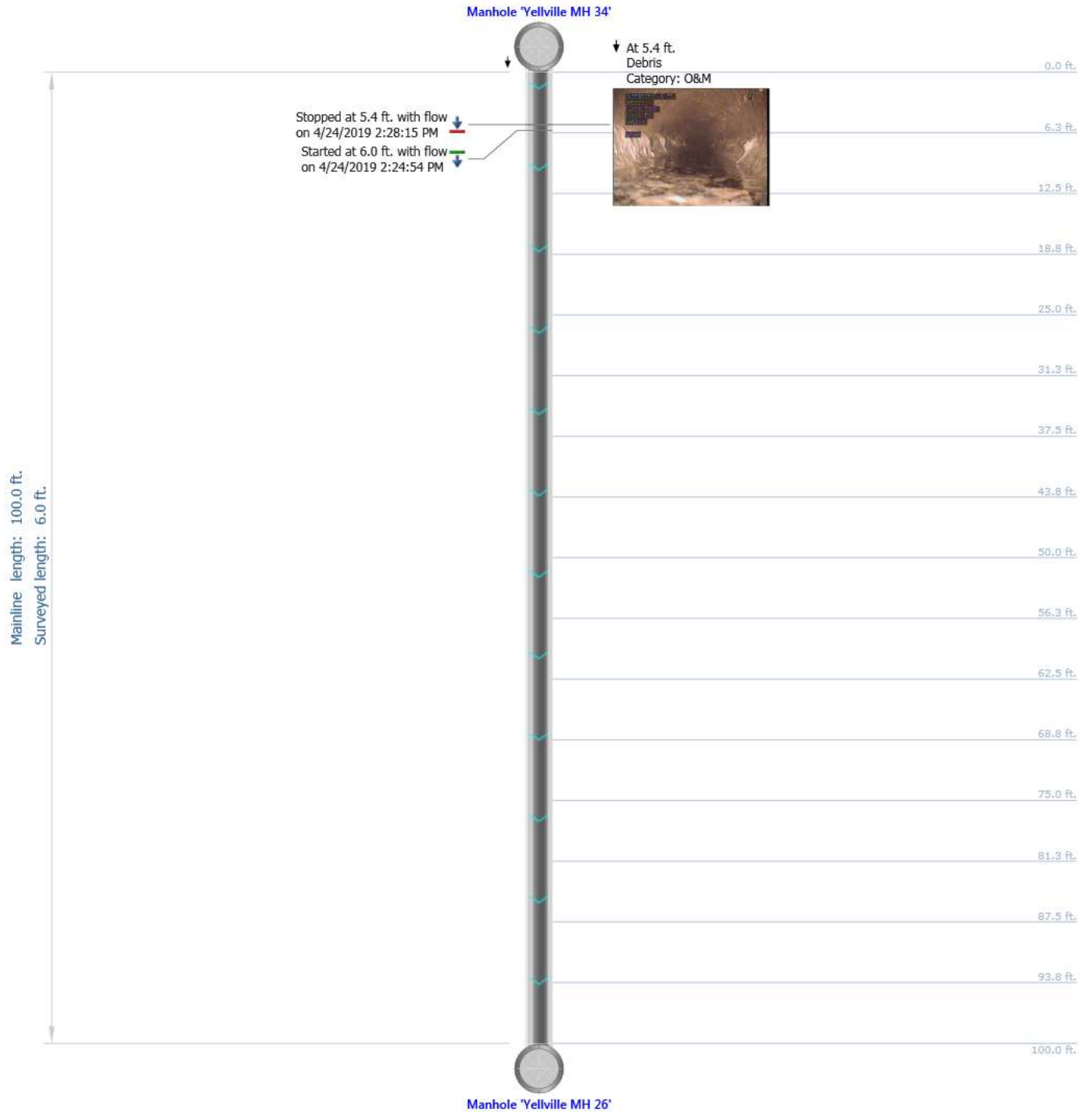
Weather:

Dry



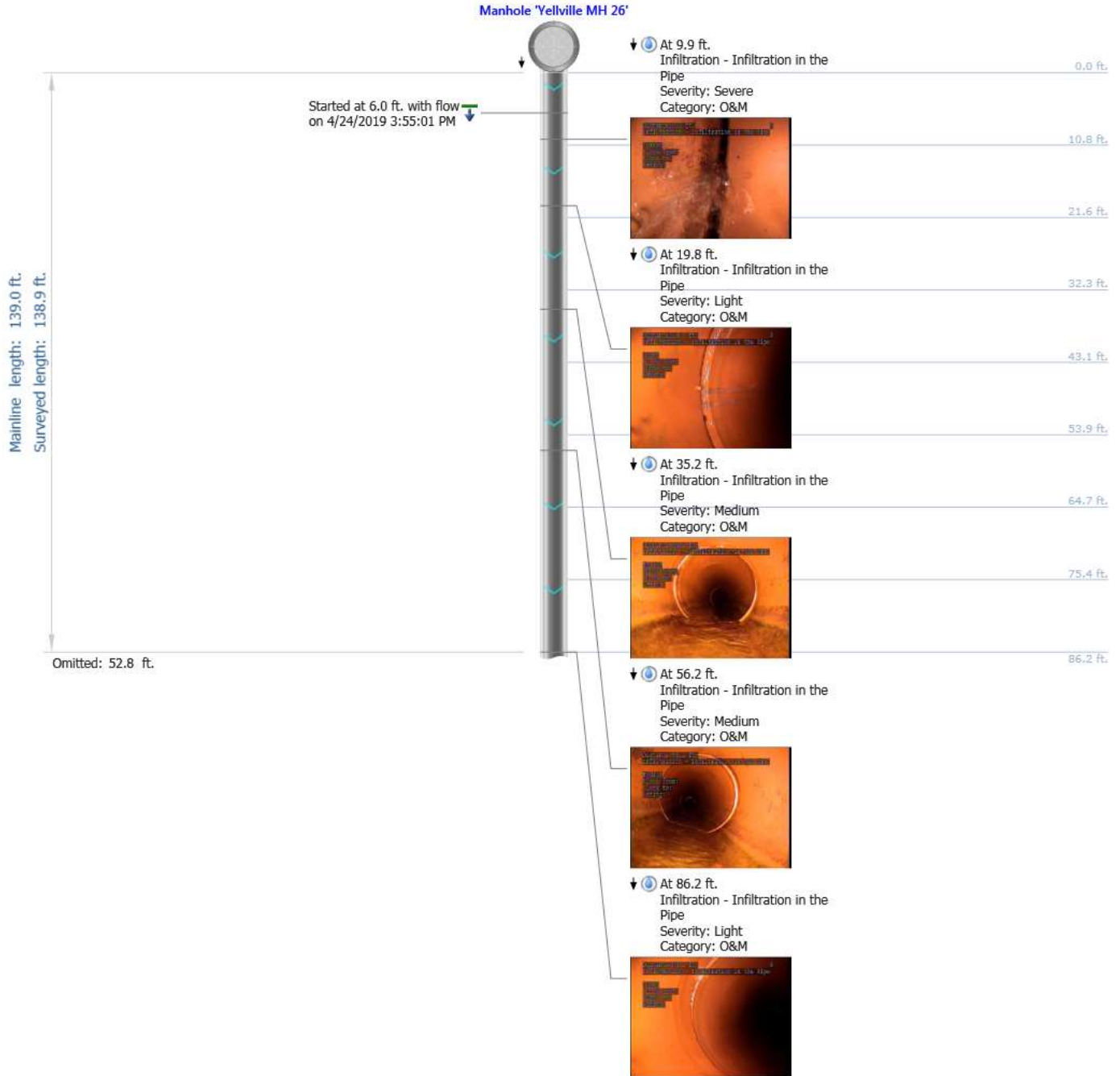
Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 34 to MH 26	City: Yellville	Address:
Start date/time: 4/24/2019 2:24 PM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 26 to MH 25	City: Yellville	Address:
Start date/time: 4/24/2019 3:55 PM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Project name:

Yellville

Mainline ID:

Yellville MH 26 to MH 25

Start date/time:

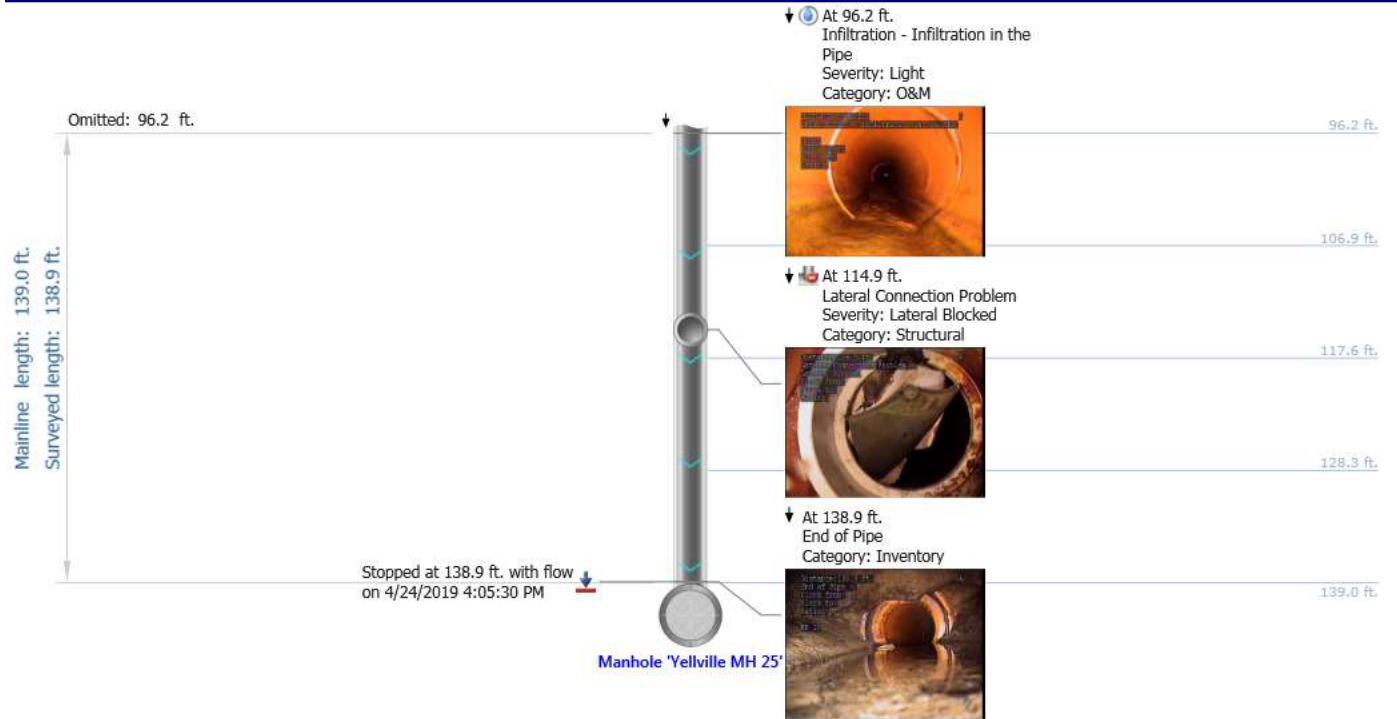
4/24/2019 3:55 PM

Direction:

With the flow

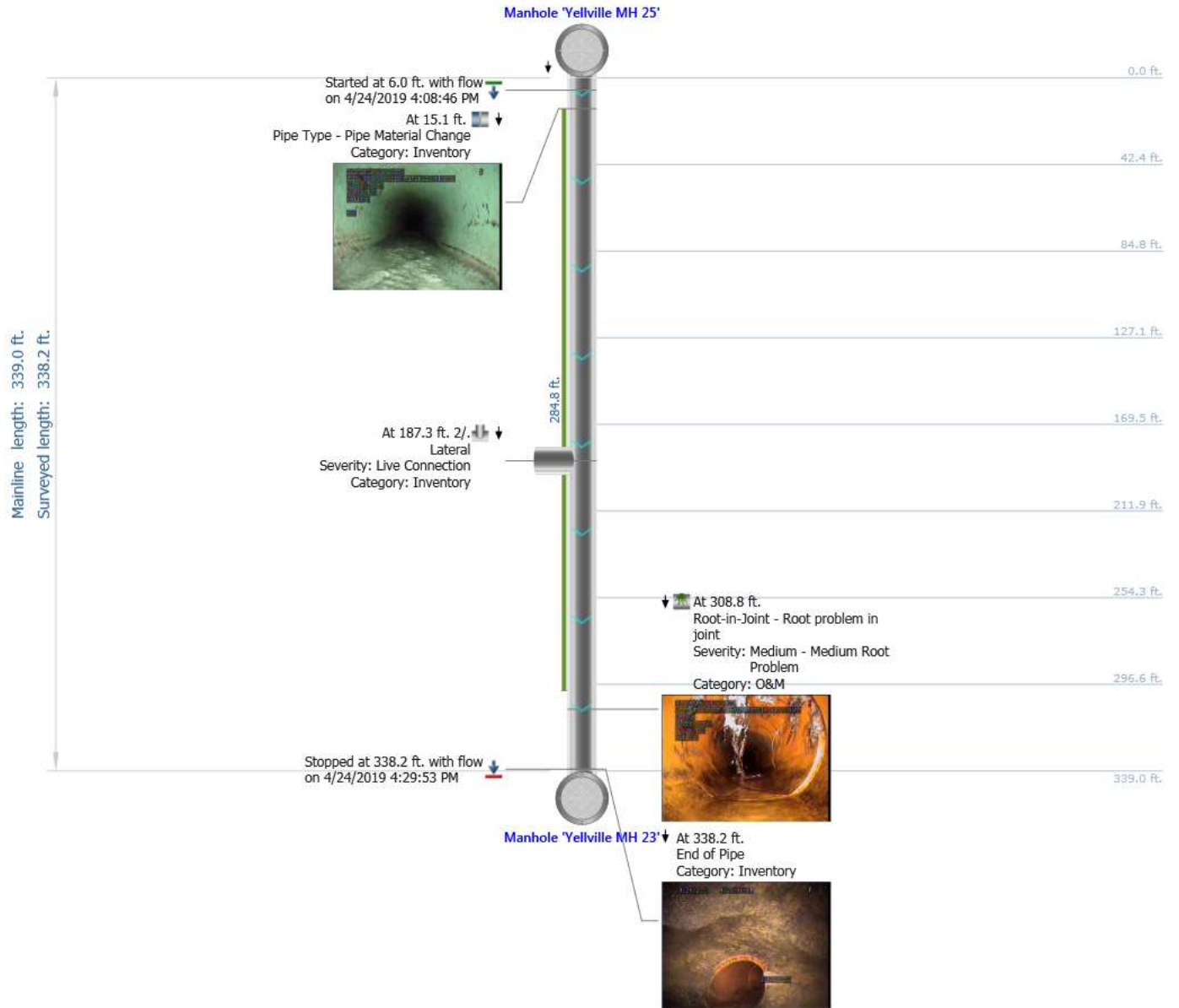
Weather:

Dry



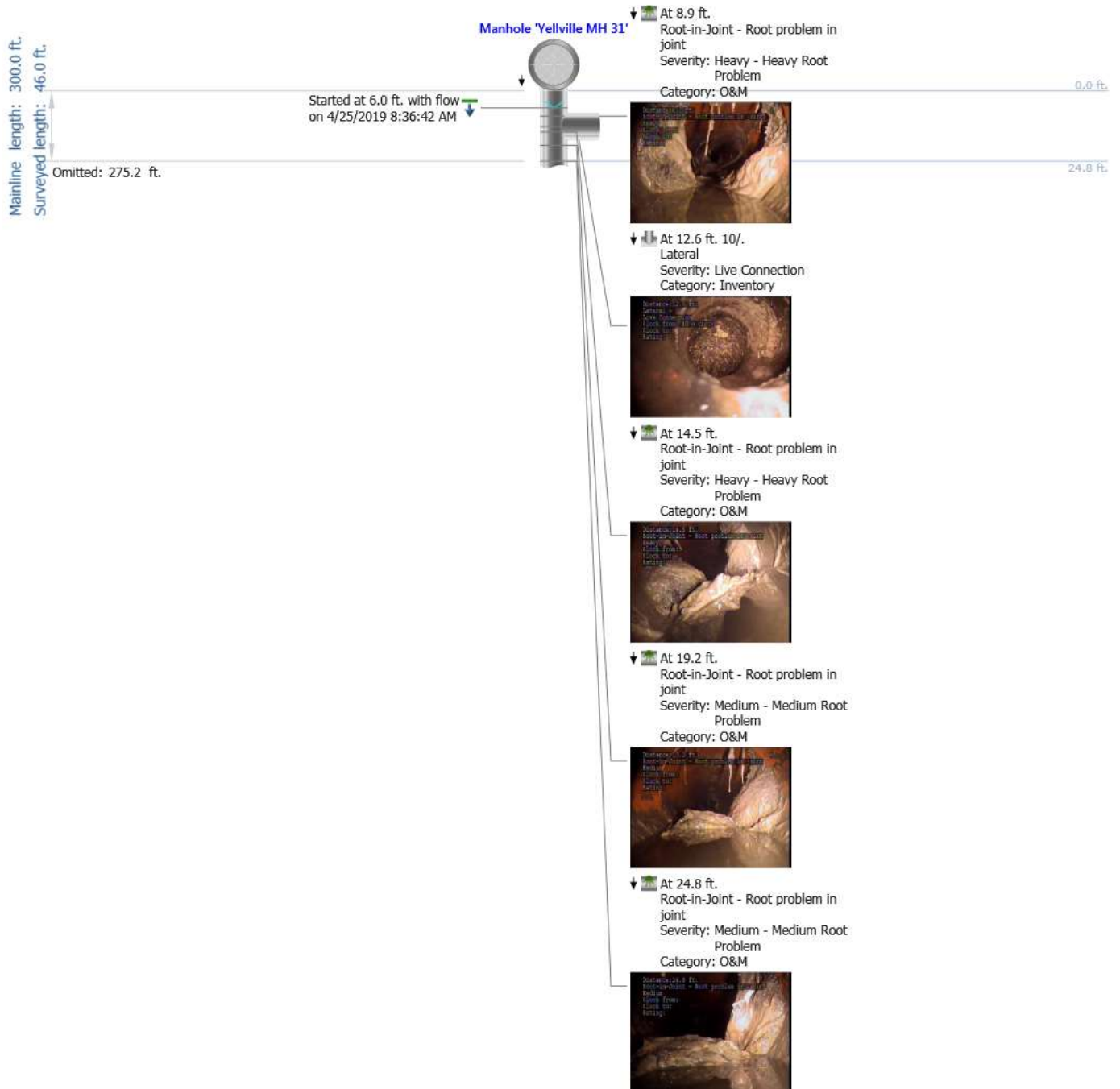
Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 25 to 23	City: Yellville	Address:
Start date/time: 4/24/2019 4:08 PM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 31 to MH 30	City: Yellville	Address:
Start date/time: 4/25/2019 8:36 AM	Direction: With the flow	Weather: Light Rain	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Project name:

Yellville

Mainline ID:

Yellville MH 31 to MH 30

Start date/time:

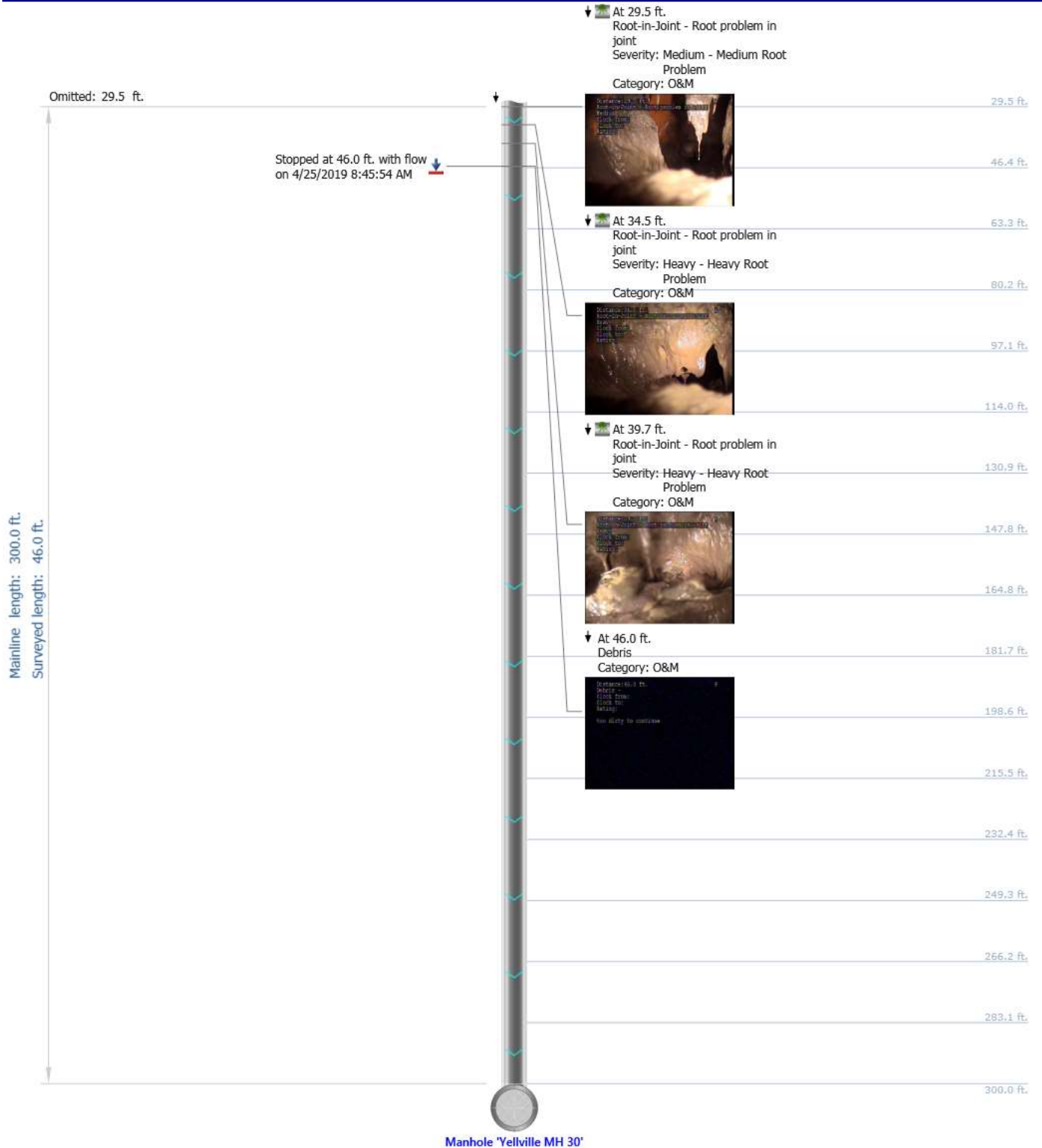
4/25/2019 8:36 AM

Direction:

With the flow

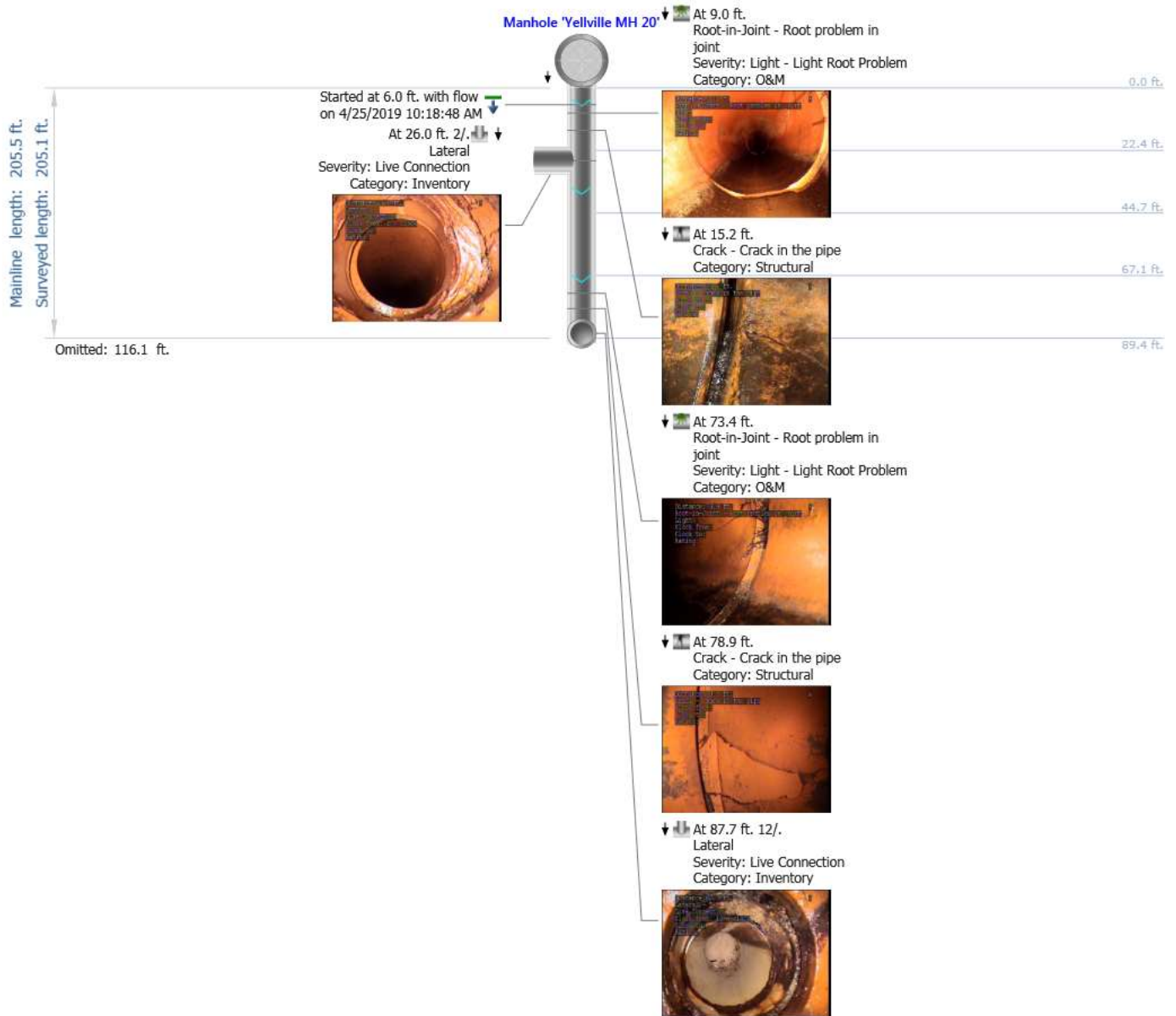
Weather:

Light Rain



Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 20 to MH 19	City: Yellville	Address:
Start date/time: 4/25/2019 10:18 AM	Direction: With the flow	Weather: Dry	Surface condition: Dirt
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Project name:

Yellville

Mainline ID:

Yellville MH 20 to MH 19

Start date/time:

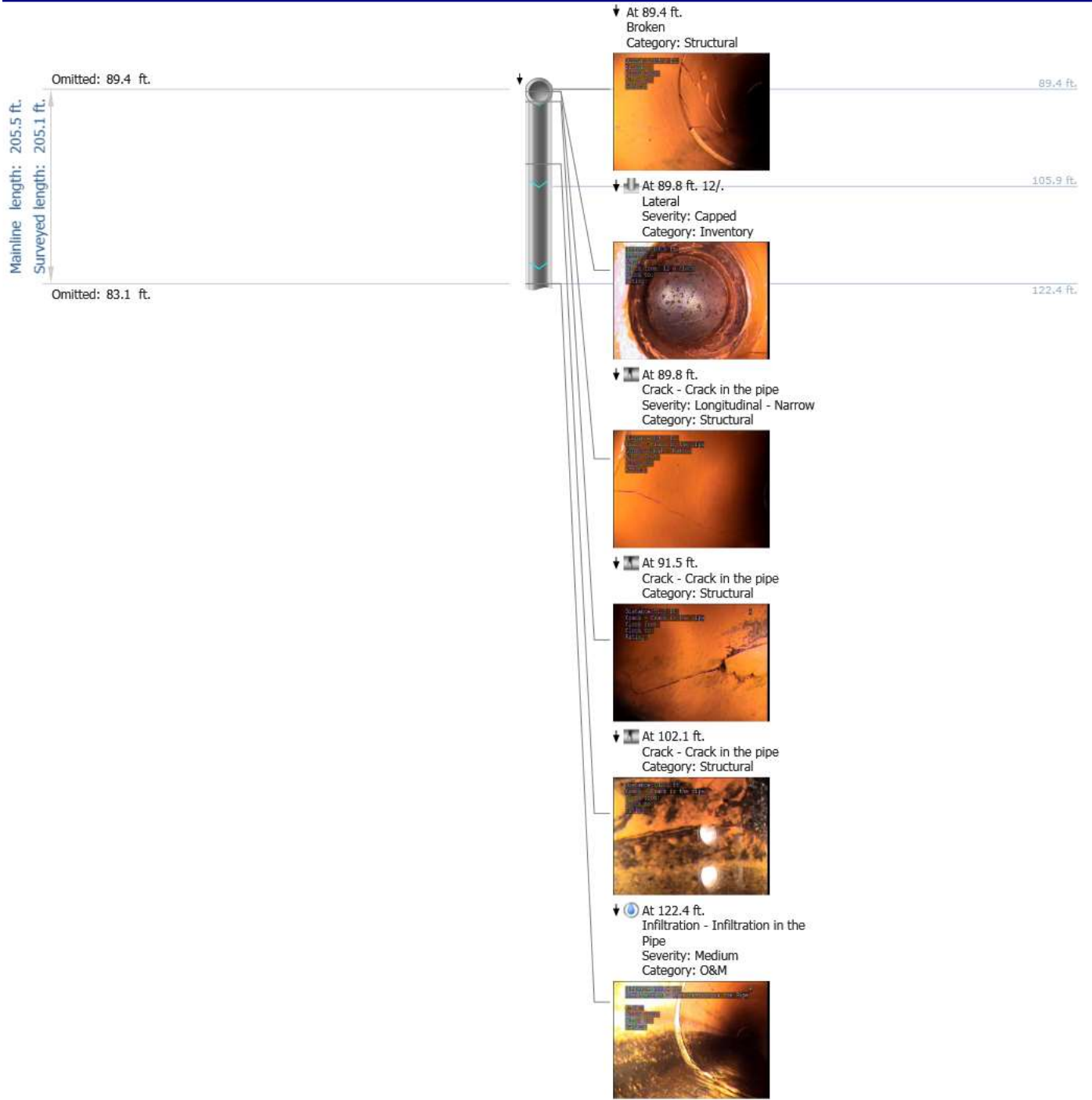
4/25/2019 10:18 AM

Direction:

With the flow

Weather:

Dry



Project name:

Yellville

Weather:

Dry

Mainline ID:

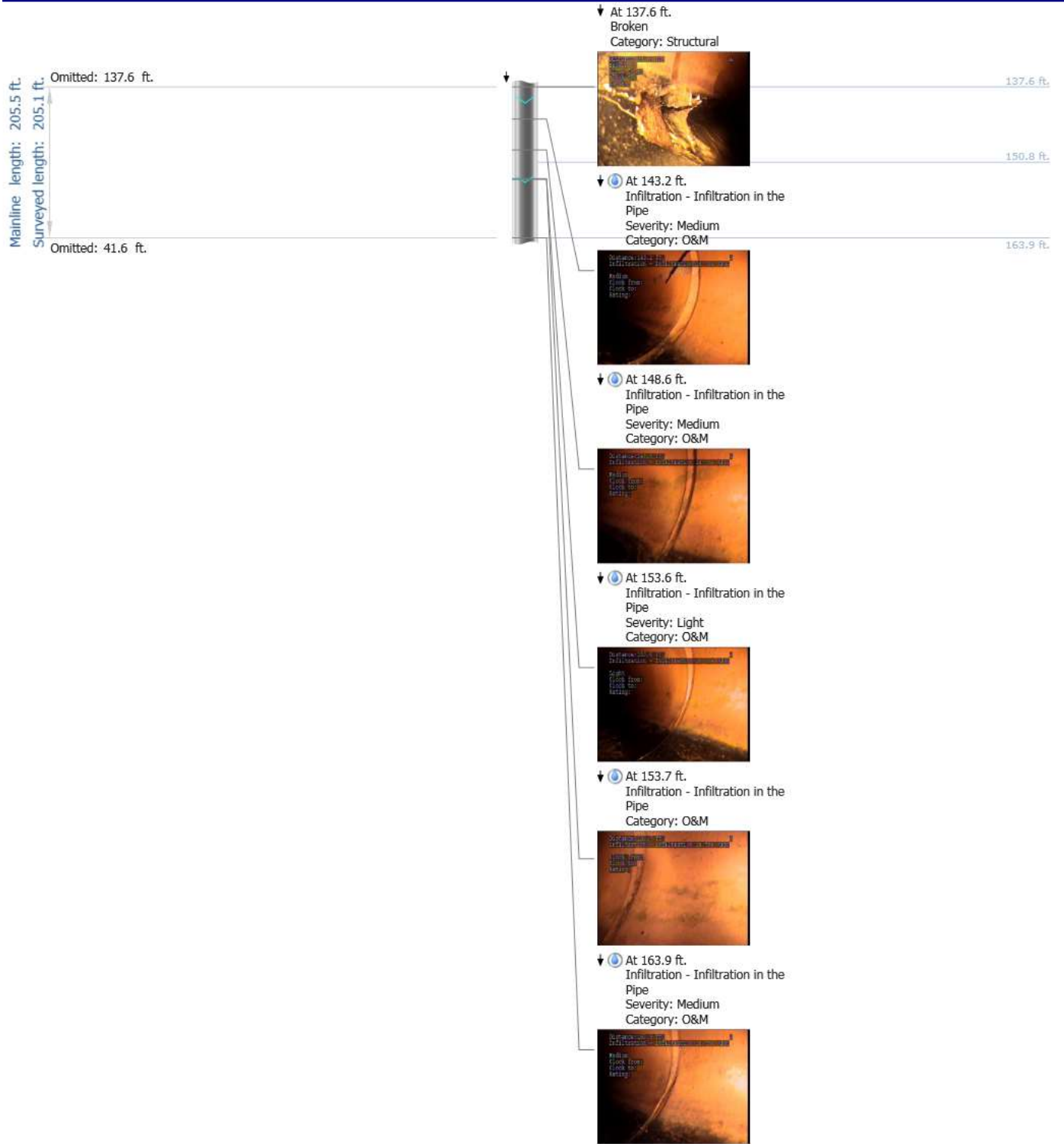
Yellville MH 20 to MH 19

Start date/time:

4/25/2019 10:18 AM

Direction:

With the flow



Project name:

Yellville

Weather:

Dry

Mainline ID:

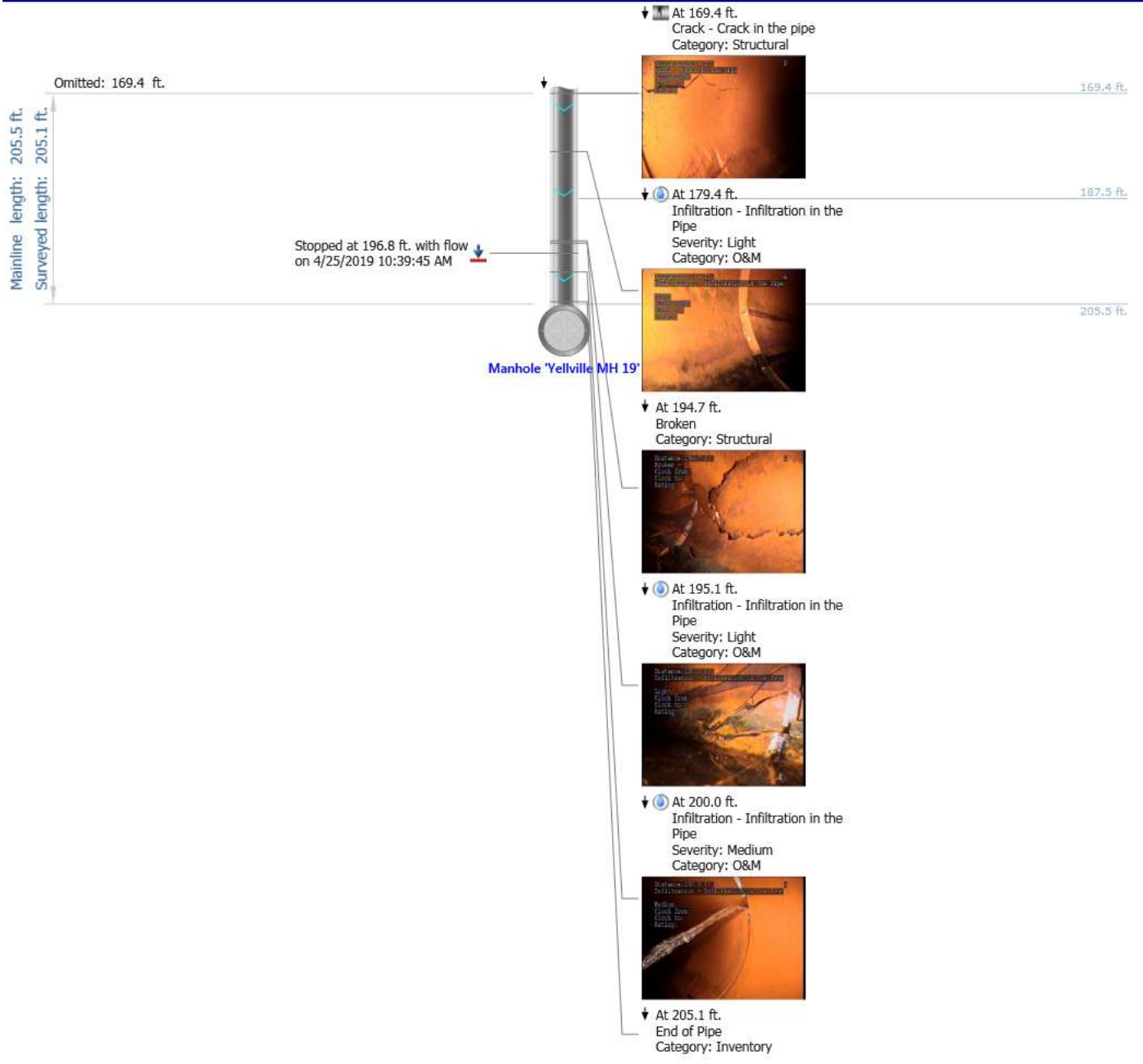
Yellville MH 20 to MH 19

Start date/time:

4/25/2019 10:18 AM

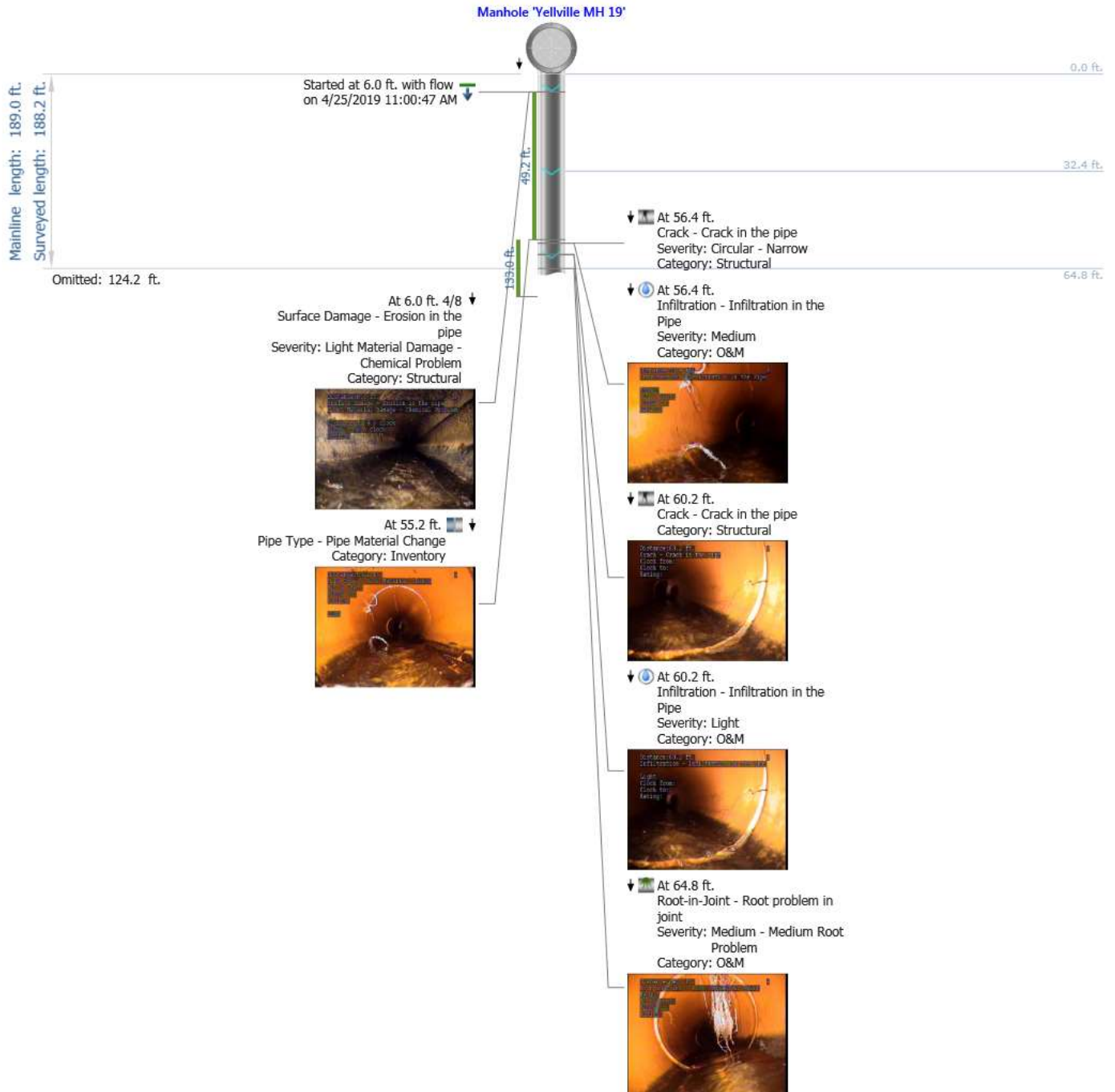
Direction:

With the flow



Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 19 to MH 18	City: Yellville	Address:
Start date/time: 4/25/2019 11:00 AM	Direction: With the flow	Weather: Dry	Surface condition: Woodland
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Project name:

Yellville

Weather:

Dry

Mainline ID:

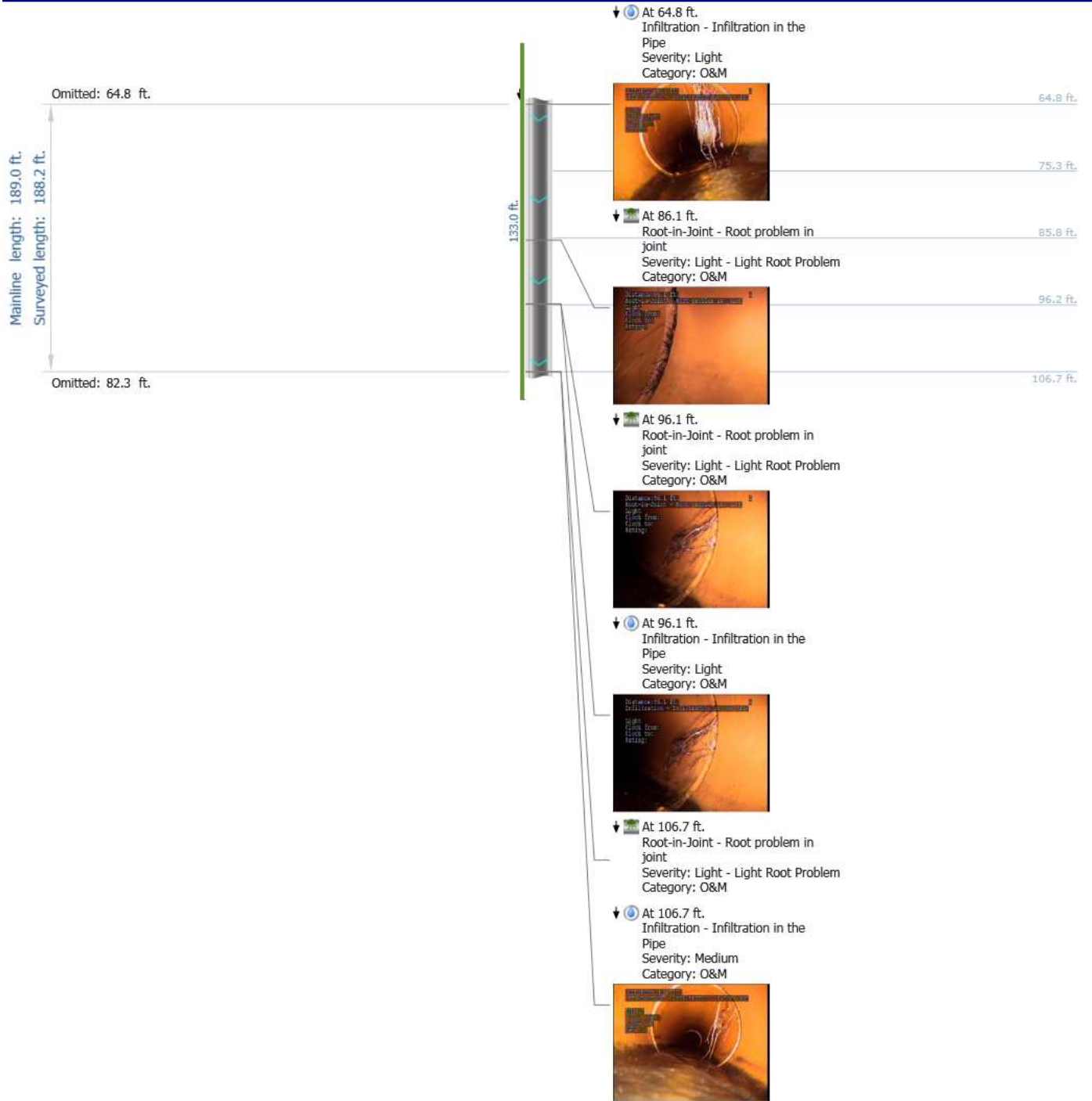
Yellville MH 19 to MH 18

Start date/time:

4/25/2019 11:00 AM

Direction:

With the flow



Project name:

Mainline ID:

Start date/time:

Direction:

Yellville

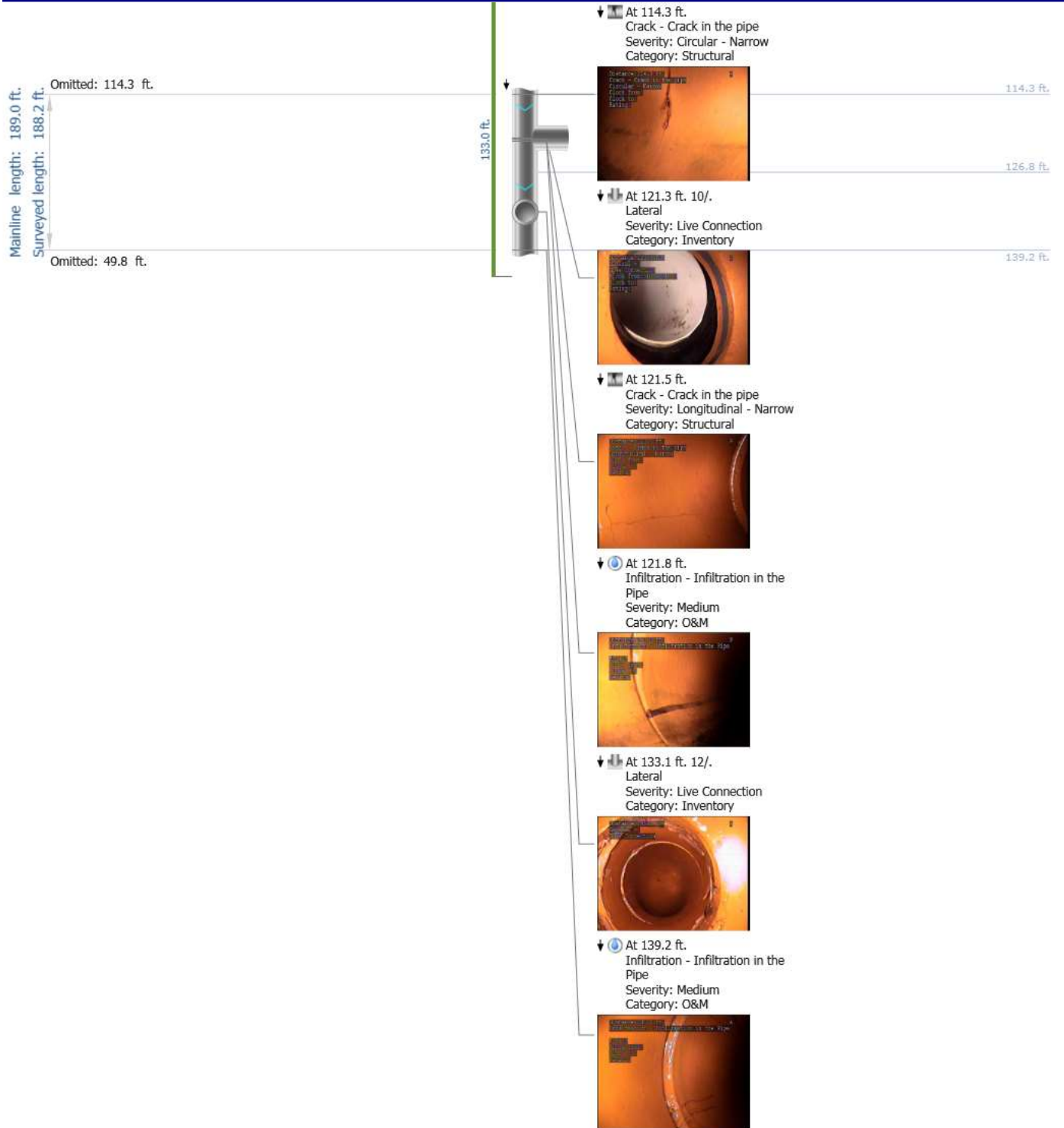
Yellville MH 19 to MH 18

4/25/2019 11:00 AM

With the flow

Weather:

Dry



Project name:

Yellville

Mainline ID:

Yellville MH 19 to MH 18

Start date/time:

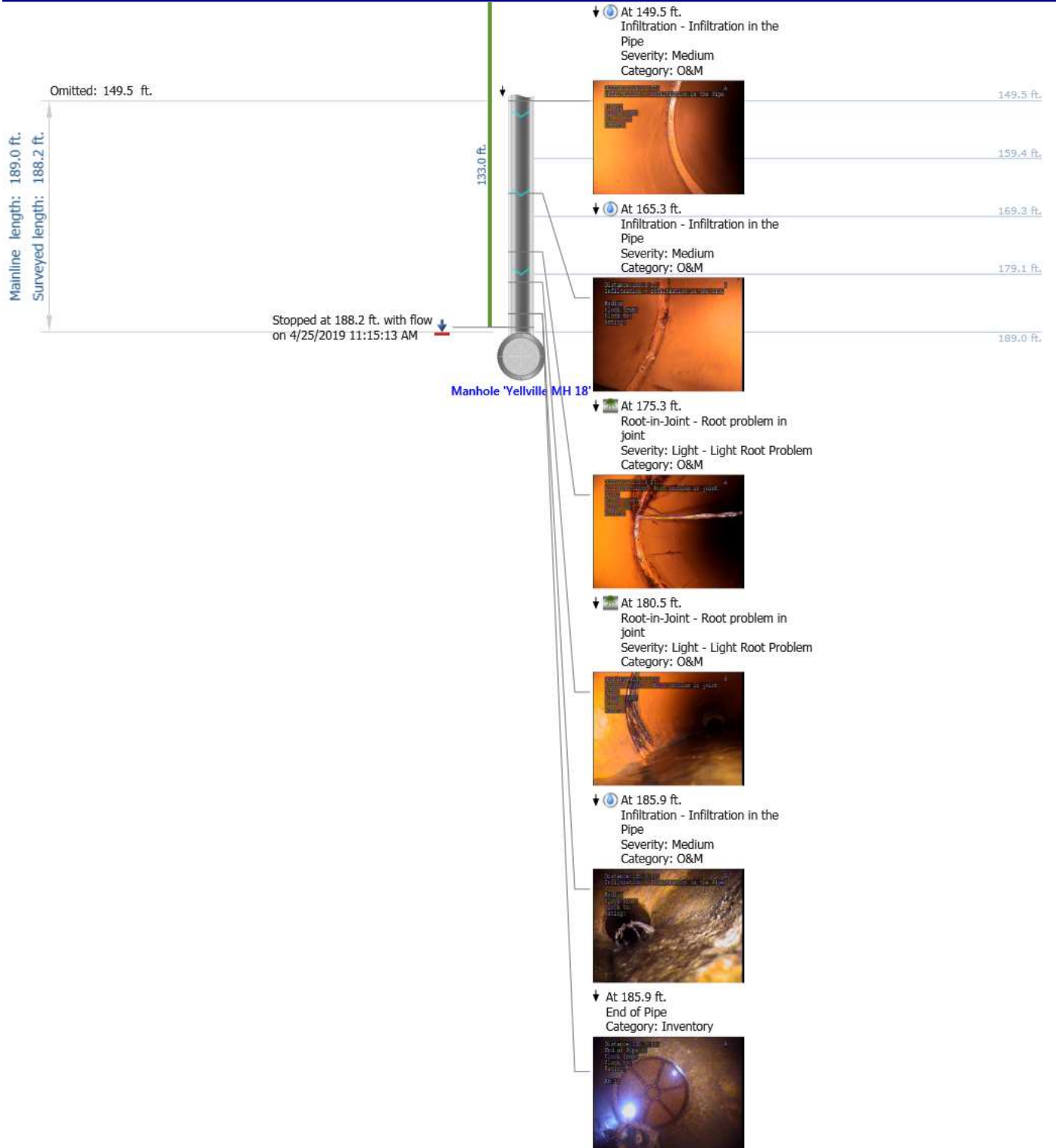
4/25/2019 11:00 AM

Direction:

With the flow

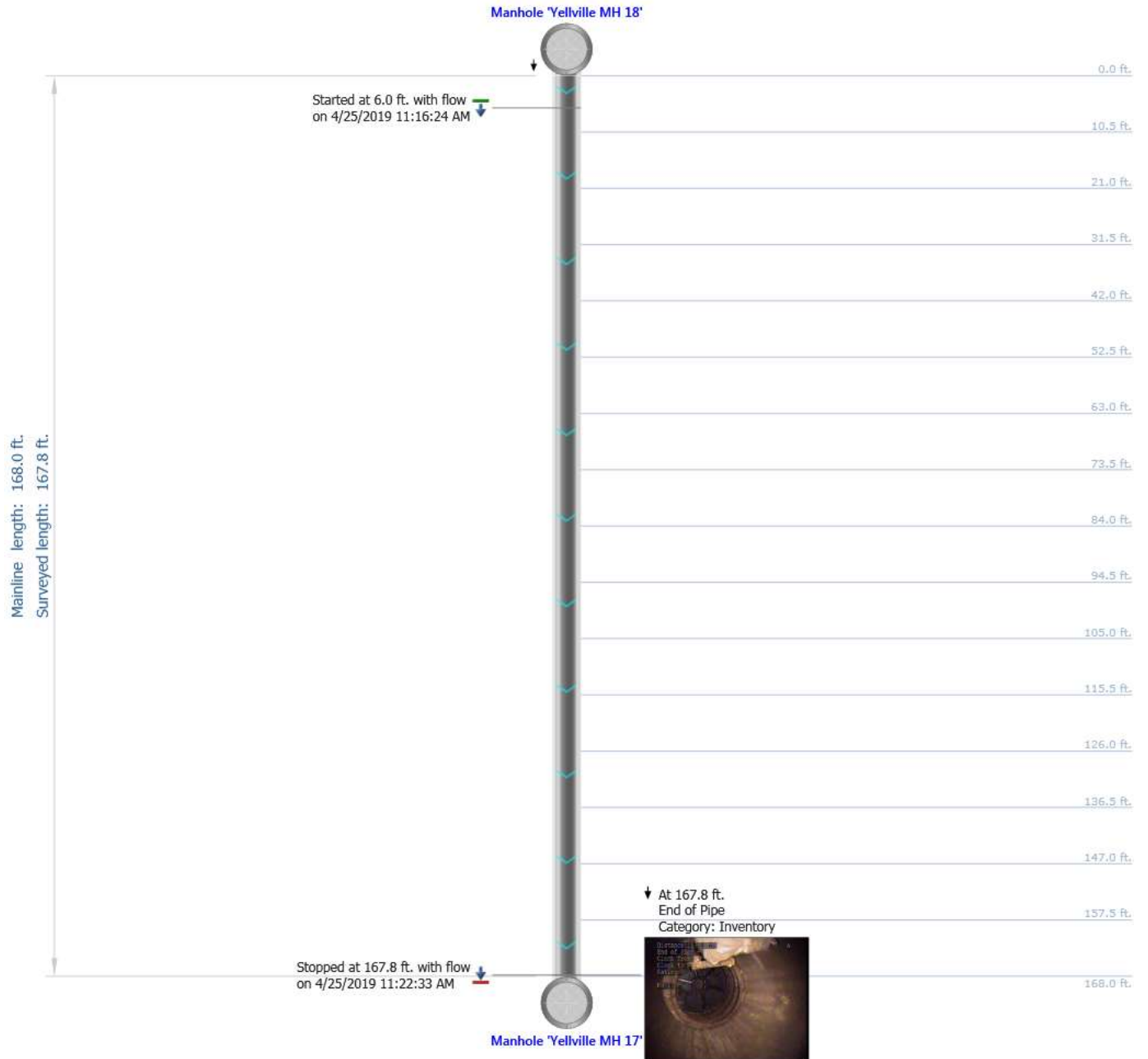
Weather:

Dry



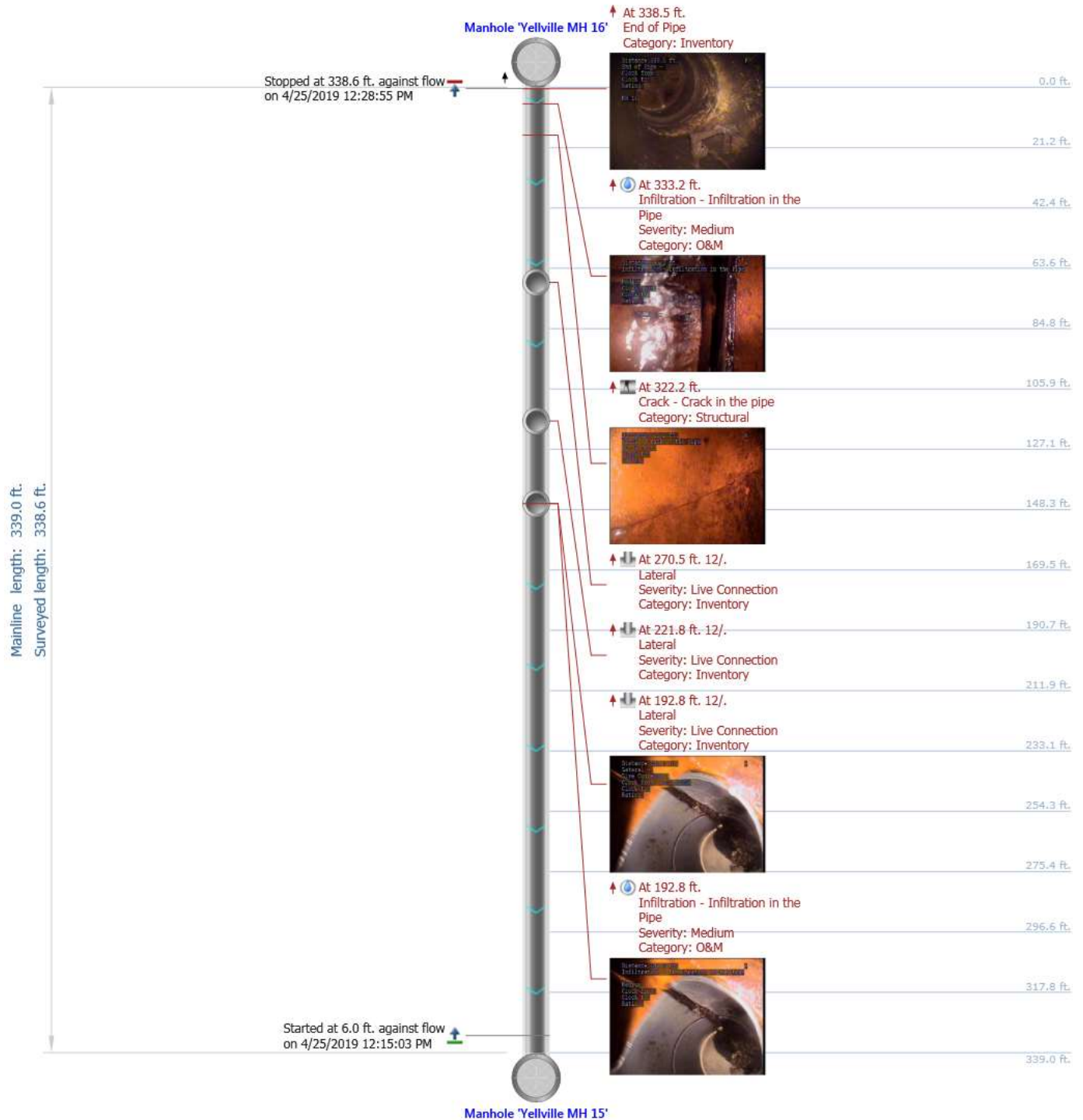
Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 18 to MH 17	City: Yellville	Address:
Start date/time: 4/25/2019 11:16 AM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.



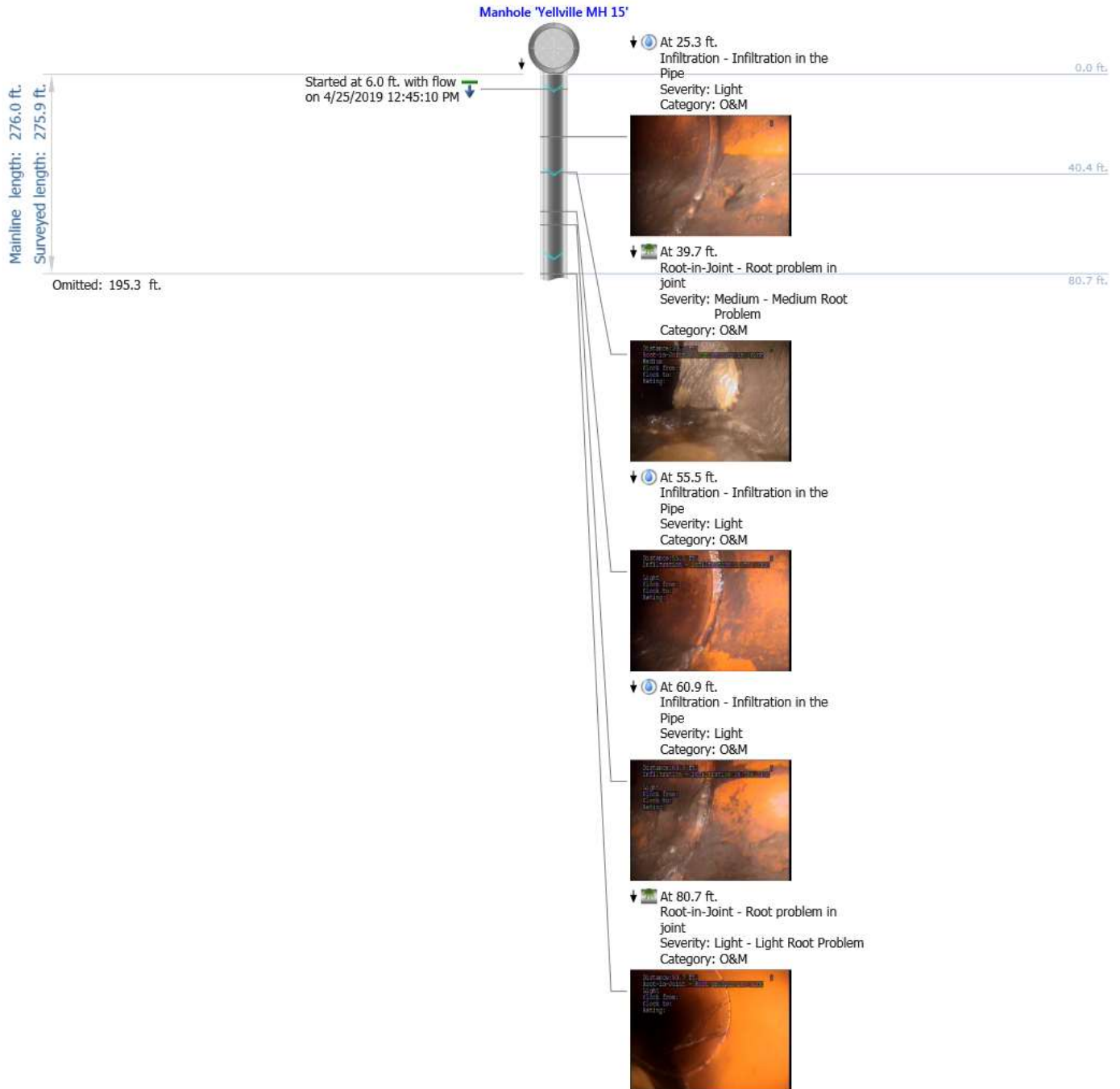
Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville 15 to MH 16	City: Yellville	Address:
Start date/time: 4/25/2019 12:15 PM	Direction: Against the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.



Main Inspections Pipe Run with Images

Project name:	Mainline ID:	City:	Address:
Yellville	Yellville MH 15 to MH 14	Yellville	
Start date/time:	Direction:	Weather:	Surface condition:
4/25/2019 12:45 PM	With the flow	Dry	Woodland
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay	8.0 in.	8.0 in.



Project name:

Yellville

Weather:

Dry

Mainline ID:

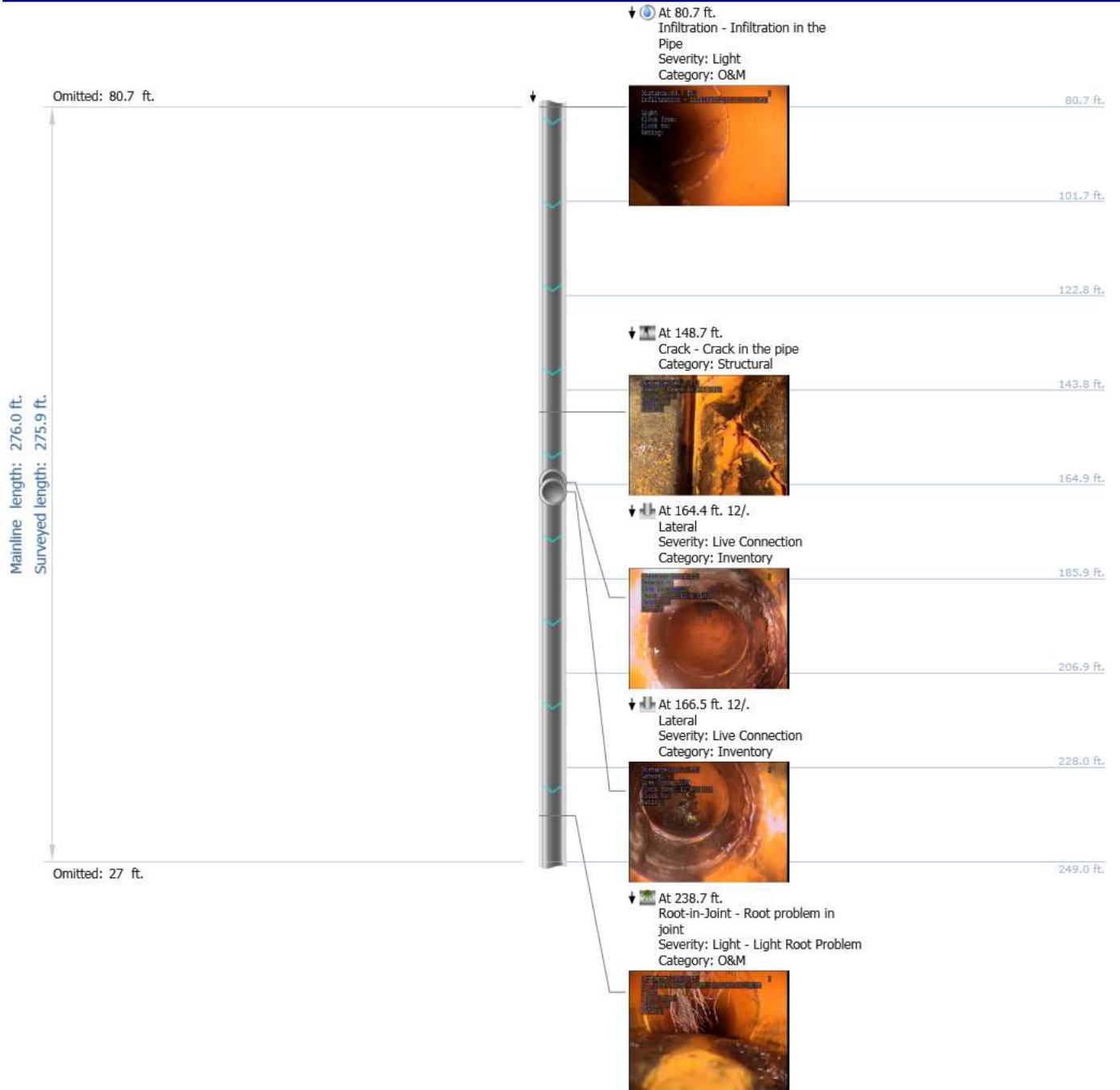
Yellville MH 15 to MH 14

Start date/time:

4/25/2019 12:45 PM

Direction:

With the flow



Project name:

Yellville

Weather:

Dry

Mainline ID:

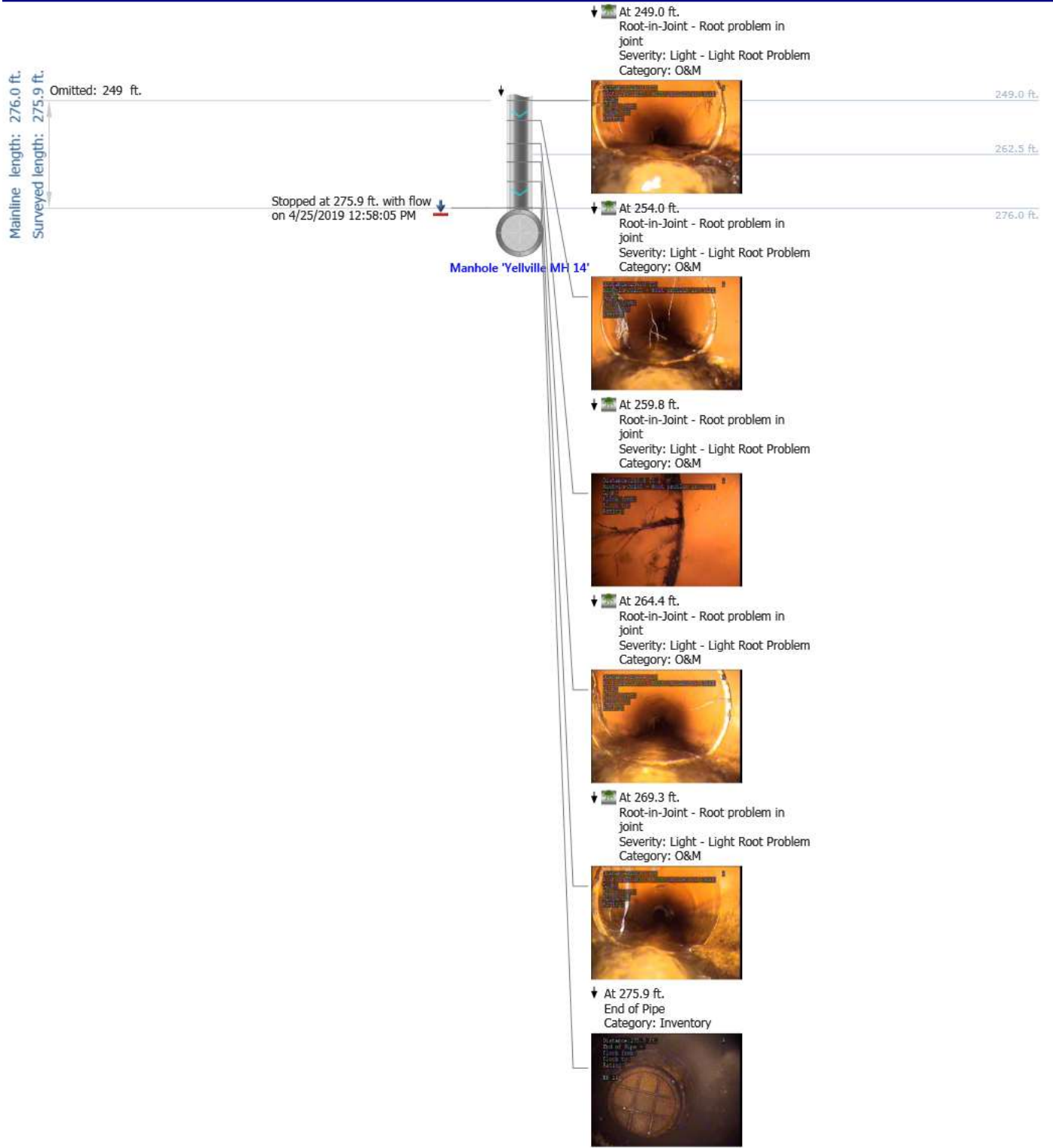
Yellville MH 15 to MH 14

Start date/time:

4/25/2019 12:45 PM

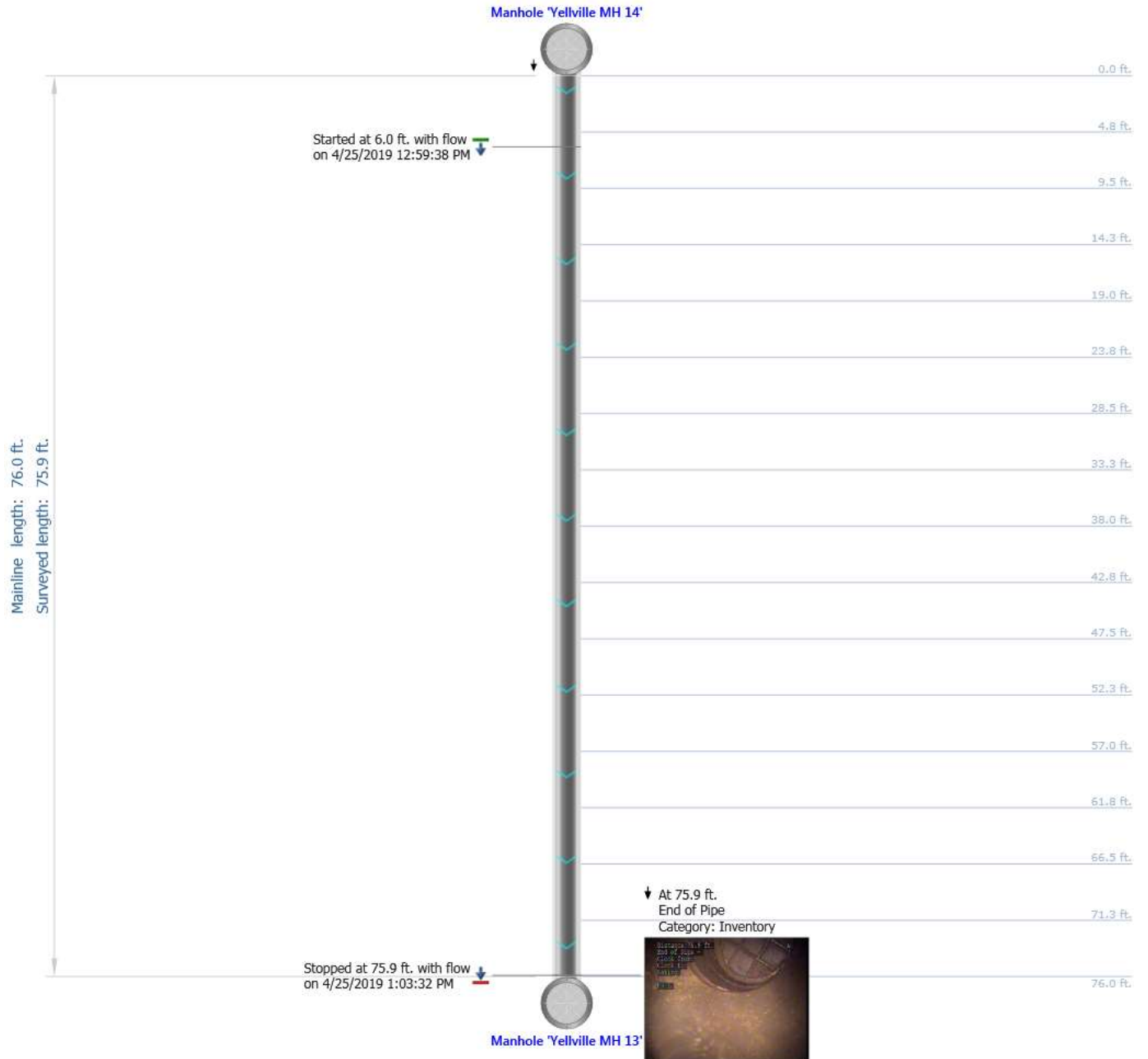
Direction:

With the flow



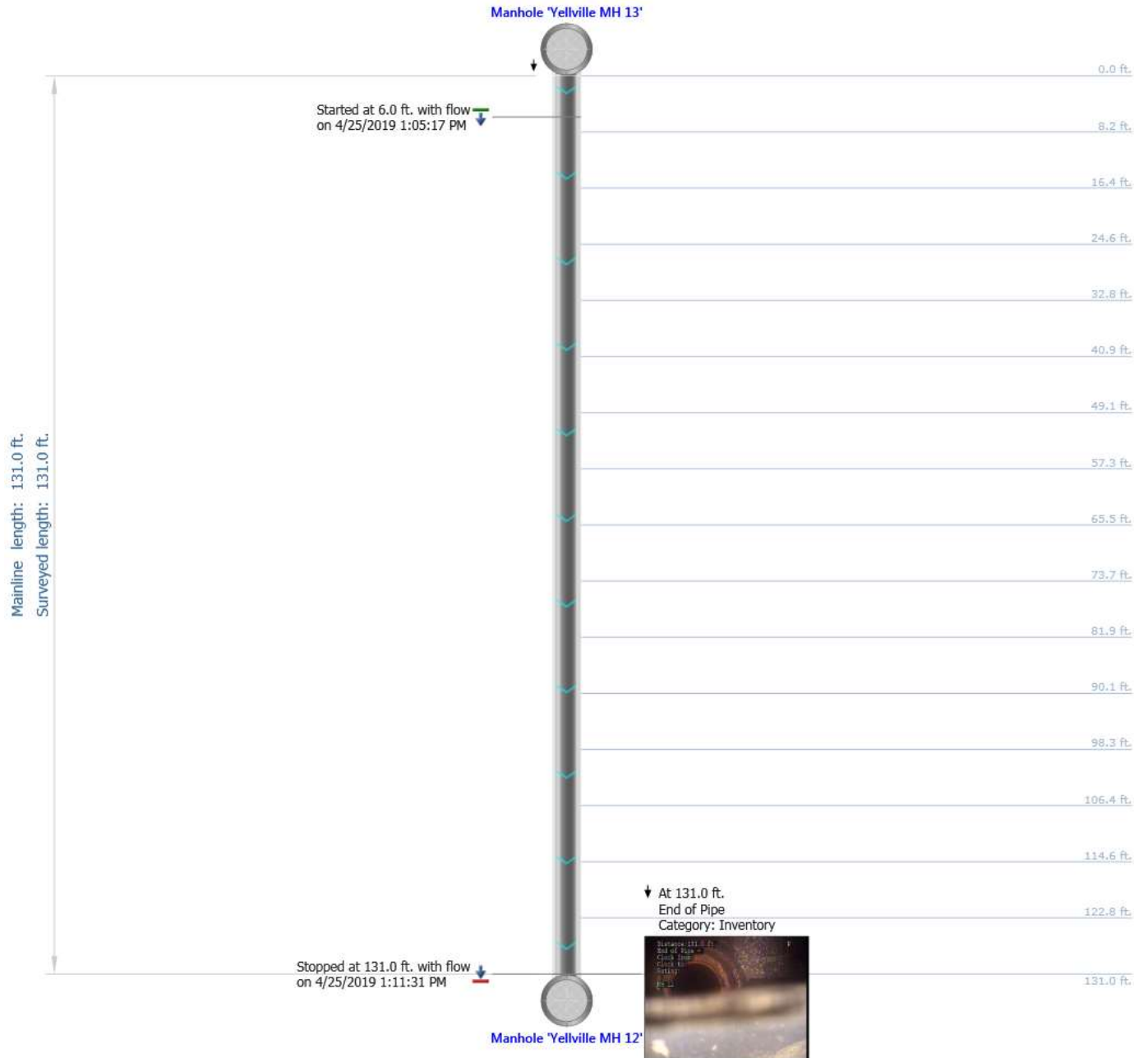
Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 14 to MH 13	City: Yellville	Address:
Start date/time: 4/25/2019 12:59 PM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.



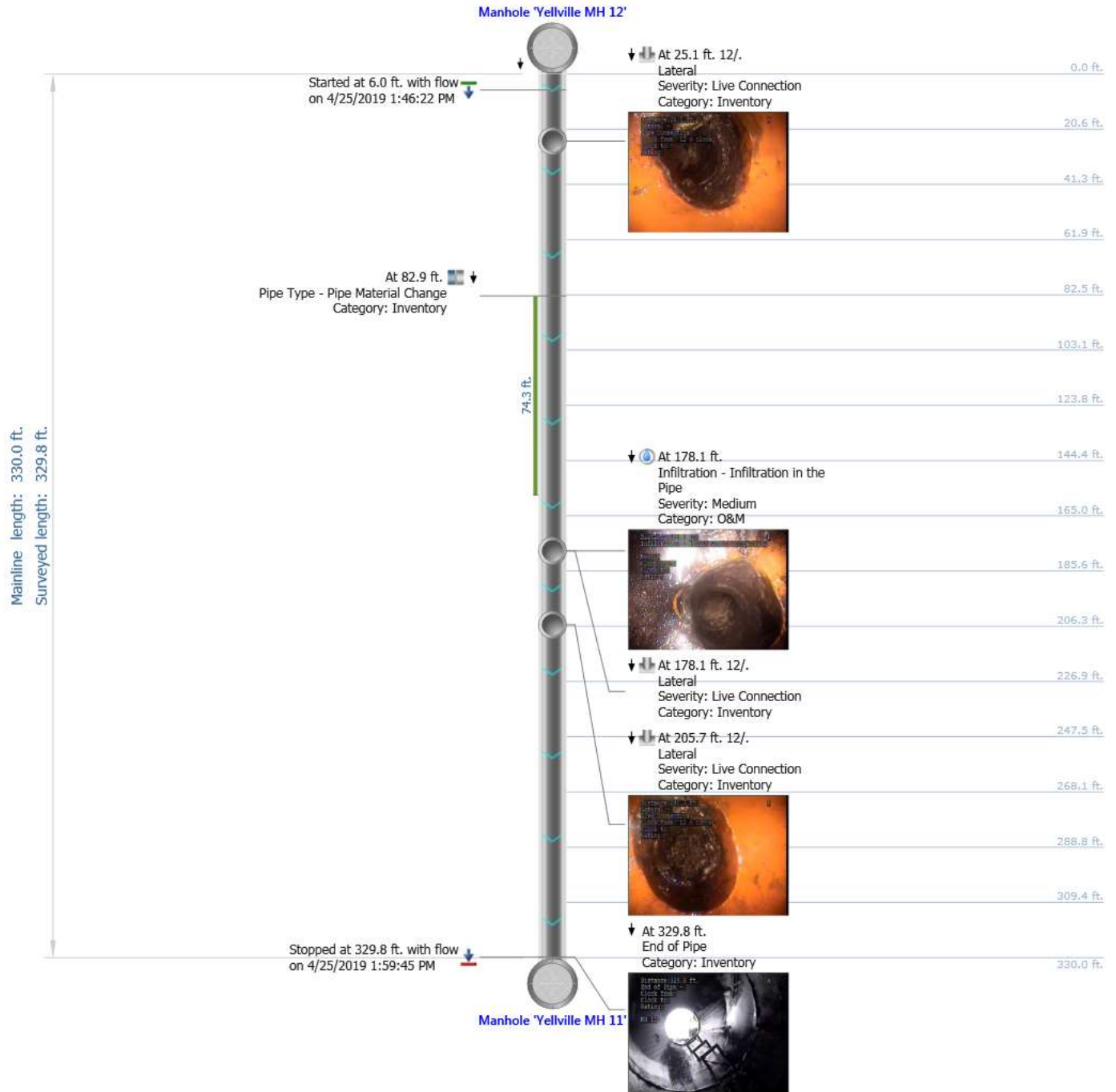
Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 13 to MH 12	City: Yellville	Address:
Start date/time: 4/25/2019 1:05 PM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.



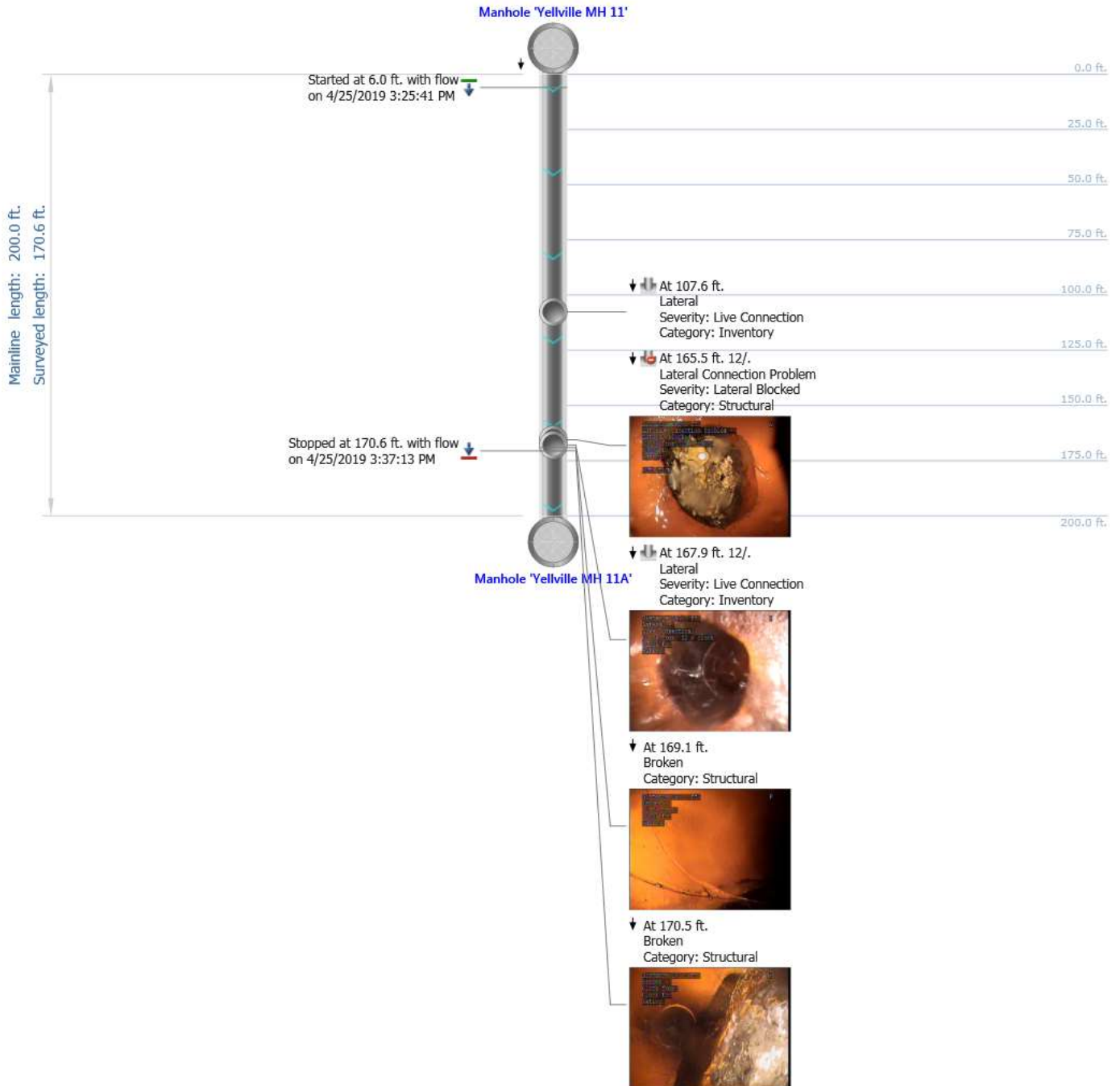
Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 12 to MH 11	City: Yellville	Address:
Start date/time: 4/25/2019 1:46 PM	Direction: With the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.



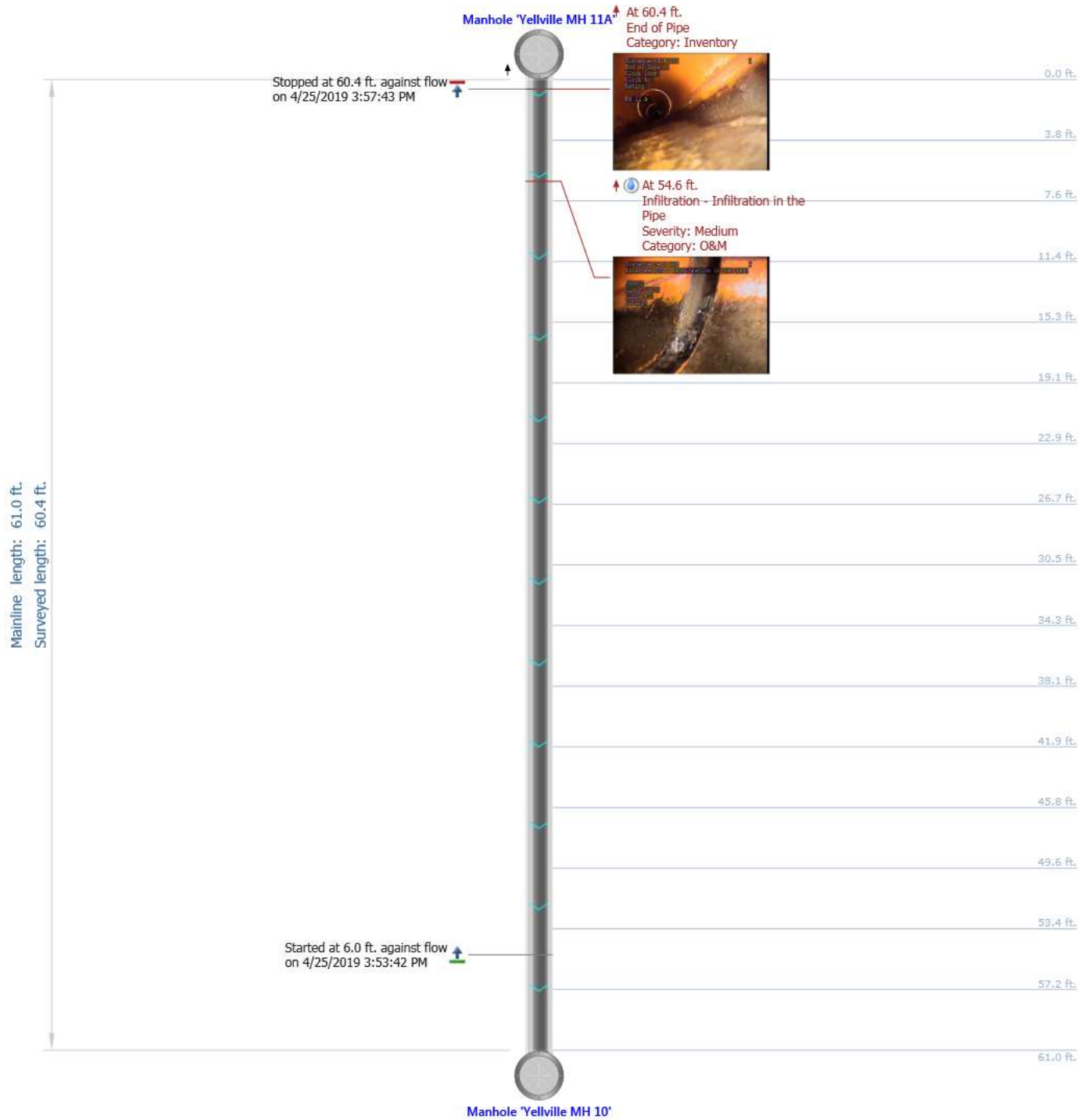
Main Inspections Pipe Run with Images

Project name:	Mainline ID:	City:	Address:
Yellville	Yellville MH 11 to MH 11A	Yellville	
Start date/time:	Direction:	Weather:	Surface condition:
4/25/2019 3:25 PM	With the flow	Dry	Asphalt
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay	10.0 in.	10.0 in.



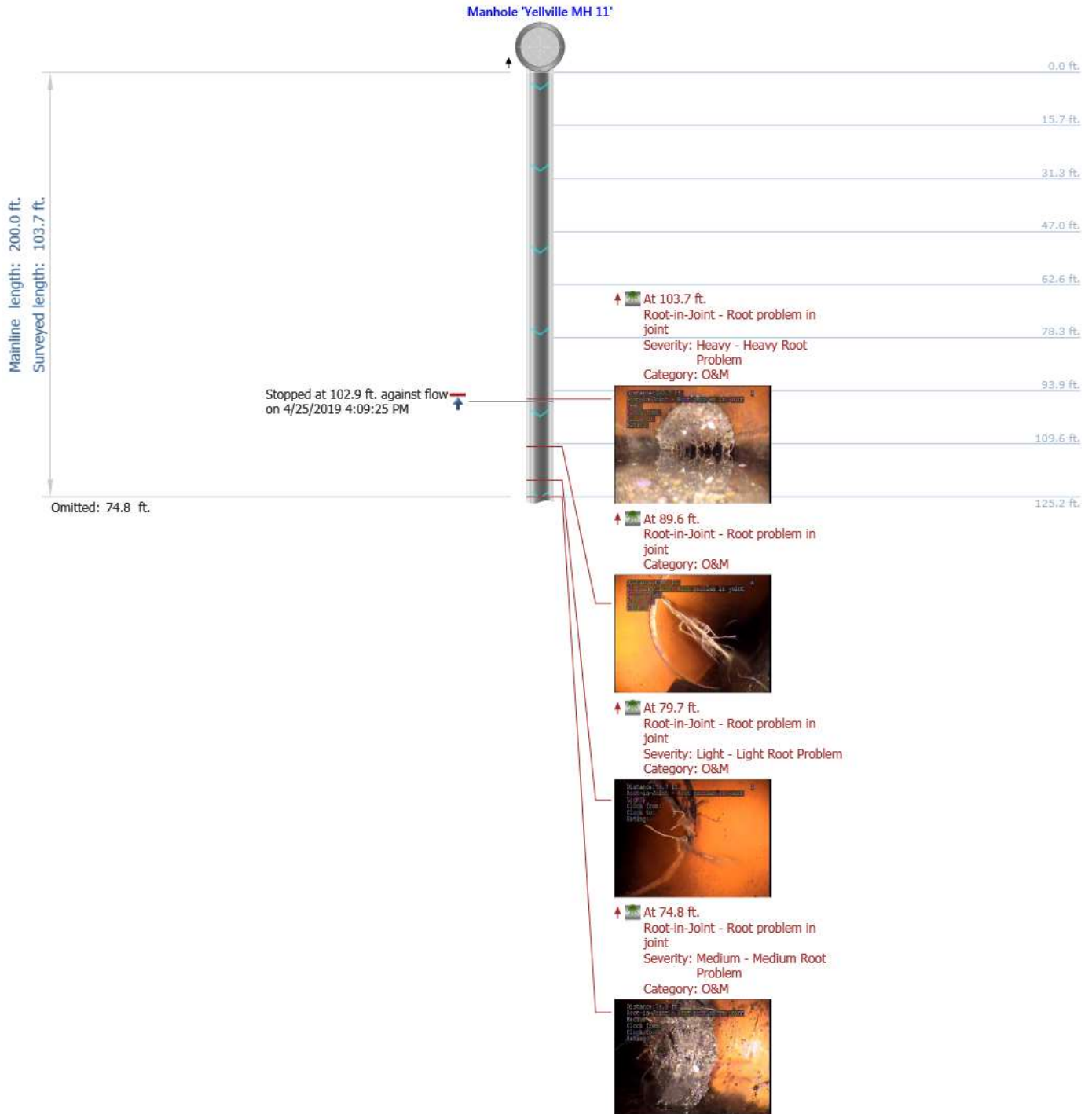
Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 10 to MH 11a	City: Yellville	Address:
Start date/time: 4/25/2019 3:53 PM	Direction: Against the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay	Pipe height: 10.0 in.	Pipe width: 10.0 in.



Main Inspections Pipe Run with Images

Project name: Yellville	Mainline ID: Yellville MH 11A to MH 11	City: Yellville	Address:
Start date/time: 4/25/2019 3:59 PM	Direction: Against the flow	Weather: Dry	Surface condition: Asphalt
Pipe shape: Circular	Pipe material: Clay	Pipe height: 10.0 in.	Pipe width: 10.0 in.



Project name:

Mainline ID:

Start date/time:

Direction:

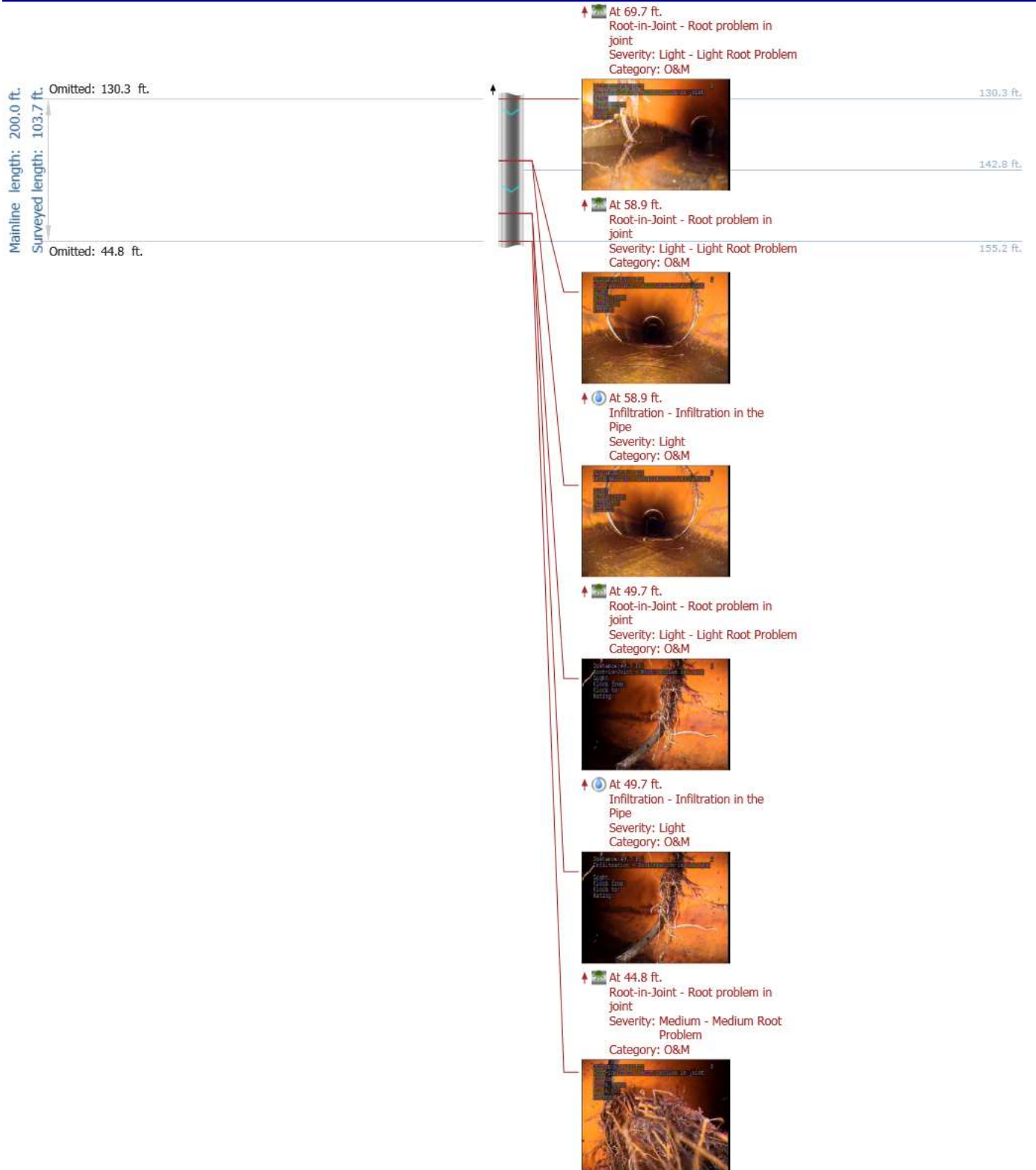
Yellville

Yellville MH 11A to MH 11 4/25/2019 3:59 PM

Against the flow

Weather:

Dry



Project name:

Mainline ID:

Start date/time:

Direction:

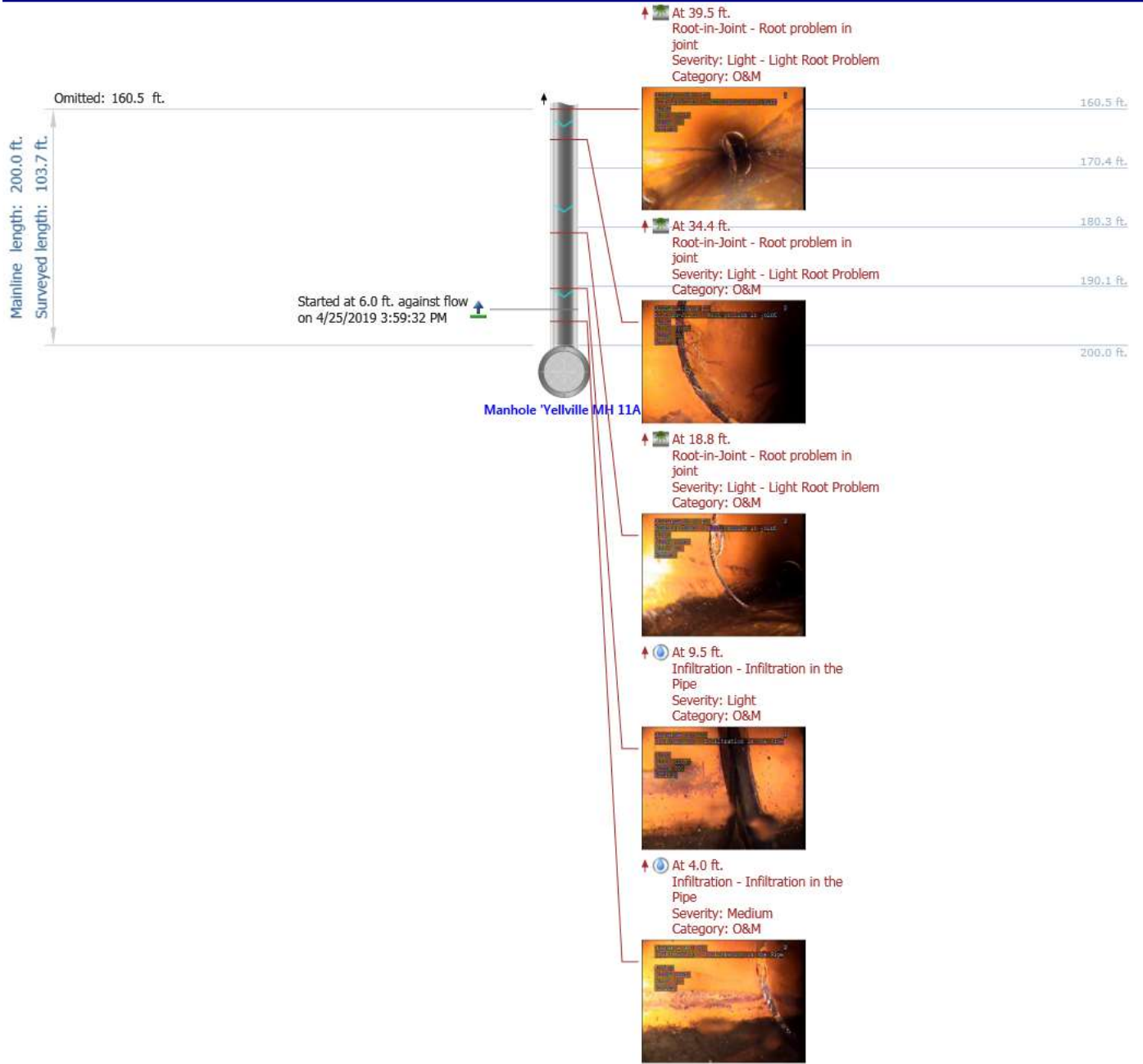
Yellville

Yellville MH 11A to MH 11 4/25/2019 3:59 PM

Against the flow

Weather:

Dry



Main Inspections Small Photos

Mainline ID: Yellville MH 36 to MH 35	City: Yellville	Address:	Project name: Yelleville
Start date/time: 4/23/2019 11:47 AM	Asset length: 231.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 36	Depth US:	Downstream node: Yellville MH 35	Depth DS:
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations



Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
78.1 ft.	D		10 /	Lateral	Live Connection		



96.4 ft.	D		12 /	Lateral Connection Problem	Lateral Blocked		Lateral Capped
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
105.2 ft.	D	/	Crack	Longitudinal - Narrow		
						
114.9 ft.	D	/	Crack	Longitudinal - Narrow		
						
119.8 ft.	D	/	Crack	Longitudinal - Narrow		
						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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125.4 ft.	D	/	Infiltration	Medium		
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160.9 ft.	D	/	Root-in-Joint	Heavy		
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230.7 ft.	D	/	End of Pipe			MH 36
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Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 41 to MH 40	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/23/2019 2:13 PM	Asset length: 62.5 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 41	Depth US:	Downstream node: Yellville MH 40	Depth DS:
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
62.1 ft.	D		/	End of Pipe			MH 40



Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 40 to MH 39	City: Yellville	Address:	Project name: Yelleville
Start date/time: 4/23/2019 2:43 PM	Asset length: 138.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 40	Depth US:	Downstream node: Yellville MH 39	Depth DS:
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
3.7 ft.	D		12 /	Root-in-Joint	Heavy		



9.4 ft.	D		/	Crack	Longitudinal - Narrow		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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28.6 ft. D 12 / Root-in-Joint Heavy






33.6 ft. D / Root-in-Joint Heavy



54.8 ft. D / Crack Longitudinal - Narrow



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
54.8 ft.	D	/	Root-in-Joint	Light		
						
59.7 ft.	D	/	Root-in-Joint	Medium		
						
70.0 ft.	D	/	Root-in-Joint	Heavy		
						
75.0 ft.	D	/	Root-in-Joint	Light		

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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75.0 ft. D / Crack



85.2 ft. D / Root-in-Joint Light



90.8 ft. D / Root-in-Joint Medium



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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90.8 ft. D / Infiltration Light



95.2 ft. D / Root-in-Joint Light



100.6 ft. D / Root-in-Joint Heavy



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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100.6 ft. D / Infiltration Light



101.3 ft. D / Broken



105.6 ft. D / Root-in-Joint Medium



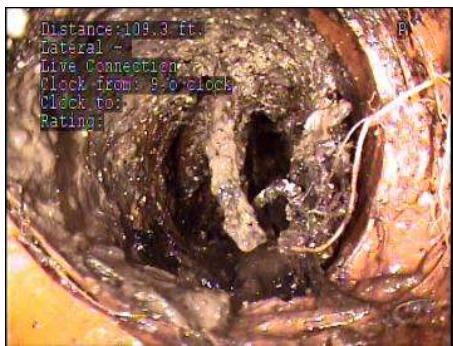
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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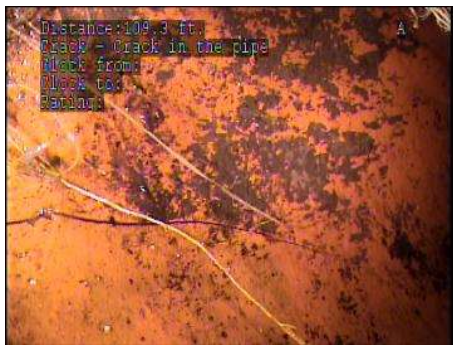
105.6 ft. D / Infiltration Light



109.3 ft. D 9 / Lateral Live Connection



109.3 ft. D / Crack



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
110.4 ft.	D	/	Root-in-Joint		Medium	



115.6 ft.	D	/	Root-in-Joint		Medium	
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Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 42 to MH 41	City: Yellville	Address:	Project name: Yelleville
Start date/time: 4/23/2019 3:38 PM	Asset length: 272.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 42	Depth US:	Downstream node: Yellville MH 41	Depth DS:
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.

Comments:
not cleaned due to no access

Observations

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



14.3 ft.	D		/	Root-in-Joint	Medium		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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19.3 ft. D / Root-in-Joint Heavy



24.5 ft. D / Root-in-Joint Medium



35.2 ft. D / Root-in-Joint Medium



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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40.4 ft.	D	/	Root-in-Joint	Medium		
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50.3 ft.	D	/	Root-in-Joint	Light		
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55.7 ft.	D	/	Root-in-Joint	Light		
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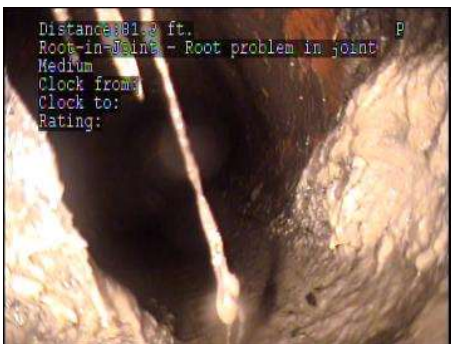
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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71.0 ft.	D	/	Root-in-Joint	Medium		
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81.3 ft.	D	/	Root-in-Joint	Medium		
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86.4 ft.	D	/	Root-in-Joint	Medium		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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111.4 ft. D / Root-in-Joint Medium



116.4 ft. D / Root-in-Joint Medium



121.7 ft. D / Root-in-Joint Medium



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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126.7 ft. D / Root-in-Joint Medium



142.4 ft. D / Root-in-Joint Heavy



147.0 ft. D / Root-in-Joint Medium



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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152.5 ft. D / Root-in-Joint Light



162.2 ft. D / Root-in-Joint Medium



167.3 ft. D / Root-in-Joint Medium



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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182.8 ft. D / Root-in-Joint Heavy



182.8 ft. D / Infiltration Light



188.2 ft. D / Root-in-Joint Heavy



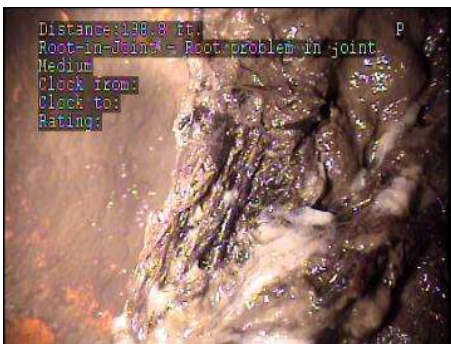
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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188.2 ft.	D	/	Infiltration	Light		
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198.8 ft.	D	/	Root-in-Joint	Medium		
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203.2 ft.	D	/	Root-in-Joint	Light		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
208.3 ft.	D	/	Root-in-Joint	Medium		
						
208.3 ft.	D	/	Infiltration	Medium		
						
212.9 ft.	D	/	Root-in-Joint	Light		
212.9 ft.	D	/	Infiltration	Light		
						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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218.8 ft.	D	/	Root-in-Joint	Light		
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223.8 ft.	D	/	Root-in-Joint	Light		
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230.0 ft.	D	/	Root-in-Joint	Light		
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230.0 ft.	D	/	Infiltration	Light		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
243.9 ft.	D	/	Root-in-Joint	Medium		
						
243.9 ft.	D	/	Infiltration	Medium		
						
248.8 ft.	D	/	Infiltration	Medium		
						
254.6 ft.	D	/	Root-in-Joint	Medium		

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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254.6 ft. D / Infiltration Light



259.3 ft. D / Root-in-Joint Light



259.3 ft. D / Infiltration Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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265.1 ft.	D	/	Broken			
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271.4 ft.	D	/	End of Pipe			
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MH 41



Inspection's photos

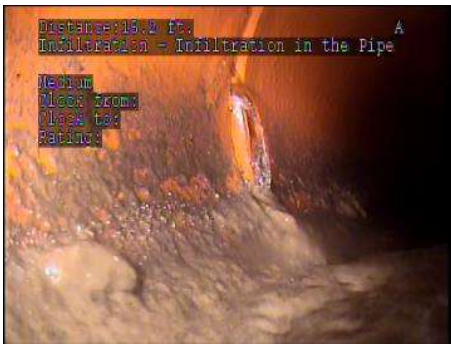
Main Inspections Small Photos

Mainline ID: Yellville MH 43 to MH 42	City: Yellville	Address:	Project name: Yelleville
Start date/time: 4/23/2019 4:26 PM	Asset length: 305.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 43	Depth US:	Downstream node: Yellville MH 42	Depth DS:
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.

Comments:
Not Cleaned due to No Access

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
15.2 ft.	D		/	Infiltration		Medium	



20.1 ft.	D		/	Infiltration		Medium	
20.1 ft.	D		/	Crack	Longitudinal - Narrow		



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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30.8 ft. D / Infiltration Light



30.8 ft. D / Broken





35.1 ft. D / Infiltration Medium



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
39.8 ft.	D	/	Infiltration	Medium		
						
61.6 ft.	D	/	Infiltration	Medium		
						
101.9 ft.	D	/	Infiltration	Medium		
						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
112.5 ft.	D	/	Infiltration	Medium		
						
122.9 ft.	D	/	Root-in-Joint	Medium		
						
143.2 ft.	D	/	Root-in-Joint	Medium		
						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
148.8 ft.	D	/	Root-in-Joint	Light		
						
178.9 ft.	D	/	Root-in-Joint	Medium		
194.4 ft.	D	/	Root-in-Joint	Light		
						
199.7 ft.	D	/	Root-in-Joint	Medium		
						
204.8 ft.	D	/	Root-in-Joint	Medium		

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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215.2 ft.	D	/	Root-in-Joint	Light	
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220.7 ft.	D	/	Root-in-Joint	Medium	
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220.7 ft.	D	/	Broken		
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225.4 ft.	D	/	Root-in-Joint	Medium	
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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230.8 ft.	D	/	Root-in-Joint	Medium		
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235.9 ft.	D	/	Root-in-Joint	Medium		
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240.8 ft.	D	/	Root-in-Joint	Heavy		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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245.9 ft. D / Root-in-Joint Medium



251.1 ft. D / Root-in-Joint Heavy



256.6 ft. D / Root-in-Joint Heavy



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
261.3 ft.	D	/	Root-in-Joint	Heavy		
						
266.4 ft.	D	/	Root-in-Joint	Medium		
						
271.7 ft.	D	/	Root-in-Joint	Heavy		
						

Observations

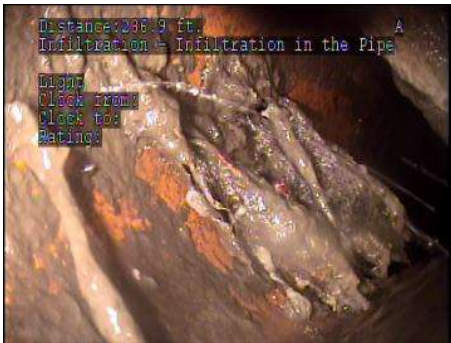
Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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276.5 ft. D / Root-in-Joint Medium



286.9 ft. D / Root-in-Joint Medium

286.9 ft. D / Infiltration Light



291.9 ft. D / Root-in-Joint Medium



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
304.3 ft.	D	/	End of Pipe			MH 42



304.3 ft.	D	/	Infiltration	Medium		
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Inspection's photos

Main Inspections Small Photos

Mainline ID: Yelleville MH 40 to 39 attempt	City: 2nd Yelleville	Address:	Project name: Yelleville
Start date/time: 4/24/2019 9:05 AM	Asset length: 138.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yelleville MH 40	Depth US:	Downstream node: Yelleville MH 39	Depth DS:
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
9.4 ft.	D		/	Crack	Longitudinal - Narrow		



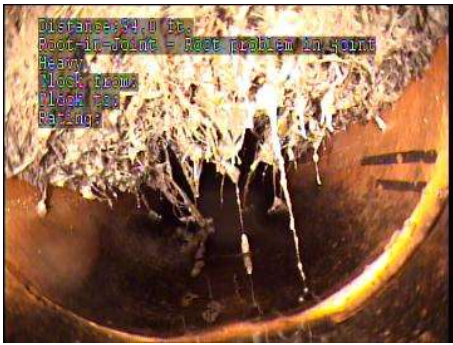
28.8 ft.	D		/	Root-in-Joint	Heavy		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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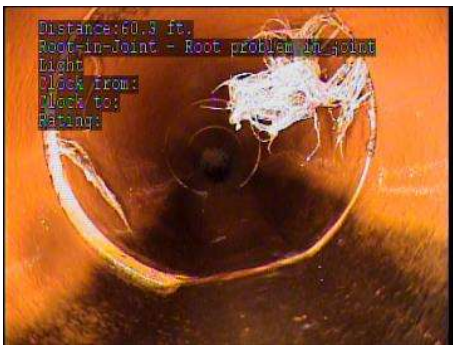
34.0 ft. D / Root-in-Joint Heavy



55.3 ft. D / Root-in-Joint Light



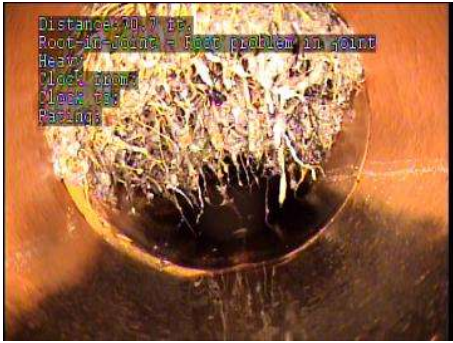
60.3 ft. D / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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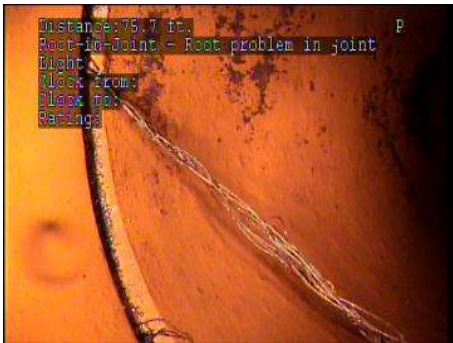
70.7 ft. D / Root-in-Joint Heavy



75.7 ft. D / Broken



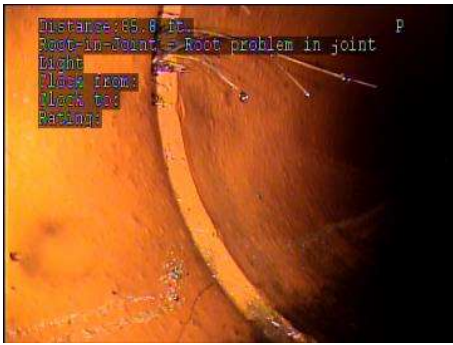
75.7 ft. D / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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85.8 ft. D / Root-in-Joint Light



91.7 ft. D / Root-in-Joint Medium



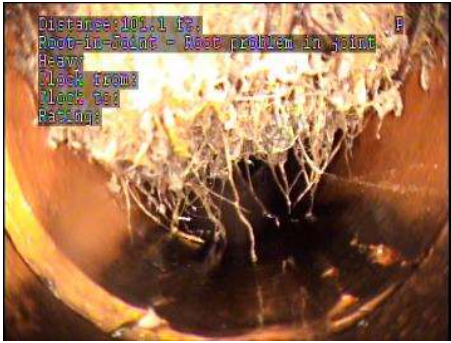
96.5 ft. D / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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101.1 ft. D / Root-in-Joint Heavy



106.5 ft. D / Root-in-Joint Medium



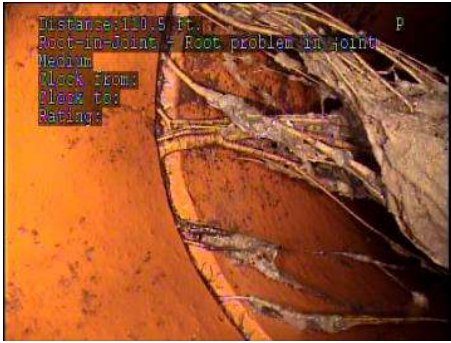
106.5 ft. D / Infiltration Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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110.5 ft.	D	/	Root-in-Joint	Medium		
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115.4 ft.	D	/	Root-in-Joint	Medium		
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137.7 ft.	D	/	End of Pipe			MH 40
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Inspection's photos

Main Inspections Small Photos

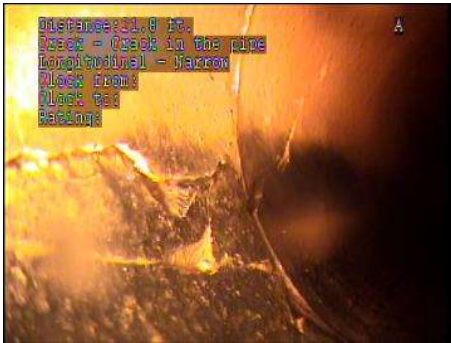
Mainline ID: Yellville MH 39 to MH 38.	City: Yellville	Address:	Project name: Yelleville
Start date/time: 4/24/2019 9:44 AM	Asset length: 64.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 39	Depth US:	Downstream node: Yellville MH 38	Depth DS:
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

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



21.8 ft.	D		/	Crack	Longitudinal - Narrow		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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26.9 ft. D / Root-in-Joint Light



33.4 ft. D / Crack Longitudinal -
Narrow

42.4 ft. D / Root-in-Joint Medium



47.2 ft. D / Root-in-Joint Heavy



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
47.6 ft.	D	/	Crack	Longitudinal - Narrow		
						
53.0 ft.	D	/	Root-in-Joint	Heavy		
55.2 ft.	D	/	Crack			
						
57.0 ft.	D	/	Root	Heavy		
57.0 ft.	D	/	Unknown Node			
						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
57.4 ft.	D	/	Root	Heavy		



63.5 ft.	D	/	End of Pipe			Mh 39
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Inspection's photos

Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
Yellville MH 38 to MH 37	Yellville		Yelleville
Start date/time:	Asset length:	Weather:	Operator:
4/24/2019 10:08 AM	179.0 ft.	Dry	Terry
Upstream node:	Depth US:	Downstream node:	Depth DS:
Yellville MH 38		Yellville MH 37	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay Tile	8.0 in.	8.0 in.
Comments:			

Observations



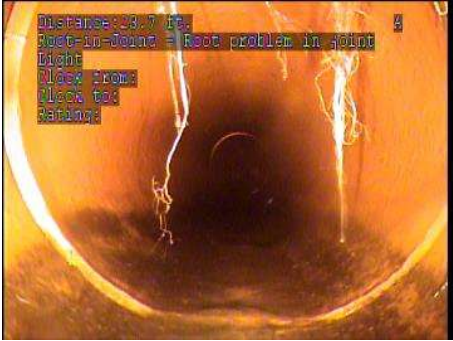
Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
8.7 ft.	D		/	Root-in-Joint	Light		






8.7 ft.	D		/	Crack	Longitudinal - Narrow		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
11.2 ft.	D	/	Crack	Circular - Narrow		
						
18.5 ft.	D	/	Root-in-Joint	Heavy		
						
23.7 ft.	D	/	Root-in-Joint	Light		
						

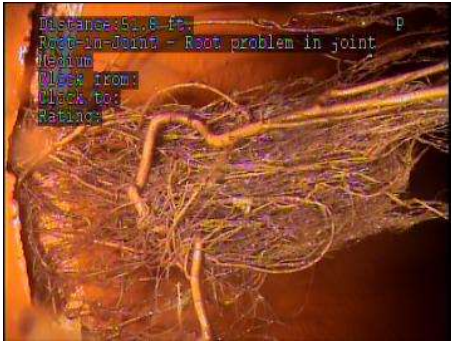
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
34.2 ft.	D	/	Root-in-Joint	Light		
						
50.5 ft.	D	2 /	Lateral	Live Connection		with flow
						
51.8 ft.	D	/	Crack	Longitudinal - Narrow		
						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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51.8 ft.	D	/	Root-in-Joint	Medium		
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57.0 ft.	D	/	Root-in-Joint	Medium		
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66.7 ft.	D	/	Root	Heavy		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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66.7 ft. D / Broken



76.8 ft. D / Root-in-Joint Light



82.3 ft. D / Root-in-Joint Heavy



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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92.7 ft.	D	/	Root-in-Joint	Medium		
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97.8 ft.	D	/	Root-in-Joint	Medium		
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97.8 ft.	D	/	Crack			
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
100.5 ft.	D	/	Crack	Circular - Narrow		
						
112.9 ft.	D	/	Root-in-Joint	Medium		
						
114.2 ft.	D	/	Crack	Circular - Narrow		
						

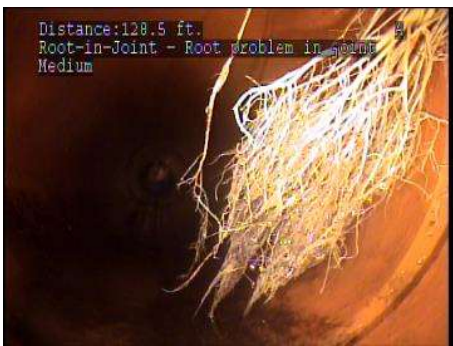
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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122.8 ft. D / Root-in-Joint Heavy



128.5 ft. D / Root-in-Joint Medium



133.7 ft. D / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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139.6 ft. D / Root-in-Lateral Heavy



139.6 ft. D 12 / Lateral Live Connection



141.0 ft. D / Root-in-Joint Heavy



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
143.8 ft.	D	/	Unknown Node			
						
143.8 ft.	D	/	Root	Heavy		
						
145.9 ft.	D	10 /	Lateral Connection Problem	Lateral Blocked		
						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
178.4 ft.	D	/	End of Pipe			MH 39



Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 37 to MH 36	City: Yellville	Address:	Project name: Yelleville
Start date/time: 4/24/2019 11:07 AM	Asset length: 113.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 37	Depth US:	Downstream node: Yellville MH 36	Depth DS:
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

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



29.9 ft.	D		/	Root-in-Joint	Medium		
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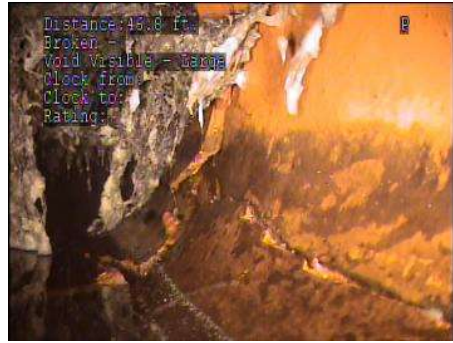
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
30.5 ft.	D	2 /	Lateral	Live Connection		With flow ?
31.8 ft.	D	/	Root-in-Joint	Medium		
36.4 ft.	D	/	Root-in-Joint	Heavy		

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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46.8 ft. D / Broken Void Visible - Large



47.5 ft. D / Root Heavy



Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 37 to MH 36, 2nd attempt	City: Yellville	Address:	Project name: Yelleville
Start date/time: 4/24/2019 11:28 AM	Asset length: 113.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 37	Depth US:	Downstream node: Yellville MH 36	Depth DS:
Pipe shape: Circular	Pipe material: Clay Tile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

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

Inspection's photos

Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
Yelleville MH 37 MH 36, 3 rd attempt	Yelleville		Yelleville
Start date/time:	Asset length:	Weather:	Operator:
4/24/2019 11:39 AM	113.0 ft.	Dry	Terry
Upstream node:	Depth US:	Downstream node:	Depth DS:
Yelleville MH 37		Yelleville MH 36	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay Tile	8.0 in.	8.0 in.
Comments:			

Observations

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

Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 35 to MH 34	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/24/2019 1:59 PM	Asset length: 270.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 35	Depth US:	Downstream node: Yellville MH 34	Depth DS:
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
40.1 ft.	D	2.6 ft.	5 / 7	Surface Damage	Severe Material Damage - Chemical Problem		



79.2 ft.	D	189.8 ft.	/	Pipe Type			Clay
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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84.3 ft. D / Root-in-Joint Light



89.3 ft. D / Root-in-Joint Medium



94.7 ft. D / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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99.9 ft. D / Crack






104.9 ft. D / Root-in-Joint Light



110.1 ft. D / Root-in-Joint Heavy



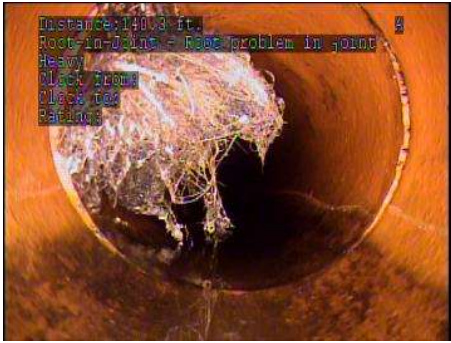
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
120.8 ft.	D	/	Root-in-Joint	Heavy		
 <p>Distance: 120.8 ft. Root-in-Joint - Root problem in joint Heavy Block from: Block to: Rating:</p>						
127.0 ft.	D	2 /	Lateral Connection Problem	Lateral Blocked		roots
 <p>Distance: 127.0 ft. Lateral Connection Problem - Lateral Blocked Block from: 4 o'clock Block to: Rating: roots</p>						
130.5 ft.	D	/	Root-in-Joint	Light		
 <p>Distance: 130.5 ft. Root-in-Joint - Root problem in joint Light Block from: Block to: Rating:</p>						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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140.3 ft. D / Root-in-Joint Heavy



146.2 ft. D / Crack



146.2 ft. D / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
167.5 ft.	D	/	Lateral Connection Problem	Lateral Blocked		roots




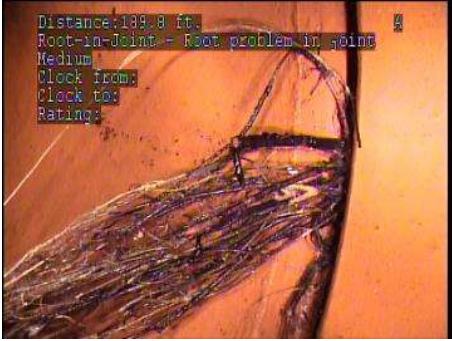

174.1 ft.	D	/	Root-in-Joint	Medium		
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179.4 ft.	D	/	Root-in-Joint	Light		
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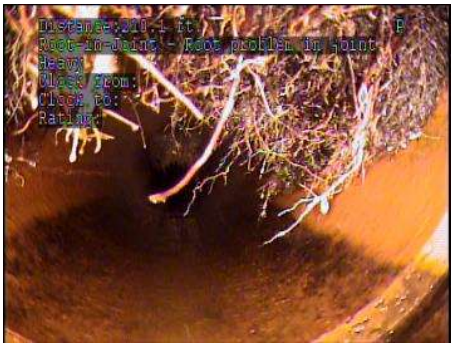
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
184.6 ft.	D	/	Root-in-Joint	Light		
						
189.8 ft.	D	/	Root-in-Joint	Medium		
						
204.7 ft.	D	/	Root-in-Joint	Medium		
						

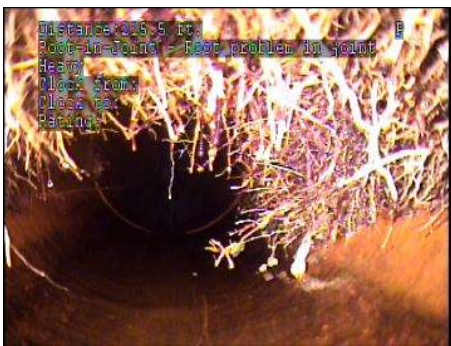
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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210.1 ft. D / Root-in-Joint Heavy



215.5 ft. D / Root-in-Joint Heavy



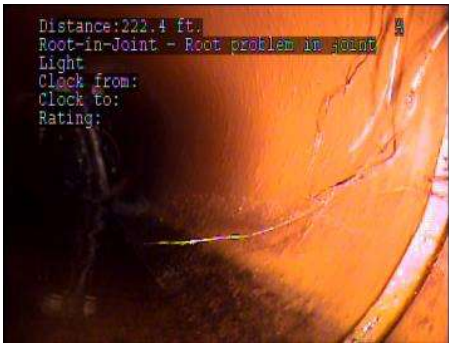
217.5 ft. D / Root-in-Joint Light



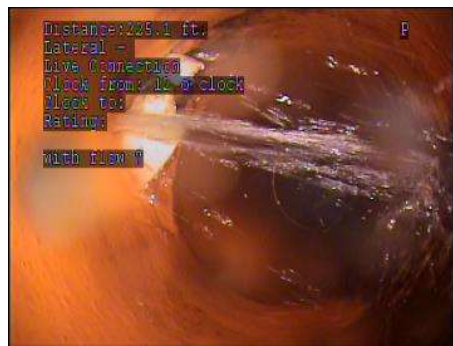
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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222.4 ft. D / Root-in-Joint Light



225.1 ft. D 12 / Lateral Live Connection with flow ?



242.5 ft. D / Root-in-Joint Heavy



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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242.5 ft. D / Infiltration Light



244.6 ft. D / Crack



247.7 ft. D / Root-in-Joint Heavy



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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257.7 ft.	D	/	Root-in-Joint	Heavy		
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262.9 ft.	D	/	Root-in-Joint	Heavy		
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268.7 ft.	D	/	End of Pipe			MH 34
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Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 34 to MH 26	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/24/2019 2:24 PM	Asset length: 100.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 34	Depth US:	Downstream node: Yellville MH 26	Depth DS:
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
5.4 ft.	D		/	Debris			rocks



Inspection's photos

Main Inspections Small Photos

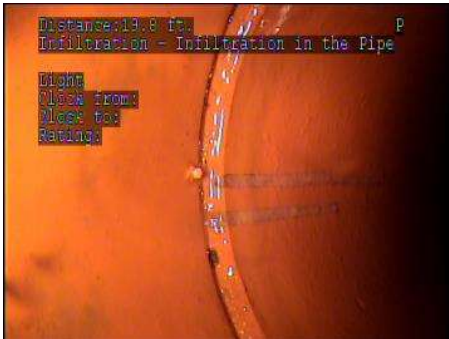
Mainline ID: Yellville MH 26 to MH 25	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/24/2019 3:55 PM	Asset length: 139.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 26	Depth US:	Downstream node: Yellville MH 25	Depth DS:
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
9.9 ft.	D		/	Infiltration	Severe		



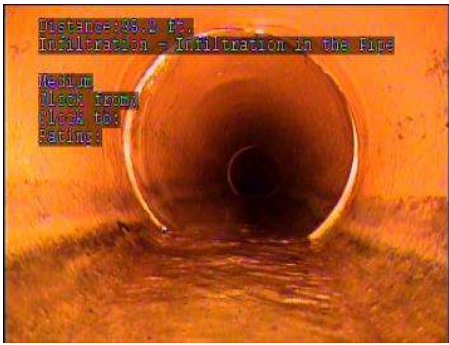
19.8 ft.	D		/	Infiltration	Light		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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35.2 ft. D / Infiltration Medium



56.2 ft. D / Infiltration Medium



86.2 ft. D / Infiltration Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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96.2 ft.	D	/	Infiltration	Light		
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114.9 ft.	D	/	Lateral Connection Problem	Lateral Blocked		
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138.9 ft.	D	/	End of Pipe		MH 25	
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Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 25 to 23	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/24/2019 4:08 PM	Asset length: 339.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 25	Depth US:	Downstream node: Yellville MH 23	Depth DS:
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.

Comments:
MH 24 is not there like map shows

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
15.1 ft.	D	284.8 ft.	/	Pipe Type			PVC



187.3 ft.	D		2 /	Lateral	Live Connection		
308.8 ft.	D		/	Root-in-Joint	Medium		



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
338.2 ft.	D	/	End of Pipe			MH 24



Inspection's photos

Main Inspections Small Photos

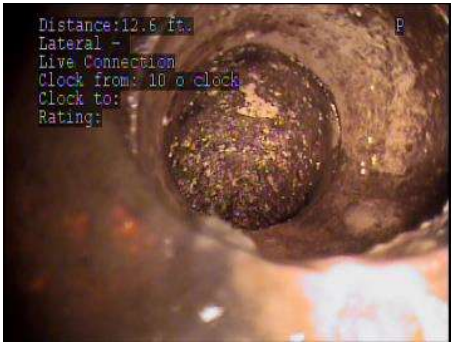
Mainline ID: Yellville MH 31 to MH 30	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 8:36 AM	Asset length: 300.0 ft.	Weather: Light Rain	Operator: Terry
Upstream node: Yellville MH 31	Depth US:	Downstream node: Yellville MH 30	Depth DS:
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

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



12.6 ft.	D		10 /	Lateral	Live Connection		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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14.5 ft.	D	/	Root-in-Joint	Heavy		
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19.2 ft.	D	/	Root-in-Joint	Medium		
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24.8 ft.	D	/	Root-in-Joint	Medium		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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29.5 ft. D / Root-in-Joint Medium



34.5 ft. D / Root-in-Joint Heavy

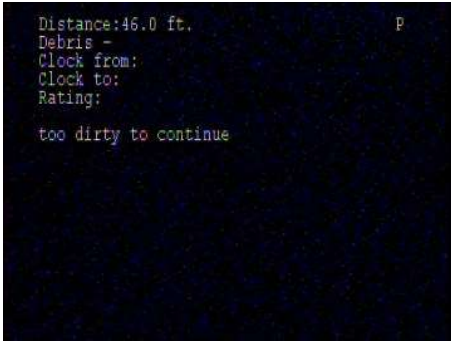


39.7 ft. D / Root-in-Joint Heavy



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
46.0 ft.	D	/	Debris			too dirty to continue



Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 20 to MH 19	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 10:18 AM	Asset length: 205.5 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 20	Depth US:	Downstream node: Yellville MH 19	Depth DS:
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

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



15.2 ft.	D		/	Crack			
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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26.0 ft. D 2 / Lateral Live Connection



73.4 ft. D / Root-in-Joint Light



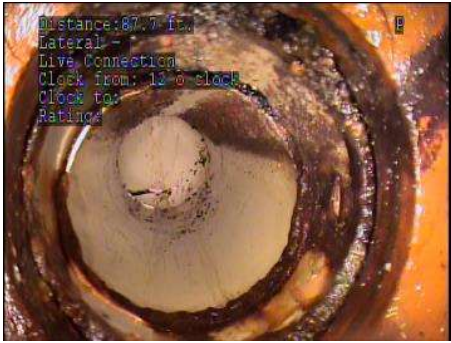
78.9 ft. D / Crack



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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87.7 ft. D 12 / Lateral Live Connection



89.4 ft. D / Broken



89.8 ft. D 12 / Lateral Capped



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
89.8 ft.	D	/	Crack	Longitudinal - Narrow		



91.5 ft.	D	/	Crack			
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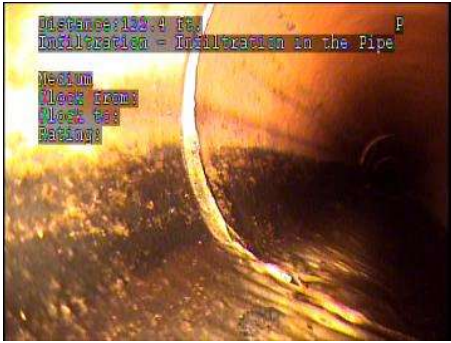
102.1 ft.	D	/	Crack			
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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122.4 ft. D / Infiltration Medium



137.6 ft. D / Broken



143.2 ft. D / Infiltration Medium



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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148.6 ft. D / Infiltration Medium



153.6 ft. D / Infiltration Light



153.7 ft. D / Infiltration



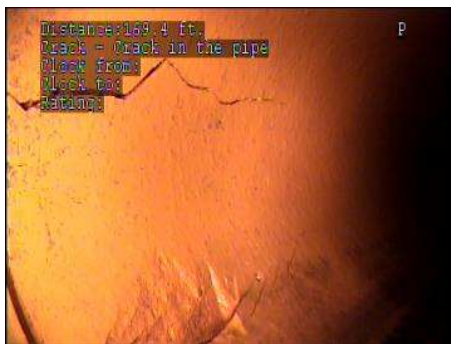
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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163.9 ft. D / Infiltration Medium



169.4 ft. D / Crack



179.4 ft. D / Infiltration Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
194.7 ft.	D	/	Broken			
195.1 ft.	D	/	Infiltration	Light		
200.0 ft.	D	/	Infiltration	Medium		
205.1 ft.	D	/	End of Pipe			MH 19

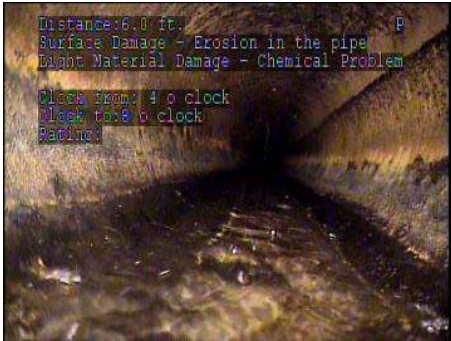
Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 19 to MH 18	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 11:00 AM	Asset length: 189.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 19	Depth US:	Downstream node: Yellville MH 18	Depth DS:
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
6.0 ft.	D	49.2 ft.	4 / 8	Surface Damage	Light Material Damage - Chemical Problem		



55.2 ft.	D	133.0 ft.	/	Pipe Type			clay
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56.4 ft.	D		/	Crack	Circular - Narrow		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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56.4 ft. D / Infiltration Medium



60.2 ft. D / Crack



60.2 ft. D / Infiltration Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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64.8 ft. D / Root-in-Joint Medium



64.8 ft. D / Infiltration Light



86.1 ft. D / Root-in-Joint Light



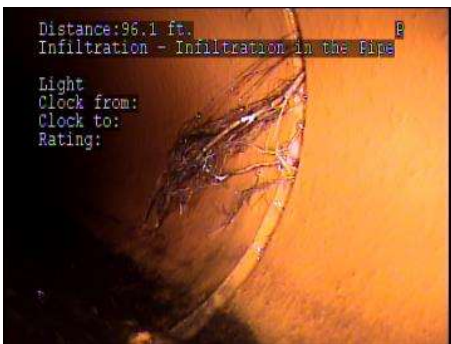
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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96.1 ft. D / Root-in-Joint Light

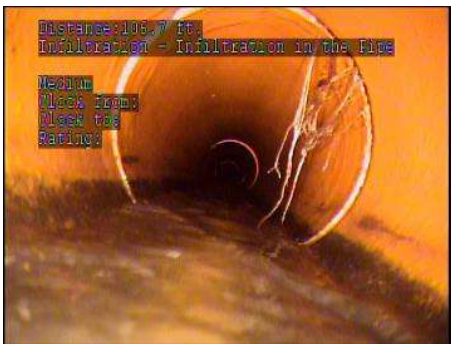


96.1 ft. D / Infiltration Light



106.7 ft. D / Root-in-Joint Light

106.7 ft. D / Infiltration Medium



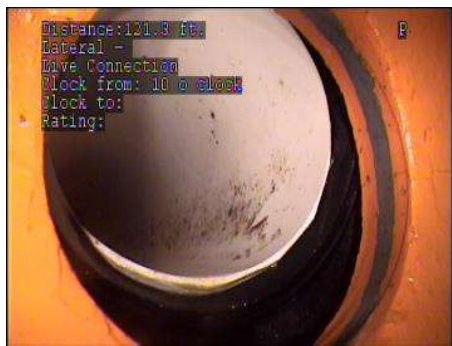
Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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114.3 ft. D / Crack Circular - Narrow



121.3 ft. D 10 / Lateral Live Connection



121.5 ft. D / Crack Longitudinal - Narrow



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
121.8 ft.	D	/	Infiltration		Medium	
133.1 ft.	D	12 /	Lateral		Live Connection	
139.2 ft.	D	/	Infiltration		Medium	

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
149.5 ft.	D	/	Infiltration	Medium		
 <p>Distance: 149.5 ft. A Infiltration - Infiltration in the Pipe Medium Clock from: Clock to: Rating:</p>						
165.3 ft.	D	/	Infiltration	Medium		
 <p>Distance: 165.3 ft. A Infiltration - Infiltration in the Pipe Medium Clock from: Clock to: Rating:</p>						
175.3 ft.	D	/	Root-in-Joint	Light		
 <p>Distance: 175.3 ft. A Root-in-Joint - Root problem in joint Light Clock from: Clock to: Rating:</p>						

Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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180.5 ft.	D	/	Root-in-Joint	Light		
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185.9 ft.	D	/	Infiltration	Medium		
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185.9 ft.	D	/	End of Pipe			MH 18
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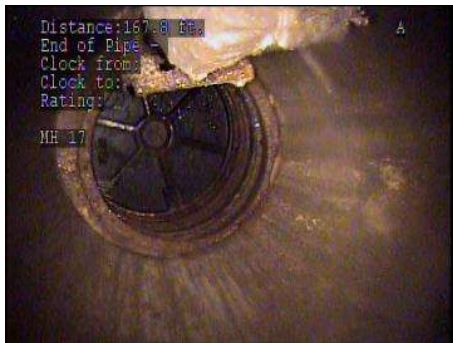
Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 18 to MH 17	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 11:16 AM	Asset length: 168.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 18	Depth US:	Downstream node: Yellville MH 17	Depth DS:
Pipe shape: Circular	Pipe material: Ductile	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
167.8 ft.	D		/	End of Pipe			MH 17



Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville 15 to MH 16	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 12:15 PM	Asset length: 339.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 16	Depth US:	Downstream node: Yellville MH 15	Depth DS:
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
192.8 ft.	U		12 /	Lateral	Live Connection		



192.8 ft.	U		/	Infiltration	Medium		
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221.8 ft.	U		12 /	Lateral	Live Connection		
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270.5 ft.	U		12 /	Lateral	Live Connection		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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322.2 ft.	U	/	Crack			
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333.2 ft.	U	/	Infiltration	Medium		
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338.5 ft.	U	/	End of Pipe			MH 16
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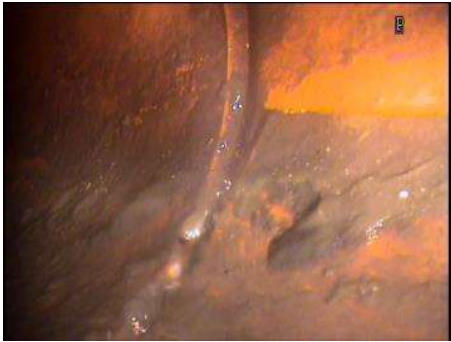
Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 15 to MH 14	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 12:45 PM	Asset length: 276.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 15	Depth US:	Downstream node: Yellville MH 14	Depth DS:
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
25.3 ft.	D		/	Infiltration		Light	



39.7 ft.	D		/	Root-in-Joint		Medium	
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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55.5 ft.	D	/	Infiltration	Light		
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60.9 ft.	D	/	Infiltration	Light		
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80.7 ft.	D	/	Root-in-Joint	Light		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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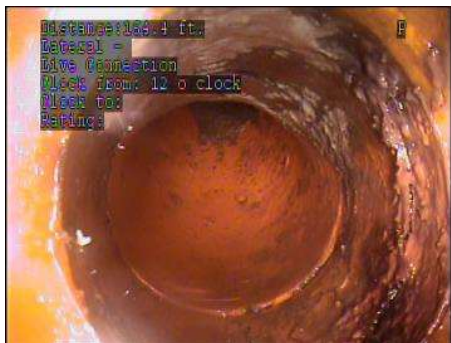
80.7 ft. D / Infiltration Light



148.7 ft. D / Crack



164.4 ft. D 12 / Lateral Live Connection



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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166.5 ft. D 12 / Lateral Live Connection



238.7 ft. D / Root-in-Joint Light



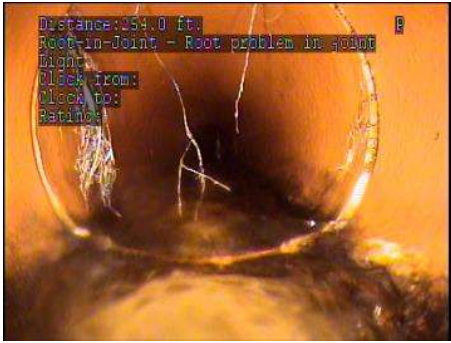
249.0 ft. D / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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254.0 ft.	D	/	Root-in-Joint	Light		
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259.8 ft.	D	/	Root-in-Joint	Light		
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264.4 ft.	D	/	Root-in-Joint	Light		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
269.3 ft.	D	/	Root-in-Joint	Light		



275.9 ft.	D	/	End of Pipe			MH 14
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Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 14 to MH 13	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 12:59 PM	Asset length: 76.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 14	Depth US:	Downstream node: Yellville MH 13	Depth DS:
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
75.9 ft.	D		/	End of Pipe			MH 13



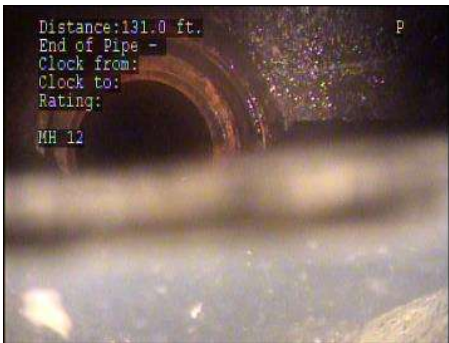
Inspection's photos

Main Inspections Small Photos

Mainline ID: Yellville MH 13 to MH 12	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 1:05 PM	Asset length: 131.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 13	Depth US:	Downstream node: Yellville MH 12	Depth DS:
Pipe shape: Circular	Pipe material: Iron	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
131.0 ft.	D		/	End of Pipe			MH 12



Inspection's photos

Main Inspections Small Photos

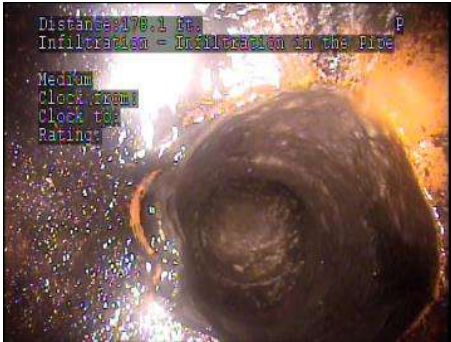
Mainline ID: Yellville MH 12 to MH 11	City: Yellville	Address:	Project name: Yellville
Start date/time: 4/25/2019 1:46 PM	Asset length: 330.0 ft.	Weather: Dry	Operator: Terry
Upstream node: Yellville MH 12	Depth US:	Downstream node: Yellville MH 11	Depth DS:
Pipe shape: Circular	Pipe material: Clay	Pipe height: 8.0 in.	Pipe width: 8.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
25.1 ft.	D		12 /	Lateral	Live Connection		



82.9 ft.	D	74.3 ft.	/	Pipe Type			ductile
178.1 ft.	D		/	Infiltration	Medium		



178.1 ft.	D		12 /	Lateral	Live Connection		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
205.7 ft.	D	12 /	Lateral	Live Connection		



329.8 ft. D / End of Pipe

MH 11



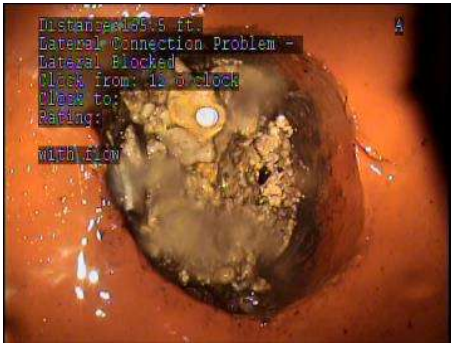
Inspection's photos

Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
Yellville MH 11 to MH 11A	Yellville		Yellville
Start date/time:	Asset length:	Weather:	Operator:
4/25/2019 3:25 PM	200.0 ft.	Dry	Terry
Upstream node:	Depth US:	Downstream node:	Depth DS:
Yellville MH 11		Yellville MH 11A	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay	10.0 in.	10.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
107.6 ft.	D		/	Lateral	Live Connection		
165.5 ft.	D		12 /	Lateral Connection Problem	Lateral Blocked		with flow



167.9 ft.	D		12 /	Lateral	Live Connection		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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169.1 ft. D / Broken



170.5 ft. D / Broken



Inspection's photos

Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
Yellville MH 10 to MH 11a	Yellville		Yellville
Start date/time:	Asset length:	Weather:	Operator:
4/25/2019 3:53 PM	61.0 ft.	Dry	Terry
Upstream node:	Depth US:	Downstream node:	Depth DS:
Yellville MH 11A		Yellville MH 10	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay	10.0 in.	10.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
54.6 ft.	U		/	Infiltration	Medium		



60.4 ft.	U		/	End of Pipe			MH 11 a
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Inspection's photos

Main Inspections Small Photos

Mainline ID:	City:	Address:	Project name:
Yellville MH 11A to MH 11	Yellville		Yellville
Start date/time:	Asset length:	Weather:	Operator:
4/25/2019 3:59 PM	200.0 ft.	Dry	Terry
Upstream node:	Depth US:	Downstream node:	Depth DS:
Yellville MH 11		Yellville MH 11A	
Pipe shape:	Pipe material:	Pipe height:	Pipe width:
Circular	Clay	10.0 in.	10.0 in.
Comments:			

Observations

Distance	Dir.	Length	From/To	Code	Modifier/Severity	Rating	Comments
4.0 ft.	U		/	Infiltration		Medium	



9.5 ft.	U		/	Infiltration		Light	
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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18.8 ft. U / Root-in-Joint Light



34.4 ft. U / Root-in-Joint Light



39.5 ft. U / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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44.8 ft.	U	/	Root-in-Joint	Medium		
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49.7 ft.	U	/	Root-in-Joint	Light		
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49.7 ft.	U	/	Infiltration	Light		
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Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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58.9 ft. U / Root-in-Joint Light



58.9 ft. U / Infiltration Light



69.7 ft. U / Root-in-Joint Light



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
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74.8 ft. U / Root-in-Joint Medium



79.7 ft. U / Root-in-Joint Light



89.6 ft. U / Root-in-Joint



Observations

Distance	Dire Length	From/To	Code	Modifier/Severity	Rating	Comments
103.7 ft.	U	/	Root-in-Joint	Heavy		



Inspection's photos



CUES, Inc.
 3600 Rio Vista Avenue
 Orlando, FL 32805
 Phone: 407-849-0190
 Fax: 407-425-1569

Main Inspections Summary

Yelleville

Mainline ID	End date/time	Operator	Start MH	Finish MH	Pipe material	Pipe height	Asset length	Surveyed
Yelleville MH 36 to MH 35	4/23/2019 12:06 PM	Terry	Yelleville MH 36	Yelleville MH 35	Clay	8.0 in.	231.0 ft.	230.7 ft.
Yelleville MH 41 to MH 40	4/23/2019 2:30 PM	Terry	Yelleville MH 41	Yelleville MH 40	Iron	8.0 in.	62.5 ft.	62.2 ft.
Yelleville MH 40 to MH 39	4/23/2019 3:00 PM	Terry	Yelleville MH 40	Yelleville MH 39	Clay Tile	8.0 in.	138.0 ft.	117.3 ft.
Yelleville MH 42 to MH 41	4/23/2019 3:58 PM	Terry	Yelleville MH 42	Yelleville MH 41	Clay Tile	8.0 in.	272.0 ft.	271.4 ft.
Yelleville MH 43 to MH 42	4/23/2019 4:45 PM	Terry	Yelleville MH 43	Yelleville MH 42	Clay Tile	8.0 in.	305.0 ft.	304.3 ft.
Yelleville MH 40 to 39 2nd attempt	4/24/2019 9:39 AM	Terry	Yelleville MH 40	Yelleville MH 39	Clay Tile	8.0 in.	138.0 ft.	137.7 ft.
Yelleville MH 39 to MH 38	4/24/2019 10:05 AM	Terry	Yelleville MH 39	Yelleville MH 38	Clay Tile	8.0 in.	64.0 ft.	63.5 ft.

Mainline ID	End date/time	Operator	Start MH	Finish MH	Pipe material	Pipe height	Asset length	Surveyed
Yellville MH 38 to MH 37	4/24/2019 10:25 AM	Terry	Yellville MH 38	Yellville MH 37	Clay Tile	8.0 in.	179.0 ft.	178.4 ft.
Yellville MH 37 to MH 36	4/24/2019 11:15 AM	Terry	Yellville MH 37	Yellville MH 36	Clay Tile	8.0 in.	113.0 ft.	47.5 ft.
Yellville MH 37 to MH 36, 2nd attempt	4/24/2019 11:36 AM	Terry	Yellville MH 37	Yellville MH 36	Clay Tile	8.0 in.	113.0 ft.	19.0 ft.
Yellville MH 36, 3rd attempt	4/24/2019 11:54 AM	Terry	Yellville MH 37	Yellville MH 36	Clay Tile	8.0 in.	113.0 ft.	50.6 ft.
Yellville MH 35 to MH 34	4/24/2019 2:22 PM	Terry	Yellville MH 35	Yellville MH 34	Ductile	8.0 in.	270.0 ft.	269.0 ft.
Sub-Total							1,998.5 ft.	1,751.6 ft.

Main Inspections Summary

Yellville

Mainline ID	End date/time	Operator	Start MH	Finish MH	Pipe material	Pipe height	Asset length	Surveyed
Yellville MH 34 to MH 26	4/24/2019 2:28 PM	Terry	Yellville MH 34	Yellville MH 26	Ductile	8.0 in.	100.0 ft.	6.0 ft.
Yellville MH 26 to MH 25	4/24/2019 4:05 PM	Terry	Yellville MH 26	Yellville MH 25	Clay	8.0 in.	139.0 ft.	138.9 ft.
Yellville MH 25 to 23	4/24/2019 4:29 PM	Terry	Yellville MH 25	Yellville MH 23	Clay	8.0 in.	339.0 ft.	338.2 ft.
Yellville MH 31 to MH 30	4/25/2019 8:45 AM	Terry	Yellville MH 31	Yellville MH 30	Clay	8.0 in.	300.0 ft.	46.0 ft.
Yellville MH 20 to MH 19	4/25/2019 10:39 AM	Terry	Yellville MH 20	Yellville MH 19	Clay	8.0 in.	205.5 ft.	205.1 ft.
Yellville MH 19 to MH 18	4/25/2019 11:15 AM	Terry	Yellville MH 19	Yellville MH 18	Ductile	8.0 in.	189.0 ft.	188.2 ft.
Yellville MH 18 to MH 17	4/25/2019 11:22 AM	Terry	Yellville MH 18	Yellville MH 17	Ductile	8.0 in.	168.0 ft.	167.8 ft.
Yellville 15 to MH 16	4/25/2019 12:28 PM	Terry	Yellville MH 15	Yellville MH 16	Clay	8.0 in.	339.0 ft.	338.6 ft.
Yellville MH 15 to MH 14	4/25/2019 12:58 PM	Terry	Yellville MH 15	Yellville MH 14	Clay	8.0 in.	276.0 ft.	275.9 ft.

Mainline ID	End date/time	Operator	Start MH	Finish MH	Pipe material	Pipe height	Asset length	Surveyed
Yellville MH 14 to MH 13	4/25/2019 1:03 PM	Terry	Yellville MH 14	Yellville MH 13	Iron	8.0 in.	76.0 ft.	75.9 ft.
Yellville MH 13 to MH 12	4/25/2019 1:11 PM	Terry	Yellville MH 13	Yellville MH 12	Iron	8.0 in.	131.0 ft.	131.0 ft.
Yellville MH 12 to MH 11	4/25/2019 1:59 PM	Terry	Yellville MH 12	Yellville MH 11	Clay	8.0 in.	330.0 ft.	329.8 ft.
Yellville MH 11 to MH 11A	4/25/2019 3:37 PM	Terry	Yellville MH 11	Yellville MH 11A	Clay	10.0 in.	200.0 ft.	170.6 ft.
Yellville MH 10 to MH 11a	4/25/2019 3:57 PM	Terry	Yellville MH 10	Yellville MH 11A	Clay	10.0 in.	61.0 ft.	60.4 ft.
Yellville MH 11A to MH 11	4/25/2019 4:09 PM	Terry	Yellville MH 11A	Yellville MH 11	Clay	10.0 in.	200.0 ft.	103.7 ft.
Sub-Total							3,053.5 ft.	2,576.1 ft.
Total							5,052.0 ft.	4,327.7 ft.

APPENDIX C

Collection System Evaluation Findings Map

ENGINEERING SERVICES, INC.

1207 SOUTH OLD MISSOURI ROAD • P. O. BOX 282 • SPRINGDALE, ARKANSAS 72765

(479) 751-8733 • (479) 751-8746 FAX • www.engineeringservices.com

**SANITARY SEWER COLLECTION SYSTEM
 CITY OF YELLEVILLE
 MARION COUNTY, ARKANSAS**

REVISION	DATE	DESCRIPTION

SCALE: 1"=400'
 DATE: Oct 4, 2019
 ENGINEER: JWD
 DRAWN BY: JAE
 W.O. #: 19804

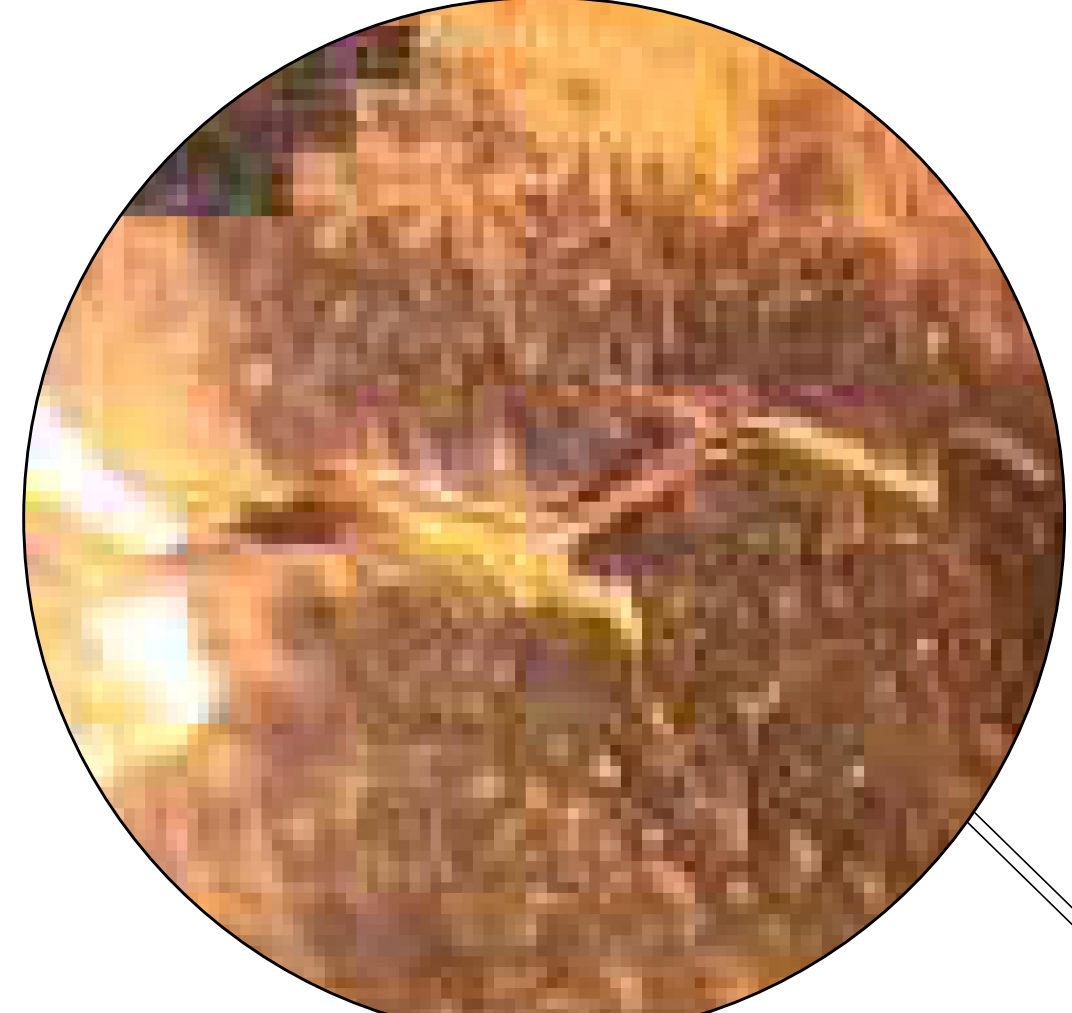
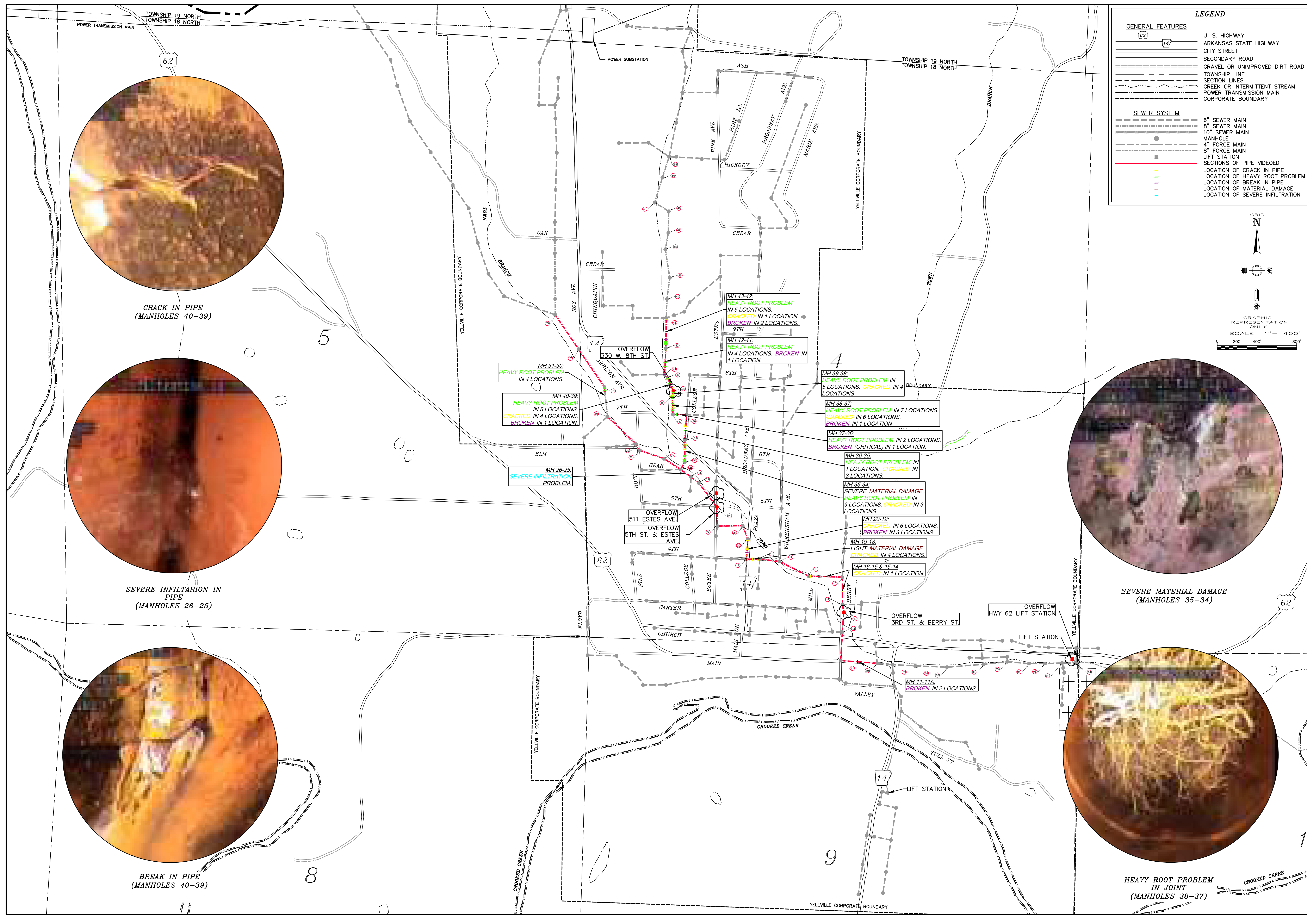
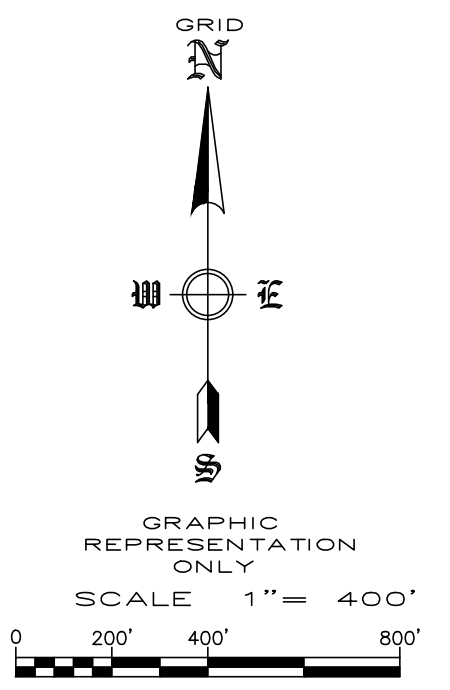
LEGEND

GENERAL FEATURES

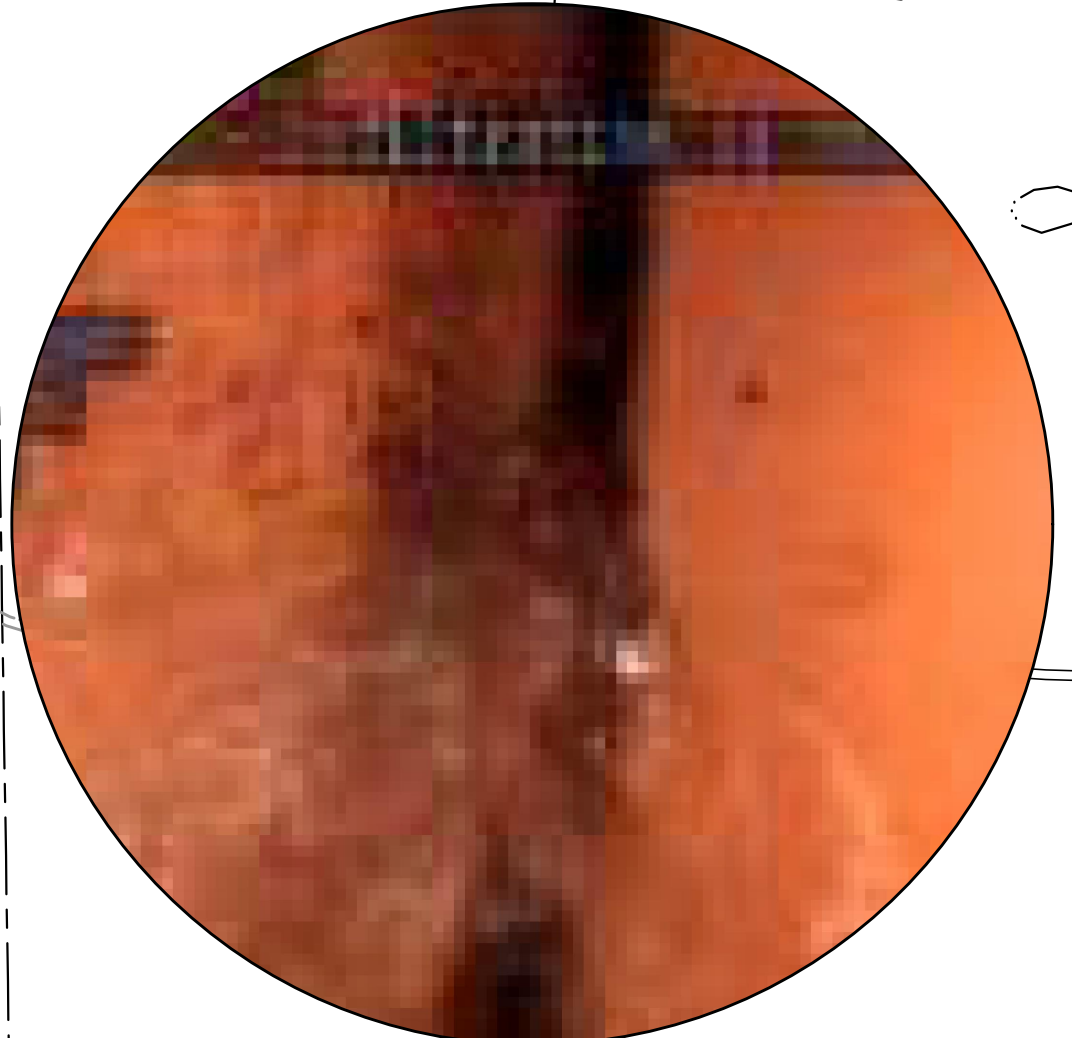
- U. S. HIGHWAY
- ARKANSAS STATE HIGHWAY
- CITY STREET
- SECONDARY ROAD
- GRAVEL OR UNIMPROVED DIRT ROAD
- TOWNSHIP LINE
- SECTION LINES
- CREEK OR INTERMITTENT STREAM
- POWER TRANSMISSION MAIN
- CORPORATE BOUNDARY

SEWER SYSTEM

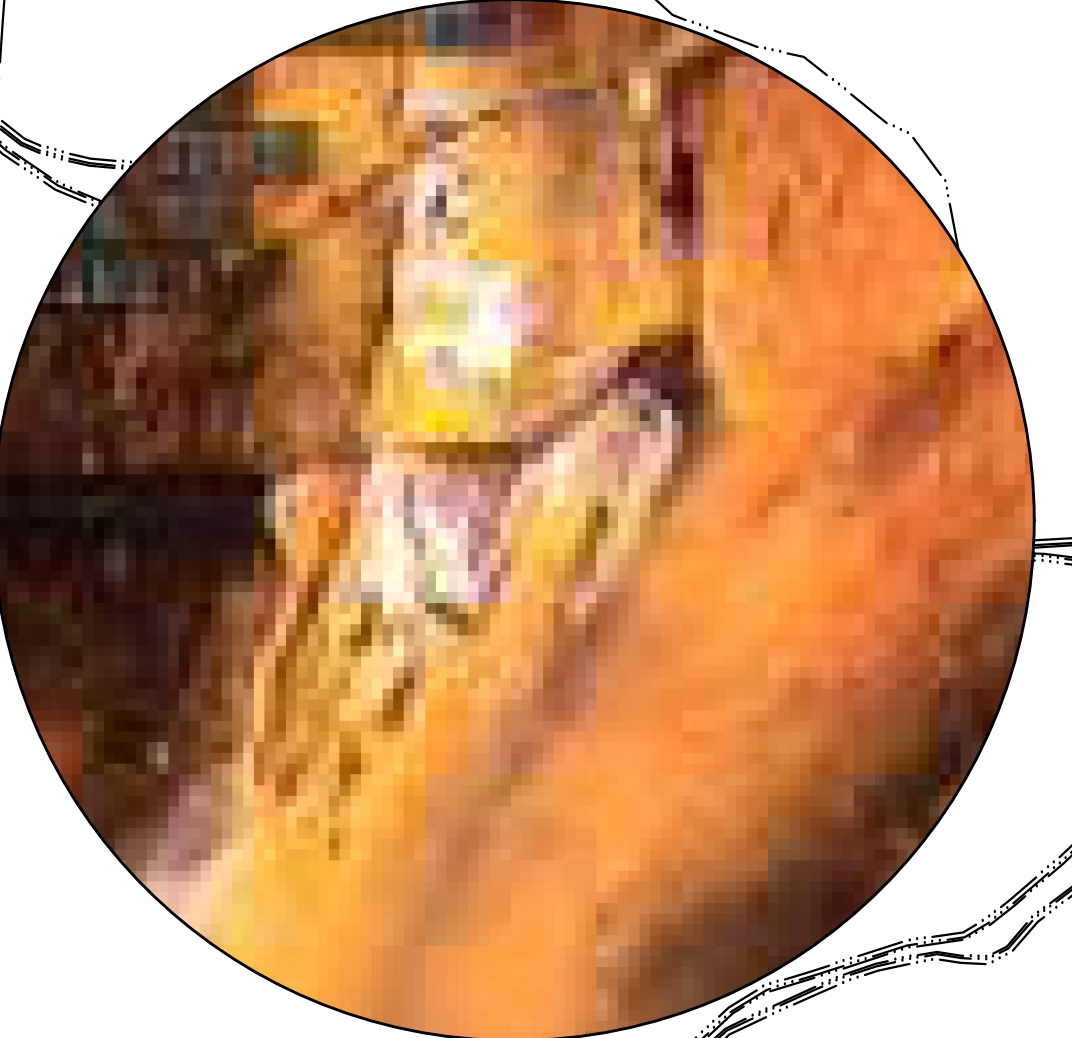
- 6" SEWER MAIN
- 8" SEWER MAIN
- 10" SEWER MAIN
- MANHOLE
- 4" FORCE MAIN
- 8" FORCE MAIN
- LIFT STATION
- SECTIONS OF PIPE VIDEOED
- LOCATION OF CRACK IN PIPE
- LOCATION OF HEAVY ROOT PROBLEM
- LOCATION OF BREAK IN PIPE
- LOCATION OF MATERIAL DAMAGE
- LOCATION OF SEVERE INFILTRATION



CRACK IN PIPE
 (MANHOLES 40-39)



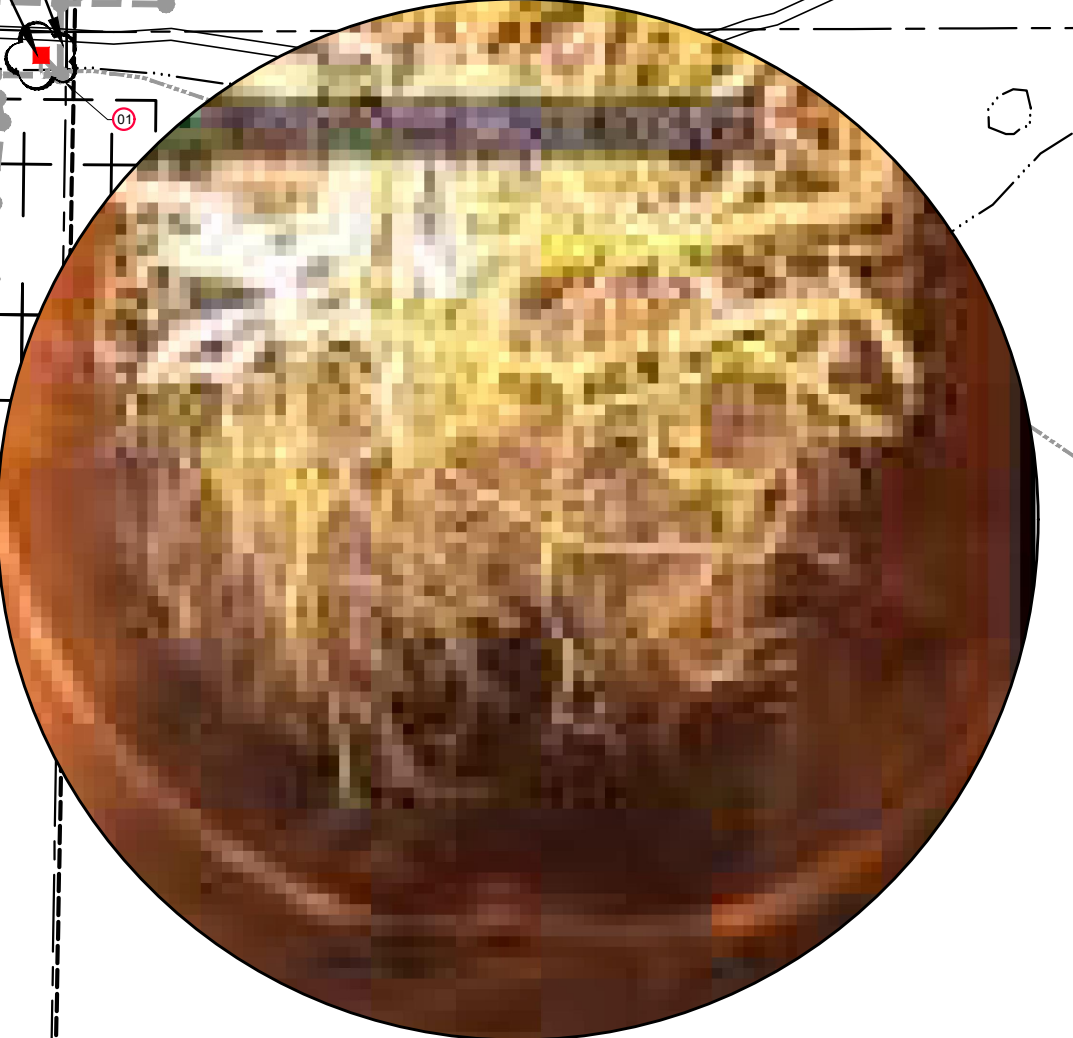
SEVERE INFILTRATION IN PIPE
 (MANHOLES 26-25)



BREAK IN PIPE
 (MANHOLES 40-39)



SEVERE MATERIAL DAMAGE
 (MANHOLES 35-34)



HEAVY ROOT PROBLEM
 IN JOINT
 (MANHOLES 38-37)

MH 31-30:
 HEAVY ROOT PROBLEM
 IN 4 LOCATIONS.

MH 40-39:
 HEAVY ROOT PROBLEM
 IN 5 LOCATIONS.
 CRACKED IN 4 LOCATIONS.
 BROKEN IN 1 LOCATION.

MH 26-25:
 SEVERE INFILTRATION
 PROBLEM.

MH 43-42:
 HEAVY ROOT PROBLEM
 IN 5 LOCATIONS.
 CRACKED IN 1 LOCATION.
 BROKEN IN 2 LOCATIONS.

MH 42-41:
 HEAVY ROOT PROBLEM
 IN 4 LOCATIONS. BROKEN IN
 1 LOCATION.

MH 39-38:
 HEAVY ROOT PROBLEM IN
 5 LOCATIONS. CRACKED IN 4
 LOCATIONS.

MH 38-37:
 HEAVY ROOT PROBLEM IN 7 LOCATIONS.
 CRACKED IN 6 LOCATIONS.
 BROKEN IN 1 LOCATION.

MH 37-36:
 HEAVY ROOT PROBLEM IN 2 LOCATIONS.
 BROKEN (CRITICAL) IN 1 LOCATION.

MH 36-35:
 HEAVY ROOT PROBLEM IN
 1 LOCATION. CRACKED IN
 3 LOCATIONS.

MH 35-34:
 SEVERE MATERIAL DAMAGE
 HEAVY ROOT PROBLEM IN
 9 LOCATIONS. CRACKED IN 3
 LOCATIONS.

MH 20-19:
 CRACKED IN 6 LOCATIONS.
 BROKEN IN 3 LOCATIONS.

MH 19-18:
 LIGHT MATERIAL DAMAGE.
 CRACKED IN 4 LOCATIONS.

MH 18-15 & 15-14:
 CRACKED IN 1 LOCATION.

OVERFLOW
 511 ESTES AVE.
 OVERFLOW
 5TH ST. & ESTES
 AVE.

OVERFLOW
 3RD ST. & BERRY ST.

MH 11-11A:
 BROKEN IN 2 LOCATIONS.

OVERFLOW
 HWY 62 LIFT STATION

LIFT STATION

APPENDIX D

Preliminary Engineering Report

ENGINEERING SERVICES, INC.

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PRELIMINARY ENGINEERING REPORT

FOR

***SEWER COLLECTION SYSTEM
REHABILITATION***

TO SERVE THE

***CITY OF YELLVILLE
MARION COUNTY, ARKANSAS***

OCTOBER 2019

Prepared in Accordance With:
*Water/Wastewater Advisory Committee
Wastewater Pre-application Requirements*

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EXISTING CONDITIONS

A. Project Name, Location, Vicinity Map

The City of Yellville is located in the northcentral part of the state of Arkansas, approximately twenty-eight miles south of the Missouri border and about twenty-six miles east of Harrison. It's located in Marion County, which is bordered to the north by the state of Missouri, to the west by Boone County, by Baxter County to the east, and by Searcy County to the south. A general location map is shown in Figure 1.1. The proposed project "Sewer Collection System Rehabilitation" is intended to improve the existing wastewater collection system and mitigate future SSOs from occurring.

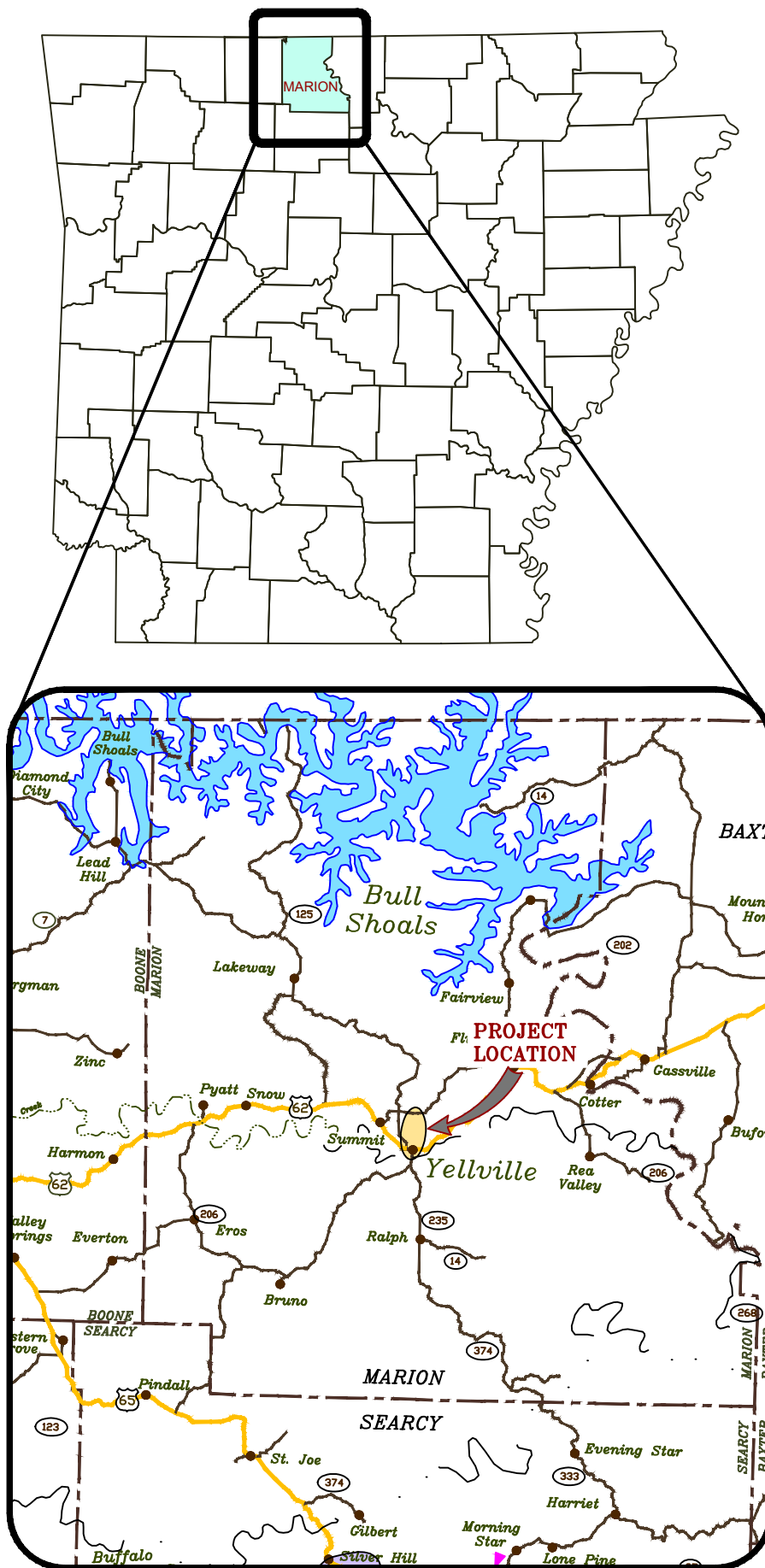
B. Need for Project

Over approximately three years, from 2016 to 2019, the City of Yellville reported forty-five significant sanitary sewer overflows (SSOs) in its sanitary sewer collection system that totaled a volume of 3,073,300 gallons. Each of these SSO's constituted an unpermitted discharge, violating the Arkansas Code Ann. §8-4-217(a)(3) and the NPDES Discharge Permit AR0034037. Due to the alarming number of SSOs, ADEQ recommended the city consult with a Professional Engineer to develop a Corrective Action Plan (CAP) to reduce the number of SSOs in the system. This letter and the city's NPDES permit are included in Appendix F.

The reported overflows occurred mostly in five different locations: manholes at 330 W. 8th Street, 511 Estes Avenue, 5th St. & Estes Avenue, 3rd Street & Berry Street, and the Highway 62 lift station. The manhole at 330 W. 8th Street is near an unnamed tributary of Town Branch, a creek that eventually discharges into Crooked Creek. Similarly, the other four locations are along Town Branch. In addition to being near such an important body of water, the manholes at four of these locations are on streets in residential or commercial areas. This proximity to people's homes and places of work makes the already alarming situation more concerning. Sanitary sewer overflows are in general harmful to people and the environment, but the frequency in which they've occurred in the City of Yellville and the locations at which they've occurred makes them increasingly more harmful.

If the issues are left untreated, SSOs will continue to occur and will make residing or working in the surrounding areas increasingly unpleasant, potentially affecting the city's economy. Similarly, if this system goes untreated and the SSOs reach the nearby bodies of water and adversely affect the water quality of these, it would greatly impact not only the immediate surrounding areas, but the whole county.

Figure 1.1 General Location Map



C. Existing Collection System

The city's sanitary sewer collection system consists of four-inch (4"), six-inch (6"), eight-inch (8"), and ten-inch (10") gravity sewer mains, and 4" and 8" force mains. The material of the pipes varies from clay to ductile iron. There are approximately 51,500 linear feet of 6", 10,000 linear feet of 8", and 220 linear feet of 10" gravity sewer mains, and approximately 840 linear feet of 4" and 4,100 linear feet of 8" force mains. The system has two lift stations. One lift station is located off of Arkansas Highway 14, heading south out of Yellville, and the other one is located off of US Highway 62, near the Yellville Cemetery.

Many sections of the collection system are in critical condition. In an effort to find the cause of the multiple SSO's the city had experienced, Arkansas Rural Water in April 2019 cleaned and inspected approximately 4,328 feet of sewer main with CCTV Equipment in order to identify possible causes for the occurring overflows. Their findings included blocked laterals, cracked mains, roots in joints and laterals, broken mains, debris, and inflow. The findings of this report are included in Appendix E and a map of the existing collection system along with the locations of the SSO's is included in Appendix A.

D. NPDES Permit

The Yellville Wastewater Treatment Plant discharges to the Crooked Creek, a tributary of the White River. The White River runs approximately 720 miles through Missouri and Arkansas. It originates in the Boston Mountains of Northwest Arkansas and flows to the north into Missouri, and loops back into Arkansas and to its mouth at the Mississippi River. Presently, it is a major recreational spot for people in the surrounding areas and tourists from all over the country.

The effluent limitations, monitoring requirements, and other conditions included in the NPDES permit that the discharge should conform to are shown in Figure 1.2 below.

Figure 1.2 NPDES Permit Requirements

Effluent Characteristics	Discharge Limitations			Monitoring Requirements	
	Mass (lbs/day, unless otherwise specified)	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Average	Monthly Avg	7-Day Avg		
CBD05	62.6	10	15	Two/Month	3-hr composite
TSS	93.8	15	23	Two/Month	3-hr composite
NH3-N	-	-	-	-	-
pH	N/A	Min: 6 s.u.	Max: 9 s.u.	Three/Month	Grab

E. Present Flows and Wastewater Characteristics

1. Infiltration & Inflow

Yellville’s wastewater flow records from June of 2017 to December 2018 show the system frequently experienced higher flows than normal. After collecting rainfall data for the same time period, it can be inferred that one of the main causes of the increased flows in the system is inflow of rainwater. The relationship between rainfall and flow data can be seen in Figure 1.4 and Figure 1.5 below. This corresponds with the multiple SSOs Yellville experienced from 2016 through 2019. Data for each of the SSO events during the 3-year period in question is included in Appendix G.

2. Wastewater Characteristics Analysis

The average influent characteristics for the city of Yellville are shown in Figure 1.3 below.

Figure 1.3 Wastewater Characteristics

Influent Characteristic	Concentration (mg/l)
NH ₃ -N (mg/l)	17.15
Total Suspended Solids (mg/l)	36.60
CBOD (mg/l)	44.28
Nitrate and Nitrite (mg/l)	0.59
Dissolved Oxygen (mg/l)	3.32
pH (s.u.)	7.05
Temperature (°C)	19.40

3. Major Wastewater Contributors

There are four industrial sewer customers in the City of Yellville, and they are all located inside the city limits.

Figure 1.4 Rainfall vs. Flow (June-Dec 2017)

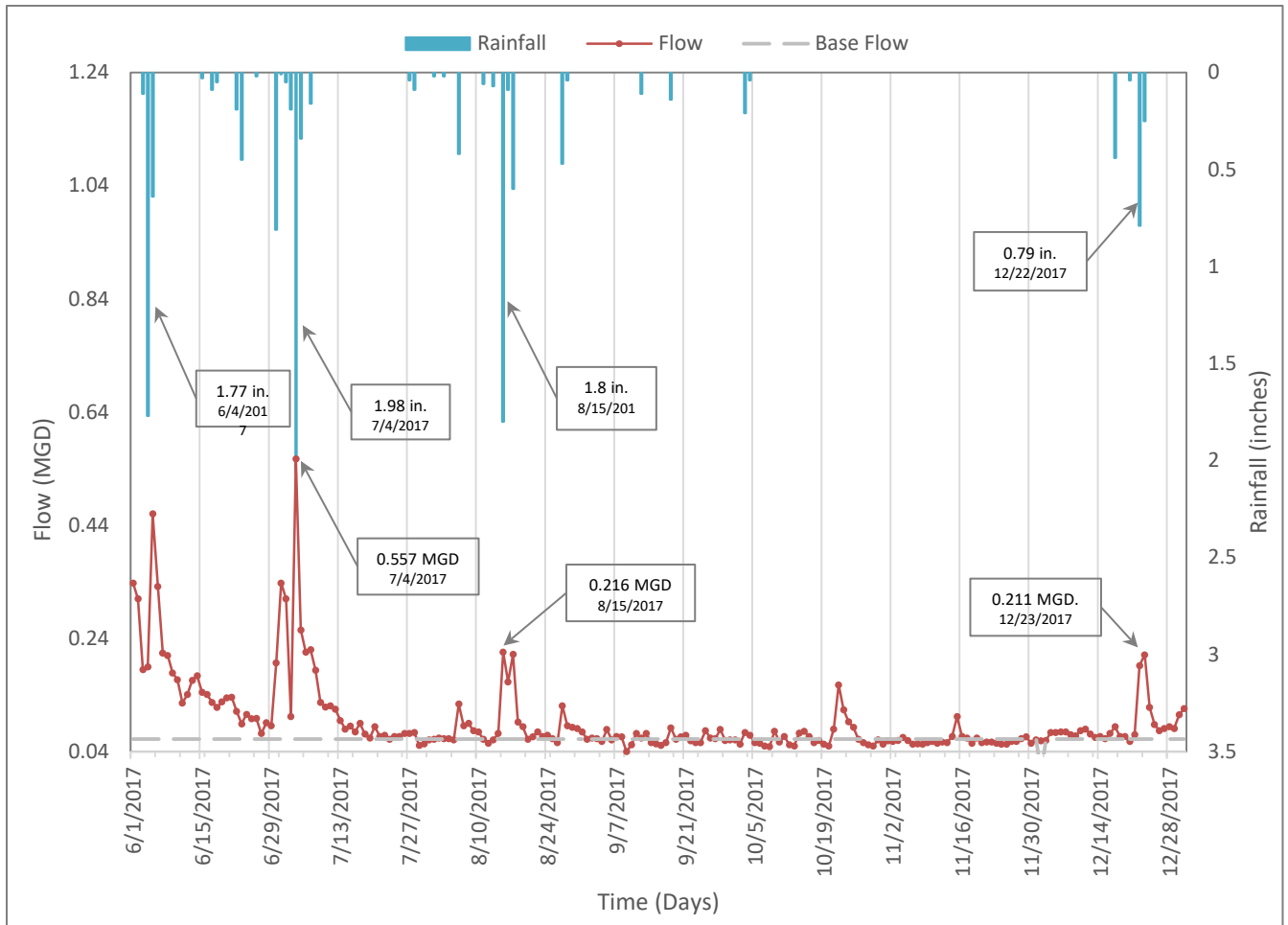
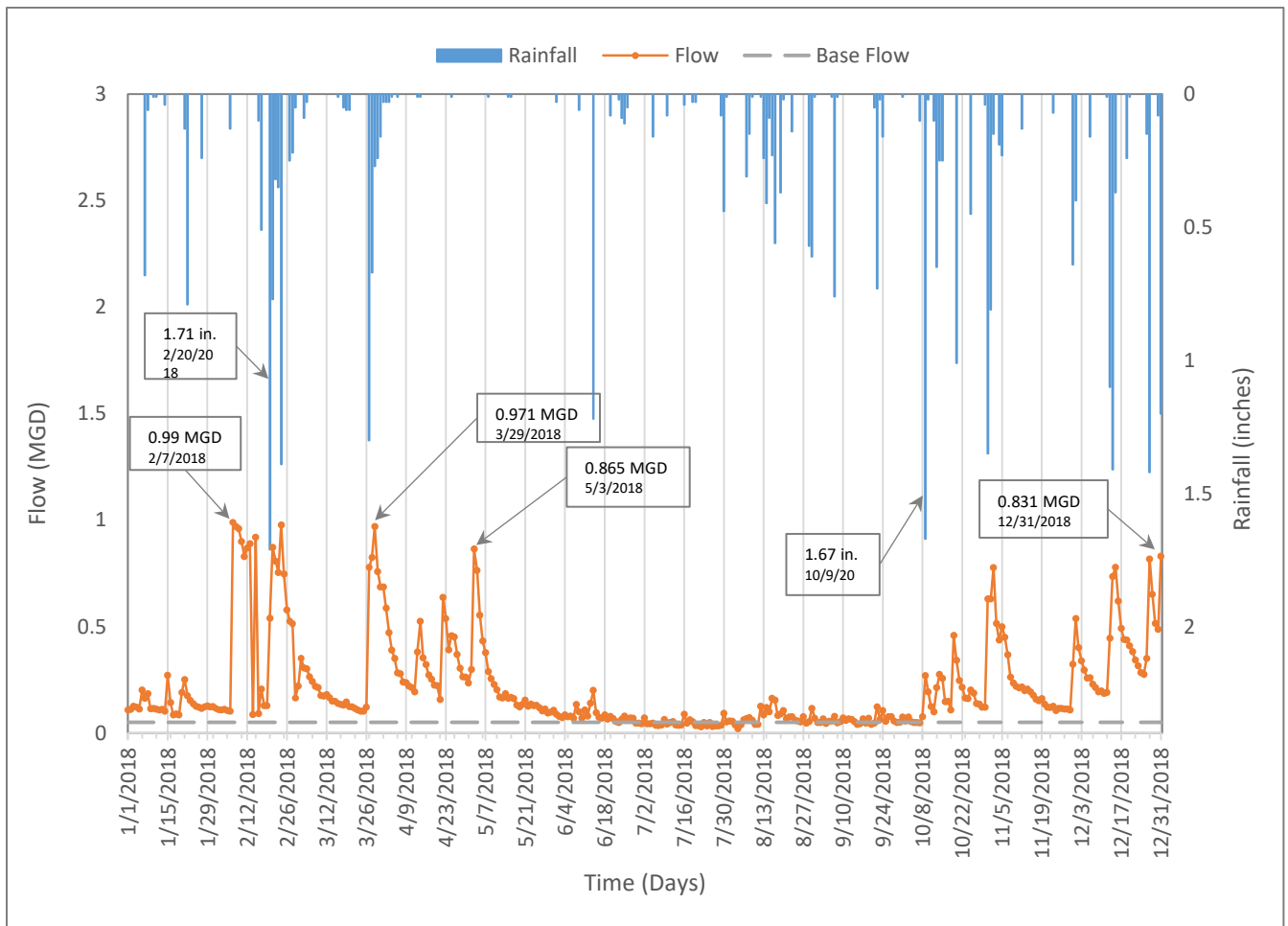


Figure 1.5 Rainfall vs. Flow (Jan-Dec 2018)



F. Financial Information

1. Rate Structure

Yellville’s current wastewater rates are the same for all sanitary sewer customers and are shown in Figure 1.6 below.

Figure 1.6 City of Yellville Wastewater Rates

Water Consumption (Gal)	Rates (\$/Mo)	
	Residential, Housing/Commercial, Industrial	Industrial and Wholesale
0 – 1000	\$16.30 (Minimum)	\$30.00
EACH ADDITIONAL 1000	\$3.95	\$3.45

2. Annual Operating and Maintenance Costs

The city of Yellville’s Operating and Maintenance costs for 2018 are shown in Figure 1.7 below.

Figure 1.7 City of Yellville Annual Operating and Maintenance Costs

Expense	Cost
Administrative Fees	\$ 5,145.00
Bad Debts	\$ 801.00
Dues and Fees	\$ 1,715.00
Insurance - general	\$ 1,303.00
Insurance - health	\$ 6,569.00
Miscellaneous	\$ 59.00
Professional Fees	\$ 3,568.00
Pension Expense	\$ 4,204.00
Repairs and Maintenance	\$ 48,681.00
Salaries	\$ 41,319.00
Supplies - Office	\$ 2,456.00
Supplies - Operating	\$ 15,246.00
Taxes - Payroll	\$ 3,151.00
Utilities	\$ 27,854.00
Debt Service	\$ 59,525.00
Replacement Reserve	\$ 161,657.00
TOTAL O&M COSTS	\$ 383,253.00

3. Existing Debt

The City of Yellville has one existing long-term debt to the Arkansas Natural Resources Commission (ANRC) for a total loan of \$100,000. The loan payments were deferred 10 years to begin on July of 2004. The city also has five bonds with USDA- Rural Development. The details of the loan and bonds are summarized below in Figure 1.8 and audits for the years 2015 through 2018 are included in Appendix D of this report..

Figure 1.8 Existing Debt Payments for Yellville

<u>Date Issued</u>	<u>Amount</u>	<u>Interest</u>	<u>Balance (12/31/18)</u>	<u>Annual Payment</u>	<u>Pay-Off Date</u>
7/15/1993	\$100,000.00	5.00%	\$34,741	\$5,988.00	2024
7/26/1993	748,200.00	5.00%	\$439,735	\$21,527.00	-
3/19/1998	*	4.50%	\$284,225	\$8,435.00	-
3/19/1998	*	4.50%	\$211,736	\$6,325.00	-
9/18/2008	\$454,000.00	4.125%	\$392,174	\$6,888.00	2048
9/18/2008	\$642,900.00	3.625%	\$559,948	\$10,362.00	2048
Subtotal - Current Loan Payments:				\$59,525.00	
TOTAL ESTIMATED ANNUAL DEBT PAYMENTS:				\$59,525.00	

*Total amount of the two bonds was \$679,600.

G. Discharge Monitoring Report Flows

The Discharge Monitoring Reports (DMR) of the last 12 months (August 2018- August 2019) are included in Appendix H.

FUTURE CONDITIONS

A. Present and Projected Population Data

As of the most recent U.S. Census Bureau in 2010, there were 1,204 persons residing in the City of Yellville and 16,653 persons residing in Marion County. Figure 2.1 lists the historical population information for the City of Yellville and Marion County from 1960 – 2010 and projected population to 2040. Figure 2.2 and Figure 2.3 illustrate the population changes and projections for Yellville and Marion County from 1960 to 2040. Historic population data for Yellville and Marion County was obtained from the U.S. Census Bureau for years 1960 through 2010. Projected population information for Marion County was obtained from the University of Arkansas at Little Rock’s Institute for Economic Advancement. Population projections for the City of Yellville were made by Engineering Services, Inc. utilizing a linear trend line method and projecting the historical trend forward. The population projections developed by the Institute for Economic Advancement are included in Appendix C.

Figure 2.1 Historic and Projected Population Trends for City of Yellville and Marion County

City/County	1960*	1970*	1980*	1990*	2000*	2010*	2020	2030	2040
City of Yellville	636	860	1044	1181	1312	1204	1130 [^]	1059 [^]	987 [^]
Marion County	6,041	7,000	11,334	12,001	16,140	16,653	15,615 [†]	14,458 [†]	13,400 [†]

* Data Obtained from U.S. Census Bureau

† Projection obtained from UALR's Institute for Economic Advancement

[^] Projection by Engineering Services, Inc.

Figure 2.2 Historic and Projected Population Trends for City of Yellville

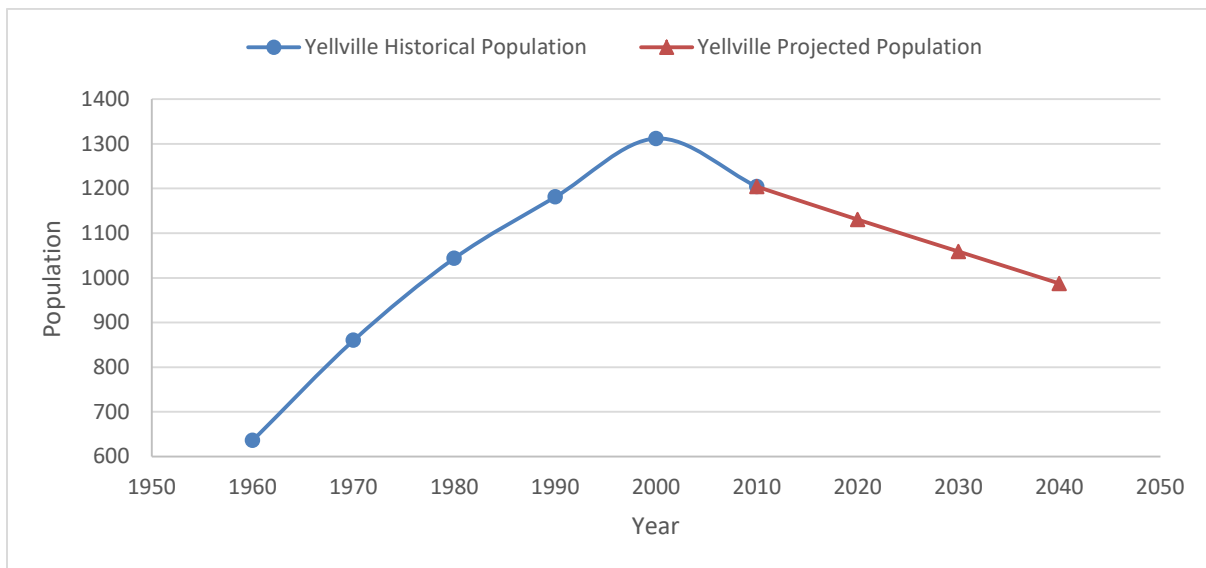
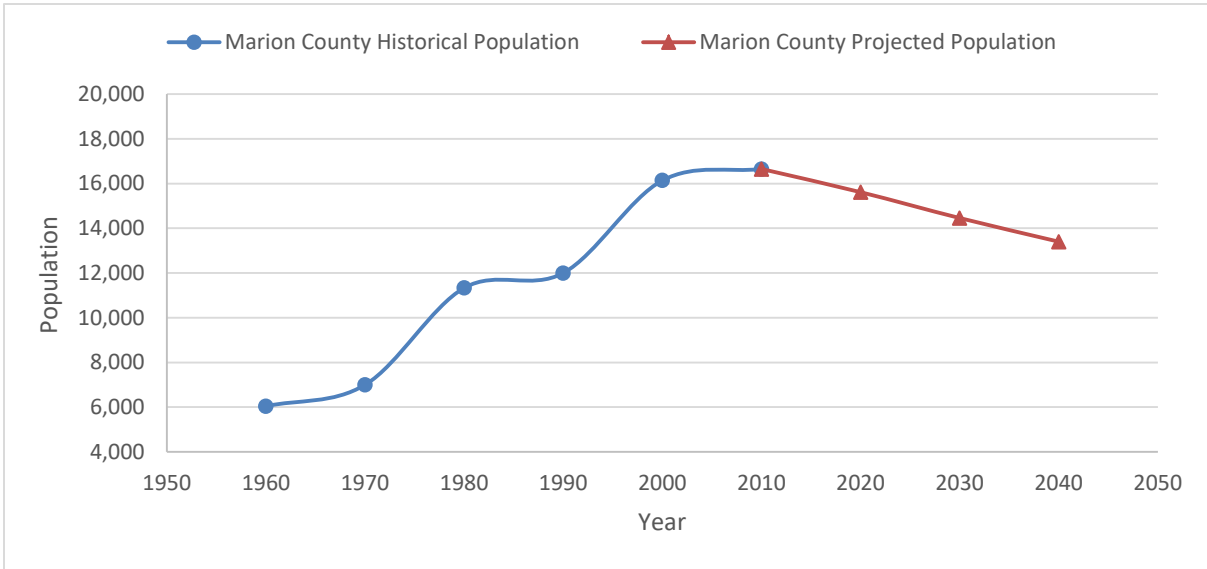


Figure 2.3 Historic and Projected Population Trends for Marion County



B. Projected Flow

The number and frequency of SSOs the city has experienced over the three-year period mentioned previously is attributed mostly to flaws in the system allowing rainfall inside the sewer mains. Therefore, the proposed improvements are predicted to reduce the amount of SSOs in the system by replacing the more damaged sections of the pipe. Flows after the project are anticipated to decrease, but not by a significant amount. Due to the partial improvements proposed throughout the system, it is difficult to predict exactly how the unimproved sections are going to be affected and as a result, how that is going to affect the flow through the system.

C. Design Effluent Limits

Effluent limits are not anticipated to change due to the proposed project.

D. Present and Projected Number of Users

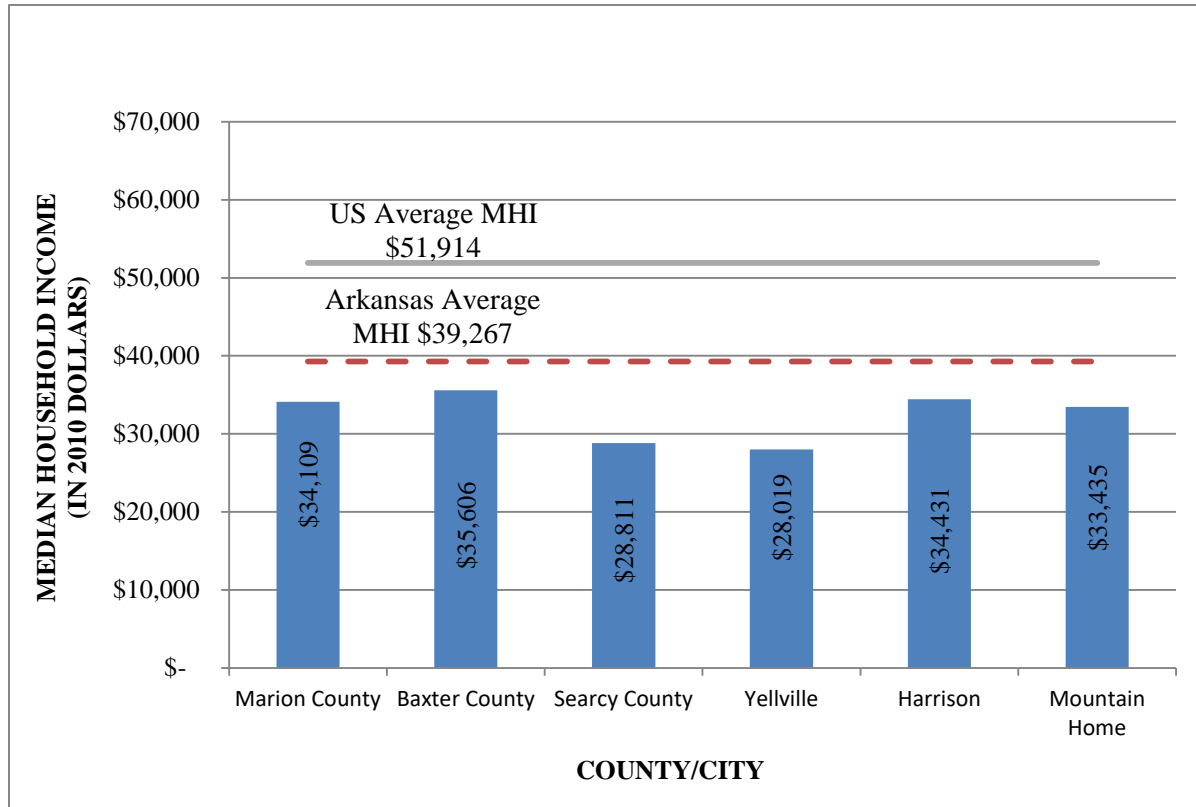
The current number of sewer customers for the City of Yellville is 528. There are no projected new users as the project proposes to rehabilitate the existing system to better serve the existing customers.

E. Median Household Income (MHI) And Low to Moderate Income (LMI)

State and federal agencies use "Median Household Income" (MHI) data compiled by and obtained from the U.S. Census Bureau as an indicator of the state of the overall economy of an area. MHI is often utilized to determine the eligibility of projects in a given area for funding assistance. Generally, the lower a region's or city's MHI relative to the MHI for the state as a

whole or relative to the MHI poverty level of the state, the more funding assistance (i.e. higher percentage of project cost funded by grants, or lower interest rates for loans) a project in that area is eligible to receive. Figure 2.4 illustrates the Median Household Income of Yellville and Marion County, as well as nearby counties and cities.

Figure 2.4 Median Household Income of Yellville, Marion County, and Nearby Cities and Counties (2006-2010 American Community Survey 5-Year Estimates)



The Median Household Income (MHI) for Marion County is \$34,109 per year and is slightly below the state median income level of \$39,267. Yellville’s MHI is \$28,019 and is below both the county’s and state’s MHI, as well as its neighboring cities. Marion County and Yellville’s MHI’s are both significantly lower than the country’s MHI at \$51,914. Marion County’s MHI is larger than the MHI of Searcy but lower than Baxter County’s.

State and federal agencies often use MHI data to determine grant eligibility of a particular project area. For projects such as the proposed Sewer Collection System Rehabilitation, one source of funding is USDA Rural Development which utilizes the following criteria to determine a project’s eligibility for funding through grants and loans:

MHI > \$40,956	May be considered for market rate interest with <i>no</i> grant. Present market rate is 3.00%.
$\$32,765 \leq \text{MHI} \leq \$40,956$	May be considered for intermediate interest rate, presently 2.375%, and up to 45% grant.
MHI < \$32,765	May be considered for low interest rate, presently 1.750%, and up to 75% grant.

Due to Yellville’s MHI, this project is eligible for a low interest rate loan, presently 1.750%, and up to a 75% grant under USDA Rural Development funding eligibility criteria. It should be noted, however, that an additional condition for qualification of the 75% grant is the existence of an imminent health risk for the customers in the proposed service area as determined by USDA. Therefore, under USDA Rural Development funding eligibility criteria the project is eligible for an intermediate interest rate of 2.375% and a grant of up to 45% the project’s total cost.

Similarly, 51.12% of the residents of the City of Yellville have Low to Moderate Income (LMI). LMI individuals or families refers to individuals or families whose household income is below 50 or 80 percent of the median income for the area when adjusted for family size. This makes Yellville eligible for the Community Development Block Grant Program (CDGB) through the Arkansas Economic Development Commission (AEDC) as well.

DEVELOPMENT AND SCREENING OF ALTERNATIVES

Several options were considered to determine the best manner in which to improve the existing sewer collection system and two alternatives were ultimately developed for further evaluation and comparison. A detailed evaluation of each alternative is provided on the following pages. A map of the proposed improvements can be found in Appendix B.

A. Alternatives Considered

The alternatives considered are as follows:

1. Alternative 1

This alternative would consist of digging up and replacing a total of 4,160 feet of damaged pipe and twenty-two manholes in two separate phases. Phase I would consist of digging up and replacing 1,400 feet of existing 8” gravity sewer main with 8” PVC as well as nine manholes. Phase II consists of digging up and replacing thirteen manholes and the remaining 2,760 feet of sewer main with 8”, 12”, and 18” PVC sewer main.

2. Alternative 2

This alternative would consist of constructing sewer mains parallel to the existing damaged pipes in order to replace them in the system.

3. Alternative 3

This alternative would consist of no improvements to the existing system and the residents in the surrounding areas will be negatively affected by the continual overflows of the sanitary sewer system.

After careful consideration of several factors, Alternative 2 was determined to be unfeasible. Constructing alongside the existing mains would require obtainment of several easements in areas where it wouldn't be possible. Additionally, the expected high cost for this alternative would be too much for the City of Yellville and would burden the residents financially. As a result, this alternative was not evaluated any further and only Alternatives 1 and 3 will be discussed in the following pages.

B. Environmental Impact

The potential for environmental impact resulting from Alternatives 1 and 2 is very low and consists of impacts from replacement of sewer mains. Best management practices will be utilized to mitigate potential adverse impacts associated with replacement of the sewer mains. On the other hand, the environmental impact for Alternative 3 could be very high. If the issues in the existing system aren't treated and SSOs continue to occur, the bodies of water in close proximity to the area would be adversely affected, negatively impacting the wildlife as well.

COST EFFECTIVE ANALYSIS

A. Cost Estimates

Cost estimates for the two alternatives deemed feasible can be found below:

1. Alternative 1

Cost estimates for the proposed improvements (Phase I, Phase II) are included in Figure 4.1 and Figure 4.3 below.

Figure 4.1 Cost Estimate – Alternative 1 (Phase I)

**PRELIMINARY OPINION OF PROBABLE COST
Sewer Collection System Rehabilitation - Phase I
City of Yellville, Arkansas
October 14, 2019**

Item No.	Est. Quantity	Unit	Item Description	Unit Price	Extension
1	1,400	LF	8" SDR 26 PVC Sewer Line (ASTM D3034)	\$ 45.00	\$ 63,000.00
2	9	EA	4' Cast-In-Place Concrete Manhole	\$ 4,000.00	\$ 36,000.00
3	40	LF	Gravel Driveway Restoration	\$ 20.00	\$ 800.00
4	120	LF	Gravel Road Restoration	\$ 35.00	\$ 4,200.00
5	12	EA	Service Wyes	\$ 150.00	\$ 1,800.00
6	6	EA	Reconnect Existing Laterals	\$ 1,000.00	\$ 6,000.00
7	1	LS	Bypass Pumping	\$ 15,000.00	\$ 15,000.00
8	1	LS	One-Year Maintenance Bond	\$ 5,000.00	\$ 5,000.00
9	1	LS	Erosion Control	\$ 5,000.00	\$ 5,000.00
10	1	LS	OSHA's Standard for Trenches Safety System	\$ 10,000.00	\$ 10,000.00
11	250	CY	Rock Excavation	\$ 50.00	<u>\$ 12,500.00</u>
Subtotal Construction Costs					\$ 159,300.00
Construction Contingency (10%)					\$ 15,930.00
Engineer's Opinion of Probable Construction Costs					\$ 175,230.00
Basic Engineering (10%)					\$ 16,000.00
Construction Observation (4.5%)					\$ 7,000.00
Legal					\$ 1,000.00
Administrative					<u>\$ 1,000.00</u>
ENGINEER'S OPINION OF PROBABLE PROJECT COSTS					<u>\$ 200,000.00</u>

Figure 4.2 Cost Estimate – Alternative 1 (Phase II)

**PRELIMINARY OPINION OF PROBABLE COST
Sewer Collection System Rehabilitation - Phase II
City of Yellville, Arkansas
October 14, 2019**

Item No.	Est. Quantity	Unit	Item Description	Unit Price	Extension
1	1,380	LF	18" SDR 26 PVC Sewer Line (ASTM D3034)	\$ 85.00	\$ 117,300.00
2	680	LF	12" SDR 26 PVC Sewer Line (ASTM D3034)	\$ 60.00	\$ 40,800.00
3	700	LF	8" SDR 26 PVC Sewer Line (ASTM D3034)	\$ 45.00	\$ 31,500.00
4	13	EA	4' Cast-In-Place Concrete Manhole	\$ 4,000.00	\$ 52,000.00
5	40	LF	8" Highway Bore with Steel Encasement	\$ 500.00	\$ 20,000.00
6	45	LF	18" Highway Bore with Steel Encasement	\$ 650.00	\$ 29,250.00
7	1,670	LF	Paved Road Restoration	\$ 100.00	\$ 167,000.00
8	35	LF	Paved Driveway Restoration	\$ 50.00	\$ 1,750.00
9	40	LF	8" Creek Crossing with Concrete Encasement	\$ 150.00	\$ 6,000.00
10	100	LF	18" Creek Crossing with Concrete Encasement	\$ 200.00	\$ 20,000.00
11	20	EA	Service Wyes	\$ 150.00	\$ 3,000.00
12	9	EA	Reconnect Existing Laterals	\$ 1,000.00	\$ 9,000.00
13	1	LS	Bypass Pumping	\$ 30,000.00	\$ 30,000.00
14	1	LS	One-Year Maintenance Bond	\$ 10,000.00	\$ 10,000.00
15	1	LS	Erosion Control	\$ 10,000.00	\$ 10,000.00
16	1	LS	OSHA's Standard for Trenches Safety System	\$ 20,000.00	\$ 20,000.00
17	600	CY	Rock Excavation	\$ 50.00	\$ 30,000.00
18	1	LS	Lift Station Improvements	\$ 150,000.00	\$ 150,000.00
Subtotal Construction Costs					\$ 747,600.00
Construction Contingency (10%)					\$ 74,760.00
Engineer's Opinion of Probable Construction Costs					\$ 822,360.00
Basic Engineering (8.5%)					\$ 64,000.00
Construction Observation (4%)					\$ 30,000.00
Legal					\$ 2,500.00
Administrative					\$ 2,000.00
ENGINEER'S OPINION OF PROBABLE PROJECT COSTS					<u>\$ 921,000.00</u>

2. Alternative 2

There is no formal cost estimate for this alternative, as no improvements will be undertaken. It is important to note, however, that there are several real costs associated with this option. One major cost is the environmental impact it would have on the Crooked River and ultimately the White River. As mentioned in the previous sections, the five locations in which the majority of the overflows occurred are either near a tributary of Town Branch Creek, or directly by it. Town Branch discharges into Crooked

Creek, which itself discharges to the White River. If the issues continue to go unaddressed, the water quality of all these bodies of water could be negatively affected and as a result tourism in the surrounding cities would be as well. Additionally, if the issues in the sewer system aren't corrected, the City of Yellville will continually be in violation of their permit and will face multiple fees.

B. Operation, Maintenance and Replacement Costs

1. Alternative 1

The operation, maintenance and replacement costs after construction of the project with Alternative 1 are expected to decrease. This is primarily due to the repairs and maintenance expenses anticipated to decrease after the improvements. However, they aren't expected to decrease by a significant amount. Partially repairing systems with infiltration and inflow issues is complicated and doesn't always immediately yield results. The anticipated OM&R costs for Alternative 1 are demonstrated in Figure 4.3 below.

Figure 4.3 Total Annual OM&R Costs After Project (Alternative 1)

Expense	Cost
Administrative Fees	\$ 5,145.00
Bad Debts	\$ 801.00
Dues and Fees	\$ 1,715.00
Insurance - general	\$ 1,303.00
Insurance - health	\$ 6,569.00
Miscellaneous	\$ 59.00
Professional Fees	\$ 3,568.00
Pension Expense	\$ 4,204.00
Repairs and Maintenance	\$ 43,681.00
Salaries	\$ 41,319.00
Supplies - Office	\$ 2,456.00
Supplies - Operating	\$ 15,246.00
Taxes - Payroll	\$ 3,151.00
Utilities	\$ 27,854.00
Debt Service	\$ 59,525.00
Replacement Reserve	\$ 161,657.00
TOTAL O&M COSTS	\$ 378,253.00

C. Salvage Value

Alternative 1 does not include any items with salvage value.

D. Present Worth

Figure 4.4 Summary of Capital Cost / Present Worth of Alternative 1

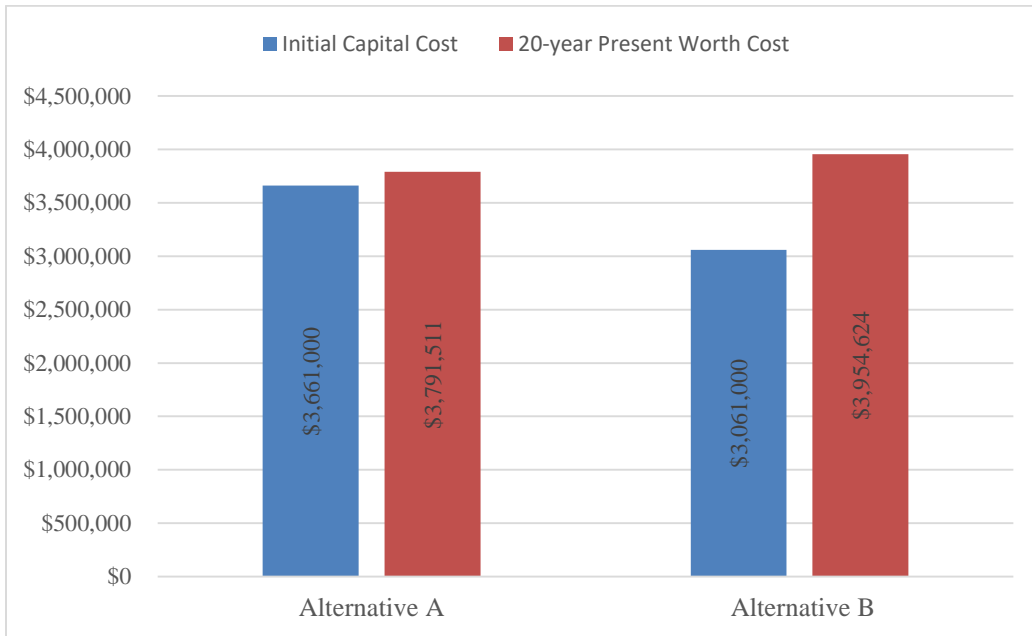


Figure 4.5 Cost Summary for Alternative 1 – Phase I

ITEM	VALUE
Initial Costs Total	\$200,000
Annual Operation and Maintenance	\$228,478
Initial Cost of Construction Items with Future Salvage Value	\$0
Salvage Value at Year 20 (50 Year Design Life)	\$0

Figure 4.6 Cost Summary for Alternative 1 – Phase II

ITEM	VALUE
Initial Costs Total	\$921,000
Annual Operation and Maintenance	\$228,478
Initial Cost of Construction Items with Future Salvage Value	\$0
Salvage Value at Year 20 (50 Year Design Life)	\$0

Figure 4.7 20 Year Present Worth Analysis for Alternative 1 – Phase I

ALTERNATIVE 1 – Phase I		
20-YEAR PRESENT WORTH ANALYSIS		
Planning Period: 20 Years		
*Real Interest Rate - 20 Years: 1.5%		
20 Year Present Worth (PW) of Constant Annual O&M Cost (P/A): 17.16864		
20 Year Present Worth (PW) of Salvage Value (P/F): 0.74247		
Itemized Depreciation:	Initial Cost	Present Worth
Initial Cost of Project:	\$200,000	\$200,000
Constant Annual Operation & Maintenance Cost:	\$228,478	\$
Salvage at Year 20 (50-year design life):	(\$0)	(\$0)
TOTAL PRESENT WORTH COSTS		
*interest rate source OMB Circular No. A94: Appendix C		\$

Figure 4.8 20 Year Present Worth Analysis for Alternative 1 – Phase II

ALTERNATIVE 1 – Phase II		
20-YEAR PRESENT WORTH ANALYSIS		
Planning Period: 20 Years		
*Real Interest Rate - 20 Years: 1.5%		
20 Year Present Worth (PW) of Constant Annual O&M Cost (P/A): 17.16864		
20 Year Present Worth (PW) of Salvage Value (P/F): 0.74247		
Itemized Depreciation:	Initial Cost	Present Worth
Initial Cost of Project:	\$921,000	\$921,000
Constant Annual Operation & Maintenance Cost:	\$228,478	\$
Salvage at Year 20 (50-year design life):	(\$0)	(\$0)
TOTAL PRESENT WORTH COSTS		
*interest rate source OMB Circular No. A94: Appendix C		\$

SELECTED ALTERNATIVE

Alternative A is recommended for the improvements to the sanitary sewer collection system. It is the least costly option and is anticipated to decrease O&M costs as well. Even though it is not anticipated to resolve all the issues in the system, it will be sufficient to decrease the frequency of the SSOs while being affordable enough to not burden the residents of Yellville. There are also several additional non-monetary factors to consider when selecting the best options for the City of Yellville. The most important non-monetary factor is the security and safety of a functioning sanitary sewer collection system for the residents in the city. In order to safeguard the health of the residents and the environment, the option to do nothing, Alternative C, is not recommended and therefore should not be considered as an option.

A. Land Requirements

No easements will be required for the project as the rehabilitation and replacement of sewer mains will be at the location of the existing system.

B. O&M Staff Required

Due to the nature of the project, it will not require any new staff to be hired to operate and maintain the system once constructed.

C. Environmental Permits

The following permits may be required for the proposed project.

- Construction Permit.
- U.S. Army Corps of Engineers Section 404 Permit

D. Potential Construction Issues

Some of the proposed sewer mains will be constructed through areas of rocky and steep terrain, making excavation difficult, but generally there should be no major construction problems.

E. Operation, Maintenance, and Replacement Costs

Existing annual operating and maintenance costs for both sewer and water are shown in Figure 5.1 below, as well as the proposed OM&R expenses for after construction in Figure 5.2. As previously mentioned, a decrease to the operating and maintenance costs is anticipated after construction of the project due to an anticipated decrease in the amount spent on repairing and maintaining the system.

Figure 5.1 Existing Annual Water and Sewer Operating and Maintenance Costs

Expense	Cost	
	Water	Sewer
Administrative Fees	\$ 5,145.00	\$ 5,145.00
Bad Debts	\$ 801.00	\$ 801.00
Dues and Fees	\$ 9,879.00	\$ 1,715.00
Insurance - general	\$ 542.00	\$ 1,303.00
Insurance - health	\$ 13,137.00	\$ 6,569.00
Miscellaneous	\$ 903.00	\$ 59.00
Professional Fees	\$ 3,568.00	\$ 3,568.00
Pension Expense	\$ 7,473.00	\$ 4,204.00
Repairs and Maintenance	\$ 64,252.00	\$ 48,681.00
Salaries	\$ 58,311.00	\$ 41,319.00
Supplies - Office	\$ 7,545.00	\$ 2,456.00
Supplies - Operating	\$ 34,908.00	\$ 15,246.00
Taxes - Payroll	\$ 5,359.00	\$ 3,151.00
Utilities	\$ 17,851.00	\$ 27,854.00
Water Purchases	\$ 240,238.00	-
Debt Service	\$ 59,525.00	\$ 59,525.00
Replacement Reserve	\$ 161,657.00	\$ 161,657.00
	\$ 691,094.00	\$ 383,253.00

Figure 5.2 Proposed Annual Sewer Operating and Maintenance Costs

Expense	Cost
Administrative Fees	\$ 5,145.00
Bad Debts	\$ 801.00
Dues and Fees	\$ 1,715.00
Insurance - general	\$ 1,303.00
Insurance - health	\$ 6,569.00
Miscellaneous	\$ 59.00
Professional Fees	\$ 3,568.00
Pension Expense	\$ 4,204.00
Repairs and Maintenance	\$ 43,681.00
Salaries	\$ 41,319.00
Supplies - Office	\$ 2,456.00
Supplies - Operating	\$ 15,246.00
Taxes - Payroll	\$ 3,151.00
Utilities	\$ 27,854.00
Debt Service	\$ 59,525.00
Replacement Reserve	\$ 161,657.00
TOTAL O&M COSTS	\$ 378,253.00

F. Funding Proposals

USDA Rural Development uses Median Household Income (MHI) from the 2010 U.S. Census to determine interest rate and grant eligibility for water and wastewater projects. Those requirements are as follows:

MHI > \$40,956	May be considered for market rate interest with <i>no</i> grant. Present market rate is 3.000%.
$\$32,765 \leq \text{MHI} \leq \$40,956$	May be considered for intermediate interest rate, presently 2.375%, and up to 45% grant.
MHI < \$32,765	May be considered for low interest rate, presently 1.750%, and up to 75% grant.

Yellville's MHI is \$28,019, making this project eligible for a low interest rate loan, presently 2.500%, and up to a 75% grant under USDA Rural Development funding eligibility criteria. It should be noted, however, that an additional condition for qualification of the 75% grant is the existence of an imminent health risk for the customers in the proposed service area as determined by USDA. Therefore, under USDA Rural Development funding eligibility criteria, the project is eligible for both an intermediate interest rate of 2.375% and a grant of up to 45% the project's total cost.

1. PHASE I: Funding Proposal 1-USDA Loan Only

Phase I - Debt Repayment (USDA Loan Only)

If the proposed project's Phase I is funded completely by a USDA Rural Development loan, the following financing would be needed:

Figure 5.3 Funding Proposal 1: If USDA Loan Only

USDA Loan	\$200,000
Total Funding Needed	\$200,000

Under this funding proposal at 2.375% interest for a 40-year loan (with a 40-year payback), the annual amount needed for debt repayment with a 10% debt reserve would be as follows:

**Figure 5.4 Monthly Debt Repayment/Reserve for Funding Proposal 1
(USDA Loan Only)**

Debt Repayment	\$646
Debt Reserve (10%)	\$65
Total	\$710
Per Customer Cost	\$1.35

**Figure 5.5 Amount Needed per Customer per Month for Funding Proposal 1
(USDA Loan Only)**

Operation & Maintenance	\$36.06
Debt Repayment	\$1.35
Total	\$37.41

2. PHASE II: Funding Proposal 1- USDA Loan Only

Phase II - Debt Repayment (USDA Loan Only)

If the proposed project’s phase II is funded completely by a loan from USDA Rural Development, the following financing would be needed:

Figure 5.6 Funding Proposal 1: If USDA Loan Only

USDA Loan	\$921,000
Total Funding Needed	\$921,000

Under this funding proposal at 2.375% interest for a 40-year loan (with a 40-year payback), the annual amount needed for debt repayment with a 10% debt reserve would be as follows:

**Figure 5.7 Monthly Debt Repayment/Reserve for Funding Proposal 1
(USDA Loan Only)**

Debt Repayment	\$2,974
Debt Reserve (10%)	\$297
Total	\$3,272
Per Customer Cost	\$6.20

**Figure 5.8 Amount Needed per Customer per Month for Funding Proposal 1
(USDA Loan Only)**

Operation & Maintenance	\$36.06
Debt Repayment	\$6.20
Total	\$42.26

For the income levels of the area, the required sewer rates for this proposal are very high for both phases in the project. If available, it is recommended the City of Yellville pursue grant funding in order to bring revenues needed from customers to a manageable level.

3. PHASE I - Funding Proposal 2 - CDBG from AEDC

As mentioned previously, due to over 51% of the residents having low to moderate income, the City of Yellville could also pursue funds from the Community Development Block Grant Program (CDGB) through the Arkansas Economic Development Commission (AEDC). Approximately 51.12% percent of the residents in Yellville have Low to Moderate Income, making this project eligible for CDBG funding.

If Phase I of the project is funded by a Community Development Block Grant, the water and sewer rates for the residents of Yellville would not have to increase.

4. PHASE II - Funding Proposal 2- USDA Loan/USDA Grant

Phase II - Debt Repayment (USDA Loan/USDA Grant)

If the proposed project’s phase II is funded both by a loan and a 45% grant of the total project cost from USDA Rural Development, the following financing would be needed:

Figure 5.9 Funding Proposal 2: If USDA Loan/USDA Grant

USDA Loan	\$506,550
USDA Grant (45%)	\$414,450
Customer Contribution	\$0
Total Funding Needed	\$921,000

**Figure 5.10 Monthly Debt Repayment/Reserve for Funding Proposal 2
(USDA Loan/USDA Grant)**

Debt Repayment	\$1,636
Debt Reserve (10%)	\$164
Total	\$1,799
Per Customer Cost	\$3.41

**Figure 5.11 Amount Needed per Customer per Month for Funding Proposal 2
(USDA Loan/USDA Grant)**

Operation & Maintenance	\$36.06
Debt Repayment	\$3.41
Total	\$39.47

G. Water & Sewer Rates

The existing water and sewer rates for the City of Yellville are shown in Figure 5.12 through Figure 5.16 below. The minimum sewer bill for a typical residence using 4000 gallons is \$28.00 a month and is \$40.35 for an industry or wholesale customer. The minimum sewer rate for a residential or commercial customer is \$16.00 with a health department fee of \$0.30. The minimum water bill for a typical residence using 4000 gallons is \$31.60 if it's inside the city, \$40.35 if it's outside the city, and \$44.25 if its on a rural extension.

Figure 5.12 City of Yellville Existing Sewer Rates

Water Consumption (Gal)	Rates (\$/Mo)	
	Residential, Housing/Commercial, Industrial	Industrial and Wholesale
0 – 1000	\$16.30 (Minimum)	\$30.00
EACH ADDITIONAL 1000	\$3.95	\$3.45

Figure 5.13 City of Yellville Existing Residential & Housing (3/4", 1", 2" Meter) Water Rates

Water Consumption (Gal)	Rates (\$/Mo)		
	Inside City	Outside City	Rural
0 – 1000	\$15.55 (Minimum)	\$30.00	\$24.30
EACH ADDITIONAL 1000	\$5.35	\$3.45	\$6.65

Figure 5.14 City of Yellville Existing Commercial & Industrial (3/4" Meter) Water Rates

Water Consumption (Gal)	Rates (\$/Mo)	
	Inside City	Outside City
0 – 1000	\$17.30 (Minimum)	\$21.65
EACH ADDITIONAL 1000	\$5.35	\$6.65

Figure 5.15 City of Yellville Existing Commercial & Industrial (1" Meter) Water Rates

Water Consumption (Gal)	Rates (\$/Mo)	
	Inside City	Outside City
0 – 1000	\$20.05 (Minimum)	\$23.05
EACH ADDITIONAL 1000	\$5.35	\$6.65

Figure 5.16 City of Yellville Existing Commercial & Industrial (2" Meter) Water Rates

Water Consumption (Gal)	Rates (\$/Mo)	
	Inside City	Outside City
0 – 1000	\$22.55 (Minimum)	\$26.05
EACH ADDITIONAL 1000	\$5.35	\$6.65

H. Project Schedule

The proposed project will follow the tentative schedule as outlined in Figure 5.17 below.

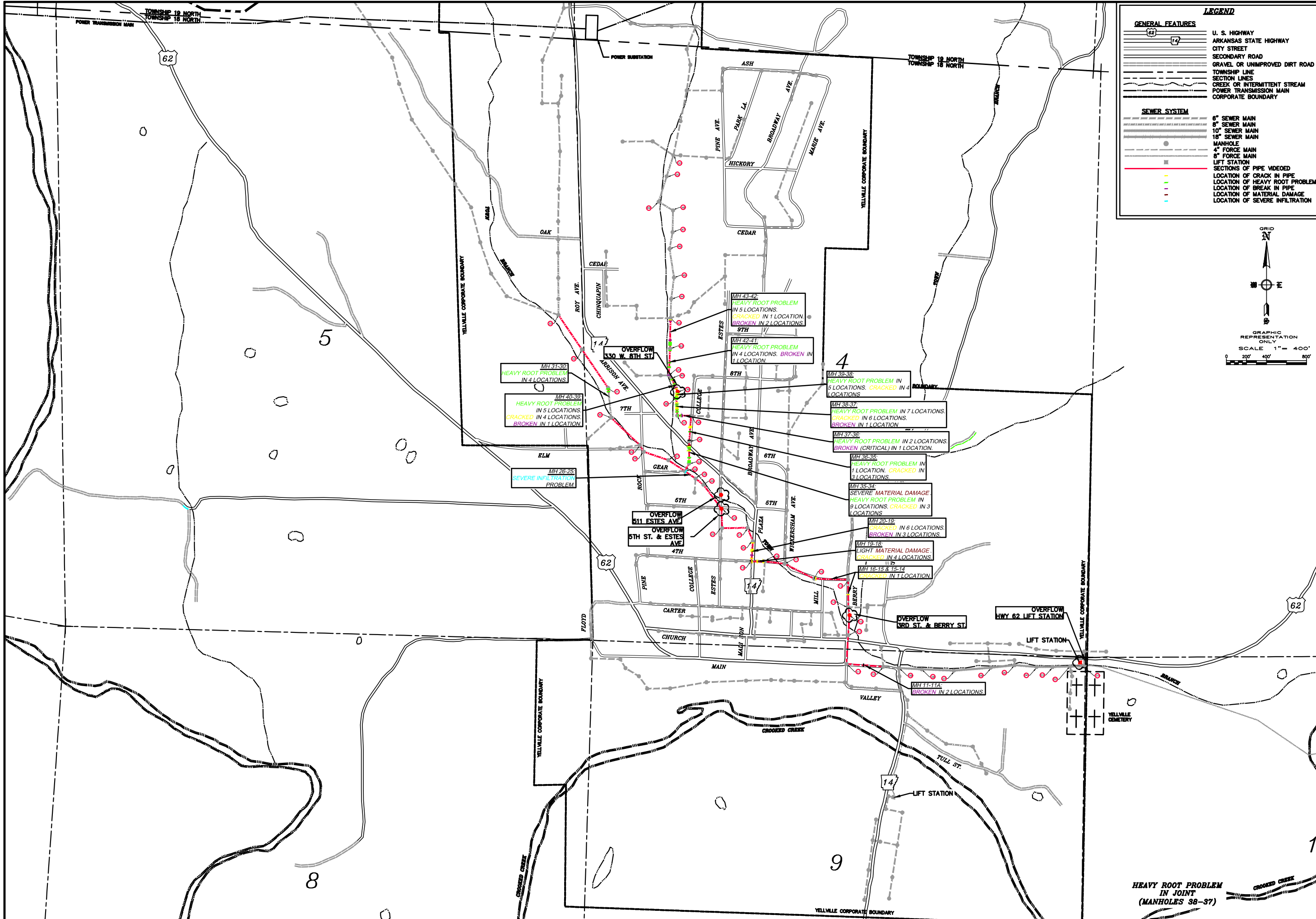
Figure 5.17 Proposed Project Schedule

<u>Project Milestone</u>	<u>Date</u>
Preliminary Engineering Report Submittal & Application	Oct, 2019
Request for Environmental Information	Oct, 2019
Preliminary Engineering Report Revise & Resubmit	Dec, 2019
Environmental Report Submittal	Jan, 2020
Funding Announcement	Dec, 2020
Draft Plans and Specifications Submittal	Mar, 2021
Final Plans and Specifications Submittal	May, 2021
Easement Acquisition	July, 2021
Advertisement for Bids	Aug, 2021
Bid Opening	Oct, 2021
Loan Closing	Dec, 2021
Contract Award	Dec, 2021
Construction Permit Application	Jan, 2022
NPDES Stormwater Permit Application	Jan, 2022
Start of Construction	Feb, 2022
Substantial Completion	Dec, 2022
Final Completion	Jan, 2023
Initiation of Operation	Jan, 2023

I. Design Calculations

The proposed project intends to replace the existing damaged sewer mains with pipes of the same size; therefore, no sizing calculations were done.

PER
APPENDIX A
Existing System Map



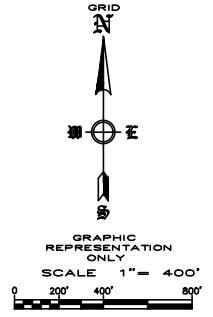
LEGEND

GENERAL FEATURES

- U. S. HIGHWAY
- ARKANSAS STATE HIGHWAY
- CITY STREET
- SECONDARY ROAD
- GRAVEL OR UNIMPROVED DIRT ROAD
- TOWNSHIP LINE
- SECTION LINES
- CREEK OR INTERMITTENT STREAM
- POWER TRANSMISSION MAIN
- CORPORATE BOUNDARY

SEWER SYSTEM

- 6" SEWER MAIN
- 8" SEWER MAIN
- 10" SEWER MAIN
- 18" SEWER MAIN
- MANHOLE
- 4" FORCE MAIN
- 8" FORCE MAIN
- LIFT STATION
- SECTIONS OF PIPE VIDEOED
- LOCATION OF CRACK IN PIPE
- LOCATION OF HEAVY ROOT PROBLEM
- LOCATION OF BREAK IN PIPE
- LOCATION OF MATERIAL DAMAGE
- LOCATION OF SEVERE INFILTRATION



ENGINEERING SERVICES INC.
BRINDLE, ARKANSAS 72764

**SANITARY SEWER COLLECTION SYSTEM REHABILITATION
SEWER COLLECTION SYSTEM REHABILITATION
YELLVILLE, MARION COUNTY, ARKANSAS**

REVISION	DATE	DESCRIPTION

SCALE: 1" = 400'
DATE: Oct 15, 2019
W.O. # 19804

HEAVY ROOT PROBLEM IN JOINT (MANHOLES 38-37)

PER
APPENDIX B

Preliminary Layout Map – Alternative 1

ENGINEERING SERVICES, INC.

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(479) 751-8733 • (479) 751-8746 FAX • www.engineeringservices.com



ENGINEERING SERVICES INC.
BRINDALE, ARKANSAS 72764

**PROPOSED IMPROVEMENTS
SEWER COLLECTION SYSTEM REHABILITATION
YELLVILLE, MARION COUNTY, ARKANSAS**

LEGEND

GENERAL FEATURES

- U. S. HIGHWAY
- ARKANSAS STATE HIGHWAY
- CITY STREET
- SECONDARY ROAD
- GRAVEL OR UNIMPROVED DIRT ROAD
- TOWNSHIP LINE
- SECTION LINES
- CREEK OR INTERMITTENT STREAM
- POWER TRANSMISSION MAIN
- CORPORATE BOUNDARY

SEWER SYSTEM

- 6" SEWER MAIN
- 8" SEWER MAIN
- 10" SEWER MAIN
- 18" SEWER MAIN
- MANHOLE
- 4" FORCE MAIN
- 8" FORCE MAIN
- LIFT STATION
- SECTIONS OF PIPE VIDEOED

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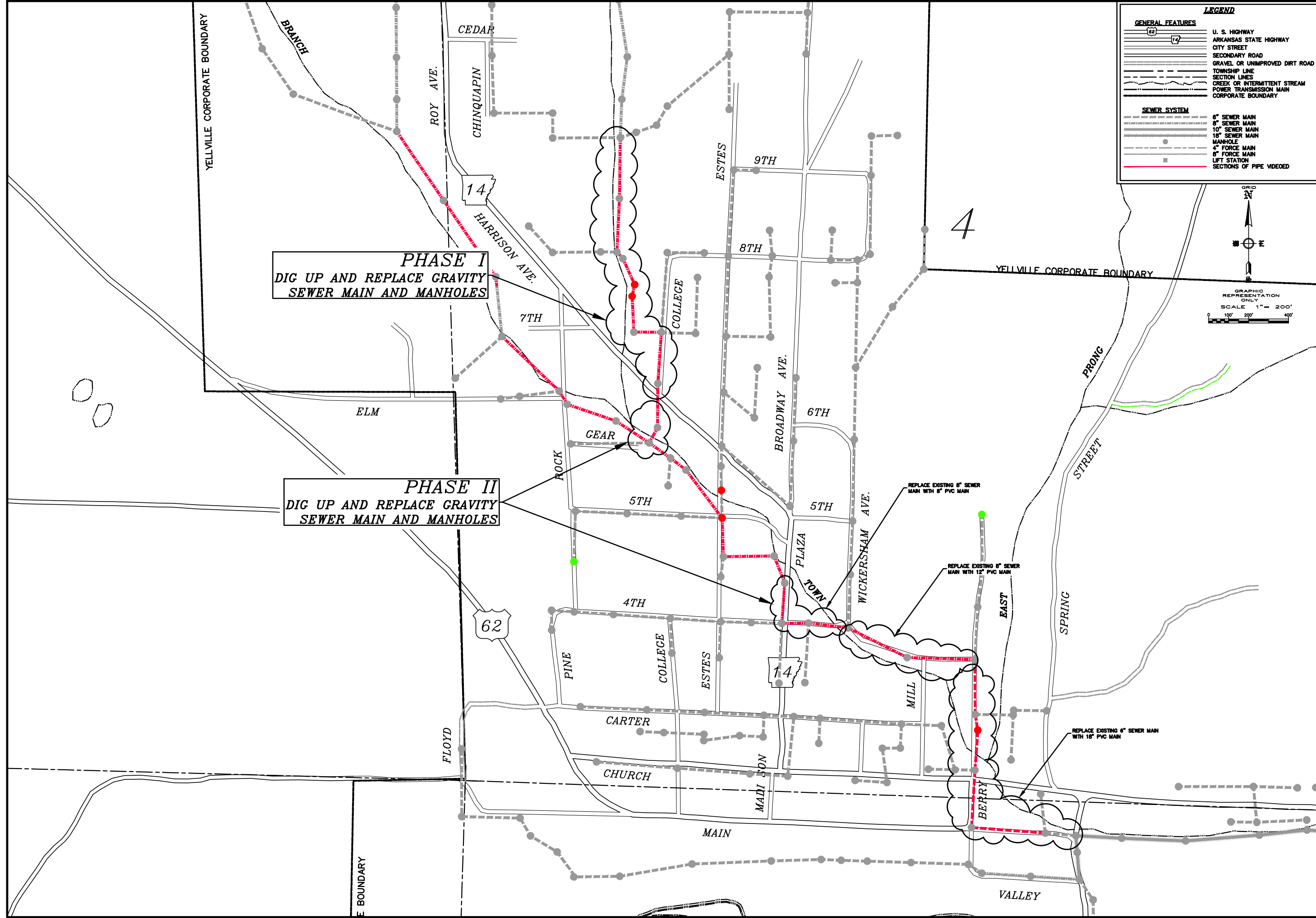
GRAPHIC REPRESENTATION ONLY

SCALE 1" = 200'

0 100' 200' 400'

**PHASE I
DIG UP AND REPLACE GRAVITY
SEWER MAIN AND MANHOLES**

**PHASE II
DIG UP AND REPLACE GRAVITY
SEWER MAIN AND MANHOLES**



REVISION	DATE	DESCRIPTION

SCALE: 1"=200'

DATE: Oct 15, 2019

W.O. # 19804

PER
APPENDIX C

Population Projections – Institute for Economic Advancement

ENGINEERING SERVICES, INC.

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	YEAR	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
LittleRiverCounty_H	History	12,920	12,730									
LittleRiverCounty_F	Fitted values	12951.93	12887.33							12064.23	12004.06	11932.25
LittleRiverCounty_L	Lower confidence limits			12531.49	12431.64	12344.92	12271.07	12197.67	12124.7	12493.95	12456.53	12419.21
LittleRiverCounty_U	Point forecasts			12913.13	12938.98	12951.93	12951.93	12951.93	12938.98	12938.98	12926.05	12913.13
LoganCounty_H	Upper confidence limits											
LoganCounty_F	History	21,987	22,082									
LoganCounty_L	Fitted values	22247.84	21872.82							20619.65	20475.82	20353.33
LoganCounty_U	Lower confidence limits			21698.53	21439.71	21226.38	21057.25	20910.36	20764.5	21655.18	21590.31	21525.64
LonokeCounty_H	Point forecasts			22026.47	21960.49	21894.7	21829.12	21763.73	21698.53	22719.98	22742.71	22742.71
LonokeCounty_F	Upper confidence limits			22359.35	22493.91	22584.07	22629.28	22674.59	22697.27			
LonokeCounty_L	History	70,025	70,753									
LonokeCounty_U	Fitted values	70192.73	70685.8							70333.25	70615.15	70969.11
MadisonCounty_H	Lower confidence limits			70262.96	69703.09	69633.43	69703.09	69842.64	70052.48	75886.95	76649.63	77497.43
MadisonCounty_F	Point forecasts			71467.64	72185.9	72911.38	73644.15	74384.29	75131.86	81961.1	83199.78	84541.68
MadisonCounty_L	Upper confidence limits			72692.97	74757.14	76343.64	77808.04	79221.26	80579.54			
MadisonCounty_U	History	15,615	15,701									
MarionCounty_H	Fitted values	15709.17	15584							14328.42	14242.7	14171.67
MarionCounty_F	Lower confidence limits			15321.31	14987.92	14794.34	14647.13	14515.9	14414.65	15978.51	16010.5	16058.6
MarionCounty_L	Point forecasts			15740.62	15772.13	15819.52	15851.19	15898.82	15930.65	17818.63	17997.71	18196.78
MarionCounty_U	Upper confidence limits			16171.41	16597.38	16915.74	17171.39	17396.08	17606.09			
MillerCounty_H	History	16,599	16,430									
MillerCounty_F	Fitted values	16547.66	16580.79							14002.62	13780.36	13575.2
MillerCounty_L	Lower confidence limits			15898.82	15413.51	15047.99	14750.02	14486.9	14228.47	15615.2	15490.78	15367.34
MillerCounty_U	Point forecasts			16333.93	16219.99	16090.75	15962.54	15851.19	15724.89	17396.08	17413.48	17413.48
MississippiCounty_H	Upper confidence limits			16797.75	17068.67	17205.77	17292.01	17343.97	17378.69			
MississippiCounty_F	History	43,620	43,402									
MississippiCounty_L	Fitted values	43958.44	43826.77							42916	43001.92	43044.94
MississippiCounty_U	Lower confidence limits			42958.94	42873.11	42830.25	42830.25	42873.11	42873.11	44622.79	44756.86	44936.25
MonroeCounty_H	Point forecasts			43564.59	43739.2	43914.51	44090.52	44267.23	44444.66	46351.09	46630.03	46957.58
MonroeCounty_F	Upper confidence limits			44178.79	44622.79	45026.21	45387.86	45706.69	46027.76			
MonroeCounty_L	History	45,529	44,765									
MonroeCounty_U	Fitted values	45706.69	45161.49							38832	38292.14	37797.57
MonroeCounty_H	Lower confidence limits			43044.94	42108.29	41357.13	40660	40014.61	39418.87	42319.36	41940.2	41606.01
MonroeCounty_F	Point forecasts			44400.23	44046.45	43695.48	43347.31	43001.92	42659.28	46073.81	45981.76	45844.02
MonroeCounty_L	Upper confidence limits			45798.2	46073.81	46166.05	46212.24	46212.24	46119.91			
MonroeCounty_U	History	7,854	7,682									
MonroeCounty_H	Fitted values	7934.693	7731.05							6216.734	6057.182	5901.725
MonroeCounty_F	Lower confidence limits			7383.477	7143.799	6932.668	6734.508	6555.109	6380.489	6620.989	6483.398	6348.666
MonroeCounty_L	Point forecasts			7532.634	7368.725	7215.595	7065.648	6911.901	6768.265	7058.586	6939.604	6822.628
MonroeCounty_U	Upper confidence limits			7677.122	7608.338	7510.07	7405.661	7288.113	7179.608			

	YEAR	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
LittleRiverCounty_H	History											
LittleRiverCounty_F	Fitted values											
LittleRiverCounty_L	Lower confidence limits	11872.74	11813.52	11766.36	11707.68	11649.28	11591.18	11544.91	11487.33	11441.47	11384.41	11338.96
LittleRiverCounty_U	Upper confidence limits	12913.13	12887.33	12874.45	12861.58	12848.73	12835.88	12810.24	12797.43	12771.87	12759.1	12733.61
LoganCounty_H	History											
LoganCounty_F	Fitted values											
LoganCounty_L	Lower confidence limits	20231.58	20110.55	20010.25	19890.55	19791.35	19672.95	19574.83	19477.2	19380.06	19283.4	19187.23
LoganCounty_U	Upper confidence limits	22765.47	22765.47	22765.47	22765.47	22742.71	22742.71	22742.71	22719.98	22719.98	22697.27	22674.59
LonokeCounty_H	History											
LonokeCounty_F	Fitted values											
LonokeCounty_L	Lower confidence limits	71324.84	71682.36	72113.75	72475.22	72911.38	73350.16	73791.59	74309.94	74757.14	75207.03	75735.33
LonokeCounty_U	Upper confidence limits	85819.37	87116.36	88432.96	89679.73	91035.06	92318.52	93620.06	94939.96	96182.24	97538.26	98913.4
MadisonCounty_H	History											
MadisonCounty_F	Fitted values											
MadisonCounty_L	Lower confidence limits	14100.99	14044.69	13974.65	13932.79	13877.17	13835.6	13794.15	13752.83	13711.63	13670.56	13643.25
MadisonCounty_U	Upper confidence limits	18361.29	18545.83	18713.49	18863.8	19034.34	19187.23	19341.34	19496.69	19653.29	19791.35	19950.31
MarionCounty_H	History											
MarionCounty_F	Fitted values											
MarionCounty_L	Lower confidence limits	13373.09	13187.17	13003.84	12823.05	12644.78	12481.46	12320.26	12161.13	12004.06	11849.01	11707.68
MarionCounty_U	Upper confidence limits	17396.08	17378.69	17361.32	17343.97	17309.31	17274.73	17240.21	17205.77	17154.23	17119.95	17068.67
MillerCounty_H	History											
MillerCounty_F	Fitted values											
MillerCounty_L	Lower confidence limits	43131.12	43174.27	43260.71	43347.31	43434.09	43521.05	43608.18	43695.48	43782.96	43870.61	44002.42
MillerCounty_U	Upper confidence limits	47240.18	47524.47	47810.47	48098.2	48387.66	48678.85	48971.8	49217.28	49513.47	49761.66	50061.12
MississippiCounty_H	History											
MississippiCounty_F	Fitted values											
MississippiCounty_L	Lower confidence limits	37272.09	36790.69	36315.5	35882.32	35418.87	34996.38	34578.94	34166.47	33758.92	33356.24	32958.35
MississippiCounty_U	Upper confidence limits	41274.49	40945.61	40619.36	40295.7	39974.62	39656.1	39340.11	39026.65	38715.68	38368.8	38063.08
MonroeCounty_H	History											
MonroeCounty_F	Fitted values											
MonroeCounty_L	Lower confidence limits	5750.258	5608.284	5469.815	5334.764	5203.049	5079.662	4954.245	4831.924	4717.338	4605.47	4496.255
MonroeCounty_U	Upper confidence limits	6210.521	6081.46	5949.128	5825.499	5704.439	5580.312	5464.348	5350.793	5234.361	5125.585	5014.054
MonroeCounty_U	Upper confidence limits	6707.624	6594.558	6476.918	6361.376	6247.896	6136.44	6026.972	5919.457	5808.049	5704.439	5597.078

	YEAR	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
LittleRiverCounty_H	History											
LittleRiverCounty_F	Fitted values											
LittleRiverCounty_L	Lower confidence limits	11282.41	11237.37	11192.51	11136.69	11092.23	11047.95	11003.84	10948.96	10905.25	10861.72	10818.36
LittleRiverCounty	Point forecasts	11980.07	11944.19	11908.41	11872.74	11837.17	11801.71	11766.36	11731.12	11695.97	11660.94	11626.01
LittleRiverCounty_U	Upper confidence limits	12720.88	12695.46	12670.1	12657.43	12632.14	12606.91	12594.3	12569.14	12544.03	12518.97	12493.95
LoganCounty_H	History											
LoganCounty_F	Fitted values											
LoganCounty_L	Lower confidence limits	19091.53	18996.31	18901.56	18807.29	18713.49	18638.79	18545.83	18453.33	18379.66	18287.99	18196.78
LoganCounty	Point forecasts	20806.07	20743.74	20681.61	20619.65	20557.89	20496.31	20434.91	20394.08	20332.99	20272.08	20211.36
LoganCounty_U	Upper confidence limits	22651.92	22651.92	22629.28	22606.66	22584.07	22561.5	22538.95	22516.42	22493.91	22471.43	22448.97
LonokeCounty_H	History											
LonokeCounty_F	Fitted values											
LonokeCounty_L	Lower confidence limits	76267.33	76726.31	77265.28	77808.04	78354.6	78905.01	79459.28	80017.45	80660.16	81226.76	81797.34
LonokeCounty	Point forecasts	87378.1	88256.27	89143.26	90129.25	91035.06	91949.98	92874.09	93807.49	94750.27	95702.53	96664.36
LonokeCounty_U	Upper confidence limits	100207.7	101518.9	102950.1	104297.2	105661.9	107044.5	108445.2	109864.2	111301.7	112758.1	114233.5
MadisonCounty_H	History											
MadisonCounty_F	Fitted values											
MadisonCounty_L	Lower confidence limits	13602.38	13575.2	13548.08	13521.01	13493.99	13467.03	13440.13	13426.69	13399.87	13386.47	13359.73
MadisonCounty	Point forecasts	16531.12	16580.79	16613.98	16663.9	16697.26	16730.69	16780.96	16814.55	16865.07	16898.84	16949.61
MadisonCounty_U	Upper confidence limits	20090.45	20231.58	20373.7	20516.81	20660.94	20806.07	20931.28	21078.31	21226.38	21354.12	21482.63
MarionCounty_H	History											
MarionCounty_F	Fitted values											
MarionCounty_L	Lower confidence limits	11556.46	11418.61	11282.41	11136.69	11003.84	10883.47	10753.64	10625.37	10498.63	10383.78	10259.92
MarionCounty	Point forecasts	14030.66	13918.86	13807.95	13711.63	13602.38	13507.5	13399.87	13293.09	13200.37	13095.19	12990.84
MarionCounty_U	Upper confidence limits	17017.54	16966.57	16915.74	16865.07	16814.55	16764.18	16697.26	16647.24	16580.79	16531.12	16465.13
MillerCounty_H	History											
MillerCounty_F	Fitted values											
MillerCounty_L	Lower confidence limits	44090.52	44178.79	44311.52	44400.23	44533.63	44622.79	44756.86	44846.46	44981.2	45071.26	45206.67
MillerCounty	Point forecasts	47098.67	47287.44	47476.97	47667.26	47858.31	48050.12	48242.71	48436.07	48581.59	48776.31	48971.8
MillerCounty_U	Upper confidence limits	50362.39	50614.84	50868.54	51174.67	51431.19	51740.7	52000.05	52260.7	52522.66	52838.74	53103.6
MississippiCounty_H	History											
MississippiCounty_F	Fitted values											
MississippiCounty_L	Lower confidence limits	32565.22	32208.96	31824.76	31476.61	31101.15	30760.91	30424.39	30091.56	29762.37	29436.77	29085.64
MississippiCounty	Point forecasts	37759.79	37458.91	37160.44	36864.34	36570.6	36279.21	35990.13	35703.36	35383.47	35101.53	34821.84
MississippiCounty_U	Upper confidence limits	43782.96	43608.18	43390.68	43174.27	42958.94	42744.68	42531.49	42319.36	42108.29	41898.28	41689.31
MonroeCounty_H	History											
MonroeCounty_F	Fitted values											
MonroeCounty_L	Lower confidence limits	4385.242	4281.249	4179.722	4080.603	3983.834	3893.252	3800.926	3710.79	3622.791	3540.418	3456.459
MonroeCounty	Point forecasts	4909.857	4807.825	4703.207	4605.47	4505.256	4411.632	4319.954	4225.953	4138.133	4052.138	3963.965
MonroeCounty_U	Upper confidence limits	5497.232	5393.771	5292.257	5192.653	5100.021	5004.036	4909.857	4817.45	4726.782	4637.821	4545.986

	YEAR	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055
LittleRiverCounty_H	History											
LittleRiverCounty_F	Fitted values											
LittleRiverCounty_L	Lower confidence limits	10775.17	10721.43	10678.63	10636	10593.54	10551.25	10509.13	10467.18	10425.4	10383.78	10342.33
LittleRiverCounty_U	Upper confidence limits	11591.18	11556.46	11521.84	11487.33	11452.92	11418.61	11384.41	11350.31	11316.31	11282.41	11248.61
LoganCounty_H	History											
LoganCounty_F	Fitted values											
LoganCounty_L	Lower confidence limits	18124.14	18033.74	17961.75	17872.17	17800.82	17729.76	17641.33	17570.91	17483.28	17413.48	17343.97
LoganCounty_U	Upper confidence limits	20150.81	20090.45	20030.27	19990.25	19930.37	19870.67	19811.15	19751.8	19692.64	19653.29	19594.42
LonokeCounty_H	History											
LonokeCounty_F	Fitted values											
LonokeCounty_L	Lower confidence limits	82371.93	83033.55	83616.82	84288.44	84880.53	85562.3	86163.33	86855.4	87553.03	88168.06	88876.23
LonokeCounty_U	Upper confidence limits	97635.85	98617.1	99608.22	100609.3	101620.4	102641.7	103777	104820	105873.5	106937.5	108012.3
MadisonCounty_H	History											
MadisonCounty_F	Fitted values											
MadisonCounty_L	Lower confidence limits	13346.37	13319.71	13306.39	13293.09	13279.81	13253.28	13240.03	13226.8	13213.58	13200.37	13187.17
MadisonCounty_U	Upper confidence limits	16983.54	17034.57	17068.67	17119.95	17154.23	17205.77	17240.21	17274.73	17326.63	17361.32	17413.48
MarionCounty_H	History											
MarionCounty_F	Fitted values											
MarionCounty_L	Lower confidence limits	10147.68	10026.63	9916.943	9808.455	9691.456	9585.435	9480.573	9376.858	9274.278	9172.82	9072.472
MarionCounty_U	Upper confidence limits	12900.22	12797.43	12708.17	12606.91	12506.45	12419.21	12320.26	12222.09	12136.83	12040.12	11956.14
MillerCounty_H	History											
MillerCounty_F	Fitted values											
MillerCounty_L	Lower confidence limits	45297.18	45433.27	45569.78	45661.01	45798.2	45935.8	46027.76	46166.05	46304.76	46443.88	46536.86
MillerCounty_U	Upper confidence limits	49168.08	49365.15	49563.01	49761.66	49961.1	50161.35	50362.39	50564.25	50716.17	50919.44	51123.52
MississippiCounty_H	History											
MississippiCounty_F	Fitted values											
MississippiCounty_L	Lower confidence limits	28796.24	28481.21	28169.64	27861.47	27556.67	27255.21	26984.02	26688.82	26396.85	26134.2	25848.3
MississippiCounty_U	Upper confidence limits	34544.37	34269.12	33996.06	33725.18	33456.45	33189.87	32925.41	32663.06	32370.41	32112.48	31856.6
MonroeCounty_H	History											
MonroeCounty_F	Fitted values											
MonroeCounty_L	Lower confidence limits	3374.492	3297.764	3219.56	3146.355	3071.742	3001.898	2930.71	2864.073	2798.951	2732.576	2670.444
MonroeCounty_U	Upper confidence limits	3881.589	3797.127	3718.219	3640.95	3561.724	3487.708	3411.816	3340.915	3271.487	3200.301	3133.795
MonroeCounty_U	Upper confidence limits	4460.428	4376.48	4294.112	4213.294	4129.865	4052.138	3975.874	3897.147	3823.8	3748.084	3677.542

	YEAR	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065
LittleRiverCounty_H	History										
LittleRiverCounty_F	Fitted values										
LittleRiverCounty_L	Lower confidence limits	10301.04	10259.92	10218.96	10178.16	10137.53	10097.06	10056.76	10026.63	9986.605	9946.739
LittleRiverCounty	Point forecasts	11214.92	11181.32	11147.83	11114.44	11081.14	11047.95	11014.85	10981.86	10948.96	10916.17
LittleRiverCounty_U	Upper confidence limits	12209.87	12185.48	12161.13	12136.83	12112.58	12088.38	12064.23	12040.12	12016.07	11992.06
LoganCounty_H	History										
LoganCounty_F	Fitted values										
LoganCounty_L	Lower confidence limits	17257.46	17188.57	17119.95	17051.61	16966.57	16898.84	16831.38	16764.18	16680.57	16613.98
LoganCounty	Point forecasts	19535.72	19477.2	19418.86	19360.69	19302.69	19264.13	19206.42	19148.89	19091.53	19034.34
LoganCounty_U	Upper confidence limits	22092.64	22070.56	22026.47	22004.45	21960.49	21938.54	21916.61	21872.82	21850.96	21807.3
LonokeCounty_H	History										
LonokeCounty_F	Fitted values										
LonokeCounty_L	Lower confidence limits	89590.09	90219.42	90944.07	91674.54	92410.88	93153.13	93901.35	94560.96	95320.48	96086.11
LonokeCounty	Point forecasts	109097.8	110194.3	111301.7	112420.3	113550.2	114691.4	115844	117008.3	118184.2	119372
LonokeCounty_U	Upper confidence limits	132853.2	134457	136216.4	137860.8	139525.1	141350.8	143057.2	144784.3	146532.1	148449.5
MadisonCounty_H	History										
MadisonCounty_F	Fitted values										
MadisonCounty_L	Lower confidence limits	13187.17	13173.99	13160.83	13147.67	13134.53	13134.53	13121.4	13121.4	13108.29	13095.19
MadisonCounty	Point forecasts	17448.34	17500.77	17535.8	17588.49	17623.7	17676.65	17712.04	17765.26	17800.82	17836.46
MadisonCounty_U	Upper confidence limits	23109.52	23248.6	23365.13	23505.74	23647.2	23765.73	23908.76	24052.64	24173.2	24318.68
MarionCounty_H	History										
MarionCounty_F	Fitted values										
MarionCounty_L	Lower confidence limits	8973.221	8875.057	8777.966	8681.938	8586.96	8501.518	8408.514	8316.527	8233.776	8143.701
MarionCounty	Point forecasts	11860.87	11766.36	11684.28	11591.18	11498.82	11418.61	11327.63	11248.61	11158.98	11070.07
MarionCounty_U	Upper confidence limits	15677.78	15615.2	15537.32	15475.29	15398.11	15336.64	15260.15	15199.23	15123.42	15063.05
MillerCounty_H	History										
MillerCounty_F	Fitted values										
MillerCounty_L	Lower confidence limits	46676.68	46816.92	46957.58	47098.67	47240.18	47334.75	47476.97	47619.61	47762.69	47906.19
MillerCounty	Point forecasts	51328.43	51534.15	51740.7	51948.08	52156.29	52365.33	52575.21	52733.17	52944.53	53156.73
MillerCounty_U	Upper confidence limits	56443.76	56726.68	57011.03	57296.8	57584	57872.64	58162.73	58454.27	58747.27	59041.74
MississippiCounty_H	History										
MississippiCounty_F	Fitted values										
MississippiCounty_L	Lower confidence limits	25565.52	25311.14	25034.25	24785.15	24514.01	24270.09	24004.58	23765.73	23529.26	23271.86
MississippiCounty	Point forecasts	31602.77	31350.95	31101.15	30853.33	30607.49	30363.61	30121.67	29881.65	29613.93	29377.96
MississippiCounty_U	Upper confidence limits	39065.7	38832	38638.33	38407.19	38177.44	37987.03	37759.79	37533.91	37309.38	37086.19
MonroeCounty_H	History										
MonroeCounty_F	Fitted values										
MonroeCounty_L	Lower confidence limits	2609.725	2547.837	2489.905	2433.291	2377.964	2323.895	2268.786	2217.199	2166.785	2117.518
MonroeCounty	Point forecasts	3068.671	3001.898	2939.515	2875.552	2815.795	2757.28	2697.282	2641.23	2586.343	2530.064
MonroeCounty_U	Upper confidence limits	3604.722	3536.879	3466.844	3401.596	3334.24	3271.487	3206.708	3146.355	3084.053	3022.985

PER
APPENDIX D

Financial Audits for City of Yellville
(2016-2018)

ENGINEERING SERVICES, INC.

1207 SOUTH OLD MISSOURI ROAD • P. O. BOX 282 • SPRINGDALE, ARKANSAS 72765
(479) 751-8733 • (479) 751-8746 FAX • www.engineeringservices.com

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND**

**AUDITED FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015**

BALLARD & COMPANY, LTD.

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BALLARD & COMPANY, LTD.

CERTIFIED PUBLIC ACCOUNTANTS

BUSINESS CONSULTANTS

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INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor and Members of City Council
City of Yellville, Arkansas

Report on the Financial Statements

We have audited the accompanying financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas, as of and for the year ended December 31, 2015, and the related notes to the financial statements, which collectively comprise the water and sewer enterprise fund of the City of Yellville, Arkansas' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the City of Yellville, Arkansas water and sewer enterprise fund as of December 31, 2015, and the changes in financial position and cash flows thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the water and sewer enterprise fund of the City of Yellville, Arkansas, and do not purport to, and do not, present fairly the financial position of the City of Yellville, Arkansas as of December 31, 2015 and the changes in its financial position and cash flows, where applicable, for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Management has omitted the management's discussion and analysis, the schedule of the proportionate share of the net pension liability, and the schedule of contributions that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion of the basic financial statements is not affected by this missing information.

Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas. The schedule of operating expenses and schedule of usage rates, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedule of operating expenses and schedule of usage rates are the responsibility of management and were derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of operating expenses and the schedule of usage rates are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated September 30, 2016 on our consideration of the City of Yellville, Arkansas water and sewer enterprise fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City of Yellville, Arkansas water and sewer enterprise fund's internal control over financial reporting and compliance.

Ballard & Company, Ltd.

Ballard & Company, Ltd.
Mountain Home, Arkansas
September 30, 2016

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 STATEMENT OF NET POSITION
 DECEMBER 31, 2015

ASSETS

Current assets:	
Cash and cash equivalents	\$ 102,375
Accounts receivable	62,516
Inventories	35,606
	<hr/>
Total current assets	200,497
Restricted assets:	
Cash and cash equivalents	254,306
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Capital assets:	
Nondepreciable assets	354,328
Depreciable assets, net of accumulated depreciation	2,732,249
	<hr/>
Total capital assets	3,086,577
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Total assets	3,541,380

DEFERRED OUTFLOWS OF RESOURCES

Deferred outflows related to pensions	28,395
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LIABILITIES

Current liabilities - payable from current assets:	
Accounts payable	39,867
Other current liabilities	12,259
	<hr/>
Total from current assets	52,126
Current liabilities - payable from restricted assets:	
Accrued interest payable	3,814
Current maturities - long-term notes	54,385
Meter deposits	40,669
	<hr/>
Total from restricted assets	98,868
Long-term liabilities:	
Long-term notes, net of current maturities	2,039,296
Net pension liability	97,269
	<hr/>
Total long-term liabilities	2,136,565
	<hr/>
Total liabilities	2,287,559

NET POSITION

Net investment in capital assets	989,082
Restricted:	
Debt service	120,450
Replacement and renewal	81,261
Other - meter deposits	11,926
Unrestricted	79,497
	<hr/>
Total net position	\$ 1,282,216

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
STATEMENT OF REVENUES, EXPENSES AND
CHANGES IN FUND NET POSITION
FOR THE YEAR ENDED DECEMBER 31, 2015

<u>OPERATING REVENUES</u>	
Water service fees	\$ 429,558
Sewer service fees	188,186
Connection and related fees	10,514
Late fees	11,902
Treatment fees	23,866
Other	<u>625</u>
Total operating revenue	<u>664,651</u>
<u>OPERATING EXPENSES</u>	
Water department	439,811
Sewer department	133,331
Depreciation expense	<u>165,255</u>
Total operating expenses	<u>738,397</u>
Operating income (loss)	<u>(73,746)</u>
<u>NONOPERATING REVENUES (EXPENSES)</u>	
Interest income	138
Interest expense	<u>(91,475)</u>
Total nonoperating revenues (expenses)	<u>(91,337)</u>
Income (loss) before transfers	(165,083)
Transfers in	<u>123,127</u>
CHANGE IN NET POSITION	(41,956)
<u>Net Position - Beginning of Year, Restated</u>	<u>1,324,172</u>
<u>NET POSITION - END OF YEAR</u>	<u><u>\$ 1,282,216</u></u>

The accompanying notes are an integral part of these statements.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2015

CASH FLOWS FROM OPERATING ACTIVITIES	
Cash received from customers	\$ 665,401
Cash paid to and/or for employees	(135,848)
Cash paid to suppliers	(436,196)
	93,357
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES	
Transfers in	123,127
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	
Principal paid on notes and bonds payable	(51,990)
Interest paid on notes and bonds payable	(91,658)
Cash paid to purchase and construct assets	(14,714)
	(158,362)
CASH FLOWS FROM INVESTING ACTIVITIES	
Cash received from interest earned	138
NET INCREASE (DECREASE) IN CASH	58,260
CASH AND CASH EQUIVALENTS - BEGINNING OF YEAR	298,421
CASH AND CASH EQUIVALENTS - END OF YEAR	\$ 356,681

Reconciliation of Operating Income (Loss) to Net Cash Provided

<u>(Used In) Operating Activities:</u>	
Operating income (loss)	\$ (73,746)
Depreciation expense	165,255
Pension - difference in expense and contributions paid	(473)
<u>(Increase) Decrease in Assets and Increase (Decrease) in Liabilities:</u>	
Accounts receivable	(3,157)
Inventory	(7,504)
Accounts payable	8,446
Other current liabilities	629
Meter deposits refundable	3,907
	3,907
Net Cash Flows from Operating Activities	\$ 93,357

Reconciliation of Total Cash and Cash Equivalents - Ending

Current assets - cash and cash equivalents	\$ 102,375
Restricted assets - cash and cash equivalents	254,306
	\$ 356,681

Reconciliation of Total Cash and Cash Equivalents - Beginning

Current assets - cash and cash equivalents	\$ 96,219
Restricted assets - cash and cash equivalents	202,202
	\$ 298,421

The accompanying notes are an integral part of these statements.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015

NOTE 1: **SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:**

Reporting Entity

The City of Yellville, Arkansas, (the "City") was incorporated on April 5, 1946 and operates under an elected mayor-council form of government. The accounting and reporting policies of the water and sewer enterprise fund of the City conform to accounting principles generally accepted in the United States of America ("GAAP").

The water and sewer enterprise fund (the "Fund") is used to account for operations of the City of Yellville's enterprise fund. Enterprise funds are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services on a continuing basis be financed or recovered primarily through user charges.

GAAP has set criteria for evaluating which potential component units to include in a City's comprehensive financial statements. The basic, but not only, criterion for including a potential component unit within the reporting entity is the governing body's ability to exercise oversight responsibility; the most significant manifestations of the ability to exercise oversight responsibility include, but are not limited to, the selection of governing authority, the designation of management, the ability to significantly influence operations, and accountability for fiscal matters. The City's comprehensive financial report does not include the water and sewer enterprise fund, which is separately reported herein. Totals are presented for financial statement purposes only and do not represent the consolidated information for all of the City of Yellville.

Measurement Focus and Basis of Accounting

Measurement focus is a term used to describe which transactions are recorded within the various financial statements. Basis of accounting refers to when transactions are recorded, regardless of the measurement focus applied. The City of Yellville's water and sewer enterprise fund's financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. The economic resources measurement focus means all assets, deferred outflows of resources, liabilities and deferred inflows of resources (whether current or non-current) are included on the statement of net position, and the operating statement presents increases (revenues) and decreases (expenses) in net total position. Under the accrual basis of accounting, revenues are recognized when earned and expenses when the liability is incurred or economic asset used.

Operating income reported in the financial statements includes revenues and expenses related to the primary continuing operations of the fund. Principal operating revenues are charges to customers for water, sewer, and related services. Operating expenses include the costs of providing these services, administrative expenses, and depreciation of capital assets. All revenue and expenses not meeting these definitions are reported as nonoperating revenues and expenses in the financial statements.

Cash and Cash Equivalents

Cash accounts are displayed separately on the Statement of Net Position as "current" and "restricted." Restricted assets consist of amounts set aside under the various debt agreements and by the City Council to fulfill the requirements of the debt agreements and for other specific uses. Cash, including restricted cash, includes all demand accounts of the fund.

For the purpose of the Statement of Cash Flows, "cash and cash equivalents" include all demand and savings accounts, and any certificates of deposit or short-term investments with an original maturity of three months or less.

Accounts Receivable

Accounts receivable reflects the balances due from the individuals and businesses using the water and sewer services provided by the City. Management closely monitors outstanding balances and evaluates collectability of its accounts receivable on a per-customer basis. Customer accounts are typically collected within a short period of time, and, based on its assessment of current conditions, management believes realization losses on the amount outstanding at the end of 2015 will be immaterial. Accordingly, the account balance is reported at the full amount outstanding.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015

NOTE 1: **SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: – Continued**

Inventories

Inventories held by the water and sewer fund are valued at lower of cost or market using the first-in/first-out method.

Capital Assets

Capital assets are recorded at cost and are updated for additions or retirements during the year. Improvements are capitalized and the cost of normal maintenance and repairs that do not add to the value of the asset or materially extend an asset's life are not capitalized. Capital assets are depreciated by the straight-line method over their estimated useful lives. Estimated useful lives are as follows:

Buildings and Improvements	20 - 40 Years
System and Improvements	25 - 40 Years
Furniture and Fixtures	5 - 7 Years
Machinery and Equipment	5 - 10 Years
Vehicles	5 Years

Accounts Payable

Accounts payable consists of various trade accounts which are typically payable within thirty (30) days.

Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources (expense) until then.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to future periods and so will not be recognized as an inflow of resources (revenue) until that time. The water and sewer enterprise fund of the City of Yellville did not have any items that qualify for reporting in this category.

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Arkansas Public Employees Retirement System (APERS) have been determined on the same basis as they are reported by APERS. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms.

Net Position

Net position represents the difference between assets plus deferred outflows of resources and liabilities and deferred inflows of resources, and is classified into the following categories:

- *Net Investment in Capital Assets* - Consists of capital assets, net of accumulated depreciation, reduced by outstanding balances of any bonds or other borrowings that are attributable to the acquisition, construction or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.

**CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEAR ENDED DECEMBER 31, 2015**

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: – Continued

Net Position - Continued:

- *Restricted* – Consists of amounts which have external constraints imposed by creditors (such as through debt covenants), grantors, contributors or laws, or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.
- *Unrestricted* – Consists of net position that does not meet the definition of “net investment in capital assets” or “restricted.”

When both restricted and unrestricted resources are available for use, it is the City’s policy to use restricted resources first, and then unrestricted resources as they are needed.

Budget and Budgetary Accounting

Enterprise fund service delivery levels are determined by the extent of consumer demand. Because enterprise fund revenues and expenses fluctuate with the changing service delivery levels, accounting principles generally accepted in the United States of America do not require the financial statements to include budgetary comparisons. Accordingly, such comparisons have not been included.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires the use of estimates based on management’s knowledge and experience. Due to their prospective nature, actual results could differ from those estimates.

NOTE 2: CASH AND INVESTMENTS:

Legal Provisions for Deposits and Investments

State law generally provides that municipal funds be deposited in federally insured banks located in the State of Arkansas. These deposits may be in the form of checking accounts, savings accounts, and/or certificates of deposit. Public funds may also be invested in direct obligations of the United States of America and obligations on which the principal and interest are fully guaranteed by the United States of America.

Deposits and Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the water and sewer enterprise fund of the City of Yellville, Arkansas will not be able to recover deposits or will not be able to recover collateral securities. The City’s policy is to place deposits only in collateralized or insured accounts. As of December 31, 2015, none of the fund’s bank deposits were exposed to custodial credit risk.

NOTE 3: RESTRICTED ASSETS:

These assets consist of cash restricted by various bond and loan agreements and the City Council for debt service and other specific uses. Restricted assets as of December 31, 2015 were as follows:

Debt service and reserve deposits	\$ 120,450
Repair and replacement funds	81,261
Meter deposit funds	<u>52,595</u>
 Total restricted assets	 <u>\$ 254,306</u>

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015**

NOTE 4: CAPITAL ASSETS:

Capital asset activity for the year ended December 31, 2015 was as follows:

	<u>BEGINNING BALANCE</u>	<u>INCREASES</u>	<u>DECREASES</u>	<u>ENDING BALANCE</u>
<i>Capital assets, not being depreciated:</i>				
Land and land rights	\$ 17,408	\$ -	\$ -	\$ 17,408
Construction in progress	3,150	-	(3,150)	-
Idle plant property	336,920	-	-	336,920
	<u>357,478</u>	<u>-</u>	<u>(3,150)</u>	<u>354,328</u>
<i>Capital assets, being depreciated:</i>				
Vehicles	30,500	-	-	30,500
Machinery and equipment	199,769	7,825	(9,390)	198,204
Building improvements	35,741	-	-	35,741
Furniture and fixtures	25,607	10,039	(12,970)	22,676
System and improvements	6,361,659	-	-	6,361,659
	<u>6,653,276</u>	<u>17,864</u>	<u>(22,360)</u>	<u>6,648,780</u>
<i>Less accumulated depreciation for:</i>				
Vehicles	(20,100)	(2,600)	-	(22,700)
Machinery and equipment	(165,858)	(6,612)	9,390	(163,080)
Building improvements	(11,702)	(1,409)	-	(13,111)
Furniture and fixtures	(25,607)	(3,068)	12,970	(15,705)
Idle plant property	(286,673)	-	-	(286,673)
System and improvements	(3,263,695)	(151,567)	-	(3,415,262)
	<u>(3,773,635)</u>	<u>(165,256)</u>	<u>22,360</u>	<u>(3,916,531)</u>
 Total capital assets, being depreciated, net	 <u>2,879,641</u>	 <u>(147,392)</u>	 <u>-</u>	 <u>2,732,249</u>
 Capital assets, net	 <u>\$ 3,237,119</u>	 <u>\$ (147,392)</u>	 <u>\$ (3,150)</u>	 <u>\$ 3,086,577</u>

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015**

NOTE 5: LONG-TERM LIABILITIES:

Long-term liability activity for the year ended December 31, 2015 was as follows:

	<u>BALANCE</u>			<u>BALANCE</u>		<u>AMOUNTS</u>
	<u>12/31/14</u>	<u>ADDITIONS</u>	<u>REDUCTIONS</u>	<u>12/31/15</u>	<u>DUE WITHIN</u>	<u>ONE YEAR</u>
Note payable - ANRC	\$ 57,345	\$ -	\$ (5,173)	\$ 52,172	\$	5,431
Bonds Payable:						
Series 1992 (RD 92-01)	519,758	-	(18,534)	501,224		19,482
Series 1998 (RD 91-05)	315,808	-	(7,372)	308,436		7,710
Series 1998 (RD 91-07)	235,417	-	(5,527)	229,890		5,781
Series 2008A (RD 93-09)	418,105	-	(6,088)	412,017		6,343
Series 2008B (RD 93-11)	599,238	-	(9,296)	589,942		9,638
 Total long-term liabilities	 <u>\$ 2,145,671</u>	 <u>\$ -</u>	 <u>\$ (51,990)</u>	 <u>\$ 2,093,681</u>	 <u>\$</u>	 <u>54,385</u>

ANRC PAYABLE

On July 15, 1993, the City entered into a loan agreement with the Arkansas Natural Resources Commission. The loan, in the amount of \$100,000, has annual payments in the amount of \$8,024, beginning July 2004 over a term of twenty years with interest at a rate of 5% per annum.

Maturities of the Arkansas Natural Resources Commission loan payable subsequent to December 31, 2015 are as follows:

<u>Year</u>	<u>Principal Amount</u>	<u>Interest Amount</u>
2016	\$ 5,431	\$ 2,593
2017	5,703	2,321
2018	5,988	2,036
2019	6,287	1,737
2020	6,601	1,423
2021-2023	<u>22,162</u>	<u>2,221</u>
	<u>\$ 52,172</u>	<u>\$ 12,331</u>

Bonds Payable (USDA - Rural Development)

On July 26, 1993, the City of Yellville signed a loan agreement with the United States Department of Agriculture, Rural Development for funds for improvements to the water and sewer system. This note, in the amount of \$748,200, bears interest at 5.00% and is collateralized by a revenue bond in held by Rural Development.

**CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEAR ENDED DECEMBER 31, 2015**

NOTE 5: LONG-TERM LIABILITIES: - Continued

Bonds Payable (USDA - Rural Development) - Continued

On March 19, 1998, the City of Yellville adopted Ordinance 98-1, which authorized the issuance of the 1998 bonds in the total amount of \$679,600 for water system improvements. The two bonds were issued to the United States Department of Agriculture, Rural Development, and require monthly payments in the amount of \$1,786 and \$1,334, with interest at a rate of 4.5% per annum. Payments commenced April 19, 2000. In conjunction with the two bond issues, Rural Development also issued two grants for the water system improvements which totaled \$919,900.

On September 18, 2008, the City of Yellville signed two loan agreements with the United States Department of Agriculture, Rural Development for funds for improvements to the water and sewer system. These notes, in the amounts of \$454,000 and \$642,900, bear interest at 4.125% and 3.625%, respectively, and are collateralized by revenue bonds in each amount held by Rural Development. Interest in the amount of \$13,476 has been capitalized as part of the project cost. Payments on the first note are in the amount of \$1,935 and are due monthly through September 2048. An interest-only payment was due on the second note in September, 2009, followed by monthly payments in the amount of \$2,572 through September 2048.

Maturities of the bonds payable to USDA – Rural Development subsequent to December 31, 2015, are as follows:

<u>Year</u>	<u>Principal Amount</u>	<u>Interest Amount</u>
2016	\$ 48,954	\$ 86,670
2017	51,192	84,432
2018	53,534	82,090
2019	55,985	79,639
2020	58,549	77,075
2021-2025	335,584	342,536
2026-2030	420,151	257,869
2031-2035	375,459	163,065
2036-2040	296,493	92,319
2041-2045	224,794	45,626
2045-2048	<u>120,814</u>	<u>5,701</u>
	<u>\$ 2,041,509</u>	<u>\$ 1,317,022</u>

NOTE 6: FUND REQUIREMENTS:

Various ordinances authorized the issuance of the 1992, 1998, and 2008 Series of Water and Sewer Revenue Bonds, and established certain funds and the manner in which revenues are to be deposited and transferred between the various funds.

The cash funds required and their uses are as follows:

Water and Sewer Revenue Fund

Ordinance 98-1, for the 1998 bond issue and Ordinances 5-1 (amended) and 1-WS-2008-B for the 2008 bond issues confirmed and continued the 1992 bond ordinance requirement that all revenues of the system shall be paid into the Water and Sewer Revenue Fund (the Revenue Fund), and that the revenues in this fund are pledged and shall be applied to the payment of the expenses of operation and maintenance of the system, to the payment of the principal of and interest on all outstanding bonds, to the establishment and maintenance of any required debt service reserves and to the providing of a depreciation fund.

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015**

NOTE 6: FUND REQUIREMENTS: - Continued

Water and Sewer Operations and Maintenance Fund

The ordinances also confirmed and continued the requirement that a special fund titled the "Water and Sewer Operations and Maintenance Fund" (the Operating Fund) be established. On or before the first day of each month, funds sufficient for that month's operating requirements are to be transferred from the Revenue Fund into the Operating Fund and disbursed as needed for the operation and maintenance of the system.

1992 Water and Sewer Revenue Bond Fund

Ordinance SO-6 set forth the requirement that a special fund be established titled the "1992 Water and Sewer Revenue Bond Fund." On the first of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$368. When a debt service reserve has accumulated in the amount of \$34,704, the additional \$368 transfer need not be made. This fund has been established and the required transfers have been made. Further, the total required debt service reserve has been established.

1998 Revenue Bond Fund

Ordinance 98-1 set forth the requirement that a special fund be established titled the "1998 Revenue Bond Fund." On or before the first business day of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$313. When a debt service reserve has accumulated in the amount of \$37,440, the additional \$313 transfer need not be made. This fund has been established and the required transfers for principal and interest have been made. Further, the total required debt service reserve has been established.

2008A Water and Sewer Bond Fund

Ordinance 5-1, adopted August 7, 2006 and amended by Ordinance 1-WS-2008-B, adopted July 7, 2008, set forth the requirement that a special fund be established titled the "2008A Water and Sewer Bond Fund." On the first of each month, monies are to be transferred from the Revenue Fund into this Fund in an amount sufficient to pay the next monthly installment on the bonds plus \$194. When a debt service reserve has accumulated in the amount of \$23,220, the additional \$194 transfer need not be made. This fund has been established and the required transfers have been made.

2008B Water and Sewer Bond Fund

Ordinance 1-WS-2008-B, adopted July 7, 2008, set forth the requirement that a special fund be established titled the "2008B Water and Sewer Bond Fund." On the first of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$258. When a debt service reserve has accumulated in the amount of \$30,864, the additional \$258 transfer need not be made. This fund has been established and the required transfers have been made.

Water and Sewer Depreciation Fund

The bond ordinances all set forth the requirement that a special fund be established titled the "Water and Sewer Depreciation Fund." On the first of each month, 5% of the gross system revenues of the preceding month are to be transferred to this fund from the Revenue Fund. The monies in this fund are to be used solely for the purpose of paying the cost of replacements or repairs to the system made necessary by the aging of the system or for the cost of economically justifiable extensions to the system. The ordinances do not specify an accumulated balance at which point the transfers may stop; however, they do state that if funds are accumulated in excess of required replacements or repairs for the remainder of the current fiscal year plus the next ensuing fiscal year, the excess can be transferred back into the Revenue Fund. This fund has been established and the required transfers have been made.

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEAR ENDED DECEMBER 31, 2015

NOTE 6: FUND REQUIREMENTS: - Continued

Meter Deposits

Meter deposits are refundable customer deposits for which reserves in an amount sufficient to refund the deposits in total must be held. Meter deposit reserves at December 31, 2015 were \$52,595, an excess of \$11,926 over the total customer deposits of \$40,669.

NOTE 7: DEBT SERVICE RATIO:

Various debt covenants require that the net revenues of the system shall equal not less than a certain percentage of the maximum annual debt service requirements of all outstanding bonds plus other indebtedness of the system, including any additional bonds proposed, should the City desire to issue additional bonds secured on a senior or parity basis to the outstanding bonds.

The actual ratio at December 31, 2015 was 149%, computed as follows:

Operating income (loss)	\$ (73,746)
Plus Depreciation Expense	165,255
Plus Transferred Sales Tax Revenues	<u>123,127</u>
 Funds Available for Debt Service	 <u>\$ 214,636</u>
 Maximum Annual Debt Service Requirements on the USDA Loans and ANRC Obligation	 <u>\$ 143,648</u>
 Debt Service Ratio	 <u>149%</u>

NOTE 8: LEASE AGREEMENTS:

During the year ended December 31, 2011, the City of Yellville entered into lease agreements for the maintenance of four of its water tanks. Annual payments totaling \$53,712 are due for the first eight years of the contracts. Beginning in the ninth year, annual payments will be \$27,274, with cost adjustments applied every three years. If the City elects to terminate the contracts prior to remitting the first eight annual fees, the unpaid balance of the first eight annual fees will be due and payable within thirty days of the written notice of termination.

Minimum lease payments subsequent to December 31, 2015 are as follows:

<u>Year</u>	<u>Amount</u>
2016	\$ 53,712
2017	53,712
2018	<u>53,712</u>
 Total	 <u>\$ 161,136</u>

NOTE 9: TRANSFERS FROM OTHER FUNDS:

Authorized through a special election by the vote of the electors of the City of Yellville, an additional 1% sales and use tax was levied within the City beginning January 01, 2013. Under the City Council's authorization, 1/2 of the 1% is distributed from the City's sales tax monies for the water and sewer fund. Transfers and payments within the City of Yellville's funds are substantially for the purpose of subsidizing operating functions.

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015**

NOTE 10: INSURANCE COVERAGE:

The water and sewer fund of the City of Yellville, Arkansas has purchased insurance coverage to cover potential losses due to the various risks related to the damage to and/or destruction of assets, errors and omissions, injuries to employees, and natural disasters. The amount of settlements has not exceeded the insurance coverage in the past three years. Further, there were no significant reductions in insurance coverage in the major categories of risk from coverage in the prior year.

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS):

Plan Description

The water and sewer fund of the City of Yellville, Arkansas provides pension benefits for its eligible employees through the Arkansas Public Employees Retirement System (APERS), a cost-sharing multiple-employer defined-benefit pension plan that covers all municipal employees who are not covered by another authorized plan. The plan was established by the authority of the Arkansas General Assembly with the passage of Act 177 of 1957.

The Arkansas Public Employees Retirement System issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to Arkansas Public Employees Retirement System, 124 West Capitol, Suite 400, Little Rock, Arkansas 72201 or can be accessed at www.apers.org.

The general administration and responsibility for the proper operation of the System is vested in the nine members of the Board of Trustees of the Arkansas Public Employees Retirement System (the Board). Membership includes three state and three non-state employees, all appointed by the Governor, and three ex-officio trustees, including the Auditor of the State, the Treasurer of the State and the Director of the Department of Finance and Administration

Benefits Provided

Benefit provisions are set forth in Arkansas Code Annotated, Title 24, Chapters 5 and 6 and may only be amended by the Arkansas General Assembly. APERS provides retirement, disability and death benefits. Retirement benefits are determined as a percentage of the member's highest 3-year average compensation times the member's years of service. The percentage used is based upon whether a member is contributory or non-contributory as follows:

Contributory, prior to 7/1/2005	2.07%
Contributory, on or after 7/1/2005	2.03%
Non-Contributory	1.72%

Members are eligible to retire with a full benefit under the following conditions:

- at age 65 with 5 years of service,
- at any age with 28 years actual service
- at age 60 with 20 years of actual service if under the old contributory plan (prior to July 1, 2005),
or
- at age 55 with 35 credited service for elected or public safety officials.

Members may retire with a reduced benefit at age 55 with at least 5 years of actual service at age 55 or at any age with 25 years of service.

Members are eligible for disability benefits with 5 years of service. Disability benefits are computed as an age and service benefit, based on service and pay at disability. Death benefits may also be payable to members' survivors.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2015

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

Contributions

Contribution requirements are set forth in Arkansas Code Annotated, Title 24, Chapter 4. The contributions are expected to be sufficient to finance the costs of benefits earned by members during the year and make a level payment that, if paid annually over a reasonable period of future years, will fully cover the unfunded costs of benefit commitments for services previously rendered. Members who began service prior to July 1, 2005 are not required to make contributions to APERS. Member who began service on or after July 1, 2005 are required to contribute 5% of their salary. Employers are required to contribute at a rate established by the Board of Trustees of APERS based on an actuary's determination of a rate required to fund the plan. Employers contributed 14.76% of compensation during the first six months of 2015. Effective July 1, 2015, employers contributed 14.50% of compensation.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions

At December 31, 2015, the water and sewer enterprise fund of the City of Yellville, Arkansas reported a liability of \$97,269 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2015, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The water and sewer fund of the City of Yellville, Arkansas' proportion of the net pension liability was based on its share of contributions to the pension plan relative to the total contributions of all participating employers. At June 30, 2015, the Fund's proportion was .0057%.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions - Continued

For the year ended December 31, 2015, the water and sewer fund recognized pension expense of \$12,659. At December 31, 2015, the water and sewer fund reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 6,853	\$ 0
Changes of assumptions	15,428	0
Net difference between projected and actual earnings on pension plan investments	5,187	0
Changes in proportion and differences between Water and Sewer Fund contributions and proportionate share of contributions	927	0
Water and Sewer Fund contributions subsequent to the measurement date	7,271	0
Total	\$ 35,666	\$ 0

**CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEAR ENDED DECEMBER 31, 2015**

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

\$7,271 reported as deferred outflows of resources related to pensions resulting from the water and sewer fund's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2015. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year:	
2016	\$ 23
2017	23
2018	(931)
2019	5,200
Thereafter	24,080

Actuarial Assumptions

The total pension liability in the June 30, 2015 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level of Percent of Payroll
Remaining Amortization Period	23 years
Asset Valuation Method	4-year smoothed market
Actuarial Assumptions:	
Investment Rate of Return	7.50%
Salary Increases	3.25 - 9.85% including inflation
Post-Retirement Cost-of-Living Increases	3% Annual Compounded Increase
Mortality Table	Based on RP-2000 Combined Healthy mortality table, projected to 2020 using Projection Scale BB, set-forward 2 years for males and 1 year for females

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the current asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for the 10-year period from 2015 to 2024 were based upon capital market assumptions provided by plan's investment consultant(s).

**CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEAR ENDED DECEMBER 31, 2015**

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

For each major asset class included in the pension plan's current asset allocation as of June 30, 2015, best estimates are summarized in the following table:

Asset Class	Current Allocation	Long-Term Expected Real Rate of Return
Broad Domestic Equity	42%	6.82%
International Equity	25%	6.88%
Real Assets	12%	3.07%
Absolute Return	5%	3.35%
Domestic Fixed	16%	.83%
Total	<u>100%</u>	

Discount Rate

A single discount rate of 7.50% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.50%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the water and sewer fund's proportionate share of the net pension liability to changes in the discount rate

The following presents the water and sewer fund's proportionate share of the net pension liability calculated using the discount rate of 7.50%, as well as what the water and sewer fund's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage point-higher (8.50%) than the current rate. Amounts are reported as of the measurement date of June 30, 2015:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Water and sewer fund's proportionate share of the net pension liability	172,204	104,540	48,267

NOTE 12: RESTATEMENT OF BEGINNING NET POSITION

The water and sewer fund has implemented GASB Statement of Governmental Accounting Standards No. 68, *Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27*, which requires the water and sewer fund, as an employer participating in a cost-sharing, multiple-employer defined benefit pension plan, to recognize a liability for its proportionate share of the net pension liability (of all employers for benefits provided through the pension plan) - the collective net pension liability. As the adjustments to conform to the provisions of this Statement are to be applied retroactively, net position as of January 01, 2015 has been reduced by \$69,348 for the effect of the application of this statement. The restatement of beginning balances does not include deferred inflows of resources or deferred outflows of resources.

SUPPLEMENTARY INFORMATION

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF OPERATING EXPENSES
 FOR THE YEAR ENDED DECEMBER 31, 2015

	<u>Water Fund</u>	<u>Sewer Fund</u>
Dues and fees	\$ 9,816	\$ 844
Insurance - general	1,295	1,588
Insurance - health	12,720	5,360
Miscellaneous	1,893	44
Professional fees	6,553	5,448
Pension expense	7,360	5,299
Repairs and maintenance	59,989	33,586
Salaries	63,688	31,197
Supplies - office	10,445	737
Supplies - operating	16,526	15,054
Taxes - payroll	5,665	2,901
Utilities	17,028	31,273
Water purchases	<u>228,833</u>	<u>-</u>
Total Operating Expenses	<u>\$ 441,811</u>	<u>\$ 133,331</u>

See independent auditor's report on supplementary information.

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF USAGE RATES
 FOR THE YEAR ENDED DECEMBER 31, 2015

Water Rate Schedule
Inside City Limits

Minimum	1,000 gallons	\$13.25 to \$37.75	per thousand gallons, depending upon user type and meter size
Each thereafter	1,000 gallons	\$3.70 to \$4.10	per thousand gallons, depending upon user type and meter size

Outside City Limits

Minimum	1,000 gallons	\$16.75 to \$25.00	per thousand gallons, depending upon user type and meter size
Each thereafter	1,000 gallons	\$3.70 to \$4.20	per thousand gallons, depending upon user type and meter size

Sewer Rate Schedule
Inside City Limits

Minimum	1,000 gallons of water used per month: \$14.00
Each thereafter	1,000 gallons: \$ 2.70 per thousand gallons
Over	10,000 gallons of water used per month: \$2.60 per 1,000 gallons

OTHER REPORTS



BALLARD & COMPANY, LTD.

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BUSINESS CONSULTANTS

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REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor and Members of City Council
City of Yellville, Arkansas

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas, as of and for the year ended December 31, 2015, and the related notes to the financial statements, which collectively comprise the City of Yellville, Arkansas water and sewer enterprise fund's basic financial statements, and have issued our report thereon dated September 30, 2016.

Internal Control Over Financial Reporting

In planning and performing our audits of the financial statements, we considered the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control. Accordingly, we do not express an opinion on the effectiveness of the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. We did identify certain deficiencies in internal control, described below, that we consider to be material weaknesses.

2015-1 To ensure the proper safeguarding of assets, financial accounting duties relating to receipting, depositing, disbursing, and reconciling cash transactions should be segregated as much as possible among appropriate employees. The water and sewer enterprise fund of the City of Yellville's management did not segregate these duties to sufficiently reduce the risks of fraud or error and properly safeguard the fund's assets due to limited financial resources. We recommend that the financial accounting duties for the water and sewer enterprise fund be segregated among employees to the extent possible.

The City of Yellville's management responded and indicated that they will segregate the duties relating to receipting, depositing, disbursing, and reconciling cash transactions for the water and sewer enterprise fund to the extent possible with the current staffing levels.

2015-2 Since cash is so readily subject to error and mishandling, effective control of checks, currency, and other cash items should begin at the time of receipt and continue through deposit, custody, and disbursement. Timely deposits and sufficient detail of each deposit help to safeguard cash receipts. We noted deficiencies in these stated controls in the City of Yellville water and sewer enterprise fund's cash management procedures, particularly with regard to receipts for meter deposits. We recommend that management design and implement controls to ensure that all cash receipts are deposited on a timely basis and that deposits contain sufficient detail to properly identify and record the source of the receipts.

The City of Yellville's management responded and indicated that they have implemented control procedures to ensure that all cash receipts are deposited timely and that deposits contain sufficient supporting documentation to properly identify and record the source of the receipts.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the water and sewer enterprise fund of the City of Yellville, Arkansas' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audits and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

City of Yellville's Response to Findings

The City of Yellville's response to the findings identified in our audit is previously described. The City of Yellville's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Ballard & Company, Ltd.

Ballard & Company, Ltd.
Mountain Home, Arkansas
September 30, 2016

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND**

AUDITED FINANCIAL STATEMENTS

**FOR THE YEARS ENDED
DECEMBER 31, 2017 AND 2016**

BALLARD & COMPANY, LTD.

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INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor and Members of City Council
City of Yellville, Arkansas

Report on the Financial Statements

We have audited the accompanying financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas, as of and for the years ended December 31, 2017 and 2016, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the City of Yellville, Arkansas water and sewer enterprise fund as of December 31, 2017 and 2016, and the changes in financial position and cash flows thereof for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the water and sewer enterprise fund of the City of Yellville, Arkansas, and do not purport to, and do not, present fairly the financial position of the City of Yellville, Arkansas as of December 31, 2017 and 2016 and the changes in its financial position and cash flows, where applicable, for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Schedule of the Fund's Proportionate Share of the Net Pension Liability and the Schedule of Fund Contributions be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Management has omitted the management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion of the basic financial statements is not affected by this missing information.

Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas. The schedules of operating expenses and schedule of usage rates, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules of operating expenses and schedule of usage rates are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules of operating expenses and the schedule of usage rates are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated April 24, 2018 on our consideration of the City of Yellville, Arkansas water and sewer enterprise fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City of Yellville, Arkansas water and sewer enterprise fund's internal control over financial reporting and compliance.

Ballard & Company, Ltd.

Ballard & Company, Ltd.
Mountain Home, Arkansas
April 24, 2018

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
STATEMENTS OF NET POSITION
DECEMBER 31, 2017 AND 2016

<u>ASSETS</u>	<u>2017</u>	<u>2016</u>
Current assets:		
Cash and cash equivalents	\$ 116,391	\$ 96,796
Accounts receivable	66,280	68,202
Inventories	42,377	37,957
Total current assets	<u>225,048</u>	<u>202,955</u>
Restricted assets:		
Cash and cash equivalents	325,718	292,393
Capital assets:		
Nondepreciable assets	28,167	354,328
Depreciable assets, net of accumulated depreciation	2,707,323	2,566,585
Total capital assets	<u>2,735,490</u>	<u>2,920,913</u>
Total assets	<u>3,286,256</u>	<u>3,416,261</u>
 <u>DEFERRED OUTFLOWS OF RESOURCES</u>		
Deferred outflows related to pensions	<u>49,044</u>	<u>41,572</u>
 <u>LIABILITIES</u>		
Current liabilities - payable from current assets:		
Accounts payable	30,025	32,848
Other current liabilities	12,227	13,048
Total from current assets	<u>42,252</u>	<u>45,896</u>
Current liabilities - payable from restricted assets:		
Accrued interest payable	3,437	3,622
Current maturities - long-term notes	59,522	56,895
Meter deposits	40,926	40,646
Total from restricted assets	<u>103,885</u>	<u>101,163</u>
Long-term liabilities:		
Long-term notes, net of current maturities	1,922,562	1,982,088
Net pension liability	155,040	131,887
Total long-term liabilities	<u>2,077,602</u>	<u>2,113,975</u>
Total liabilities	<u>2,223,739</u>	<u>2,261,034</u>
 <u>DEFERRED INFLOWS OF RESOURCES</u>		
Deferred inflows related to pensions	<u>7,264</u>	<u>10,667</u>
 <u>NET POSITION</u>		
Net investment in capital assets	749,969	878,307
Restricted:		
Debt service	135,538	127,969
Replacement and renewal	137,010	111,456
Other - meter deposits	12,244	12,322
Unrestricted	69,536	56,078
Total net position	<u>\$ 1,104,297</u>	<u>\$ 1,186,132</u>

The accompanying notes are an integral part of these statements.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
STATEMENTS OF REVENUES, EXPENSES AND
CHANGES IN FUND NET POSITION
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
<u>OPERATING REVENUES</u>		
Water service fees	\$ 471,920	\$ 458,007
Sewer service and treatment fees	223,979	220,506
Connection and related fees	5,428	6,520
Late penalties	13,666	13,300
Other	1,586	1,069
	<u>716,579</u>	<u>699,402</u>
<u>OPERATING EXPENSES</u>		
Water department	437,810	463,657
Sewer department	197,792	170,863
Depreciation expense	162,606	165,664
	<u>798,208</u>	<u>800,184</u>
Total operating revenue	<u>716,579</u>	<u>699,402</u>
Operating income (loss)	<u>(81,629)</u>	<u>(100,782)</u>
<u>NONOPERATING REVENUES (EXPENSES)</u>		
Interest income	355	240
Interest expense	(86,565)	(89,068)
Gain (loss) on disposal of assets	(51,006)	-
	<u>(137,216)</u>	<u>(88,828)</u>
Total nonoperating revenues (expenses)	<u>(137,216)</u>	<u>(88,828)</u>
Income (loss) before transfers and capital contributions	(218,845)	(189,610)
Transfers in	123,029	122,057
Transfers out	(5,200)	-
	<u>117,829</u>	<u>122,057</u>
Total transfers in (out)	<u>117,829</u>	<u>122,057</u>
Capital contributions	19,181	-
	<u>19,181</u>	<u>-</u>
Capital contributions	<u>19,181</u>	<u>-</u>
CHANGE IN NET POSITION	(81,835)	(67,553)
<u>Net Position - Beginning of Year</u>		
Restated in 2016 (Note 12)	<u>1,186,132</u>	<u>1,253,685</u>
<u>NET POSITION - END OF YEAR</u>	<u>\$ 1,104,297</u>	<u>\$ 1,186,132</u>

The accompanying notes are an integral part of these statements.

CITY OF YELLEVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers	\$ 718,781	\$ 693,614
Cash paid to and/or for employees	(123,756)	(126,978)
Cash paid to suppliers	(507,631)	(512,776)
Net Cash Provided by (Used in) Operating Activities	87,394	53,860
 CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Transfers in	123,029	122,057
 CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Principal paid on notes and bonds payable	(56,899)	(54,389)
Interest paid on notes and bonds payable	(86,750)	(89,260)
Cash paid to purchase and construct assets	(14,209)	-
Net Cash Provided by (Used in) Capital and Related Financing Activities	(157,858)	(143,649)
 CASH FLOWS FROM INVESTING ACTIVITIES		
Cash received from interest earned	355	240
 NET INCREASE (DECREASE) IN CASH	52,920	32,508
CASH AND CASH EQUIVALENTS - BEGINNING OF YEAR	389,189	356,681
 CASH AND CASH EQUIVALENTS - END OF YEAR	\$ 442,109	\$ 389,189

Reconciliation of Operating Income (Loss) to Net Cash Provided

<u>(Used In) Operating Activities:</u>		
Operating income (loss)	\$ (81,629)	\$ (100,782)
Depreciation expense	162,606	165,664
<u>(Increase) Decrease in Assets and Increase (Decrease) in Liabilities:</u>		
Accounts receivable	1,922	(5,686)
Inventory	(4,420)	(2,351)
Deferred outflows of resources	(7,472)	7,193
Accounts payable	(2,823)	(7,019)
Other current liabilities	(820)	788
Net pension liability	23,153	(521)
Deferred inflows of resources	(3,403)	(3,403)
Meter deposits refundable	280	(23)
Net Cash Flows from Operating Activities	\$ 87,394	\$ 53,860

Reconciliation of Total Cash and Cash Equivalents - Ending

Current assets - cash and cash equivalents	\$ 116,391	\$ 96,796
Restricted assets - cash and cash equivalents	325,718	292,393
	\$ 442,109	\$ 389,189

Reconciliation of Total Cash and Cash Equivalents - Beginning

Current assets - cash and cash equivalents	\$ 96,796	\$ 102,375
Restricted assets - cash and cash equivalents	292,393	254,306
	\$ 389,189	\$ 356,681

The accompanying notes are an integral part of these statements.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Reporting Entity

The City of Yellville, Arkansas, (the "City") was incorporated on April 5, 1946 and operates under an elected mayor-council form of government. The water and sewer fund (the "Fund") is responsible for the operation and maintenance of the City's water distribution system and its sewer treatment system.

The Fund is operated as an enterprise fund of the City. An enterprise fund is used to account for operations that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs, including depreciation, of providing goods or services on a continuing basis be financed or recovered primarily through user charges.

The City's comprehensive financial report does not include the water and sewer enterprise fund, which is separately reported herein. These financial statements are intended to present only the financial position, results of operations and cash flows attributable to the Fund and are not intended to, and do not, reflect the financial position, results of operations and cash flows of the City of Yellville as a whole.

Basis of Accounting

The financial statements of the Fund are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") as applicable to enterprise funds of governmental entities using the economic resources measurement focus and the accrual basis of accounting. The economic resources measurement focus means all assets, deferred outflows of resources, liabilities and deferred inflows of resources (whether current or non-current) are included on the statement of net position, and the operating statement presents increases (revenues) and decreases (expenses) in net total position. Under the accrual basis of accounting, revenues are recognized when earned and expenses when the liability is incurred or economic asset used. The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations).

Basis of Presentation

The presentation of the Fund's financial statements follows the requirement of GASB Statement No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments* (GASB Statement No. 34) – applicable to enterprise funds, as amended. In accordance with the requirements of GASB Statement No. 34, the Department's net position is categorized into net investment in capital assets, restricted and unrestricted, as applicable. In addition, operating income reported in the financial statements includes revenues and expenses related to the primary continuing operations of the fund. Principal operating revenues are charges to customers for water, sewer, and related services. Operating expenses include the costs of providing these services, administrative expenses, and depreciation of capital assets. All revenue and expenses not meeting these definitions are reported as nonoperating revenues and expenses in the financial statements.

Cash and Cash Equivalents

Cash accounts are displayed separately on the Statement of Net Position as "current" and "restricted." Restricted assets consist of amounts set aside under the various debt agreements and by the City Council to fulfill the requirements of the debt agreements and for other specific uses. Cash, including restricted cash, includes all demand accounts of the fund.

For the purpose of the Statement of Cash Flows, "cash and cash equivalents" include all demand and savings accounts, and any certificates of deposit or short-term investments with an original maturity of three months or less.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: – Continued

Accounts Receivable

Accounts receivable reflects the balances due from the individuals and businesses using the water and sewer services provided by the City. Management closely monitors outstanding balances and evaluates collectability of its accounts receivable on a per-customer basis. Customer accounts are typically collected within a short period of time, and, based on its assessment of current conditions, management believes realization losses on the amount outstanding at the end of 2017 and 2016 will be immaterial. Accordingly, the account balances are reported at the full amounts outstanding.

Inventories

Inventories of the materials and supplies used in the operation of the system are stated at average cost.

Capital Assets

Capital assets purchased or acquired with an original cost of \$1,000 or more are reported at cost. Additions, improvements and other capital outlays that significantly extend the useful life of an asset are capitalized. Other cost of normal maintenance and repairs that do not materially extend an asset's life are expensed as incurred. Capital assets are depreciated by the straight-line method over their estimated useful lives:

Buildings and Improvements	20 - 40 Years
System and Improvements	25 - 40 Years
Furniture and Fixtures	5 - 7 Years
Machinery and Equipment	5 - 10 Years
Vehicles	5 Years

Accounts Payable

Accounts payable consists of various trade accounts which are typically payable within thirty (30) days.

Deferred Outflows/Inflows of Resources

Deferred outflows/inflows of resources are financial statement elements distinct from assets and liabilities and represent a consumption or production of net position that applies to future periods and so will not be recognized as an outflow or inflow of resources until then. The Fund's deferred outflows and inflows of resources consist of deferred outflows and inflows of resources related to the Fund's pension plan activities, as further discussed in Note 11.

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Arkansas Public Employees Retirement System (APERS) have been determined on the same basis as they are reported by APERS.

Net Position

Net position represents the difference between assets plus deferred outflows of resources and liabilities and deferred inflows of resources, and is classified into the following categories:

- *Net Investment in Capital Assets* - Consists of net capital assets reduced by outstanding balances of any debt obligations and deferred inflows of resources attributable to the acquisition, construction, or improvement of those assets and increased by deferred outflows of resources related to those assets.

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: – Continued

Net Position - Continued:

- *Restricted net position*— net position is considered restricted if its use is constrained to a particular purpose. Restrictions are imposed by external organizations such as federal or state laws or buyers of the City’s bonds. Restricted net position is restricted assets reduced by liabilities and deferred inflows of resources related to the restricted assets.
- *Unrestricted net position* – consists of all other net position that does not meet the definition of the above two components and is available for general use by the Fund.

When both restricted and unrestricted resources are available for use, it is the City’s policy to use restricted resources first, and then unrestricted resources as they are needed.

Budget and Budgetary Accounting

Enterprise fund service delivery levels are determined by the extent of consumer demand. Because enterprise fund revenues and expenses fluctuate with the changing service delivery levels, accounting principles generally accepted in the United States of America do not require the financial statements to include budgetary comparisons. Accordingly, such comparisons have not been included.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires the use of estimates based on management’s knowledge and experience. Due to their prospective nature, actual results could differ from those estimates.

NOTE 2: CASH AND INVESTMENTS:

Legal Provisions for Deposits and Investments

State law generally provides that municipal funds be deposited in federally insured banks located in the State of Arkansas. These deposits may be in the form of checking accounts, savings accounts, and/or certificates of deposit. Public funds may also be invested in direct obligations of the United States of America and obligations on which the principal and interest are fully guaranteed by the United States of America.

Deposits and Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the water and sewer enterprise fund of the City of Yellville, Arkansas will not be able to recover deposits or will not be able to recover collateral securities. The City’s policy is to place deposits only in collateralized or insured accounts. As of December 31, 2017 and 2016, the Fund’s bank balances of \$451,225 and \$392,246, respectively, were fully covered by Federal Depository Insurance and pledged collateral held by the pledging financial institution in the City of Yellville’s name.

NOTE 3: RESTRICTED ASSETS:

These assets consist of cash restricted by various bond and loan agreements and the City Council for debt service and other specific uses. Restricted assets as of December 31, 2017 and 2016 were as follows:

	2017	2016
Debt service and reserve deposits	\$ 135,538	\$ 127,969
Repair and replacement funds	137,010	111,456
Meter deposit funds	53,170	52,968
Total restricted assets	\$ 325,718	\$ 292,393

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016**

NOTE 4: CAPITAL ASSETS:

Capital asset activity for the year ended December 31, 2017 was as follows:

	<u>BEGINNING BALANCE</u>	<u>INCREASES</u>	<u>DECREASES</u>	<u>ENDING BALANCE</u>
<i>Capital assets, not being depreciated:</i>				
Land and land rights	\$ 17,408	\$ -	\$ -	\$ 17,408
Construction in progress	-	10,759	-	10,759
Idle plant property	336,920	-	(336,920)	-
	<u>354,328</u>	<u>10,759</u>	<u>(336,920)</u>	<u>28,167</u>
<i>Capital assets, being depreciated:</i>				
Vehicles	30,500	-	(19,000)	11,500
Machinery and equipment	198,204	-	(8,092)	190,112
Building improvements	35,741	-	-	35,741
Furniture and fixtures	22,676	-	(7,080)	15,596
System and improvements	6,361,659	22,631	(1,375)	6,382,915
	<u>6,648,780</u>	<u>22,631</u>	<u>(35,547)</u>	<u>6,635,864</u>
<i>Less accumulated depreciation for:</i>				
Vehicles	(25,300)		13,800	(11,500)
Machinery and equipment	(169,822)	(6,017)	8,092	(167,747)
Building improvements	(14,519)	(1,409)	-	(15,928)
Furniture and fixtures	(19,051)	(3,346)	7,080	(15,317)
Idle plant property	(286,673)		286,673	-
System and improvements	(3,566,830)	(151,835)	616	(3,718,049)
	<u>(4,082,195)</u>	<u>(162,607)</u>	<u>316,261</u>	<u>(3,928,541)</u>
Total capital assets, being depreciated, net	<u>2,566,585</u>	<u>(139,976)</u>	<u>280,714</u>	<u>2,707,323</u>
Capital assets, net	<u>\$ 2,920,913</u>	<u>\$ (129,217)</u>	<u>\$ (56,206)</u>	<u>\$ 2,735,490</u>

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016**

NOTE 4: CAPITAL ASSETS - Continued:

Capital asset activity for the year ended December 31, 2016 was as follows:

	<u>BEGINNING BALANCE</u>	<u>INCREASES</u>	<u>DECREASES</u>	<u>ENDING BALANCE</u>
<i>Capital assets, not being depreciated:</i>				
Land and land rights	\$ 17,408	\$ -	\$ -	\$ 17,408
Idle plant property	336,920	-	-	336,920
	<u>354,328</u>	<u>-</u>	<u>-</u>	<u>354,328</u>
<i>Capital assets, being depreciated:</i>				
Vehicles	30,500	-	-	30,500
Machinery and equipment	198,204	-	-	198,204
Building improvements	35,741	-	-	35,741
Furniture and fixtures	22,676	-	-	22,676
System and improvements	6,361,659	-	-	6,361,659
	<u>6,648,780</u>	<u>-</u>	<u>-</u>	<u>6,648,780</u>
<i>Less accumulated depreciation for:</i>				
Vehicles	(22,700)	(2,600)	-	(25,300)
Machinery and equipment	(163,080)	(6,742)	-	(169,822)
Building improvements	(13,111)	(1,408)	-	(14,519)
Furniture and fixtures	(15,705)	(3,346)	-	(19,051)
Idle plant property	(286,673)	-	-	(286,673)
System and improvements	(3,415,262)	(151,568)	-	(3,566,830)
	<u>(3,916,531)</u>	<u>(165,664)</u>	<u>-</u>	<u>(4,082,195)</u>
Total capital assets, being depreciated, net	<u>2,732,249</u>	<u>(165,664)</u>	<u>-</u>	<u>2,566,585</u>
Capital assets, net	<u>\$ 3,086,577</u>	<u>\$ (165,664)</u>	<u>\$ -</u>	<u>\$ 2,920,913</u>

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 5: LONG-TERM LIABILITIES:

Long-term liability activity for the year ended December 31, 2017 was as follows:

	BALANCE 12/31/16	ADDITIONS	PRINCIPAL PAYMENTS	BALANCE 12/31/17	AMOUNTS DUE WITHIN ONE YEAR
Note payable - ANRC	\$ 46,432	\$ -	\$ (5,703)	\$ 40,729	\$ 5,988
Bonds Payable:					
Series 1992 (RD 92-01)	481,741	-	(20,479)	461,262	21,526
Series 1998 (RD 91-05)	300,725	-	(8,065)	292,660	8,435
Series 1998 (RD 91-07)	224,108	-	(6,047)	218,061	6,324
Series 2008A (RD 93-09)	405,673	-	(6,611)	399,062	6,888
Series 2008B (RD 93-11)	580,304	-	(9,994)	570,310	10,361
 Total long-term liabilities	 <u>\$ 2,038,983</u>	 <u>\$ -</u>	 <u>\$ (56,899)</u>	 <u>\$ 1,982,084</u>	 <u>\$ 59,522</u>

Long-term liability activity for the year ended December 31, 2016 was as follows:

	BALANCE 12/31/15	ADDITIONS	PRINCIPAL PAYMENTS	BALANCE 12/31/16	AMOUNTS DUE WITHIN ONE YEAR
Note payable - ANRC	\$ 52,172	\$ -	\$ (5,740)	\$ 46,432	\$ 5,703
Bonds Payable:					
Series 1992 (RD 92-01)	501,224	-	(19,483)	481,741	20,478
Series 1998 (RD 91-05)	308,436	-	(7,711)	300,725	8,064
Series 1998 (RD 91-07)	229,890	-	(5,782)	224,108	6,047
Series 2008A (RD 93-09)	412,017	-	(6,344)	405,673	6,610
Series 2008B (RD 93-11)	589,942	-	(9,638)	580,304	9,993
 Total long-term liabilities	 <u>\$ 2,145,671</u>	 <u>\$ -</u>	 <u>\$ (51,990)</u>	 <u>\$ 2,038,983</u>	 <u>\$ 56,895</u>

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 5: LONG-TERM LIABILITIES: - Continued

ARKANASAS NATURAL RESOURCES PAYABLE

On July 15, 1993, the City entered into a loan agreement with the Arkansas Natural Resources Commission. The loan, in the amount of \$100,000, has annual payments in the amount of \$8,024, beginning July 2004 over a term of twenty years with interest at a rate of 5% per annum.

Maturities of the Arkansas Natural Resources Commission loan payable subsequent to December 31, 2017 are as follows:

<u>Year</u>	<u>Principal Amount</u>	<u>Interest Amount</u>
2018	\$ 5,988	\$ 2,036
2019	6,287	1,737
2020	6,602	1,422
2021	6,932	1,092
2022	7,278	746
2023	<u>7,642</u>	<u>382</u>
	<u>\$ 40,729</u>	<u>\$ 7,415</u>

Bonds Payable (USDA - Rural Development)

On July 26, 1993, the City of Yellville signed a loan agreement with the United States Department of Agriculture, Rural Development for funds for improvements to the water and sewer system. This note, in the amount of \$748,200, bears interest at 5.00% and is collateralized by a revenue bond in held by Rural Development.

On March 19, 1998, the City of Yellville adopted Ordinance 98-1, which authorized the issuance of the 1998 bonds in the total amount of \$679,600 for water system improvements. The two bonds were issued to the United States Department of Agriculture, Rural Development, and require monthly payments in the amount of \$1,786 and \$1,334, with interest at a rate of 4.5% per annum. Payments commenced April 19, 2000. In conjunction with the two bond issues, Rural Development also issued two grants for the water system improvements which totaled \$919,900.

On September 18, 2008, the City of Yellville signed two loan agreements with the United States Department of Agriculture, Rural Development for funds for improvements to the water and sewer system. These notes, in the amounts of \$454,000 and \$642,900, bear interest at 4.125% and 3.625%, respectively, and are collateralized by revenue bonds in each amount held by Rural Development. Interest in the amount of \$13,476 has been capitalized as part of the project cost. Payments on the first note are in the amount of \$1,935 and are due monthly through September 2048. An interest-only payment was due on the second note in September, 2009, followed by monthly payments in the amount of \$2,572 through September 2048.

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016**

NOTE 5: LONG-TERM LIABILITIES: - Continued

Maturities of the bonds payable to USDA – Rural Development subsequent to December 31, 2017 are as follows:

<u>Year</u>	<u>Principal Amount</u>	<u>Interest Amount</u>
2018	\$ 53,534	\$ 82,090
2019	55,985	79,639
2020	58,549	77,075
2021	61,233	74,391
2022	64,042	71,582
2023-2027	367,124	310,996
2028-2032	452,442	218,377
2033-2037	324,138	133,482
2038-2042	243,492	70,435
2043-2047	242,042	27,702
2048	<u>18,775</u>	<u>239</u>
	<u>\$ 1,941,356</u>	<u>\$ 1,146,008</u>

NOTE 6: FUND REQUIREMENTS:

Various ordinances authorized the issuance of the 1992, 1998, and 2008 Series of Water and Sewer Revenue Bonds, and established certain funds and the manner in which revenues are to be deposited and transferred between the various funds.

The cash funds required and their uses are as follows:

Water and Sewer Revenue Fund

Ordinance 98-1, for the 1998 bond issue and Ordinances 5-1 (amended) and 1-WS-2008-B for the 2008 bond issues confirmed and continued the 1992 bond ordinance requirement that all revenues of the system shall be paid into the Water and Sewer Revenue Fund (the Revenue Fund), and that the revenues in this fund are pledged and shall be applied to the payment of the expenses of operation and maintenance of the system, to the payment of the principal of and interest on all outstanding bonds, to the establishment and maintenance of any required debt service reserves and to the providing of a depreciation fund.

Water and Sewer Operations and Maintenance Fund

The ordinances also confirmed and continued the requirement that a special fund titled the "Water and Sewer Operations and Maintenance Fund" (the Operating Fund) be established. On or before the first day of each month, funds sufficient for that month's operating requirements are to be transferred from the Revenue Fund into the Operating Fund and disbursed as needed for the operation and maintenance of the system.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 6: FUND REQUIREMENTS: - Continued

1992 Water and Sewer Revenue Bond Fund

Ordinance SO-6 set forth the requirement that a special fund be established titled the "1992 Water and Sewer Revenue Bond Fund." On the first of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$368. When a debt service reserve has accumulated in the amount of \$34,704, the additional \$368 transfer need not be made. This fund has been established and the required transfers for principal and interest have been made. Further, the total required debt service reserve has been established.

1998 Revenue Bond Fund

Ordinance 98-1 set forth the requirement that a special fund be established titled the "1998 Revenue Bond Fund." On or before the first business day of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$313. When a debt service reserve has accumulated in the amount of \$37,440, the additional \$313 transfer need not be made. This fund has been established and the required transfers for principal and interest have been made. Further, the total required debt service reserve has been established.

2008A Water and Sewer Bond Fund

Ordinance 5-1, adopted August 7, 2006 and amended by Ordinance 1-WS-2008-B, adopted July 7, 2008, set forth the requirement that a special fund be established titled the "2008A Water and Sewer Bond Fund." On the first of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$194. When a debt service reserve has accumulated in the amount of \$23,220, the additional \$194 transfer need not be made. This fund has been established and the required transfers have been made.

2008B Water and Sewer Bond Fund

Ordinance 1-WS-2008-B, adopted July 7, 2008, set forth the requirement that a special fund be established titled the "2008B Water and Sewer Bond Fund." On the first of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$258. When a debt service reserve has accumulated in the amount of \$30,864, the additional \$258 transfer need not be made. This fund has been established and the required transfers have been made.

Water and Sewer Depreciation Fund

The bond ordinances all set forth the requirement that a special fund be established titled the "Water and Sewer Depreciation Fund." On the first of each month, 5% of the gross system revenues of the preceding month are to be transferred to this fund from the Revenue Fund. The monies in this fund are to be used solely for the purpose of paying the cost of replacements or repairs to the system made necessary by the aging of the system or for the cost of economically justifiable extensions to the system. The ordinances do not specify an accumulated balance at which point the transfers may stop; however, they do state that if funds are accumulated in excess of required replacements or repairs for the remainder of the current fiscal year plus the next ensuing fiscal year, the excess can be transferred back into the Revenue Fund. This fund has been established and the required transfers have been made.

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 6: FUND REQUIREMENTS: - Continued

Meter Deposits

Meter deposits are refundable customer deposits for which reserves in an amount sufficient to refund the deposits in total must be held. Meter deposit reserves at December 31, 2017 were \$53,170, an excess of \$12,244 over the total customer deposits of \$40,926. Meter deposit reserves at December 31, 2016 were \$52,968, an excess of \$12,322 over the total customer deposits of \$40,646.

NOTE 7: DEBT SERVICE RATIO:

Various debt covenants require that the net revenues of the system shall equal not less than a certain percentage of the maximum annual debt service requirements of all outstanding bonds plus other indebtedness of the system, including any additional bonds proposed, should the City desire to issue additional bonds secured on a senior or parity basis to the outstanding bonds.

The actual percentages at December 31, 2017 and 2016 were 142% and 131%, computed as follows:

	2017	2016
Operating income (loss)	\$ (81,629)	\$ (100,782)
Plus Depreciation Expense	162,606	165,664
Plus Transferred Sales Tax Revenues	123,029	122,057
Funds Available for Debt Service	\$ 204,006	\$ 186,939
Maximum Annual Debt Service Requirements on the USDA Loans and ANRC Obligation	\$ 143,648	\$ 143,648
Debt Service Coverage Percentage	142%	131%

NOTE 8: LEASE AGREEMENTS:

During the year ended December 31, 2011, the City of Yellville entered into lease agreements for the maintenance of four of its water tanks. Annual payments totaling \$53,712 are due for the first eight years of the contracts. Beginning in the ninth year, annual payments will be \$27,274, with cost adjustments applied every three years. If the City elects to terminate the contracts prior to remitting the first eight annual fees, the unpaid balance of the first eight annual fees will be due and payable within thirty days of the written notice of termination.

Minimum lease payments subsequent to December 31, 2017 are as follows:

Year	Amount
2018	\$ 53,712

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 9: TRANSFERS TO/FROM OTHER FUNDS:

Authorized through a special election by the vote of the electors of the City of Yellville, an additional 1% sales and use tax was levied within the City beginning January 01, 2013. Under the City Council's authorization, ½ of the 1% is distributed from the City's sales tax monies for the water and sewer fund. Transfers and payments within the City of Yellville's funds are substantially for the purpose of subsidizing operating functions.

During the year ended December 31, 2017, the water and sewer fund transferred a vehicle to the street fund. The remaining undepreciated cost of the vehicle, \$5,200, has been recorded as a transfer out.

NOTE 10: RISK MANAGEMENT:

The Fund has purchased insurance coverage to cover potential losses due to the various risks related to the damage to and/or destruction of assets, errors and omissions, injuries to employees, and natural disasters. The amount of settlements has not exceeded the insurance coverage in the past three years. Further, there were no significant reductions in insurance coverage in the major categories of risk from coverage in the prior year.

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS):

Plan Description

The Fund provides pension benefits for its eligible employees through the Arkansas Public Employees Retirement System (APERS), a cost-sharing multiple-employer defined-benefit pension plan that covers municipal employees whose municipalities have elected coverage under this system. The plan was established by the authority of the Arkansas General Assembly with the passage of Act 177 of 1957.

The Arkansas Public Employees Retirement System issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to Arkansas Public Employees Retirement System, 124 West Capitol, Suite 400, Little Rock, Arkansas 72201 or can be accessed at www.apers.org.

The general administration and responsibility for the proper operation of the System is vested in the nine members of the Board of Trustees of the Arkansas Public Employees Retirement System (the Board). Membership includes three state and three non-state employees, all appointed by the Governor, and three ex-officio trustees, including the Auditor of the State, the Treasurer of the State and the Director of the Department of Finance and Administration.

Benefits Provided

Benefit provisions are established by state law and may only be amended by the Arkansas General Assembly. APERS provides retirement, disability and death benefits. Retirement benefits are determined as a percentage of the member's highest 3-year average compensation times the member's years of service.

Members are eligible to retire with a full benefit under the following conditions:

- at age 65 with 5 years of service,
- at any age with 28 years actual service
- at age 55 with 35 credited service for elected officials or public safety members.

Members may retire with a reduced benefit at age 55 with at least 5 years of actual service at age 55 or at any age with 25 years but less than 28 years of actual service. The plan also provides for disability and survivor benefits.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

Contributions

The plan was established as contributory. Act 793 of 1977 allowed existing and previous members to become noncontributory members. Anyone joining after January 1, 1978, was automatically enrolled as a noncontributory member. Act 2084 of 2005 established a new contributory requirement for all covered employees first hired on or after July 1, 2005. Employees hired prior to this date that are noncontributory have the option to become a contributory member at any time.

Contributions are expected to be sufficient to finance the costs of benefits earned by members during the year and make a level payment that, if paid annually over a reasonable period of future years, will fully cover the unfunded costs of benefit commitments for services previously rendered. Member who began service on or after July 1, 2005 are required to contribute 5% of their salary. Employers are required to contribute at a rate established by the Board of Trustees of APERS based on an actuary's determination of a rate required to fund the plan. For all of 2016 and the first six months of 2017, employers contributed 14.50% of compensation. Effective July 1, 2017, the contribution rate increased to 14.75%.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions

At December 31, 2017 and 2016, the Fund reported a liability of \$155,040 and \$131,887, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2017 and June 30, 2016, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of each date. The water and sewer fund of the City of Yellville, Arkansas' proportion of the net pension liability was based on its share of contributions to the pension plan relative to the total contributions of all participating employers. At June 30, 2017 and 2016, the Fund's proportion was .0060% and .0055%, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions - Continued

For the years ended December 31, 2017 and 2016, the water and sewer fund recognized pension expense of \$27,503 and \$18,197, respectively. At December 31, 2017 and 2016, the Fund reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<u>Deferred Outflows:</u>	<u>2017</u>	<u>2016</u>
Differences between expected and actual experience	\$ 3,006	\$ 125
Changes of assumptions	24,905	10,107
Net difference between projected and actual earnings on pension plan investments	6,497	23,026
Changes in proportion and differences between Water and Sewer Fund contributions and proportionate share of contributions	7,436	700
Contributions subsequent to the measurement date	7,200	7,614
Total	<u>\$ 49,044</u>	<u>\$ 41,572</u>

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

<u>Deferred Inflows:</u>	<u>2017</u>	<u>2016</u>
Differences between expected and actual experience	\$ 3,049	\$ 4,731
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	0	0
Changes in proportion and differences between Water and Sewer Fund contributions and proportionate share of contributions	<u>4,215</u>	<u>5,936</u>
Total	<u>\$ 7,264</u>	<u>\$ 10,667</u>

Actuarial Assumptions

The total pension liability amounts in the June 30, 2017 and 2016 actuarial valuations were determined using the following actuarial assumptions, applied to all periods included in the measurement:

2017:

Actuarial Cost Method	Entry Age Normal
Discount Rate	7.15%
Inflation Rate	3.25%
Investment Rate of Return (net of investment and administrative expenses)	7.15%
Salary Increases	3.25 - 9.85%

Mortality Rate Table

Based on RP-2000 Combined Healthy mortality table, projected to 2020 using projection scale BB, set-forward 2 years for males and 1 year for females

2016:

Actuarial Cost Method	Entry Age Normal
Discount Rate	7.50%
Inflation Rate	2.50%
Investment Rate of Return (net of investment and administrative expenses)	7.50%
Salary Increases	3.25 - 9.85%

Mortality Rate Table

Based on RP-2000 Combined Healthy mortality table, projected to 2020 using projection scale BB, set-forward 2 years for males and 1 year for females

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the current asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for the applicable 10-year period were based upon capital market assumptions provided by plan's investment consultant(s).

For each major asset class included in the pension plan's asset allocation as of June 30, 2017, best estimates are summarized in the following table:

Asset Class	Allocation	Long-Term Expected Real Rate of Return
Broad Domestic Equity	37%	5.97%
International Equity	24%	6.54%
Real Assets	16%	4.59%
Absolute Return	5%	3.15%
Domestic Fixed	18%	.83%
Total	<u>100%</u>	

For each major asset class included in the pension plan's asset allocation as of June 30, 2016, best estimates are summarized in the following table:

Asset Class	Allocation	Long-Term Expected Real Rate of Return
Broad Domestic Equity	38%	6.82%
International Equity	24%	6.88%
Real Assets	16%	3.07%
Absolute Return	5%	3.35%
Domestic Fixed	17%	.83%
Total	<u>100%</u>	

Discount Rate

A single discount rate of 7.50% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.50%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

Sensitivity of the Water and Sewer Fund's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the water and sewer fund's proportionate share of the net pension liability calculated using the discount rate of 7.50%, as well as what the water and sewer fund's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage point-higher (8.50%) than the current rate.

Amounts are reported as of the measurement date of June 30, 2017:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Water and sewer fund's proportionate share of the net pension liability	236,106	155,040	87,727

Amounts are reported as of the measurement date of June 30, 2016:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Water and sewer fund's proportionate share of the net pension liability	199,645	131,887	75,497

NOTE 12: PRIOR PERIOD ADJUSTMENT - 2016

Beginning net position for the year ended December 31, 2016 has been increased by \$309 as a result of an incorrect allocation between principal and interest for a prior year payment on the water and sewer fund's loan with the Arkansas Natural Resources Commission.

NOTE 13: CAPITAL CONTRIBUTION

During the year ended December 31, 2017, the City of Yellville received a grant for the rail spur project, which included a 500-foot water line extension to the City's industrial park. The grant money was accounted for through the Rail Spur Project Fund, which is not included in the City's Water and Sewer Fund. Payments for the extension were made from the project fund and the completed project was contributed to the City's Water and Sewer Fund. The capital contribution totaled \$19,181 for the year ended December 31, 2017.

REQUIRED SUPPLEMENTARY INFORMATION

**CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF THE FUND'S PROPORTIONATE SHARE
 OF THE NET PENSION LIABILITY**

Arkansas Public Employees Retirement System

Last 3 Years

	<u>2015</u>	<u>2016</u>	<u>2017</u>
Fund's proportion of the net pension liability	0.0057%	0.0055%	0.0060%
Fund's proportionate share of the net pension liability (asset)	\$ 97,269	\$ 137,887	\$ 155,040
Fund's covered payroll	\$ 101,381	\$ 102,415	\$ 104,782
Fund's proportionate share of the net pension liability (asset) as a percentage of its covered payroll	95.94%	134.64%	147.96%
Plan fiduciary net position as a percentage of the total pension liability	80.39%	75.50%	75.65%

Ten years worth of data will be presented as it is available.

**CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF FUND CONTRIBUTIONS**

Arkansas Public Employees Retirement System

Last 3 Years

	2015	2016	2017
Contractually required contributions	\$ 14,834	\$ 14,850	\$ 15,225
Contributions in relation to the contractually required contribution	(14,834)	(14,850)	(15,225)
Contribution deficiency (excess)	\$ -	\$ -	\$ -
Fund's covered payroll	\$ 101,381	\$ 102,415	\$ 104,782
Contributions as a percentage of covered payroll	14.63%	14.50%	14.53%

Ten years worth of data will be presented as it is available.

SUPPLEMENTARY INFORMATION

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF WATER OPERATING EXPENSES
 FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

	2017	2016
Dues and fees	\$ 9,043	\$ 10,986
Insurance - general	550	1,431
Insurance - health	11,050	10,526
Miscellaneous	554	1,430
Professional services	3,611	14,351
Pension expense	17,327	11,727
Repairs and maintenance	62,666	65,216
Salaries	43,013	50,946
Supplies - office	7,798	6,804
Supplies - operating	35,597	26,090
Taxes - payroll	5,108	5,193
Utilities	19,103	18,889
Water purchases	222,390	240,068
Total Operating Expenses	\$ 437,810	\$ 463,657

See independent auditor's report on supplementary information.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
SCHEDULE OF SEWER OPERATING EXPENSES
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

	<u>2017</u>	<u>2016</u>
Dues and fees	\$ 748	\$ 1,890
Insurance - general	1,065	1,836
Insurance - health	5,525	5,244
Miscellaneous	-	177
Professional fees	3,611	5,851
Pension expense	10,176	6,470
Repairs and maintenance	74,608	52,613
Salaries	40,143	37,953
Supplies - office	2,548	1,763
Supplies - operating	23,171	22,714
Taxes - payroll	3,118	2,851
Utilities	<u>33,079</u>	<u>31,501</u>
Total Operating Expenses	<u>\$ 197,792</u>	<u>\$ 170,863</u>

See independent auditor's report on supplementary information.

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
SCHEDULE OF USAGE RATES
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016**

Effective with the January 2017 billing, water and sewer rates were as follows:

Water Rate Schedule

<u>Residential & Housing (3/4" 1" 2" Meter)</u>	(Inside City)	(Outside City)	(Rural)
First 1,000 gallons	\$15.55	\$19.45	\$24.30
All over 1,000 (per 1,000 gallons)	\$ 5.30	\$ 6.60	\$ 6.60
<u>Commercial & Industrial 3/4" Meter</u>			
First 1,000 gallons	\$17.30	\$21.65	
All over 1,000 (per 1,000 gallons)	\$ 5.30	\$ 6.60	
<u>Commercial & Industrial 1" Meter</u>			
First 1,000 gallons	\$20.05	\$23.05	
All over 1,000 (per 1,000 gallons)	\$ 5.30	\$ 6.60	
<u>Commercial & Industrial 2" Meter</u>			
First 1,000 gallons	\$22.55	\$26.05	
All over 1,000 (per 1,000 gallons)	\$ 5.30	\$ 6.60	

Sewer Rate Schedule

<u>Residential & Housing/Commercial & Industrial</u>	
First 1,000 gallons	\$16.00
All over 1,000 (per 1,000 gallons)	\$ 3.95
<u>Industrial and Wholesale</u>	
First 1,000 gallons	\$30.00
All over 1,000 (per 1,000 gallons)	\$ 3.45

Prior to the effective date of the above rates, water and sewer rates were as follows:

Water Rate Schedule

<u>Residential & Housing (3/4" 1" 2" Meter)</u>	(Inside City)	(Outside City)	(Rural)
First 1,000 gallons	\$15.50	\$19.40	\$24.25
All over 1,000 (per 1,000 gallons)	\$ 5.25	\$ 6.55	\$ 6.55
<u>Commercial & Industrial 3/4" Meter</u>			
First 1,000 gallons	\$17.25	\$21.60	
All over 1,000 (per 1,000 gallons)	\$ 5.25	\$ 6.55	
<u>Commercial & Industrial 1" Meter</u>			
First 1,000 gallons	\$24.00	\$30.00	
All over 1,000 (per 1,000 gallons)	\$ 5.25	\$ 6.55	
<u>Commercial & Industrial 2" Meter</u>			
First 1,000 gallons	\$40.00	\$50.00	
All over 1,000 (per 1,000 gallons)	\$ 5.25	\$ 6.55	

See independent auditor's report on supplementary information.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
SCHEDULE OF USAGE RATES
FOR THE YEARS ENDED DECEMBER 31, 2017 AND 2016

Sewer Rate Schedule

Residential & Housing/Commercial & Industrial

First 1,000 gallons	\$16.00
All over 1,000 (per 1,000 gallons)	\$ 3.95

Industrial and Wholesale

First 1,000 gallons	\$30.00
All over 1,000 (per 1,000 gallons)	\$ 3.45

OTHER REPORTS



BALLARD & COMPANY, LTD.

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REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor and Members of City Council
City of Yellville, Arkansas

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas, as of and for the years ended December 31, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the City of Yellville, Arkansas water and sewer enterprise fund's basic financial statements, and have issued our report thereon dated April 24, 2018.

Internal Control Over Financial Reporting

In planning and performing our audits of the financial statements, we considered the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control. Accordingly, we do not express an opinion on the effectiveness of the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the water and sewer enterprise fund of the City of Yellville, Arkansas' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audits and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Ballard & Company, Ltd.

Ballard & Company, Ltd.
Mountain Home, Arkansas
April 24, 2018

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND**

AUDITED FINANCIAL STATEMENTS

**FOR THE YEARS ENDED
DECEMBER 31, 2018 AND 2017**

BALLARD & COMPANY, LTD.

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INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor and Members of City Council
City of Yellville, Arkansas

Report on the Financial Statements

We have audited the accompanying financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas, as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the City of Yellville, Arkansas water and sewer enterprise fund as of December 31, 2018 and 2017, and the changes in financial position and cash flows thereof for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the water and sewer enterprise fund of the City of Yellville, Arkansas, and do not purport to, and do not, present fairly the financial position of the City of Yellville, Arkansas as of December 31, 2018 and 2017 and the changes in its financial position and cash flows, where applicable, for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the schedule of the fund's proportionate share of the net pension liability and the schedule of fund contributions be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Management has omitted the management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion of the basic financial statements is not affected by this missing information.

Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas. The schedules of operating expenses and schedule of usage rates, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedules of operating expenses and schedule of usage rates are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules of operating expenses and the schedule of usage rates are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated August 15, 2019 on our consideration of the City of Yellville, Arkansas water and sewer enterprise fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City of Yellville, Arkansas water and sewer enterprise fund's internal control over financial reporting and compliance.

Ballard & Company, Ltd.

Ballard & Company, Ltd.
Mountain Home, Arkansas
August 15, 2019

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
STATEMENTS OF NET POSITION
DECEMBER 31, 2018 AND 2017**

<u>ASSETS</u>	<u>2018</u>	<u>2017</u>
Current assets:		
Cash and cash equivalents	\$ 108,082	\$ 116,391
Accounts receivable	70,177	66,280
Inventories	37,183	42,377
Total current assets	<u>215,442</u>	<u>225,048</u>
Restricted assets:		
Cash and cash equivalents	<u>384,848</u>	<u>325,718</u>
Capital assets:		
Nondepreciable assets	17,408	28,167
Depreciable assets, net of accumulated depreciation	<u>2,598,443</u>	<u>2,707,323</u>
Total capital assets	<u>2,615,851</u>	<u>2,735,490</u>
Total assets	<u>3,216,141</u>	<u>3,286,256</u>
 <u>DEFERRED OUTFLOWS OF RESOURCES</u>		
Deferred outflows related to pensions	<u>28,793</u>	<u>49,044</u>
 <u>LIABILITIES</u>		
Current liabilities - payable from current assets:		
Accounts payable	29,276	30,025
Other current liabilities	<u>12,572</u>	<u>12,227</u>
Total from current assets	<u>41,848</u>	<u>42,252</u>
Current liabilities - payable from restricted assets:		
Accrued interest payable	3,210	3,437
Current maturities - long-term notes	62,273	59,522
Meter deposits	<u>40,885</u>	<u>40,926</u>
Total from restricted assets	<u>106,368</u>	<u>103,885</u>
Long-term liabilities:		
Long-term notes, net of current maturities	1,860,286	1,922,562
Net pension liability	<u>122,866</u>	<u>155,040</u>
Total long-term liabilities	<u>1,983,152</u>	<u>2,077,602</u>
Total liabilities	<u>2,131,368</u>	<u>2,223,739</u>
 <u>DEFERRED INFLOWS OF RESOURCES</u>		
Deferred inflows related to pensions	<u>14,792</u>	<u>7,264</u>
 <u>NET POSITION</u>		
Net investment in capital assets	690,083	749,969
Restricted:		
Debt service	143,521	135,538
Replacement and renewal	188,132	137,010
Other - meter deposits	12,310	12,244
Unrestricted	<u>64,728</u>	<u>69,536</u>
Total net position	<u>\$ 1,098,774</u>	<u>\$ 1,104,297</u>

The accompanying notes are an integral part of these statements.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
STATEMENTS OF REVENUES, EXPENSES AND
CHANGES IN FUND NET POSITION
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

	<u>2018</u>	<u>2017</u>
<u>OPERATING REVENUES</u>		
Water service fees	\$ 484,384	\$ 471,920
Sewer service and treatment fees	224,735	223,979
Connection and related fees	11,759	5,428
Late penalties	13,018	13,666
Other	1,031	1,586
	<u>734,927</u>	<u>716,579</u>
<u>OPERATING EXPENSES</u>		
Water department	469,912	437,810
Sewer department	162,071	197,792
Depreciation expense	161,657	162,606
	<u>793,640</u>	<u>798,208</u>
Total operating revenue	<u>734,927</u>	<u>716,579</u>
Total operating expenses	<u>793,640</u>	<u>798,208</u>
Operating income (loss)	<u>(58,713)</u>	<u>(81,629)</u>
<u>NONOPERATING REVENUES (EXPENSES)</u>		
Interest income	1,008	355
Interest expense	(83,894)	(86,565)
Gain (loss) on disposal of assets	-	(51,006)
	<u>-</u>	<u>(51,006)</u>
Total nonoperating revenues (expenses)	<u>(82,886)</u>	<u>(137,216)</u>
Income (loss) before transfers and capital contributions	(141,599)	(218,845)
Transfers in	136,076	123,029
Transfers out	-	(5,200)
	<u>-</u>	<u>(5,200)</u>
Total transfers in (out)	136,076	117,829
Capital contributions	-	19,181
	<u>-</u>	<u>19,181</u>
CHANGE IN NET POSITION	(5,523)	(81,835)
<u>Net Position - Beginning of Year</u>	<u>1,104,297</u>	<u>1,186,132</u>
<u>NET POSITION - END OF YEAR</u>	<u>\$ 1,098,774</u>	<u>\$ 1,104,297</u>

The accompanying notes are an integral part of these statements.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from customers	\$ 729,387	\$ 718,781
Cash paid to and/or for employees	(140,812)	(123,756)
Cash paid to suppliers	(476,484)	
Cash paid to other funds	(12,689)	(507,631)
	99,402	87,394
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Transfers in	136,076	123,029
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Principal paid on notes and bonds payable	(59,525)	(56,899)
Interest paid on notes and bonds payable	(84,123)	(86,750)
Cash paid to purchase and construct assets	(42,017)	(14,209)
	(185,665)	(157,858)
CASH FLOWS FROM INVESTING ACTIVITIES		
Cash received from interest earned	1,008	355
NET INCREASE (DECREASE) IN CASH	50,821	52,920
CASH AND CASH EQUIVALENTS - BEGINNING OF YEAR	442,109	389,189
CASH AND CASH EQUIVALENTS - END OF YEAR	\$ 492,930	\$ 442,109

Reconciliation of Operating Income (Loss) to Net Cash Provided

<u>(Used In) Operating Activities:</u>		
Operating income (loss)	\$ (58,713)	\$ (81,629)
Depreciation expense	161,657	162,606
<u>(Increase) Decrease in Assets and Increase (Decrease) in Liabilities:</u>		
Accounts receivable	(3,897)	1,922
Inventory	5,195	(4,420)
Deferred outflows of resources	20,251	(7,472)
Accounts payable	(749)	(2,823)
Other current liabilities	345	(820)
Net pension liability	(32,174)	23,153
Deferred inflows of resources	7,528	(3,403)
Meter deposits refundable	(41)	280
	99,402	87,394
Net Cash Flows from Operating Activities	\$ 99,402	\$ 87,394

Reconciliation of Total Cash and Cash Equivalents - Ending

Current assets - cash and cash equivalents	\$ 108,082	\$ 116,391
Restricted assets - cash and cash equivalents	384,848	325,718
	\$ 492,930	\$ 442,109

Reconciliation of Total Cash and Cash Equivalents - Beginning

Current assets - cash and cash equivalents	\$ 116,391	\$ 96,796
Restricted assets - cash and cash equivalents	325,718	292,393
	\$ 442,109	\$ 389,189

The accompanying notes are an integral part of these statements.

CITY OF YELLEVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Reporting Entity

The City of Yellville, Arkansas, (the "City") was incorporated on April 5, 1946 and operates under an elected mayor-council form of government. The water and sewer fund (the "Fund") is responsible for the operation and maintenance of the City's water distribution system and its sewer treatment system.

The Fund is operated as an enterprise fund of the City. An enterprise fund is used to account for operations that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs, including depreciation, of providing goods or services on a continuing basis be financed or recovered primarily through user charges.

The City's comprehensive financial report does not include the water and sewer enterprise fund, which is separately reported herein. These financial statements are intended to present only the financial position, results of operations and cash flows attributable to the Fund and are not intended to, and do not, reflect the financial position, results of operations and cash flows of the City of Yellville as a whole.

Basis of Accounting

The financial statements of the Fund are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") as applicable to enterprise funds of governmental entities using the economic resources measurement focus and the accrual basis of accounting. The economic resources measurement focus means all assets, deferred outflows of resources, liabilities and deferred inflows of resources (whether current or non-current) are included on the statement of net position, and the operating statement presents increases (revenues) and decreases (expenses) in net total position. Under the accrual basis of accounting, revenues are recognized when earned and expenses when the liability is incurred or economic asset used. The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations).

Basis of Presentation

The presentation of the Fund's financial statements follows the requirement of GASB Statement No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments* (GASB Statement No. 34) – applicable to enterprise funds, as amended. In accordance with the requirements of GASB Statement No. 34, the Department's net position is categorized into net investment in capital assets, restricted and unrestricted, as applicable. In addition, operating income reported in the financial statements includes revenues and expenses related to the primary continuing operations of the fund. Principal operating revenues are charges to customers for water, sewer, and related services. Operating expenses include the costs of providing these services, administrative expenses, and depreciation of capital assets. All revenue and expenses not meeting these definitions are reported as nonoperating revenues and expenses in the financial statements.

Cash and Cash Equivalents

Cash accounts are displayed separately on the Statement of Net Position as "current" and "restricted." Restricted assets consist of amounts set aside under the various debt agreements and by the City Council to fulfill the requirements of the debt agreements and for other specific uses. Cash, including restricted cash, includes all demand accounts of the fund.

For the purpose of the Statement of Cash Flows, "cash and cash equivalents" include all demand and savings accounts, and any certificates of deposit or short-term investments with an original maturity of three months or less.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: – Continued

Accounts Receivable

Accounts receivable reflects the balances due from the individuals and businesses using the water and sewer services provided by the City. Management closely monitors outstanding balances and evaluates collectability of its accounts receivable on a per-customer basis. Customer accounts are typically collected within a short period of time, and, based on its assessment of current conditions, management believes realization losses on the amount outstanding at the end of 2018 and 2017 will be immaterial. Accordingly, the account balances are reported at the full amounts outstanding.

Inventories

Inventories of the materials and supplies used in the operation of the system are stated at average cost.

Capital Assets

Capital assets which are purchased or constructed are reported at historical cost. Additions, improvements and other capital outlays that significantly extend the useful life of an asset are capitalized. Other cost of normal maintenance and repairs that do not materially extend an asset's life are expensed as incurred. Capital assets are depreciated by the straight-line method over their estimated useful lives:

Buildings and Improvements	20 - 40 Years
System and Improvements	25 - 40 Years
Furniture and Fixtures	5 - 7 Years
Machinery and Equipment	5 - 10 Years
Vehicles	5 Years

Accounts Payable

Accounts payable consists of various trade accounts which are typically payable within thirty (30) days.

Deferred Outflows/Inflows of Resources

Deferred outflows/inflows of resources are financial statement elements distinct from assets and liabilities and represent a consumption or production of net position that applies to future periods and so will not be recognized as an outflow or inflow of resources until then. The Fund's deferred outflows and inflows of resources consist of deferred outflows and inflows of resources related to the Fund's pension plan activities, as further discussed in Note 11.

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Arkansas Public Employees Retirement System (APERS) have been determined on the same basis as they are reported by APERS.

Net Position

Net position represents the difference between assets plus deferred outflows of resources and liabilities and deferred inflows of resources, and is classified into the following categories:

- *Net Investment in Capital Assets* - Consists of net capital assets reduced by outstanding balances of any debt obligations and deferred inflows of resources attributable to the acquisition, construction, or improvement of those assets and increased by deferred outflows of resources related to those assets.

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017**

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: – Continued

Net Position - Continued:

- *Restricted net position*— net position is considered restricted if its use is constrained to a particular purpose. Restrictions are imposed by external organizations such as federal or state laws or buyers of the City's bonds. Restricted net position is restricted assets reduced by liabilities and deferred inflows of resources related to the restricted assets.
- *Unrestricted net position* – consists of all other net position that does not meet the definition of the above two components and is available for general use by the Fund.

When both restricted and unrestricted resources are available for use, it is the City's policy to use unrestricted resources first, and then restricted resources as they are needed.

Budget and Budgetary Accounting

Enterprise fund service delivery levels are determined by the extent of consumer demand. Because enterprise fund revenues and expenses fluctuate with the changing service delivery levels, accounting principles generally accepted in the United States of America do not require the financial statements to include budgetary comparisons. Accordingly, such comparisons have not been included.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires the use of estimates based on management's knowledge and experience. Due to their prospective nature, actual results could differ from those estimates.

NOTE 2: CASH AND INVESTMENTS:

Legal Provisions for Deposits and Investments

State law generally provides that municipal funds be deposited in federally insured banks located in the State of Arkansas. These deposits may be in the form of checking accounts, savings accounts, and/or certificates of deposit. Public funds may also be invested in direct obligations of the United States of America and obligations on which the principal and interest are fully guaranteed by the United States of America.

Deposits and Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the water and sewer enterprise fund of the City of Yellville, Arkansas will not be able to recover deposits or will not be able to recover collateral securities. The City's policy is to place deposits only in collateralized or insured accounts. As of December 31, 2018 and 2017, the Fund's bank balances of \$494,734 and \$451,225, respectively, were fully covered by Federal Depository Insurance and pledged collateral held by the pledging financial institution in the City of Yellville's name.

NOTE 3: RESTRICTED ASSETS:

These assets consist of cash restricted by various bond and loan agreements and the City Council for debt service and other specific uses. Restricted assets as of December 31, 2018 and 2017 were as follows:

	2018	2017
Debt service and reserve deposits	\$ 143,521	\$ 135,538
Repair and replacement funds	188,132	137,010
Meter deposit funds	53,195	53,170
Total restricted assets	\$ 384,848	\$ 325,718

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 4: CAPITAL ASSETS:

Capital asset activity for the year ended December 31, 2018 was as follows:

	<u>BEGINNING BALANCE</u>	<u>INCREASES</u>	<u>DECREASES</u>	<u>ENDING BALANCE</u>
<i>Capital assets, not being depreciated:</i>				
Land and land rights	\$ 17,408	\$ -	\$ -	\$ 17,408
Construction in progress	10,759	-	(10,759)	-
	<u>28,167</u>	<u>-</u>	<u>(10,759)</u>	<u>17,408</u>
<i>Capital assets, being depreciated:</i>				
Vehicles	11,500	22,139	-	33,639
Machinery and equipment	190,112	15,000	-	205,112
Building improvements	35,741	15,638	-	51,379
Furniture and fixtures	15,596	-	-	15,596
System and improvements	6,382,915	-	-	6,382,915
	<u>6,635,864</u>	<u>52,777</u>	<u>-</u>	<u>6,688,641</u>
<i>Less accumulated depreciation for:</i>				
Vehicles	(11,500)	(738)	-	(12,238)
Machinery and equipment	(167,747)	(6,142)	-	(173,889)
Building improvements	(15,928)	(2,060)	-	(17,988)
Furniture and fixtures	(15,317)	(279)	-	(15,596)
System and improvements	(3,718,049)	(152,438)	-	(3,870,487)
	<u>(3,928,541)</u>	<u>(161,657)</u>	<u>-</u>	<u>(4,090,198)</u>
Total capital assets, being depreciated, net	<u>2,707,323</u>	<u>(108,880)</u>	<u>-</u>	<u>2,598,443</u>
Capital assets, net	<u>\$ 2,735,490</u>	<u>\$ (108,880)</u>	<u>\$ (10,759)</u>	<u>\$ 2,615,851</u>

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 4: CAPITAL ASSETS - Continued:

Capital asset activity for the year ended December 31, 2017 was as follows:

	BEGINNING BALANCE	INCREASES	DECREASES	ENDING BALANCE
<i>Capital assets, not being depreciated:</i>				
Land and land rights	\$ 17,408	\$ -	\$ -	\$ 17,408
Construction in progress	-	10,759	-	10,759
Idle plant property	336,920	-	(336,920)	-
	<u>354,328</u>	<u>10,759</u>	<u>(336,920)</u>	<u>28,167</u>
<i>Capital assets, being depreciated:</i>				
Vehicles	30,500	-	(19,000)	11,500
Machinery and equipment	198,204	-	(8,092)	190,112
Building improvements	35,741	-	-	35,741
Furniture and fixtures	22,676	-	(7,080)	15,596
System and improvements	6,361,659	22,631	(1,375)	6,382,915
	<u>6,648,780</u>	<u>22,631</u>	<u>(35,547)</u>	<u>6,635,864</u>
<i>Less accumulated depreciation for:</i>				
Vehicles	(25,300)	-	13,800	(11,500)
Machinery and equipment	(169,822)	(6,017)	8,092	(167,747)
Building improvements	(14,519)	(1,409)	-	(15,928)
Furniture and fixtures	(19,051)	(3,346)	7,080	(15,317)
Idle plant property	(286,673)	-	286,673	-
System and improvements	(3,566,830)	(151,835)	616	(3,718,049)
	<u>(4,082,195)</u>	<u>(162,607)</u>	<u>316,261</u>	<u>(3,928,541)</u>
Total capital assets, being depreciated, net	<u>2,566,585</u>	<u>(139,976)</u>	<u>280,714</u>	<u>2,707,323</u>
Capital assets, net	<u>\$ 2,920,913</u>	<u>\$ (129,217)</u>	<u>\$ (56,206)</u>	<u>\$ 2,735,490</u>

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 5: LONG-TERM LIABILITIES:

Long-term liability activity for the year ended December 31, 2018 was as follows:

	BALANCE		PRINCIPAL	BALANCE	AMOUNTS
	12/31/17	ADDITIONS	PAYMENTS	12/31/18	DUE WITHIN
					ONE YEAR
Note payable - ANRC	\$ 40,729	\$ -	\$ (5,988)	\$ 34,741	\$ 6,287
Bonds Payable:					
Series 1992 (RD 92-01)	461,262	-	(21,527)	439,735	22,627
Series 1998 (RD 91-05)	292,660	-	(8,435)	284,225	8,823
Series 1998 (RD 91-07)	218,061	-	(6,325)	211,736	6,615
Series 2008A (RD 93-09)	399,062	-	(6,888)	392,174	7,178
Series 2008B (RD 93-11)	570,310	-	(10,362)	559,948	10,743
Total long-term liabilities	<u>\$ 1,982,084</u>	<u>\$ -</u>	<u>\$ (59,525)</u>	<u>\$ 1,922,559</u>	<u>\$ 62,273,</u>

Long-term liability activity for the year ended December 31, 2017 was as follows:

	BALANCE		PRINCIPAL	BALANCE	AMOUNTS
	12/31/16	ADDITIONS	PAYMENTS	12/31/17	DUE WITHIN
					ONE YEAR
Note payable - ANRC	\$ 46,432	\$ -	\$ (5,703)	\$ 40,729	\$ 5,988
Bonds Payable:					
Series 1992 (RD 92-01)	481,741	-	(20,479)	461,262	21,526
Series 1998 (RD 91-05)	300,725	-	(8,065)	292,660	8,435
Series 1998 (RD 91-07)	224,108	-	(6,047)	218,061	6,324
Series 2008A (RD 93-09)	405,673	-	(6,611)	399,062	6,888
Series 2008B (RD 93-11)	580,304	-	(9,994)	570,310	10,361
Total long-term liabilities	<u>\$ 2,038,983</u>	<u>\$ -</u>	<u>\$ (56,899)</u>	<u>\$ 1,982,084</u>	<u>\$ 59,522</u>

**CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2007 AND 2017**

NOTE 5: LONG-TERM LIABILITIES: - Continued

ARKANSAS NATURAL RESOURCES PAYABLE

On July 15, 1993, the City entered into a loan agreement with the Arkansas Natural Resources Commission. The loan, in the amount of \$100,000, has annual payments in the amount of \$8,024, beginning July 2004 over a term of twenty years with interest at a rate of 5% per annum.

Maturities of the Arkansas Natural Resources Commission loan payable subsequent to December 31, 2018 are as follows:

<u>Year</u>	<u>Principal Amount</u>	<u>Interest Amount</u>
2019	\$ 6,287	\$ 1,737
2020	6,602	1,422
2021	6,932	1,092
2022	7,278	746
2023	<u>7,642</u>	<u>382</u>
	<u>\$ 34,741</u>	<u>\$ 5,379</u>

Bonds Payable (USDA - Rural Development)

On July 26, 1993, the City of Yellville signed a loan agreement with the United States Department of Agriculture, Rural Development for funds for improvements to the water and sewer system. This note, in the amount of \$748,200, bears interest at 5.00% and is collateralized by a revenue bond in held by Rural Development.

On March 19, 1998, the City of Yellville adopted Ordinance 98-1, which authorized the issuance of the 1998 bonds in the total amount of \$679,600 for water system improvements. The two bonds were issued to the United States Department of Agriculture, Rural Development, and require monthly payments in the amount of \$1,786 and \$1,334, with interest at a rate of 4.5% per annum. Payments commenced April 19, 2000. In conjunction with the two bond issues, Rural Development also issued two grants for the water system improvements which totaled \$919,900.

On September 18, 2008, the City of Yellville signed two loan agreements with the United States Department of Agriculture, Rural Development for funds for improvements to the water and sewer system. These notes, in the amounts of \$454,000 and \$642,900, bear interest at 4.125% and 3.625%, respectively, and are collateralized by revenue bonds in each amount held by Rural Development. Interest in the amount of \$13,476 has been capitalized as part of the project cost. Payments on the first note are in the amount of \$1,935 and are due monthly through September 2048. An interest-only payment was due on the second note in September, 2009, followed by monthly payments in the amount of \$2,572 through September 2048.

CITY OF YELLEVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 5: LONG-TERM LIABILITIES: - Continued

Maturities of the bonds payable to USDA – Rural Development subsequent to December 31, 2018 are as follows:

<u>Year</u>	<u>Principal Amount</u>	<u>Interest Amount</u>
2019	\$ 55,986	\$ 79,638
2020	58,550	77,074
2021	61,234	74,390
2022	64,042	71,582
2023	66,981	68,643
2024-2028	384,003	294,117
2029-2033	428,140	198,576
2034-2038	344,755	118,930
2039-2043	208,208	62,212
2044-2048	<u>215,919</u>	<u>18,752</u>
	<u>\$ 1,887,818</u>	<u>\$ 1,063,914</u>

NOTE 6: FUND REQUIREMENTS:

Various ordinances authorized the issuance of the 1992, 1998, and 2008 Series of Water and Sewer Revenue Bonds, and established certain funds and the manner in which revenues are to be deposited and transferred between the various funds.

The cash funds required and their uses are as follows:

Water and Sewer Revenue Fund

Ordinance 98-1, for the 1998 bond issue and Ordinances 5-1 (amended) and 1-WS-2008-B for the 2008 bond issues confirmed and continued the 1992 bond ordinance requirement that all revenues of the system shall be paid into the Water and Sewer Revenue Fund (the Revenue Fund), and that the revenues in this fund are pledged and shall be applied to the payment of the expenses of operation and maintenance of the system, to the payment of the principal of and interest on all outstanding bonds, to the establishment and maintenance of any required debt service reserves and to the providing of a depreciation fund.

Water and Sewer Operations and Maintenance Fund

The ordinances also confirmed and continued the requirement that a special fund titled the "Water and Sewer Operations and Maintenance Fund" (the Operating Fund) be established. On or before the first day of each month, funds sufficient for that month's operating requirements are to be transferred from the Revenue Fund into the Operating Fund and disbursed as needed for the operation and maintenance of the system.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 6: **FUND REQUIREMENTS: - Continued**

1992 Water and Sewer Revenue Bond Fund

Ordinance SO-6 set forth the requirement that a special fund be established titled the "1992 Water and Sewer Revenue Bond Fund." On the first of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$368. When a debt service reserve has accumulated in the amount of \$34,704, the additional \$368 transfer need not be made. This fund has been established and the required transfers for principal and interest have been made. Further, the total required debt service reserve has been established.

1998 Revenue Bond Fund

Ordinance 98-1 set forth the requirement that a special fund be established titled the "1998 Revenue Bond Fund." On or before the first business day of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$313. When a debt service reserve has accumulated in the amount of \$37,440, the additional \$313 transfer need not be made. This fund has been established and the required transfers for principal and interest have been made. Further, the total required debt service reserve has been established.

2008A Water and Sewer Bond Fund

Ordinance 5-1, adopted August 7, 2006 and amended by Ordinance 1-WS-2008-B, adopted July 7, 2008, set forth the requirement that a special fund be established titled the "2008A Water and Sewer Bond Fund." On the first of each month, monies are to be transferred from the Revenue fund into this Fund in an amount sufficient to pay the next monthly installment on the bonds plus \$194. When a debt service reserve has accumulated in the amount of \$23,220, the additional \$194 transfer need not be made. This fund has been established and the required transfers have been made.

2008B Water and Sewer Bond Fund

Ordinance 1-WS-2008-B, adopted July 7, 2008, set forth the requirement that a special fund be established titled the "2008B Water and Sewer Bond Fund." On the first of each month, monies are to be transferred from the Revenue Fund into this fund in an amount sufficient to pay the next monthly installment on the bonds plus \$258. When a debt service reserve has accumulated in the amount of \$30,864, the additional \$258 transfer need not be made. This fund has been established and the required transfers for principal and interest have been made. Further, the total required debt service reserve has been established.

Water and Sewer Depreciation Fund

The bond ordinances all set forth the requirement that a special fund be established titled the "Water and Sewer Depreciation Fund." On the first of each month, 5% of the gross system revenues of the preceding month are to be transferred to this fund from the Revenue Fund. The monies in this fund are to be used solely for the purpose of paying the cost of replacements or repairs to the system made necessary by the aging of the system or for the cost of economically justifiable extensions to the system. The ordinances do not specify an accumulated balance at which point the transfers may stop; however, they do state that if funds are accumulated in excess of required replacements or repairs for the remainder of the current fiscal year plus the next ensuing fiscal year, the excess can be transferred back into the Revenue Fund. This fund has been established and the required transfers have been made.

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017**

NOTE 6: FUND REQUIREMENTS: - Continued

Meter Deposits

Meter deposits are refundable customer deposits for which reserves in an amount sufficient to refund the deposits in total must be held. Meter deposit reserves at December 31, 2018 were \$53,195, an excess of \$12,310 over the total customer deposits of \$40,885. Meter deposit reserves at December 31, 2017 were \$53,170, an excess of \$12,244 over the total customer deposits of \$40,926.

NOTE 7: DEBT SERVICE RATIO:

Various debt covenants require that the net revenues of the system shall equal not less than a certain percentage of the maximum annual debt service requirements of all outstanding bonds plus other indebtedness of the system, including any additional bonds proposed, should the City desire to issue additional bonds secured on a senior or parity basis to the outstanding bonds.

The actual percentages at December 31, 2018 and 2017 were 167% and 142%, computed as follows:

	2018	2017
Operating income (loss)	\$ (58,713)	\$ (81,629)
Plus Depreciation Expense	161,657	162,606
Plus Transferred Sales Tax Revenues	136,076	123,029
Funds Available for Debt Service	\$ 239,020	\$ 204,006
Maximum Annual Debt Service Requirements on the USDA Loans and ANRC Obligation	\$ 143,648	\$ 143,648
Debt Service Coverage Percentage	167%	142%

NOTE 8: TANK MAINTENANCE AGREEMENTS:

During the year ended December 31, 2011, the City of Yellville entered into agreements for the maintenance of four of its water tanks. Annual payments totaling \$53,712 are due for the first eight years of the contracts. Beginning in the ninth year, annual payments will be \$27,274, with cost adjustments applied every three years. If the City elects to terminate the contracts prior to remitting the first eight annual fees, the unpaid balance of the first eight annual fees will be due and payable within thirty days of the written notice of termination.

NOTE 9: TRANSFERS TO/FROM OTHER FUNDS:

Authorized through a special election by the vote of the electors of the City of Yellville, an additional 1% sales and use tax was levied within the City beginning January 01, 2013. Under the City Council's authorization, ½ of the 1% is distributed from the City's sales tax monies for the water and sewer fund. Transfers and payments within the City of Yellville's funds are substantially for the purpose of subsidizing operating functions.

During the year ended December 31, 2017, the water and sewer fund transferred a vehicle to the street fund. The remaining undepreciated cost of the vehicle, \$5,200, has been recorded as a transfer out.

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017**

NOTE 10: RISK MANAGEMENT:

The Fund has purchased insurance coverage to cover potential losses due to the various risks related to the damage to and/or destruction of assets, errors and omissions, injuries to employees, and natural disasters. The amount of settlements has not exceeded the insurance coverage in the past three years. Further, there were no significant reductions in insurance coverage in the major categories of risk from coverage in the prior year.

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS):

Plan Description

The Fund provides pension benefits for its eligible employees through the Arkansas Public Employees Retirement System (APERS), a cost-sharing multiple-employer defined-benefit pension plan that covers municipal employees whose municipalities have elected coverage under this system. The plan was established by the authority of the Arkansas General Assembly with the passage of Act 177 of 1957.

The Arkansas Public Employees Retirement System issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to Arkansas Public Employees Retirement System, 124 West Capitol, Suite 400, Little Rock, Arkansas 72201 or can be accessed at www.apers.org.

The general administration and responsibility for the proper operation of the System is vested in the nine members of the Board of Trustees of the Arkansas Public Employees Retirement System (the Board). Membership includes three state and three non-state employees, all appointed by the Governor, and three ex-officio trustees, including the Auditor of the State, the Treasurer of the State and the Director of the Department of Finance and Administration.

Benefits Provided

Benefit provisions are established by state law and may only be amended by the Arkansas General Assembly. APERS provides retirement, disability and death benefits. Retirement benefits are determined as a percentage of the member's highest 3-year average compensation times the member's years of service.

Members are eligible to retire with a full benefit under the following conditions:

- at age 65 with 5 years of service,
- at any age with 28 years actual service
- at age 55 with 35 credited service for elected officials or public safety members.

Members may retire with a reduced benefit at age 55 with at least 5 years of actual service at age 55 or at any age with 25 years but less than 28 years of actual service. The plan also provides for disability and survivor benefits.

Contributions

The plan was established as contributory. Act 793 of 1977 allowed existing and previous members to become noncontributory members. Anyone joining after January 1, 1978, was automatically enrolled as a noncontributory member. Act 2084 of 2005 established a new contributory requirement for all covered employees first hired on or after July 1, 2005. Employees hired prior to this date that are noncontributory have the option to become a contributory member at any time.

Contributions are expected to be sufficient to finance the costs of benefits earned by members during the year and make a level payment that, if paid annually over a reasonable period of future years, will fully cover the unfunded costs of benefit commitments for services previously rendered. Member who began service on or after July 1, 2005 are required to contribute 5% of their salary.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

Contributions - Continued

Employers are required to contribute at a rate established by the Board of Trustees of APERS based on an actuary's determination of a rate required to fund the plan. For first six months of 2017, employers contributed 14.50% of compensation. Effective July 1, 2017, the contribution rate increased to 14.75%. Effective July 1, 2018, the contribution rate increased to 15.32%. Contributions made to the plan by the Fund for the years ended December 31, 2018 and 2017 were \$16,072 and \$15,225, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions

At December 31, 2018 and 2017, the Fund reported a liability of \$122,866 and \$155,040, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018 and June 30, 2017, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of each date. The water and sewer fund of the City of Yellville, Arkansas' proportion of the net pension liability was based on its share of contributions to the pension plan relative to the total contributions of all participating employers. At June 30, 2018 and 2017, the Fund's proportion was .0056% and .0060%, respectively.

For the years ended December 31, 2018 and 2017, the water and sewer fund recognized pension expense of \$7,473 and \$17,327, respectively. At December 31, 2018 and 2017, the Fund reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

<u>Deferred Outflows:</u>	<u>2018</u>	<u>2017</u>
Differences between expected and actual experience	\$ 1,954	\$ 3,006
Changes of assumptions	13,980	24,905
Net difference between projected and actual earnings on pension plan investments	0	6,497
Changes in proportion and differences between Water and Sewer Fund contributions and proportionate share of contributions	4,753	7,436
Contributions subsequent to the measurement date	8,106	7,200
Total	<u>\$ 28,793</u>	<u>\$ 49,044</u>

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources to Pensions - Continued

<u>Deferred Inflows:</u>	<u>2018</u>	<u>2017</u>
Differences between expected and actual experience	\$ 1,290	\$ 3,049
Changes of assumptions	3,109	0
Net difference between projected and actual earnings on pension plan investments	7,598	0
Changes in proportion and differences between Water and Sewer Fund contributions and proportionate share of contributions	<u>2,795</u>	<u>4,215</u>
Total	<u>\$ 14,792</u>	<u>\$ 7,264</u>

The amount reported as deferred outflow of resources related to pensions resulting from contributions subsequent to the measurement date of \$8,106 will be recognized as a reduction of the net pension liability for the year ending December 31, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the Plan will be recognized in pension expense as follows:

<u>Year Ending December 31,</u>	<u>Net Deferred Outflows</u>
2019	16,368
2020	8,289
2021	(13,028)
<u>2022</u>	<u>(5,734)</u>
<u>Total</u>	<u>5,895</u>

Actuarial Assumptions

The total pension liability amounts in the June 30, 2018 and 2017 actuarial valuations were determined using the following actuarial assumptions, applied to all periods included in the measurement:

<u>2018:</u>	
Actuarial Cost Method	Entry Age Normal
Discount Rate	7.15%
Inflation Rate	3.25%
Investment Rate of Return (net of investment and administrative expenses)	7.15%
Salary Increases	3.25 - 9.85%
Mortality Rate Table	Based on RP-2014 weighted generational mortality tables for healthy annuitant, disability, or employee death in service, as applicable. The tables applied credibility adjustments of 135% for males and 125% for females and were adjusted for fully generational mortality improvements using Scale MP-2017.

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

2017:

Actuarial Cost Method	Entry Age Normal
Discount Rate	7.15%
Inflation Rate	3.25%
Investment Rate of Return (net of investment and administrative expenses)	7.15%
Salary Increases	3.25 - 9.85%
Mortality Rate Table	Based on RP-2000 Combined Healthy mortality table, projected to 2020 using projection scale BB, set-forward 2 years for males and 1 year for females

Long-term Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the current asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for the 10-year period from 2018 – 2027 (and 2017 – 2026 as of June 30, 2017) were based upon capital market assumptions provided by the plan's investment consultant.

For each major asset class included in the pension plan's asset allocation as of June 30, 2018, these best estimates are summarized in the following table:

Asset Class	Allocation	Long-Term Expected Real Rate of Return
Broad Domestic Equity	37%	5.97%
International Equity	24%	6.07%
Real Assets	16%	4.59%
Absolute Return	5%	3.15%
Domestic Fixed	18%	.83%
Total	<u>100%</u>	

For each major asset class included in the pension plan's asset allocation as of June 30, 2017, the long-term expected rates of return are shown in the following table:

Asset Class	Allocation	Long-Term Expected Real Rate of Return
Broad Domestic Equity	37%	5.97%
International Equity	24%	6.54%
Real Assets	16%	4.59%
Absolute Return	5%	3.15%
Domestic Fixed	18%	.83%
Total	<u>100%</u>	

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 NOTES TO FINANCIAL STATEMENTS
 FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 11: ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (APERS): - Continued

Discount Rate

For each of the June 30, 2018 and 2017 valuations, a single discount rate of 7.15% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.15%. The projection of cash flows used to determine these single discount rates assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Water and Sewer Fund's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the water and sewer fund's proportionate share of the net pension liability calculated using the discount rate of 7.15%, as well as what the water and sewer fund's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage point-higher than the current rate.

Amounts are reported as of the measurement date of June 30, 2018:

	1% Decrease (6.15%)	Current Discount Rate (7.15%)	1% Increase (8.15%)
Water and sewer fund's proportionate share of the net pension liability	200,880	122,866	58,511

Amounts are reported as of the measurement date of June 30, 2017:

	1% Decrease (6.15%)	Current Discount Rate (7.15%)	1% Increase (8.15%)
Water and sewer fund's proportionate share of the net pension liability	236,106	155,040	87,727

NOTE 13: CAPITAL CONTRIBUTION

During the year ended December 31, 2017, the City of Yellville received a grant for the rail spur project, which included a 500-foot water line extension to the City's industrial park. The grant money was accounted for through the Rail Spur Project Fund, which is not included in the City's Water and Sewer Fund. Payments for the extension were made from the project fund and the completed project was contributed to the City's Water and Sewer Fund. The capital contribution totaled \$19,181 for the year ended December 31, 2017.

REQUIRED SUPPLEMENTARY INFORMATION

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF THE FUND'S PROPORTIONATE SHARE
 OF THE NET PENSION LIABILITY

Arkansas Public Employees Retirement System

	Last 4 Years			
	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Fund's proportion of the net pension liability	0.0057%	0.0055%	0.0060%	0.0056%
Fund's proportionate share of the net pension liability (asset)	\$ 97,269	\$ 137,887	\$ 155,040	\$ 122,866
Fund's covered payroll	\$ 101,381	\$ 102,415	\$ 104,782	\$ 106,320
Fund's proportionate share of the net pension liability (asset) as a percentage of its covered payroll	95.94%	134.64%	147.96%	115.56%
Plan fiduciary net position as a percentage of the total pension liability	80.39%	75.50%	75.65%	79.59%

Ten years worth of data will be presented as it is available.

**CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
SCHEDULE OF FUND CONTRIBUTIONS**

Arkansas Public Employees Retirement System

	Last 4 Years			
	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Contractually required contributions	\$ 14,834	\$ 14,850	\$ 15,225	\$ 16,072
Contributions in relation to the contractually required contribution	<u>(14,834)</u>	<u>(14,850)</u>	<u>(15,225)</u>	<u>(16,072)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Fund's covered payroll	\$ 101,381	\$ 102,415	\$ 104,782	\$ 106,320
Contributions as a percentage of covered payroll	14.63%	14.50%	14.53%	15.12%

Ten years worth of data will be presented as it is available.

SUPPLEMENTARY INFORMATION

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF WATER OPERATING EXPENSES
 FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

	<u>2018</u>	<u>2017</u>
Administrative fees	\$ 5,145	\$ -
Bad debts	801	-
Dues and fees	9,879	9,043
Insurance - general	542	550
Insurance - health	13,137	11,050
Miscellaneous	903	554
Professional services	3,568	3,611
Pension expense	7,473	17,327
Repairs and maintenance	64,252	62,666
Salaries	58,311	43,013
Supplies - office	7,545	7,798
Supplies - operating	34,908	35,597
Taxes - payroll	5,359	5,108
Utilities	17,851	19,103
Water purchases	<u>240,238</u>	<u>222,390</u>
Total Operating Expenses	<u>\$ 469,912</u>	<u>\$ 437,810</u>

See independent auditor's report on supplementary information.

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF SEWER OPERATING EXPENSES
 FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

	<u>2018</u>	<u>2017</u>
Administrative fees	\$ 5,145	\$ -
Bad debts	801	-
Dues and fees	1,715	748
Insurance - general	1,303	1,065
Insurance - health	6,569	5,525
Miscellaneous	59	-
Professional fees	3,568	3,611
Pension expense	4,204	10,176
Repairs and maintenance	48,681	74,608
Salaries	41,319	40,143
Supplies - office	2,456	2,548
Supplies - operating	15,246	23,171
Taxes - payroll	3,151	3,118
Utilities	<u>27,854</u>	<u>33,079</u>
Total Operating Expenses	<u>\$ 162,071</u>	<u>\$ 197,792</u>

See independent auditor's report on supplementary information.

CITY OF YELLVILLE, ARKANSAS
 WATER AND SEWER ENTERPRISE FUND
 SCHEDULE OF USAGE RATES
 FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

Effective with the January 2018 billing, water and sewer rates were as follows:

Water Rate Schedule

<u>Residential & Housing (3/4" 1" 2" Meter)</u>	(Inside City)	(Outside City)	(Rural)
First 1,000 gallons	\$15.55	\$19.45	\$24.30
All over 1,000 (per 1,000 gallons)	\$ 5.35	\$ 6.65	\$ 6.65
<u>Commercial & Industrial 3/4" Meter</u>			
First 1,000 gallons	\$17.30	\$21.65	
All over 1,000 (per 1,000 gallons)	\$ 5.35	\$ 6.65	
<u>Commercial & Industrial 1" Meter</u>			
First 1,000 gallons	\$20.05	\$23.05	
All over 1,000 (per 1,000 gallons)	\$ 5.35	\$ 6.65	
<u>Commercial & Industrial 2" Meter</u>			
First 1,000 gallons	\$22.55	\$26.05	
All over 1,000 (per 1,000 gallons)	\$ 5.35	\$ 6.65	

Sewer Rate Schedule

<u>Residential & Housing/Commercial & Industrial</u>		
First 1,000 gallons	\$16.00	
All over 1,000 (per 1,000 gallons)	\$ 3.95	
<u>Industrial and Wholesale</u>		
First 1,000 gallons	\$30.00	
All over 1,000 (per 1,000 gallons)	\$ 3.45	

Effective with the January 2017 billing, water and sewer rates were as follows:

Water Rate Schedule

<u>Residential & Housing (3/4" 1" 2" Meter)</u>	(Inside City)	(Outside City)	(Rural)
First 1,000 gallons	\$15.55	\$19.45	\$24.30
All over 1,000 (per 1,000 gallons)	\$ 5.30	\$ 6.60	\$ 6.60
<u>Commercial & Industrial 3/4" Meter</u>			
First 1,000 gallons	\$17.30	\$21.65	
All over 1,000 (per 1,000 gallons)	\$ 5.30	\$ 6.60	
<u>Commercial & Industrial 1" Meter</u>			
First 1,000 gallons	\$20.05	\$23.05	
All over 1,000 (per 1,000 gallons)	\$ 5.30	\$ 6.60	
<u>Commercial & Industrial 2" Meter</u>			
First 1,000 gallons	\$22.55	\$26.05	
All over 1,000 (per 1,000 gallons)	\$ 5.30	\$ 6.60	

CITY OF YELLVILLE, ARKANSAS
WATER AND SEWER ENTERPRISE FUND
SCHEDULE OF USAGE RATES
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

Sewer Rate Schedule

Residential & Housing/Commercial & Industrial

First 1,000 gallons	\$16.00
All over 1,000 (per 1,000 gallons)	\$ 3.95

Industrial and Wholesale

First 1,000 gallons	\$30.00
All over 1,000 (per 1,000 gallons)	\$ 3.45

OTHER REPORTS



BALLARD & COMPANY, LTD.

CERTIFIED PUBLIC ACCOUNTANTS

BUSINESS CONSULTANTS

Members of the American Institute of Certified Public Accountants
Member of the Arkansas Society of Certified Public Accountants

210 E 7TH STREET, SUITE 2
MOUNTAIN HOME, AR 72653
870-425-6256

416 N. E. MAIN STREET
MOUNTAIN VIEW, AR 72560
870-269-2390

980 ASH FLAT DRIVE
ASH FLAT, AR 72513
870-994-2812

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor and Members of City Council
City of Yellville, Arkansas

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the water and sewer enterprise fund of the City of Yellville, Arkansas, as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the City of Yellville, Arkansas water and sewer enterprise fund's basic financial statements, and have issued our report thereon dated August 15, 2019.

Internal Control Over Financial Reporting

In planning and performing our audits of the financial statements, we considered the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control. Accordingly, we do not express an opinion on the effectiveness of the water and sewer enterprise fund of the City of Yellville, Arkansas' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the water and sewer enterprise fund of the City of Yellville, Arkansas' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audits and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Ballard & Company, Ltd.

Ballard & Company, Ltd.
Mountain Home, Arkansas
August 15, 2019

PER
APPENDIX E

Yellville Sewer Collection System Evaluation

ENGINEERING SERVICES, INC.

1207 SOUTH OLD MISSOURI ROAD • P. O. BOX 282 • SPRINGDALE, ARKANSAS 72765

(479) 751-8733 • (479) 751-8746 FAX • www.engineeringservices.com

See Quarterly Report Appendix B

PER
APPENDIX F
NPDES Permit and ADEQ Letter



January 23, 2019

CERTIFIED MAIL: 9489 0090 0027 6022 2323 02

Honorable Shawn Lane
City of Yellville
P.O. Box 647
Yellville, AR 72687

**RE: Permit Number: AR0034037, AFIN: 45-00023
City of Yellville**

Dear Mayor Lane:

A review of the NPDES file for the above mentioned facility for the period of January 1, 2016 through January 22, 2019 revealed the following compliance issues:

The facility has reported forty-five (45) Significant Sanitary Sewer Overflow Events during the above review period totaling 3,073,300 gallons. Each of the forty five (45) bypasses constitutes an unpermitted discharge that violates Ark. Code Ann. § 8-4-217(a)(3). A record of these bypasses is included with this letter.

Due to repeat occurrences, the Department recommends that you consult with a Professional Engineer licensed in the state of Arkansas for the purpose of developing a Corrective Action Plan (CAP). The CAP should include the following:

- A professional engineer certification
- Detailed corrective actions the City of Yellville will perform to reduce SSOs
- A milestone schedule
- A reasonable expected date of final compliance

Please submit the CAP within 30 days of receipt of this letter. Any violation of your NPDES Permit is subject to enforcement action by this Department, pursuant to the Arkansas Water and Air Pollution Control Act. The regulations and your NPDES Permit require that you take all reasonable measures necessary to eliminate or prevent the occurrence of violations.

Should you have any questions concerning the above referenced compliance issues, please feel free to contact me at 501-682-0649, or you may e-mail me at rathe@adeq.state.ar.us.

Sincerely,

A handwritten signature in blue ink that reads "Rebecca A. Rathe".

Rebecca Rathe
Enforcement Analyst
Office of Water Quality

**AUTHORIZATION TO DISCHARGE WASTEWATER UNDER
THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND
THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT**

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. § 1251 et seq.),

The applicant's mailing address is:

City of Yellville
P.O. Box 647
Yellville, AR 72687

The facility address is:

1385 MC 6001
Yellville, AR 72687

is authorized to discharge from a facility located as follows: from intersection of Hwy 412E & Hwy 14, south on Hwy 14 approximately 1.5 miles to Mill Creek Road, thence 1.5 miles east on Mill Creek Road in Marion County, Arkansas.

Latitude: 36° 13' 13.5"; Longitude: 92° 39' 41.08"

to receiving waters named:

Crooked Creek, thence to the White River in Segment 4I of the White River Basin.

The outfall is located at the following coordinates:

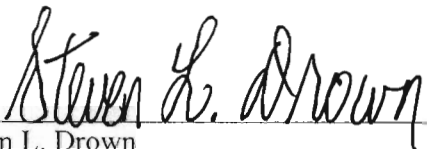
Outfall 001: Latitude: 36° 13' 15"; Longitude: 92° 39' 50"

Discharge shall be in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit.

Issue Date: February 28, 2010

Effective Date: March 1, 2010

Expiration Date: February 28, 2015



Steven L. Drown
Chief, Water Division
Arkansas Department of Environmental Quality

**PART I
PERMIT REQUIREMENTS**

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 001 - treated municipal wastewater.

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below from a treatment system consisting of screening, an extended aeration activated sludge system followed by clarification, UV disinfection, and postaeration with a design flow of 0.75 MGD.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
		Monthly Avg.	Monthly Avg.		
Flow	N/A	Report, MGD	Report, MGD (Daily Maximum)	Once/day	Totalizing meter
Carbonaceous Biochemical Oxygen Demand (CBOD5)	62.6	10	15	Two/month	3-hr composite
Total Suspended Solids (TSS)	93.8	15	23	Two/month	3-hr composite
Ammonia Nitrogen (NH3-N)					
(April)	24.4	3.9	3.9	Three/month	3-hr composite
(May-Oct)	6.3	1	1.5	Three/month	3-hr composite
(Nov-March)	31.3	5	7.5	Three/month	3-hr composite
Dissolved Oxygen	N/A	6.0 (Inst. Min.)		Three/month	Grab
Fecal Coliform Bacteria (FCB)		(colonies/100ml)			
	N/A	200	400	Three/month	Grab
Nitrate + Nitrite Nitrogen	62.6	10	15	Two/month	Grab
pH	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	Three/month	Grab

There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks. There shall be no visible sheen due to the presence of oil (Sheen means an iridescent appearance on the surface of the water).

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples shall be taken after final treatment at the following monitoring coordinates: Latitude: 36° 13' 13.2" Longitude: 92° 39' 38.4"

All unauthorized Sanitary Sewer Overflows (SSO) must be reported to ADEQ. See Condition No. 3 of Part II.

SECTION B. PERMIT COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

Compliance is required on the effective date of the permit.

PART II OTHER CONDITIONS

1. The operator of this wastewater treatment facility shall be licensed as Class III by the State of Arkansas in accordance with Act 211 of 1971, Act 1103 of 1991, Act 556 of 1993, and APCEC Regulation No. 3, as amended.
2. For publicly owned treatment works, the 30-day average percent removal for Carbonaceous Biochemical Oxygen Demand (CBOD5) and Total Suspended Solids shall not be less than 85 percent unless otherwise authorized by the permitting authority in accordance with 40 CFR Part 133.102, as adopted by reference in APCEC Regulation No. 6.
3. Sanitary Sewer Overflow (SSO):
 - A. An overflow is any spill, release or diversion of sewage from a sanitary sewer collection system, including:
 - 1) an overflow that results in a discharge to waters of the state; and
 - 2) an overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the state.

B. Immediate Reporting

All overflows shall be reported to the Enforcement Branch of the Water Division by telephone (501-682-0638), facsimile (501-682-0910), or by email at WaterEnfSSO@adeq.state.ar.us within 24 hours from the time the permittee becomes aware of the circumstance.

At a minimum the report shall identify:

1. The location(s) of overflow;
2. The receiving water (If there is one);
3. The duration of overflow;
4. Cause of overflow; and
5. The estimated volume of overflow (MG).

C. Discharge Monitoring Reports (DMRs)

The permittee shall report every month all overflows with the Discharge Monitoring Report (DMR) submittal. These reports shall be summarized and reported in tabular format with the minimum following information. The permittee may use ADEQ Form attached to the permit or a copy of the form may obtain from the following web site:

http://www.adeq.state.ar.us/water/branch_enforcement/forms/ss0_report.asp

1. The location(s) of overflow;
 2. The receiving water (If there is one);
 3. The duration of overflow;
 4. Cause of overflow;
 5. The estimated volume of overflow (MG);
 6. A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
 7. The estimated date and time when the overflow began and stopped or will be stopped;
 8. The cause or suspected cause of the overflow;
 9. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
 10. If reasonably made, an estimate of the number of persons who came into contact with wastewater from the overflow; and
 11. Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.
4. In accordance with 40 CFR Parts 122.62 (a)(2) and 124.5, this permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations when new information is received that actual or potential exceedance of State water quality criteria and/or narrative criteria are determined to be the result of the permittee's discharge(s) to a relevant water body or a Total Maximum Daily Load (TMDL) is established or revised for the water body that was not available at the time of the permit issuance that would have justified the application of different permit conditions at the time of permit issuance.
5. Other Specified Monitoring Requirements

The permittee may use alternative appropriate monitoring methods and analytical instruments other than as specified in Part I Section A of the permit without a major permit modification under the following conditions:

- The monitoring and analytical instruments are consistent with accepted scientific practices;
- The requests shall be submitted in writing to the Permits Section of the Water Division of the ADEQ for use of the alternate method or instrument.
- The method and/or instrument is in compliance with 40 CFR Part 136 or acceptable to the Director; and
- All associated devices are installed, calibrated, and maintained to insure the accuracy of the measurements and are consistent with the accepted capability of that type of device. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Control/Quality Assurance program.

Upon written approval of the alternative monitoring method and/or analytical instruments, these methods or instruments must be consistently utilized throughout the monitoring period.

ADEQ must be notified in writing and the permittee must receive written approval from ADEQ if the permittee decides to return to the original permit monitoring requirements.

6. Contributing Industries and Pretreatment Requirements

A. The following pollutants may not be introduced into the treatment facility:

- (1) pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;
- (2) pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;
- (3) solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference* or pass through**;
- (4) any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Pass Through** or Interference* with the POTW;
- (5) heat in amounts which will inhibit biological activity in the POTW resulting in Interference*, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 deg. C (104 deg. F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;
- (6) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference* or pass through**;
- (7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
- (8) Any trucked or hauled pollutants, except at discharge points designated by the POTW.

B. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.

C. The permittee shall provide adequate notice to the Department of the following:

- (1) any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and

- (2) any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Any notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

* According to 40 CFR 403.3(p) the term *Pass Through* means a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

** According to 40 CFR Part 403.3(k) the term *Interference* means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- (1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

- (2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

PART III STANDARD CONDITIONS

SECTION A – GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; and/or for denial of a permit renewal application. **Any values reported in the required Discharge Monitoring Report (DMR) which are in excess of an effluent limitation specified in Part I shall constitute evidence of violation of such effluent limitation and of this permit.**

2. Penalties for Violations of Permit Conditions

The Arkansas Water and Air Pollution Control Act provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than twenty-five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

3. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to the following:

- a. Violation of any terms or conditions of this permit; or
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- d. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.
- e. Failure of the permittee to comply with the provisions of APCEC Regulation No. 9 (Permit fees) as required by Part III.A.10. herein.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4. Toxic Pollutants

Notwithstanding Part III.A.3., if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under APCEC Regulation No. 2, as amended, or Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitations on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standards or prohibition and the permittee so notified.

The permittee shall comply with effluent standards, narrative criteria, or prohibitions established under APCEC Regulation No. 2, as amended, or Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Civil and Criminal Liability

Except as provided in permit conditions on “Bypassing” (Part III.B.4.a.), and “Upsets” (Part III.B.5.b), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of this permit or applicable state and federal statutes or regulations which defeats the regulatory purposes of the permit may subject the permittee to criminal enforcement pursuant to the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Clean Water Act.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

8. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

9. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Permit Fees

The permittee shall comply with all applicable permit fee requirements for wastewater discharge permits as described in APCEC Regulation No. 9 (Regulation for the Fee System for Environmental Permits). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR Parts 122.64 and 124.5 (d), as adopted in APCEC Regulation No. 6 and the provisions of APCEC Regulation No. 8.

SECTION B – OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carryout operation, maintenance, and testing functions required to insure compliance with the conditions of this permit.

2. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power for the treatment facility is reduced, is lost, or alternate power supply fails.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment or the water receiving the discharge.

4. Bypass of Treatment Facilities

a. Bypass not exceeding limitation

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.B.4.b. and 4.c.

b. Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III.D.6. (24-hour notice).

c. Prohibition of bypass

- (1) Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal or preventive maintenance; and
 - (c) The permittee submitted notices as required by Part III.B.4.b.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Part III.B.4.c.(1).

5. Upset Conditions

- a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Part III.B.5.b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- b. Conditions necessary for demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;

- (2) The permitted facility was at the time being properly operated.
 - (3) The permittee submitted notice of the upset as required by Part III.D.6.; and
 - (4) The permittee complied with any remedial measures required by Part III.B.3.
- c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the State. Written approval must be obtained from the ADEQ for land application only.

7. Power Failure

The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators, or retention of inadequately treated effluent.

SECTION C – MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director. Intermittent discharges shall be monitored.

2. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than +/- 10% from true discharge rates throughout the range of expected discharge volumes and shall be installed at the monitoring point of the discharge.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals frequent enough to insure accuracy of measurements and shall

insure that both calibration and maintenance activities will be conducted. An adequate analytical quality control program, including the analysis of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory. At a minimum, spikes and duplicate samples are to be analyzed on 10% of the samples.

4. Penalties for Tampering

The Arkansas Water and Air Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than ten thousand dollars (\$10,000) or by both such fine and imprisonment.

5. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1 and other approved Form by ADEQ). Permittees are required to use preprinted DMR forms provided by ADEQ, unless specific written authorization to use other reporting forms is obtained from ADEQ. Monitoring results obtained during the previous calendar month shall be summarized and reported on a DMR form postmarked no later than the 25th day of the month following the completed reporting period to begin on the effective date of the permit. Duplicate copies of DMR forms signed and certified as required by Part III.D.11. and all other reports required by Part III.D., shall be submitted to the Director at the following address:

Permits Enforcement Branch
Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

If permittee uses outside laboratory facilities for sampling and/or analysis, the name and address of the contract laboratory shall be included on the DMR.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated on the DMR.

7. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring

instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

8. Record Contents

Records and monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements, and preservatives used, if any;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) and time analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The measurements and results of such analyses.

9. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
- d. Sample, inspect, or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION D – REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice and provide plans and specification to the Director for review and approval prior to any planned physical alterations or additions to the permitted facility. Notice is required only when:

Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

The permit is nontransferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Part III.C.5. **Discharge Monitoring Reports must be submitted even when no discharge occurs during the reporting period.**

5. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-four Hour Report

- a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain the following information:
 - (1) a description of the noncompliance and its cause;
 - (2) the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - (3) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- b. The following shall be included as information which must be reported within 24 hours:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
 - (2) Any upset which exceeds any effluent limitation in the permit and
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part I of the permit to be reported within 24 hours to the Enforcement Section of the Water Division of the ADEQ.
- c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours to the Enforcement Section of the Water Division of the ADEQ.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Parts II.D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.6.

8. Changes in Discharge of Toxic Substances for Industrial Dischargers

The permittee shall notify the Director as soon as he/she knows or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 CFR Part 122.42(a)(1); or
- b. That any activity has occurred or will occur which would result in any discharge on a non-routine or infrequent basis of a toxic pollutant which is not limited in the permit, if

that discharge will exceed the highest of the “notification levels” described in 40 CFR Part 122.42(a)(2).

9. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit. Information shall be submitted in the form, manner and time frame requested by the Director.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The complete application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated in APCEC Regulation No. 6.

11. Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified as follows:

- a. All **permit applications** shall be signed as follows:
 - (1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (ii) The manager of one or more manufacturing, production, or operation facilities, provided: the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or

- (3) For a municipality, State, Federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) The chief executive officer of the agency, or
 - (ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- b. All **reports** required by the permit and **other information** requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described above.
 - (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - (3) The written authorization is submitted to the Director.
- c. Certification. Any person signing a document under this section shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

12. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2 and APCEC Regulation No. 6, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Environmental Quality. As required by the Regulations, the name and address of any permit applicant or permittee, permit applications, permits, and effluent data shall not be considered confidential.

13. Penalties for Falsification of Reports

The Arkansas Air and Water Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part III.A.2. and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

PART IV DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. **“Act”** means the Clean Water Act, Public Law 95-217 (33.U.S.C. 1251 et seq.) as amended.
2. **“Administrator”** means the Administrator of the U.S. Environmental Protection Agency.
3. **“Applicable effluent standards and limitations”** means all State and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.
4. **“Applicable water quality standards”** means all water quality standards to which a discharge is subject under the federal Clean Water Act and which has been (a) approved or permitted to remain in effect by the Administrator following submission to the Administrator pursuant to Section 303(a) of the Act, or (b) promulgated by the Director pursuant to Section 303(b) or 303(c) of the Act, and standards promulgated under (APCEC) Regulation No. 2, as amended.
5. **“Bypass”** means the intentional diversion of waste streams from any portion of a treatment facility.
6. **“Daily Discharge”** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.
Mass Calculations: For pollutants with limitations expressed in terms of mass, the “daily discharge” is calculated as the total mass of pollutant discharged over the sampling day.
Concentration Calculations: For pollutants with limitations expressed in other units of measurement, determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the “daily discharge” determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during that sampling day by using the following formula: where C= daily concentration, F=daily flow and n=number of daily samples

$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

7. **“Monthly average”** means the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month. For Fecal Coliform Bacteria (FCB) report the monthly average (see 30-day average below).
8. **“Daily Maximum”** discharge limitation means the highest allowable “daily discharge” during the calendar month. The 7-day average for Fecal Coliform Bacteria (FCB) is the geometric mean of the values of all effluent samples collected during the calendar week in colonies per 100 ml.

9. **“Department”** means the Arkansas Department of Environmental Quality (**ADEQ**).
10. **“Director”** means the Administrator of the U.S. Environmental Protection Agency and/or the Director of the Arkansas Department of Environmental Quality.
11. **“Grab sample”** means an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
12. **“Industrial User”** means a nondomestic discharger, as identified in 40 CFR Part 403, introducing pollutants to a POTW.
13. **“National Pollutant Discharge Elimination System”** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under Sections 307, 402, 318, and 405 of the Clean Water Act.
14. **“POTW”** means a Publicly Owned Treatment Works.
15. **“Severe property damage”** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in products.
16. **“APCEC”** means the Arkansas Pollution Control and Ecology Commission.
17. **“Sewage sludge”** means the solids, residues, and precipitate separated from or created in sewage by the unit processes at a POTW. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and stormwater runoff that are discharged to or otherwise enter a POTW.
18. **“7-day average”** discharge limitation, other than for Fecal Coliform Bacteria (FCB), is the highest allowable arithmetic mean of the values for all effluent samples collected during the calendar week. The 7-day average for Fecal Coliform Bacteria (FCB) is the geometric mean of the values of all effluent samples collected during the calendar week in colonies/100 ml. The Discharge Monitoring Report should report the highest 7-day average obtained during the calendar month. For reporting purposes, the 7-day average values should be reported as occurring in the month in which the Saturday of the calendar week falls in.
19. **“30-day average”**, other than for Fecal Coliform Bacteria (FCB), is the arithmetic mean of the daily values for all effluent samples collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The 30-day average for Fecal Coliform Bacteria (FCB) is the geometric mean of the values for all effluent samples collected during a calendar month. For Fecal Coliform Bacteria (FCB), report the monthly average as a 30-day geometric mean in colonies per 100 ml.
20. **“24-hour composite sample”** consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample collected at frequent intervals proportional to flow over the 24-hour period.
21. **“12-hour composite sample”** consists of 12 effluent portions, collected no closer together than one hour and composited according to flow. The daily sampling intervals shall include the highest flow periods.
22. **“6-hour composite sample”** consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited

- according to flow **or** a sample collected at frequent intervals proportional to flow over the 6-hour period.
23. **“3-hour composite sample”** consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow or a sample collected at frequent intervals proportional to flow over the 3-hour period.
24. **“Treatment works”** means any devices and systems used in storage, treatment, recycling, and reclamation of municipal sewage and industrial wastes, of a liquid nature to implement section 201 of the Act, or necessary to recycle reuse water at the most economic cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities, and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment.
25. **“Upset”** means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. Any upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventive maintenance, or careless or improper operations.
26. **“Sanitary Sewer System Overflow”** means an overflow is any spill, release or diversion of sewage from a sanitary sewer collection system, including:
- 1) an overflow that results in a discharge to waters of the state; and
 - 2) an overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the state.
27. **“For Fecal Coliform Bacteria (FCB)”**, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads. For Fecal Coliform Bacteria (FCB) report the monthly average as a 30-day geometric mean in colonies per 100 ml.
28. **“Dissolved oxygen limit”**, shall be defined as follows:
- 1) When limited in the permit as a minimum monthly average, shall mean the lowest acceptable monthly average value, determined by averaging all samples taken during the calendar month;
 - 2) When limited in the permit as an instantaneous minimum value, shall mean that no value measured during the reporting period may fall below the stated value.
29. **The term “MGD”** shall mean million gallons per day.
30. **The term “mg/l”** shall mean milligrams per liter or parts per million (ppm).
31. **The term “µg/l”** shall mean micrograms per liter or parts per billion (ppb).
32. **The term “cfs”** shall mean cubic feet per second.
33. **The term “ppm”** shall mean parts per million.
34. **The term “s.u.”** shall mean standard units.
35. **The term “Instantaneous Maximum”** when limited in the permit as an instantaneous maximum value, shall mean that no value measured during the reporting period may fall above the stated value.
36. **Monitoring and Reporting:**

When a permit becomes effective, monitoring requirements are of the immediate period of the permit effective date. Where the monitoring requirement for an effluent characteristic is monthly or more frequently, the Discharge Monitoring Report (DMR) shall be submitted by the 25th of the month following the sampling. Where the monitoring requirement for an effluent characteristic is Quarterly, Semi-Annual, Annual, or Yearly, the DMR shall be submitted by the 25th of the month following the monitoring period end date.

MONTHLY:

is defined as a calendar month or any portion of a calendar month for monitoring requirement frequency of once/month or more frequently.

QUARTERLY:

(1) is defined as a fixed calendar quarter or any part of the fixed calendar quarter for a non-seasonal effluent characteristic with a measurement frequency of once/quarter. Fixed calendar quarters are: January through March, April through June, July through September, and October through December; or

(2) is defined as a fixed three month period (or any part of the fixed three month period) of or dependent upon the seasons specified in the permit for a seasonal effluent characteristic with a monitoring requirement frequency of once/quarter that does not coincide with the fixed calendar quarter. Seasonal calendar quarters are: May through July, August through October, November through January, and February through April.

SEMI-ANNUAL:

is defined as the fixed time periods January through June, and July through December (or any portion thereof) for an effluent characteristic with a measurement frequency of once/6 months or twice/year.

ANNUAL or YEARLY:

is defined as a fixed calendar year or any portion of the fixed calendar year for an effluent characteristic or parameter with a measurement frequency of once/year. A calendar year is January through December, or any portion thereof.

37. **The term "Weekday"** means Monday – Friday.

Final Statement of Basis

This Fact Sheet is for information and justification of the permit limits only and is not enforceable.

For renewal of the final discharge Permit Number AR0034037 with AFIN 45-00023 to discharge to Waters of the State.

1. PERMITTING AUTHORITY.

The issuing office is:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT.

The applicant's mailing address is:

City of Yellville
P.O. Box 647
Yellville, AR 72687

The facility address is:

City of Yellville
1385 MC 6001
Yellville, AR 72687

3. PREPARED BY.

The permit was prepared by:

Marysia Jastrzebski, P.E.
Staff Engineer
Discharge Permits Section, Water Division
(870)446-5939
E-mail: marysia@adeq.state.ar.us

4. PERMIT ACTIVITY.

Previous Permit Effective Date: 01/01/2005
Previous Permit Expiration Date: 12/31/2009

The permittee submitted a permit renewal application on 10/8/2009. The current discharge permit is being reissued for a 5-year term in accordance with regulations promulgated at 40 CFR Part 122.46(a).

DMR Review:

The Discharge Monitoring Reports (DMR's) from the previous permit cycle were reviewed during the permit renewal process. There were the following violations reported during the last two years:

Fecal Coliform Bacteria: August 2008(7-Day Avg. only)
Ammonia Nitrogen: May 2008, June 2008(7-Day Avg. only)

Since there were no recent violations no further permit action is required.

Legal Order Review:

There are currently no active Consent Administrative Orders (CAOs) or Notice of Violations (NOVs) for this facility.

5. SIGNIFICANT CHANGES FROM THE PREVIOUSLY ISSUED PERMIT.

The permittee is responsible for carefully reading the permit in detail and becoming familiar with all of the changes therein:

1. The coordinates of the facility location have been corrected.
2. The 7-Day Average effluent limitations for Ammonia Nitrogen for the months of May through March have been revised.
3. The effluent limitations for Ammonia Nitrogen for the month of April have been revised.
4. The effluent limitation for Dissolved Oxygen for the months of November through April has been included.
5. A list of treatment units have been included on Page 1 of Part IA.
6. A special condition requiring a Class III licensed operator has been included in Part II.
7. The monitoring frequencies for Carbonaceous Biochemical Oxygen Demand(5 day), Total Suspended Solids, and Nitrite+Nitrate Nitrogen have been revised.
8. Parts II, III, and IV have been revised.

6. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION.

The outfall is located at the following coordinates based on the submitted application:

Latitude: 36° 13' 15" Longitude: 92° 39' 50"

The receiving waters named:

Crooked Creek, thence to the White River in Segment 4I of the White River Basin. The receiving stream with USGS Hydrologic Unit Code (H.U.C) of 11010003 and reach # 048 is a Water of the State classified for primary contact recreation, raw water source for domestic (public and private), industrial, and agricultural water supplies, propagation of desirable species of fish and other aquatic life, and other compatible uses. The receiving stream is a losing stream.

7. 303(d) LIST AND ENDANGERED SPECIES CONSIDERATIONS.

a. 303(d) List:

The receiving stream is listed on the 2008 303(d) list in Category 5a as impaired for Total Dissolved Solids (TDS) and Temperature. No TMDL is available at this time and low priority has been assigned to this corrective action. Since the source for Temperature impairment is listed as a resource extraction (mining) no permit action is required. The source for TDS impairment is shown to be unknown. It is the best engineering judgment of the permit writer that the discharge from the City of Yellville does not cause or contribute to this impairment. Therefore, no permitting action is required.

A reopener clause is established in Part II of the permit, which allows the permit to be modified, if necessary, to include more stringent limits, if necessary, based on final loading allocations in the completed and approved TMDL.

b. Endangered Species:

No comments on the application were received from the U.S. Fish and Wildlife Service (USF&WS).

8. OUTFALL AND TREATMENT PROCESS DESCRIPTION.

The following is a description of the facility described in the application:

- a. Design Flow: 0.75 MGD
- b. Type of Treatment: screening, an extended aeration activated sludge system followed by clarification, UV disinfection, and postaeration
- c. Discharge Description: treated municipal wastewater
- d. Facility Status: This facility is classified as a Minor municipal since the design flow of the facility (0.75 MGD) is lower than 1.0 MGD.

9. ACTIVITY.

Under the Standard Industrial Classification (SIC) code of 4941 or North American Industry Classification System (NAICS) code of 221320, the applicant's activities are the operation of a sewage treatment plant.

10. INDUSTRIAL WASTEWATER CONTRIBUTIONS.

NO INDUSTRIAL USERS

Currently, it does not appear the permittee receives process wastewater from any significant industrial users as defined by 40 CFR Part 403.3(v). Standard boilerplate Pretreatment Prohibitions (40 CFR Part 403.5[b]) and reporting requirements are deemed appropriate at this time.

11. SEWAGE SLUDGE PRACTICES.

Sludge generated by this facility is disposed of at the permitted sanitary landfill.

12. PERMIT CONDITIONS.

The Arkansas Department of Environmental Quality has made a determination to issue a final permit for the discharge described in the application. Permit requirements are based on federal regulations (40 CFR Parts 122, 124, and Subchapter N), the National Pretreatment Regulation in 40 CFR Part 403 and regulations promulgated pursuant to the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et. seq.).

Final Effluent Limitations

Outfall 001- treated municipal wastewater

i. Conventional and/or Toxic Pollutants

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
		Monthly Avg.	Monthly Avg.		
Flow	N/A	Report, MGD	Report, MGD (Daily Maximum)	Once/day	Totalizing meter

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
		Monthly Avg.	Monthly Avg.		
Carbonaceous Biochemical Oxygen Demand (CBOD5)	62.6	10	15	Two/month	3-hr composite
Total Suspended Solids (TSS)	93.8	15	23	Two/month	3-hr composite
Ammonia Nitrogen (NH3-N)					
(April)	24.4	3.9	3.9	Three/month	3-hr composite
(May-Oct)	6.3	1	1.5	Three/month	3-hr composite
(Nov-March)	31.3	5	7.5	Three/month	3-hr composite
Dissolved Oxygen	N/A	6.0 (Inst. Min.)		Three/month	Grab
Fecal Coliform Bacteria (FCB)		(colonies/100ml)			
	N/A	200	400	Three/month	Grab
Nitrate + Nitrite Nitrogen	62.6	10	15	Two/month	Grab
pH	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	Three/month	Grab

- ii. **Solids, Foam, and Free Oil:** There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks. There shall be no visible sheen due to the presence of oil (Sheen means an iridescent appearance on the surface of the water).

13. BASIS FOR PERMIT CONDITIONS.

The following is an explanation of the derivation of the conditions of the final permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons suggesting the decisions as required under 40 CFR Part 124.7 (48 FR 1413, April 1, 1983).

Technology-Based Versus Water Quality-Based Effluent Limitations And Conditions

Following regulations promulgated at 40 CFR Part 122.44 (1)(2)(ii), the final permit limits are based on either technology-based effluent limits pursuant to 40 CFR Part 122.44 (a) or on State water quality standards and requirements pursuant to 40 CFR Part 122.44 (d), whichever are more stringent as follows:

Parameter	Water Quality-Based		Technology-Based/BPJ		Previous Permit		Permit Limit	
	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l	Monthly Avg. mg/l	7-day Avg. mg/l
CBOD5	10	15	30	45	10	15	10	15
TSS	15	23	30	45	15	23	15	23
NH3-N								
(April)	3.9	3.9	N/A	N/A	5	8	3.9	3.9
(May-Oct)	1	1.5	N/A	N/A	1	2	1	1.5
(Nov-March)	5	7.5	N/A	N/A	5	8	5	7.5
Dissolved Oxygen								
(May-Oct)	6.0(Inst. Min.)		N/A		6.0(Inst. Min.)		6.0(Inst. Min.)	
(Nov-Apr)	6.0(Inst. Min.)		N/A		N/A		6.0(Inst. Min.)	
FCB (col/100 ml)	200	400	N/A	N/A	200	400	200	400
NO ₂ + NO ₃ - N	10	15	N/A	N/A	10	15	10	15
pH	6.0-9.0 s.u.		6.0-9.0 s.u.		6-9 s.u.		6.0-9.0 s.u.	

Parameter	Water Quality or Technology	Justification
CBOD5	Water Quality	Reg. 6.301(C)(2)(a), previous permit, 40 CFR 122.44(l)
TSS	Water Quality	Reg. 6.301(C)(2)(b), previous permit, 40 CFR 122.44(l)
NH3-N****	Water Quality	Reg. 2.512, previous permit, 40 CFR 122.44(l)
DO***	Water Quality	Reg. 2.505
Fecal Coliform Bacteria	Water Quality	Reg. 6.301(C)(2)(d), previous permit, 40 CFR 122.44(l)
Nitrate + Nitrite Nitrogen	Water Quality	Reg. 6.301(C)(2)(e), previous permit, 40 CFR 122.44(l)
pH	Water Quality	Reg. 2.504

* Ammonia Nitrogen for April

The effluent limitations for the month of April have been revised based on toxicity-based water quality standards. A review of Discharge Monitoring Reports for the month of April for the last 5 years indicates that the existing facility is capable of meeting these new limitations. No permit schedule is allowed. The final limits must be met on the effective date of the permit.

** Ammonia Nitrogen for May through March

The 7-Day Average Effluent Limitations have been slightly revised in accordance with the following equation:

$$\text{Daily Maximum limits} = \text{Monthly average limits} \times 1.5$$

*** Dissolved Oxygen

The effluent limitation for the months of November through April has been included. A review of Discharge Monitoring Reports for the months of May through October for the last 5 years indicates that the existing facility is capable of meeting this limitation. The facility already utilizes post-aeration. No permit schedule is allowed. The final limit must be met on the effective date of the permit.

a. **Anti-backsliding**

The final permit is consistent with the requirements to meet Anti-backsliding provisions of the Clean Water Act (CWA), Section 402(o) [40 CFR 122.44(l)]. The final effluent limitations for reissuance permits must be as stringent as those in the previous permit, unless the less stringent limitations can be justified using exceptions listed in 40 CFR 122.44 (l)(2)(i).

The final permit maintains the requirements of the previous permit with the following exception:

The monitoring frequency for Carbonaceous Biochemical Oxygen Demand (5 day), Total Suspended Solids, and Nitrite+Nitrate Nitrogen have been reduced using EPA's *Interim Guidance for Performance - Based Reductions of NPDES Permit Monitoring Frequencies*. This decrease in monitoring frequency does not constitute backsliding based on 40 CFR 122.44 (l)(2)(i)(B)(1) - information is available (DMR data) which was not available at the time of permit issuance.

b. **Limits Calculations**

i. Mass limits:

The calculation of the loadings (lbs per day) uses a design flow of 0.75 MGD and the following equation:

$$\text{lbs/day} = \text{Concentration (mg/l)} \times \text{Flow (MGD)} \times 8.34$$

ii. Daily Maximum Limits:

$$\text{Daily Maximum limits} = \text{Monthly average limits} \times 1.5$$

iii. Ammonia-Nitrogen (NH₃-N):

The water quality effluent limitations for Ammonia are based either on DO-based effluent limits or on toxicity-based standards, whichever are more stringent. The toxicity-based effluent limitations are based on Reg. 2.512 and Section 5.35 of the CPP.

c. **208 Plan (Water Quality Management Plan)**

The 208 Plan, developed by the ADEQ under provisions of Section 208 of the federal Clean Water Act, is a comprehensive program to work toward achieving federal water goals in Arkansas. The initial 208 Plan, adopted in 1979, provides for annual updates, but can be revised more often if necessary. The 208 Plan has been revised to change a design flow from 1 mgd to 0.75 mgd, change the effluent limitation for Ammonia Nitrogen for the month of April from 5 mg/l to 3.9 mg/l and add the effluent limitation of 6 mg/l for Dissolved Oxygen for the months of November through April.

14. SAMPLE TYPE AND FREQUENCY.

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [40 CFR Part 122.48(b)] and to ensure compliance with permit limitations [40 CFR Part 122.44(i)(1)]

Requirements for sample type and sampling frequency for all parameters except Carbonaceous Biochemical Oxygen Demand (5 day), Total Suspended Solids, and Nitrite+Nitrate Nitrogen have been based on the current permit discharge.

The requirements for sampling frequency for Carbonaceous Biochemical Oxygen Demand (5 day), Total Suspended Solids, and Nitrite+Nitrate Nitrogen have been reduced to twice/month using EPA's *Interim Guidance for Performance - Based Reductions of NPDES Permit Monitoring Frequencies*. This decrease in monitoring frequency does not constitute backsliding based on 40 CFR 122.44 (1)(2)(i)(B)(1) since information (DMR data) is available which was not available at the time of permit issuance.

The requirements for sample type and sampling frequency for Dissolved Oxygen for the months of November through April are the same as the requirements for this parameter for the rest of the year.

Parameter	Previous Permit		Final Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
Flow	Once/day	Totalizing meter	Once/day	Totalizing meter
CBOD5	Three/month	3-hr composite	Two/month	3-hr composite
TSS	Three/month	3-hr composite	Two/month	3-hr composite

Parameter	Previous Permit		Final Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
NH3-N				
(April)	Three/month	3-hr composite	Three/month	3-hr composite
(May-Oct)	Three/month	3-hr composite	Three/month	3-hr composite
(Nov-Apr)	Three/month	3-hr composite	Three/month	3-hr composite
Dissolved Oxygen				
(May-Oct)	Three/month	grab	Three/month	grab
(Nov-Apr)	N/A	N/A	Three/month	grab
FCB	Three/month	grab	Three/month	grab
NO ₂ + NO ₃ - N	Three/month	grab	Two/month	grab
pH	Three/month	grab	Three/month	grab

15. PERMIT COMPLIANCE.

Compliance with final effluent limitations is required by the following schedule:

Compliance is required on the effective date of the permit.

16. MONITORING AND REPORTING.

The applicant is at all times required to monitor the discharge on a regular basis and report the results monthly. The monitoring results will be available to the public.

17. SOURCES.

The following sources were used to prepare the draft and final permits:

- a. Application No. AR0034037 received 10/8/2009.
- b. Arkansas Water Quality Management Plan (WQMP).
- c. APCEC Regulation No. 2.
- d. APCEC Regulation No. 3.
- e. APCEC Regulation No. 6.
- f. 40 CFR Parts 122, 125, 133 and 403.
- g. Discharge permit file AR0034037.
- h. Discharge Monitoring Reports (DMRs).
- i. "Arkansas Water Quality Inventory Report 2008 (305B)", ADEQ.
- j. "Identification and Classification of Perennial Streams of Arkansas", Arkansas Geological Commission.

- k. Continuing Planning Process (CPP).
- l. Technical Support Document For Water Quality-based Toxic Control.
- m. Region 6 Implementation Guidance for Arkansas Water Quality Standards promulgated at 40 CFR Part 131.36.
- n. Inspection Report dated July 20, 2009.
- o. E-mail dated November 10, 2009, from Chris Roberts to Marysia Jastrzebski.

18. POINT OF CONTACT.

For additional information, contact:

Marysia Jastrzebski, P.E.
Permits Branch, Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317
Telephone:(870)446-5939

PER
APPENDIX G

Sanitary Sewer Overflows Data

ENGINEERING SERVICES, INC.

1207 SOUTH OLD MISSOURI ROAD • P. O. BOX 282 • SPRINGDALE, ARKANSAS 72765

(479) 751-8733 • (479) 751-8746 FAX • www.engineeringservices.com

NPID	FacilityName	Location	DateOverflowStarted	DateOverflowStopped	Volume
AR0034037	YELLVILLE, CITY OF	511 estes street overflow went into Shawnee town branch	1/12/2019 0:00	1/13/2019 0:00	35,000
AR0034037	YELLVILLE, CITY OF	3rd and berry street overflow went into Shawnee town branch	1/12/2019 0:00	1/13/2019 0:00	30,000
AR0034037	YELLVILLE, CITY OF	330 west 8th street overflow went into Shawnee town branch	1/12/2019 0:00	1/13/2019 0:00	25,000
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east man hole went into Shawnee town branch	1/4/2019 0:00	1/5/2019 0:00	25,000 gallons
AR0034037	YELLVILLE, CITY OF	5th and estes overflow went into Shawnee town branch	1/4/2018 0:00	1/5/2019 0:00	10,000 gallons
AR0034037	YELLVILLE, CITY OF	330 west 8th street overflow went into Shawnee town branch	5/3/2018 0:00	5/4/2018 0:00	35,000 gallons
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east overflow went into Shawnee town branch	5/3/2018 0:00	5/4/2018 0:00	50,000 gallons
AR0034037	YELLVILLE, CITY OF	3rd and berry street overflow went into Shawnee town branch	5/3/2018 0:00	5/4/2018 0:00	75,000 gallons
AR0034037	YELLVILLE, CITY OF	5th and estes street overflow went into Shawnee town branch	5/3/2018 0:00	5/4/2018 0:00	10,000 gallons
AR0034037	YELLVILLE, CITY OF	5 th and estes street overflow went into the Shawnee town branch	5/3/2018 0:00	5/4/2018 0:00	50,000 gallons
AR0034037	YELLVILLE, CITY OF	330 west 8 th street Shawnee town branch	3/29/2018 0:00	3/30/2018 0:00	30,000 gallons
AR0034037	YELLVILLE, CITY OF	330 west 8 th street Shawnee town branch	3/29/2018 0:00	3/30/2018 0:00	30,000 gallons
AR0034037	YELLVILLE, CITY OF	3 rd and berry street Shawnee town branch	3/29/2018 0:00	3/30/2018 0:00	60,000 gallons
AR0034037	YELLVILLE, CITY OF	511 estes Shawnee town branch	3/29/2018 0:00	3/30/2018 0:00	50,000 gallons
AR0034037	YELLVILLE, CITY OF	5 th and estes street Shawnee town branch	3/29/2018 0:00	3/30/2018 0:00	25,000 gallons
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east Shawnee town branch	2/28/2018 0:00	2/28/2018 0:00	75,000 gallons
AR0034037	YELLVILLE, CITY OF	511 estes street Shawnee town branch	2/24/2018 0:00	2/25/2018 0:00	45,000 gallons

AR0034037	YELLVILLE, CITY OF	4 th and berry street	2/24/2018 0:00	2/25/2018 0:00	60,000 gallons
AR0034037	YELLVILLE, CITY OF	5 th and estes street Shawnee town branch	2/24/2018 0:00	2/25/2018 0:00	30,000 gallons
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east went in to Shawnee town branch	2/24/2018 0:00	2/25/2018 0:00	100,000
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east Shawnee town branch	7/5/2017 0:00	7/5/2017 0:00	40,000 gallons
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east	6/27/2017 0:00	6/27/2017 0:00	50,000
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east the overflow went into the Shawnee town branch	5/20/2017 0:00	5/20/2017 0:00	75,000 gallons
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east overflow went to the Shawnee town branch	5/3/2017 0:00	5/6/2017 0:00	500,000 gallons
AR0034037	YELLVILLE, CITY OF	511 estes street overflow went to the Shawnee town branch	5/3/2017 0:00	5/5/2017 0:00	100,000 gallons
AR0034037	YELLVILLE, CITY OF	5th and estes street overflow went in to the Shawnee town branch	5/3/2017 0:00	5/5/2017 0:00	50,000 gallons
AR0034037	YELLVILLE, CITY OF	330 west 8th street overflow went to the Shawnee town branch	5/3/2017 0:00	5/5/2017 0:00	35,000 gallons
AR0034037	YELLVILLE, CITY OF	511 estes Shawnee town branch	4/29/2017 0:00	5/1/2017 0:00	150,000 gallons
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east Shawnee town branch	4/29/2017 0:00	5/1/2017 0:00	300,000 gallons
AR0034037	YELLVILLE, CITY OF	5 th and estes Shawnee town branch	4/29/2017 0:00	5/1/2017 0:00	50,000 gallons
AR0034037	YELLVILLE, CITY OF	330 west 8 th street	4/29/2017 0:00	5/1/2017 0:00	60,000 gallons
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east went to the Shawnee town branch	4/26/2017 0:00	4/28/2017 0:00	150,000
AR0034037	YELLVILLE, CITY OF	330 west 8 th street	4/26/2017 0:00	4/27/2017 0:00	25,000 gallons
AR0034037	YELLVILLE, CITY OF	5 th and estes	4/26/2017 0:00	4/27/2017 0:00	20,000 gallons
AR0034037	YELLVILLE, CITY OF	511 estes	4/26/2017 0:00	4/27/2017 0:00	75,000 gallons
AR0034037	YELLVILLE, CITY OF		4/22/2017 0:00	4/22/2017 0:00	35,000
AR0034037	YELLVILLE, CITY OF		4/22/2017 0:00	4/23/2017 0:00	20,000
AR0034037	YELLVILLE, CITY OF		4/21/2017 0:00	4/23/2017 0:00	100,000
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east	4/5/2017 0:00	4/5/2017 0:00	60,000 gallons
AR0034037	YELLVILLE, CITY OF	330 west 8th street Shawnee town branch	3/27/2017 0:00	3/28/2017 0:00	20,000 gallons

AR0034037	YELLVILLE, CITY OF	511 north estes street Shawnee town branch	3/27/2017 0:00	3/28/2017 0:00	25,000 gallons
AR0034037	YELLVILLE, CITY OF	444 hwy 62 east the Shawnee town branch	3/27/2017 0:00	3/28/2017 0:00	60,000 gallons
AR0034037	YELLVILLE, CITY OF	444 Hwy 62 E. - MH - Town Branch 9" heavy rainfall	8/14/2016 0:00	8/17/2016 0:00	40,000
AR0034037	YELLVILLE, CITY OF	Hwy 444 & Hwy 62 E. - MH - Town Branch	6/17/2016 0:00	6/17/2016 0:00	10,000

PER
APPENDIX H

Discharge Monitoring Reports (Aug 2018 – Aug 2019)

ENGINEERING SERVICES, INC.

1207 SOUTH OLD MISSOURI ROAD • P. O. BOX 282 • SPRINGDALE, ARKANSAS 72765

(479) 751-8733 • (479) 751-8746 FAX • www.engineeringservices.com

DMR Copy of Record

Permit: AR003-0037
Permittee: YELLVILLE, CITY OF
Facility: YELLVILLE, CITY OF
Major: No
Permittee Address: P.O. BOX 647
Facility Location: 1385 MCCOOL 6001
 YELLVILLE, AR 72687
Permitted Feature: 001
Discharge: 001-A
 External Outfall
001-MONTHLY-TRTD MUNICIPAL WW

Report Dates & Status:
Monitoring Period: From 08/01/18 to 08/31/18
DMR Due Date: 08/23/18
Status: NetDAR Validated
 Considerations for Form Completion

REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY). DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM). 45-00023

Principal Executive Officer: Stuart Oxford
Title: Wastewater Superintendent
Telephone: 870-656-9355

Cds	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex.	Frequency of Analysis	Sample Type
					Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3				
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	9.33	6 INST MIN	=	>=	19 - mg/L	0	0330 - Three Per Month	GR - GRAB	
00400	pH	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	7.4	6 MINIMUM	=	>=	12 - SU	0	0330 - Three Per Month	GR - GRAB	
00530	Solids, total suspended	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	0.84	93.8 MO AVG	<	<	19 - mg/L	0	0330 - Three Per Month	03 - COMP-3	
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	0.04	6.3 MO AVG	=	<=	19 - mg/L	0	0330 - Three Per Month	03 - COMP-3	
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	0.6	62.6 MO AVG	=	<=	19 - mg/L	0	0330 - Three Per Month	03 - COMP-3	
50050	Flow, in conduit or first treatment plant	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	0.076032	Req Mon-MO AVG	=	0.164	TM - TOTALZ	0	0101 - Daily	TM - TOTALZ	
74655	Coliform, fecal general	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	2.76	62.6 MO AVG	=	<=	13 - #/100mL	0	0330 - Three Per Month	GR - GRAB	
80082	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	2.76	62.6 MO AVG	=	<=	19 - mg/L	0	0330 - Three Per Month	03 - COMP-3	

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Comments

Environmental Services Company, Inc. 13715 West Markham Little Rock, Arkansas 72211 (501) 221-2865

Attachments

Report Last Saved By

YELLVILLE, CITY OF

User: ypwwpp@yellville.net

Name: Stuart Oxford

E-Mail: ypwwpp@yellville.net

Date/Time: 2018-09-18 10:30 (Time Zone: -05:00)

Report Last Signed By

Stuart Oxford

User: ypwwpp@yellville.net

Name: Stuart Oxford

E-Mail: ypwwpp@yellville.net

DMR Copy of Record

Permit
 Permit #: **AR60034637**
 Major: **No**
 Facility: **YELVILLE, CITY OF**
 Facility Location: **YELVILLE, CITY OF
 1385 MCCOOL 6001
 YELVILLE, AR 72687**

Permitted Feature: **001 External Outfall**
 Discharge: **001-A
 001-MONTHLY-TRTD MUNICIPAL WW**

Report Dates & Status
 Monitoring Period: **From 09/01/18 to 06/30/18**
 DMR Due Date: **10/25/18**
 Status: **NetDAR Validated**

Considerations for Form Completion
REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY). DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM). 45-00023

Principal Executive Officer
 First Name: **Stuart**
 Last Name: **Oxford**
 Title: **Wastewater Superintendent**
 Telephone: **870-656-9355**

No Data Indicator (NODI)
 Form NODI: --

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Qualifier 1	Value 1	Quantity or Loading	Qualifier 2	Value 2	Units	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	6.89	6.89	6 INST MIN	>=	>=	19 - mg/L	=	7.4	12 - SU	0	03300 - Three Per Month	GR - GRAB
00400	pH	1 - Effluent Gross	0	--	7.3	7.3	6 MINIMUM	>=	>=	19 - mg/L	=	9 MAXIMUM	12 - SU	0	03300 - Three Per Month	GR - GRAB
00530	Solids, total suspended	1 - Effluent Gross	0	--	0.55	92.8 MO AVG	26 - l/bd	<	<	26 - l/bd	=	1	19 - mg/L	0	03300 - Three Per Month	03 - COMP-3
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	--	0.01	6.3 MO AVG	26 - l/bd	<	<	26 - l/bd	=	1	19 - mg/L	0	03300 - Three Per Month	03 - COMP-3
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	3.68	52.6 MO AVG	26 - l/bd	<=	<=	26 - l/bd	=	11	19 - mg/L	0	03300 - Three Per Month	GR - GRAB
50650	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	0.051697	Req Non DAILY l/d	03 - MGD	=	0.124	03 - MGD	=	15.7 DA AVG	19 - mg/L	0	0101 - Daily	TM - TOTALZ
74855	Calcium, fecal general	1 - Effluent Gross	0	--	2.02	52.6 MO AVG	26 - l/bd	<=	<=	26 - l/bd	=	4.5	19 - mg/L	0	03300 - Three Per Month	GR - GRAB
8082	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	2.02	52.6 MO AVG	26 - l/bd	<=	<=	26 - l/bd	=	15.7 DA AVG	19 - mg/L	0	03300 - Three Per Month	03 - COMP-3

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 Environmental Services Company, Inc. 13715 West Markham Little Rock, Arkansas 72211 (601) 221-2665

Attachments
 No attachments.

Report Last Saved By
 YELVILLE, CITY OF

User: **ypwwwp@yeshville.net**
 Name: **Stuart Oxford**
 E-Mail: **ypwwwp@yeshville.net**

Date/Time: **2018-10-22 10:15 (Time Zone: -05:00)**

Report Last Signed By
 User: **ypwwwp@yeshville.net**
 Name: **Stuart Oxford**
 E-Mail: **ypwwwp@yeshville.net**

DMR Copy of Record

Permit
 Permit #: AIR9034037
 Major: No
 Permitted Feature: 001 External Outfall

Permittee: YELVILLE, CITY OF
 P.O. BOX 847
 YELVILLE, AR 72687
 Facility Location: YELVILLE, CITY OF
 1385 MCCOOL 6001
 YELVILLE, AR 72687

Discharge: 001-A
 001-MONTHLY-TRTD MUNICIPAL WW
 Status: NetDMR Validated

DMR Due Date: 11/25/18
 Title: Wastewater Superintendent
 Telephone: 870-656-0385

Monitoring Location Season # Param. NODI
 1 - Effluent Gross 0 --

1 - Effluent Gross 0 --
 1 - Effluent Gross 0 --
 1 - Effluent Gross 0 --

1 - Effluent Gross 0 --
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 1 - Effluent Gross 0 --

1 - Effluent Gross 0 --
 1 - Effluent Gross 0 --
 1 - Effluent Gross 0 --

Report Dates & Status

Monitoring Period: From 10/01/18 to 10/31/18
 Considerations for Form Completion
 REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY). DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM). 45-00023

Principal Executive Officer
 Stuart
 Oxford

Form NODI:
 No Data Indicator (NODI)

Quantity or Loading
 Qualifier 1 Value 1 Qualifier 2 Value 2 Units Value 3 Qualifier 3 Value 3

Quality or Concentration
 Value 1 Value 2 Value 3

Units Value 3

of Ex. Frequency of Analysis Sample Type

03300 Oxygen, dissolved [DO] 19 - mg/L 03300 - Three Per Month GR - GRAB

03300 Oxygen, dissolved [DO] 19 - mg/L 03300 - Three Per Month GR - GRAB

03300 pH 12 - SU 03300 - Three Per Month GR - GRAB

03300 Solids, total suspended 2.8 03300 - Three Per Month GR - GRAB

03300 Solids, total suspended 2.8 03300 - Three Per Month GR - GRAB

03300 Nitrogen, ammonia total [as N] 0.28 03300 - Three Per Month 03 - COMP-3

03300 Nitrogen, ammonia total [as N] 0.28 03300 - Three Per Month 03 - COMP-3

03300 Nitrite + Nitrate total [as N] 10.4 03300 - Twice Per Month GR - GRAB

Submission Note

If a parameter row does not contain any values for the Sample not Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 Environmental Services Company, Inc. 13715 West Markham Little Rock, Arkansas 72211 (501) 221-2565

Attachments
 No attachments.

Report Last Saved By
 YELVILLE, CITY OF

User: ypw@yville.net
 Stuart Oxford

E-Mail: ypw@yville.net
 2018-11-18 21:54 (Time Zone: -06:00)

Report Last Signed By
 User: ypw@yville.net
 Stuart Oxford

Name: Stuart Oxford
 E-Mail: ypw@yville.net

DMR Copy of Record

Permit
 Permit #: AR0034037
 Major: No
 Permitted Feature: 001 External Outfall
 Facility: YELVILLE, CITY OF
 1285 MCCOOL 6001
 YELVILLE, AR 72687

Permittee Address: YELVILLE, CITY OF
 P.O. BOX 647
 YELVILLE, AR 72687
 Facility Location:
 Discharge: 001-A
 001-MONTHLY-TRTD MUNICIPAL WW
 Status: NetDMR Validated

DMR Due Date: 12/25/18
 Title: Wastewater Superintendent
 Telephone: 870-656-9385

Reporting Period: From 11/01/18 to 11/30/18
 Considerations for Form Completion:

REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY). DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM). 45-00023
 Principal/Executive Officer

First Name: Stuart
 Last Name: Oxford

No Data Indicator (NODI)

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading		Quality or Concentration		Units	# of Ex. Frequency of Analysis	Sample Type
					Qualifier 1	Value 1	Qualifier 2	Value 2			
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Permit Req. Value NODI	Sample	Permit Req. Value NODI	Sample	19 - mg/L	03/30 - These Per Month GR - GRAB	GR - GRAB
00400	pH	1 - Effluent Gross	0	--	Permit Req. Value NODI	Sample	Permit Req. Value NODI	Sample	19 - mg/L	03/30 - These Per Month GR - GRAB	GR - GRAB
00530	Solids, total suspended	1 - Effluent Gross	0	--	4.37	93.8 MO AVG	26 - lb/d	26 - lb/d	26 - mg/L	03/30 - These Per Month GR - GRAB	GR - GRAB
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	1	--	0.1	31.3 MO AVG	26 - lb/d	26 - lb/d	26 - mg/L	03/30 - These Per Month GR - GRAB	GR - GRAB
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	11.56	62.6 MO AVG	26 - lb/d	26 - lb/d	26 - mg/L	03/30 - These Per Month GR - GRAB	GR - GRAB
60030	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	0.778	Req Non MO AVG	05 - MGD	Req Mon DAILY MX 03 - MGD	05 - MGD	01/01 - Daily	TM - TOTALZ
74085	Coliform, fecal general	1 - Effluent Gross	0	--	6.28	62.6 MO AVG	26 - lb/d	26 - lb/d	26 - mg/L	03/30 - These Per Month GR - GRAB	GR - GRAB
80042	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	6.28	62.6 MO AVG	26 - lb/d	26 - lb/d	26 - mg/L	03/30 - These Per Month GR - GRAB	GR - GRAB

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 Environmental Services Company, Inc. 13716 West Markham Little Rock, Arkansas 72211 (601) 221-2565

Attachments
 No attachments.

Report Last Saved By
 YELVILLE, CITY OF

User: ypw@yvelville.net
Name: Stuart Oxford
E-Mail: ypw@yvelville.net
Date/Time: 2018-12-18 10:12 (Time Zone: -06:00)

Report Last Signed By
User: ypw@yvelville.net
Name: Stuart Oxford
E-Mail: ypw@yvelville.net

DMR Copy of Record

Permit
 Permit #: AR0034037
 Major: No
 Facility: YELLVILLE, CITY OF
 1395 MCCOOL 6001
 YELLVILLE, AR 72687
 Facility Location:
 P.O. BOX 647
 YELLVILLE, AR 72687
 Permitted Feature: 001-A
 External Outfall
 Discharge: 001-A
 001-MONTHLY-TRTD MUNICIPAL WW

Report Dates & Status
 Monitoring Period: From 12/01/18 to 12/31/18
 DMR Due Date: 01/25/19
 Status: NedDMR Validated
 Considerations for Form Completion: REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY); DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM). 45-00023

Principal Executive Officer
 First Name: Stuart
 Last Name: Oxford
 Title: Wastewater Superintendent
 Telephone: 870-656-0385

Ceda	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex. Frequency of Analysis	Sample Type
					Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3			
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	8.82	>=	6 INST MIN	=	19 - mg/L	0	0330 - Three Per Month GR - GRAB	
00400	pH	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	7.3	>=	6 MINIMUM	=	12 - SU	0	0330 - Three Per Month GR - GRAB	
00500	Solids, total suspended	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	7.52	<	2.4	=	19 - mg/L	0	0330 - Three Per Month GR - GRAB	
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	1	--	Sample Permit Req. Value NODI	0.11	=	0.04	=	19 - mg/L	0	0330 - Three Per Month GR - GRAB	
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	22.27	<=	5 MO AVG	=	19 - mg/L	0	0330 - Three Per Month GR - GRAB	
50050	Flow, in condition of first treatment plant	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	0.417323	=	0.531	=	03 - MGD	0	0101 - Daily TM - TOTAL	
74055	Coliform, fecal general	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	15.03	<=	200 30DA GEO	=	13 - #/100mL	0	0330 - Three Per Month GR - GRAB	
80082	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	62.6 MO AVG	<=	10 MO AVG	=	19 - mg/L	0	0230 - Twice Per Month 03 - COMP-3	

Submission Note

If a parameter row does not contain any values for the Sample or Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Comments

Attachments

Report Last Saved By

YELLVILLE, CITY OF

User: ypw@yellville.net

Name: Stuart Oxford

E-Mail: ypw@yellville.net

Date/Time: 2019-01-22 10:01 (Time Zone: -06:00)

Report Last Signed By

User: ypw@yellville.net

Name: Stuart Oxford

E-Mail: ypw@yellville.net

DMR Copy of Record

Permit
 Permit #: AR0034037
 Major: No
 Permitted Features: 001 External Outfall

Permittee: YELLVILLE, CITY OF
Permittee Address: YELLVILLE, CITY OF
 P.O. BOX 647
 YELLVILLE, AR 72687
Facility Location: YELLVILLE, CITY OF
 1385 MCCOOL 6001
 YELLVILLE, AR 72687

Discharge: 001-A
 001-MONTHLY-TRTD MUNICIPAL WW

Report Dates & Status
 Monitoring Period: From 01/01/19 to 01/31/19
 Considerations for Form Completion: DMR Due Date: 02/25/19
 Status: **Met/RR Validated**

Principal Executive Officer
 First Name: Stuart
 Last Name: Oxford
 Title: Wastewater Superintendent
 Telephone: 870-656-9385

Form NODI: No Data Indicator (NODI)

Code	Parameter Name	Monitoring Location	Season	Param. NODI	Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
00300	Oxygen, dissolved [OC]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	10.32	>=	>=	19 - mg/L	Qualifier 2	Value 2	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
00400	pH	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	7.3	>=	>=	12 - SU	=	7.2	12 - SU	0	03/30 - Three Per Month	GR - GRAB
00500	Solids, total suspended	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	9.24	<	<	26 - lb/d	<	2.5	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	1	--	Sample Permit Req. Value NODI	0.03	<	<	26 - lb/d	<	0.01	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
00630	Nitrate total [as N]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	19.88	<	<	26 - lb/d	=	5.32	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	0.539677	=	=	03 - MGD	=	10 MO AVG	19 - mg/L	0	02/30 - Twice Per Month	GR - GRAB
74035	Coliform, fecal (general)	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	11.41	<	<	Req Non MO AVG	=	1	13 - #/100mL	0	01/01 - Daily	TM - TOTALZ
80082	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	62.6 MO AVG	<	<	26 - lb/d	=	200 30DA GEO	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB

Submission Note
 If a parameter row does not contain any values for the Sample not Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 Environmental Services Company, Inc. 13715 West Mantham Little Rock, Arkansas 72211 (501) 221-2565

Attachments
 No attachments

Report Last Saved By
 YELLVILLE, CITY OF
 User: ypwwwp@yehville.net
 Name: Stuart Oxford
 E-Mail: ypwwwp@yehville.net
 Date/Time: 2019-02-18 20:33 (Time Zone: -06:00)

Report Last Signed By
 User: ypwwwp@yehville.net
 Name: Stuart Oxford
 E-Mail: ypwwwp@yehville.net

DMR Copy of Record

Permit
 Permit #: **AR0034027** **YELLEVILLE, CITY OF**
 Major: **No** **P.O. BOX 647**
 YELLEVILLE, AR 72867
 Facility Location:
 Permitted Feature: **001** **001-A**
 External Outfall **001-MONTHLY-TRTD MUNICIPAL WW**
 Discharge:
 Report Dates & Status: **From 02/01/19 to 02/28/19** **03/25/19**
 Monitoring Period: **DMR Due Date:**
 Considerations for Form Completion: **Wastewater Superintendent**
 Principal Executive Officer: **Stuart Oxbrd**
 Title:
 First Name: **870-656-9385**
 Last Name:
 No Data Indicator (NODI): **MetDMR Validated**

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex.	Frequency of Analysis	Sample Type
					Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3				
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	6.23	6 INST MIN	>=	19 - mg/L	0	0330 - Three Per Month GR - GRAB			
00400	pH	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	7.1	6 MINIMUM	>=	12 - SU	0	0330 - Three Per Month GR - GRAB			
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	21.13	3.3	<	19 - mg/L	0	0230 - Twice Per Month 03 - COMP-3			
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	1	--	Sample Permit Req. Value NODI	0.19	0.03	=	19 - mg/L	6	0330 - Three Per Month 03 - COMP-3			
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	1100.76	184.23	=	19 - mg/L	1	0230 - Twice Per Month GR - GRAB			
50050	Flow, in conduit or flow treatment plant	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	0.526893	10 MO AVG	<=	19 - mg/L	0	0101 - Daily			
74055	Coliform, fecal general	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	14.92	200 30DA GED	<=	13 - #/100mL	0	0330 - Three Per Month GR - GRAB			
80682	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	62.6 MO AVG	10 MO AVG	<=	19 - mg/L	0	0230 - Twice Per Month 03 - COMP-3			

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Tracking, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Code	Parameter Name	Monitoring Location	Field	Type	Description	Acknowledge
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	Quantity or Loading Sample Value 1	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	Quality or Concentration Sample Value 2	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	Quality or Concentration Sample Value 3	Soft	The provided sample value is outside the permit limit. (Error Code: 1)	Yes

Comments
 Environmental Services Company, Inc. 13715 West Markham Little Rock, Arkansas 72211 (501) 221-2555

Attachments

Name	Type	Size
Goatmilkdumping.docx	docx	32016

Report Last Saved By
YELLEVILLE, CITY OF
 User: **ypwwwp@yellville.net**

DMR Copy of Record

Permit
 Permit #: AR06934037
 Major: No
 Facility: YELVILLE, CITY OF
 1395 MCCOOL 6001
 YELVILLE, AR 72687
 Permitted Feature: 001 External Outfall
 Discharge: 001-A
 001-MONTHLY-TRTD MUNICIPAL WW
 Status: **NetDMR Validated**

Report Dates & Status
 Monitoring Period: From 03/01/19 to 03/31/19
 DMR Due Date: 04/25/19
 Considerations for Form Completion: REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY), DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM). 4S-00023

Principal Executive Officer: Stuart Oxford
 Title: Wastewater Superintendent
 Telephone: 870-656-9385

Code	Parameter Name	Monitoring Location	Season	# Param. NODI	Qualifier 1	Value 1	Quantity or Loading	Qualifier 2	Value 2	Units	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample	8.29	Permit Req. <	6 INST MIN	>=	19 - mg/L	=	0	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
00400	pH	1 - Effluent Gross	0	--	Sample	7.3	Permit Req. <	6 MINIMUM	>=	12 - SU	=	7.4	12 - SU	0	03/30 - Three Per Month	GR - GRAB
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample	7.79	Permit Req. <	26 - lbd	=	2.5	=	2.5	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	1	--	Sample	0.11	Permit Req. <=	26 - lbd	=	0.04	=	0.08	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	Sample	11.28	Permit Req. <=	26 - lbd	=	5 MO AVG	=	7.57 DA AVG	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
50060	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample	0.345774	Permit Req. <=	0.822	=	10 MO AVG	=	15.7 DA AVG	19 - mg/L	0	02/30 - Twice Per Month	GR - GRAB
74055	Coliform, fecal general	1 - Effluent Gross	0	--	Sample	6.3	Permit Req. <	200 30DA GEO	=	1	=	1	13 - #/100mL	0	03/30 - Three Per Month	GR - GRAB
80082	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	Sample	62.6 MO AVG	Permit Req. <=	26 - lbd	=	2	=	2.1	19 - mg/L	0	03/30 - Three Per Month	GR - GRAB
					Value NODI											
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DMR Copy of Record

Permit

Permit #: AR003403Z
Major: No
Permitted Feature: 001 External Outfall
Permittee Address: YELLEVILLE, CITY OF
 P.O. BOX 647
 YELLEVILLE, AR 72687
Facility Location: YELLEVILLE, CITY OF
 1385 MCCOOL 6001
 YELLEVILLE, AR 72687
Discharge: 001-A
 601-MONTHLY-TRTD MUNICIPAL WW
Status: NetDMR Validated

Report Dates & Status

Monitoring Period: From 04/01/19 to 04/30/19
DMR Due Date: 6/25/19

Considerations for Form Completion

REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY). DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM). 45-00023

Principal Executive Officer

First Name: Stuart
Last Name: Oxford
Title: Wastewater Superintendent
Telephone: 870-656-9385

Form NODI:

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	8.47	6 INST MIN	=	>=	19 - mg/L	=	7.4	12 - SU	0	03300 - These Per Month	GR - GRAB
00400	pH	1 - Effluent Gross	0	--	7.3	6 MINIMUM	=	>=	19 - mg/L	=	9 MAXIMUM	12 - SU	0	03300 - These Per Month	GR - GRAB
00530	Solids, total suspended	1 - Effluent Gross	0	--	13.83	93.8 MO AVG	<	26 - l/bd	19 - mg/L	<	3.5	19 - mg/L	0	02300 - Twice Per Month	03 - COMP-3
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	2	--	0.1	24.4 MO AVG	<	26 - l/bd	19 - mg/L	<	0.03	19 - mg/L	0	03300 - These Per Month	03 - COMP-3
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	19.62	62.6 MO AVG	<	26 - l/bd	19 - mg/L	<	3.9 MO AVG	19 - mg/L	0	03300 - These Per Month	03 - COMP-3
50050	Flow, in conduit or first treatment plant	1 - Effluent Gross	0	--	0.434033	Req Non MO AVG	=	0.771	03 - MGD	=	15.7 DA AVG	19 - mg/L	0	02300 - Twice Per Month	GR - GRAB
74055	Coliform, fecal general	1 - Effluent Gross	0	--	8.21	62.6 MO AVG	<	26 - l/bd	19 - mg/L	<	2.1	19 - mg/L	0	02300 - Twice Per Month	03 - COMP-3
80882	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	8.21	62.6 MO AVG	<	26 - l/bd	19 - mg/L	<	19 MO AVG	19 - mg/L	0	02300 - Twice Per Month	03 - COMP-3

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Environmental Services Company, Inc. 13715 West Markham Little Rock, Arkansas 72211 (601) 221-2585

Attachments

No attachments.

Report Last Saved By

YELLEVILLE, CITY OF

User: ypwwwwp@yellville.net

Name: Stuart Oxford

E-Mail: ypwwwwp@yellville.net

Date/Time: 2019-05-20 08:52 (Time Zone: -05:00)

Report Last Signed By

User: ypwwwwp@yellville.net

Name: Stuart Oxford

E-Mail: ypwwwwp@yellville.net

DMR Copy of Record

Permit
 Permit #: AR0034037
 Major: No
 Permitted Features: 001 External Outfall
 Facility: YELLVILLE, CITY OF
 1385 MCCOOL 6001
 YELLVILLE, AR 72687

Permittee Address: YELLVILLE, CITY OF
 P.O. BOX 647
 YELLVILLE, AR 72687
 Discharge: 001-A
 001-MONTHLY-TRTD MUNICIPAL WW
 Status: NetDMR Validated

Report Dates & Status: DMR Due Date: 06/25/18
 Monitoring Period: From 05/01/18 to 05/31/18
 Considerations for Form Completion:

REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY), DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM), 45-00023

Principal/Executive Officer: Stuart Oxford
 Title: Wastewater Superintendent
 Telephone: 870-656-9385

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading		Quality or Concentration		# of Ex. Frequency of Analysis		Sample Type
					Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample	7.52	19 - mg/L	=	0330 - Three Per Month	GR - GRAB	
					Permit Req. <=	>=	19 - mg/L	=	0330 - Three Per Month	GR - GRAB	
00400	pH	1 - Effluent Gross	0	--	Sample	7.3	12 - SU	=	0330 - Three Per Month	GR - GRAB	
					Permit Req. <=	>=	6 MINIMUM	=	0330 - Three Per Month	GR - GRAB	
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample	10.1	19 - mg/L	=	0230 - Twice Per Month	03 - COMP-3	
					Permit Req. <=	93.6 MO AVG	26 - l/bd	=	0230 - Twice Per Month	03 - COMP-3	
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	--	Sample	0.07	19 - mg/L	=	0330 - Three Per Month	03 - COMP-3	
					Permit Req. <=	6.3 MO AVG	26 - l/bd	=	0330 - Three Per Month	03 - COMP-3	
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	Sample	9.3	19 - mg/L	=	0230 - Twice Per Month	GR - GRAB	
					Permit Req. <=	62.6 MO AVG	26 - l/bd	=	0230 - Twice Per Month	GR - GRAB	
50500	Flow, in conduit or first treatment plant	1 - Effluent Gross	0	--	Sample	0.391419	03 - MGD	=	0101 - Daily	TM - TOTALZ	
					Permit Req. <=	Req Non MO AVG	Req Mon DAILY MX 03 - MGD	=	0101 - Daily	TM - TOTALZ	
74655	Coliform, fecal general	1 - Effluent Gross	0	--	Sample	1	13 - #/100mL	=	0330 - Three Per Month	GR - GRAB	
					Permit Req. <=	200 300A GEO	400 7 DA GEO	=	0330 - Three Per Month	GR - GRAB	
80982	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	Sample	8.9	19 - mg/L	=	0230 - Twice Per Month	03 - COMP-3	
					Permit Req. <=	62.6 MO AVG	26 - l/bd	=	0230 - Twice Per Month	03 - COMP-3	

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 Environmental Services Company, Inc. 13715 West Markham Little Rock, Arkansas 72211 (501) 221-2555

Attachments
 No attachments.

Report Last Saved By
 YELLVILLE, CITY OF

User: ypwpp@yellville.net
Name: Stuart Oxford
E-Mail: ypwpp@yellville.net
Date/Time: 2018-06-17 20:42 (Time Zone: -05:00)

Report Last Signed By
User: ypwpp@yellville.net
Name: Stuart Oxford
E-Mail: ypwpp@yellville.net

DMR Copy of Record

Permit
 Permit #: AR0034037
 Major: No
 Facility: YELVILLE, CITY OF
 1385 MCCOOL 6001
 YELVILLE, AR 72687

Permitted Feature:
 001- External Outfall
 Discharge: 001-A
 001-MONTHLY-TRTD MUNICIPAL WW

Report Dates & Status
 Monitoring Period: From 06/01/19 to 06/30/19
 DMR Due Date: 07/25/19
 Status: NetDMR Validated

Considerations for Form Completion
 REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY); DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM); 45-00023

Principal Executive Officer
 First Name: Stuart
 Last Name: Oxford
 Title: Wastewater Superintendent
 Telephone: 870-566-9385

Code	Parameter Name	Monitoring Location	Season	Param. NODI	Quantity or Loading			Quality or Concentration			Units	# of Ex.	Frequency of Analysis	Sample Type		
					Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3						
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	8.84	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	19 - mg/L	0	03/30 - Three Per Month GR - GRAB	GRAB
00400	pH	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	7.4	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	12 - SU	0	03/30 - Three Per Month GR - GRAB	GRAB
00500	Solids, total suspended	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	26 - lb/d	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	19 - mg/L	0	02/30 - Twice Per Month 03 - COMP-3	GRAB
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	0.03	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	19 - mg/L	0	03/30 - Three Per Month 03 - COMP-3	GRAB
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	5.34	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	19 - mg/L	0	03/30 - Three Per Month GR - GRAB	GRAB
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	0.313767	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	03 - MGD	0	01/01 - Daily	TM - TOTALZ
74035	Coliform, fecal general	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	2.87	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	13 - #/100mL	0	03/30 - Three Per Month GR - GRAB	GRAB
60082	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	-	Sample Permit Req. Value NODI	62.6 MO AVG	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	19 - mg/L	0	02/30 - Twice Per Month 03 - COMP-3	GRAB

Submission Note
 If a parameter row does not contain any values for the Sample not Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 Environmental Services Company, Inc. 13715 West Markham Little Rock, Arkansas 72211 (501) 221-2565

Attachments
 No attachments.

Report Last Saved By
 YELVILLE, CITY OF
 User: ypwawp@yehville.net
 Name: Stuart Oxford
 E-Mail: ypwawp@yehville.net
 Date/Time: 2019-07-21 12:00 (Time Zone: -05:00)

Report Last Signed By
 User: ypwawp@yehville.net
 Name: Stuart Oxford
 E-Mail: ypwawp@yehville.net

DMR Copy of Record

Permit
 Permit #: AR00034037
 Major: No
 Permitted Feature: 001 External Outfall
 Facility: YELVILLE, CITY OF
 1385 MCCOOL 6001
 YELVILLE, AR 72687

Permittee Address: YELVILLE, CITY OF
 P.O. BOX 647
 YELVILLE, AR 72687
Facility Location: YELVILLE, CITY OF
 1385 MCCOOL 6001
 YELVILLE, AR 72687

Discharge: 001-A
 001-MONTHLY-TRTD MUNICIPAL WW
Status: NetDNR Validated

DMR Due Date: 08/25/19
Telephone: 870-656-0365

Title: Wastewater Superintendent

Report Dates & Status
 Monitoring Period: From 07/01/18 to 07/31/19
 Considerations for Form Completion: REPORT FLOW AS MONTHLY AVG. & DAILY MAX. IN MGD (MILLION GALLONS/DAY), DISSOLVED OXYGEN MUST BE EQUAL OR ABOVE THE SPECIFIED LEVEL AT ALL TIMES (INSTANTANEOUS MINIMUM), 45-00023

Principal Executive Officer
 First Name: Stuart
 Last Name: Oxford

No Data Indicator (NODI)
 Form NODI: -

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading		Quality or Concentration		Units	Value 3	Value 2	Value 1	Qualifier 1	Qualifier 2	Qualifier 3	# of Ex. Frequency of Analysis	Sample Type
					Value 1	Qualifier 1	Value 2	Qualifier 2									
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	-	8.13	>=	6 INST MIN	<	19 - mg/L	19 - mg/L	0	03300 - These Per Month	GR - GRAB				
00400	pH	1 - Effluent Gross	0	-	7.4	>=	6 MINIMUM	<=	12 - SU	7.4	0	03300 - These Per Month	GR - GRAB				
00530	Solids, total suspended	1 - Effluent Gross	0	-	2.04	<	99.9 MO AVG	<=	26 - lb/d	2.5	23.7 DA AVG	<	19 - mg/L	02300 - Twice Per Month	03 - COMP-3		
00610	Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	-	0.01	<	6.3 MO AVG	<=	26 - lb/d	0.01	1.57 DA AVG	<=	19 - mg/L	03300 - These Per Month	03 - COMP-3		
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	-	2.33	<	62.6 MO AVG	<=	26 - lb/d	2.82	10 MO AVG	<=	19 - mg/L	02300 - Twice Per Month	GR - GRAB		
50050	Flow, in conduit or final treatment plant	1 - Effluent Gross	0	-	0.113871	=	Req Mon MO AVG	=	03 - MGD	0.254	Req Mon DAILY MX 03 - MGD	=	0101 - Daily	TM - TOTALZ			
74055	Coliform, fecal general	1 - Effluent Gross	0	-	1.96	<	62.6 MO AVG	<=	26 - lb/d	1.3	200 30DA GED	<=	13 - #/100mL	03300 - These Per Month	GR - GRAB		
60042	BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	-	1.96	<	62.6 MO AVG	<=	26 - lb/d	2.4	10 MO AVG	<=	19 - mg/L	02300 - Twice Per Month	03 - COMP-3		

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 Environmental Services Company, Inc. 13716 West Markham Little Rock, Arkansas 72211 (501) 221-2565

Attachments
 No attachments

Report Last Saved By
 YELVILLE, CITY OF
 User: ypwwwp@yellville.net

Name: Stuart Oxford
E-Mail: ypwwwp@yellville.net

Date/Time: 2019-08-22 21:29 (Time Zone: -05:00)

Report Last Signed By
 User: ypwwwp@yellville.net

Name: Stuart Oxford
E-Mail: ypwwwp@yellville.net

DMR Copy of Record

Permit
 Permit #: AR00034037
 Major: No
 Permitted Feature: 001 External Outfall
 Facility: YELLEVILLE, CITY OF
 1385 MCCOOL 6001
 YELLEVILLE, AR 72687

Report Dates & Status
 Monitoring Period: From: 08/01/19 to 08/31/19
 Status: NetBMR Validated
 Considerations for Form Completion:

Principal Executive Officer
 First Name: Stuart
 Last Name: Oxford
 Title: Wastewater Superintendent
 Telephone: 870-656-9385

Form NODI: No Data Indicator (NODI)

Parameter Name	Monitoring Location	Season #	Param. NODI	Qualifier 1	Value 1	Quantity or Loading	Qualifier 2	Value 2	Units	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
00300 Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	8.12		6 INST MIN	>=				19 - mg/L	0	03/30 - These Per Month	GR - GRAB
00460 pH	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	7.3		6 MINIMUM	>=			7.4	12 - SU	0	03/30 - These Per Month	GR - GRAB
00530 Solids, total suspended	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	1.6		9.8 MO AVG		26 - lb/d			19 - mg/L	0	03/30 - These Per Month	03 - COMP-3
00610 Nitrogen, ammonia total [as N]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	0.01		6.3 MO AVG		26 - lb/d			19 - mg/L	0	03/30 - These Per Month	03 - COMP-3
00630 Nitrate + Nitrite total [as N]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	10.12		62.6 MO AVG		26 - lb/d			19 - mg/L	0	02/30 - Twice Per Month	03 - COMP-3
50090 Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	0.007419		03 - MGD		03 - MGD			19 - mg/L	0	01/01 - Daily	TM - TOTALZ
74005 Coliform, fecal general	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	2.05		65.6 MO AVG		26 - lb/d			13 - #/100mL	0	03/30 - These Per Month	GR - GRAB
80042 BOD, carbonaceous [5 day, 20 C]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	2.05		65.6 MO AVG		26 - lb/d			19 - mg/L	0	02/30 - These Per Month	03 - COMP-3

Submission Note
 If a parameter row does not contain any values for the Sample nor Effluent Tracking, then none of the following fields will be submitted for that row: Unit#, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors
 No errors.

Comments
 Environmental Services Company, Inc. 13715 West Markham Little Rock, Arkansas 72211 (501) 221-2565

Report Last Saved By
 YELLEVILLE, CITY OF
 User: ypwwwwp@yellville.net
 Name: Stuart Oxford
 E-Mail: ypwwwwp@yellville.net
 Date/Time: 2019-09-22 11:44 (Time Zone: -05:00)

Report Last Signed By
 User: ypwwwwp@yellville.net
 Name: Stuart Oxford
 E-Mail: ypwwwwp@yellville.net

APPENDIX E

WWAC Approval Letter

ENGINEERING SERVICES, INC.

1207 SOUTH OLD MISSOURI ROAD • P. O. BOX 282 • SPRINGDALE, ARKANSAS 72765

(479) 751-8733 • (479) 751-8746 FAX • www.engineeringservices.com

A. Mark Bennett III
WWAC Chairman
101 East Capitol Avenue, Suite 350
Little Rock, Arkansas 72201



PHONE (501) 682-3978
FAX (501) 682-0561
E-MAIL mark.bennett@arkansas.gov

State of Arkansas WATER/WASTEWATER ADVISORY COMMITTEE

November 12, 2019

The Honorable Shawn Lane
Mayor, City of Yellville
Post Office Box 647
Yellville, Arkansas 72687

Re: Yellville's Pre-application for Recommendation on Wastewater Funding

Dear Mayor Lane,

On November 6, 2019, the Water/Wastewater Advisory Committee reviewed your pre-application for funding to rehabilitate the existing wastewater treatment facility. The Committee recommends funding be provided by the Arkansas Economic Development Commission's Community and Development Block Grant (CDBG) Program and the U.S. Dept. of Agriculture, Rural Development (RD). The actual funding amounts cannot be determined at this time. The use of CDBG and RD funds would be up to you. This recommendation is conditioned on a satisfactory response being provided to the Arkansas Department of Health's letter dated November 1, 2019.

While these are not comments, the National Pollutant Discharge Elimination System (NPDES) Branch of Arkansas Department of Environmental Quality's (ADEQ) Water Division has asked that we mention the need for an NPDES permit, a Storm Water Permit for construction and a Wastewater Treatment Construction Permit. The NPDES program and the Arkansas Water and Air Pollution Control Act require that any facility that discharges wastewater to a water of the State must have a NPDES permit. To discharge without a required NPDES permit subjects the facility to potential civil and criminal penalties.

Any construction projects disturbing one or more acres must have a storm water construction permit issued by ADEQ. The development of a Storm Water Pollution Prevention Plan is included as a permit requirement and must include the implementation of Best Management Practices (BMPs) during construction. These BMPs must include erosion and sediment control measures to prevent sediment from leaving the construction site.

Wastewater Treatment Construction Permits are required for the construction of any municipal and industrial treatment and collection facilities that discharge treated wastewater to a river or stream. Wastewater treatment construction permits are required for small on-site wastewater disposal systems that commonly serve developments or small areas in the treatment of domestic wastewater.

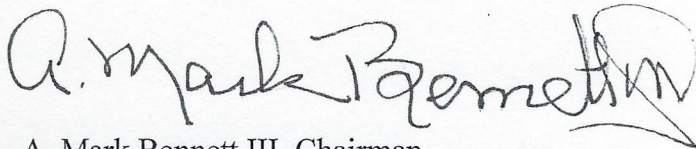
Page 2 of 2

Water/Wastewater Advisory Committee review
Yellville's Pre-application for Recommendation

As a reminder, per Arkansas Department of Transportation instruction, any construction and/or maintenance along highways must stay out of the right of way.

We appreciate your cooperation with this pre-application process. If you have any questions or comments, contact Vernon Lowe, Water Resources Engineer, at (501) 682-0555.

Sincerely,

A handwritten signature in black ink that reads "A. Mark Bennett III". The signature is written in a cursive style with a large, stylized initial "A" and a prominent "III" at the end.

A. Mark Bennett III, Chairman
Water/Wastewater Advisory Committee

AMB/VLL/hdd

cc: Mr. Jeffery K. Dehnhardt, P.E., Engineering Services, Inc.
WWAC Committee Members