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City of Akron

Consent Decree
Semi Annual Report
July 1, 2014 – December 31, 2014

February 13, 2015

Department of Public Service
Akron Engineering Bureau
Environmental Division

City of Akron
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Semi-Annual Report
July 1 – December 31, 2014

Table of Contents

List of Abbreviations and Acronyms

AFP	Advanced Facilities Plan
CAG	Community Action Group
CCTV	Closed-Circuit Television
CIPP	Cured in Place Process
CMOM	Capacity, Management, Operations, and Maintenance
CSO	Combined Sewer Overflow
CSS	Combined Sewer Systems
EPA	Environmental Protection Agency
FOG	Fats, Oils and Grease
FSE	Food Service Establishments
GIS	Geographic Information System
HVAC	Heating, Ventilation, and Air Conditioning
ID	Identification
IPS	Integrated Plan Stakeholders
LCI	Little Cuyahoga Interceptor
LF	Lineal Feet
LTCP	Long Term Control Plan
Mg/l	Milligrams per Liter
MGD	Million Gallons per Day
MH	Manhole
MLSS	Mixed Liquor Suspended Solids
NASSCO	National Association of Sewer Service Companies
NFA	No Feasible Alternative
No.	Number
NOI	Notice of Intent
OCI	Ohio Canal Interceptor
OCIT	Ohio Canal Interceptor Tunnel
OHPO	Ohio Historic Preservation Office
OSHA	Occupational Safety and Health Administration
PER	Preliminary Engineering Report
PTI	Permit to Install
QAPP	Quality Assurance Project Plan
RAS	Return Activated Sludge
RCA	Root Cause Analysis
RIO	Remote Input/Output
SCPHD	Summit County Public Health Department
SEP	Supplemental Environmental Project
SOP	Standard Operating Procedure
SORNP	Sewer Overflow and Response Notification Plan
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
WAS	Waste Activated Sludge
WPCLF	Water Pollution Control Loan Fund
WPCS	Water Pollution Control Station
WRF	Water Reclamation Facility (See: WPCS)

Section 1: Specific Action Projects

1.A Upgrade of the WPCS

Status of Work Plan Development	The Work Plan for Water Pollution Control Station (WPCS) improvements was submitted to EPA on February 10, 2010 per the Consent Decree.
Status of Design and Construction Activities	No activity during this reporting period.
Status of Stress Test Protocol Development	The Technical Memorandum for the detailed clarifier test procedures to be used during the Year 2 Evaluation is currently being developed.
Status and Results of Stress Tests	Year I testing during Wet Weather events and Stress Testing was ongoing. Clarifier Testing was completed on July 7-11, 2014, August 20-25, 2014, and November 17-20, 2014. Progress meetings were held on August 18, 2014 and November 7, 2014 to review the results of the July and August Clarifier Testing, respectively. A three week operation period for Unit 6 in Step Feed mode was completed in August. The review and analysis of the Clarifier Testing results for the November testing and the Year 2 Evaluation Plan was started in December.
Capacity Achieved at the WPCS After Upgrade	Information will be provided based on the Year 1 Evaluation results.
Project Cost Incurred During Reporting Period	Project costs incurred during the reporting period were approximately $94,077.

1.B Upgrade of the WPCS (Contingency Projects)

Per the Akron Consent Decree 2009 Modifying Train 6 to Step Feed Mode Work Plan, dated February 10, 2010, the scope of the WPCS Contingency Project will be defined after the limitations of upgrading Secondary Treatment Train 6 to step feed mode are better understood.

1.C Status of Sewer Separation Projects

1.C.1 Rack 8 Separation Project

Activities Undertaken During Reporting Period	Project is complete. Project close out at the end of the one-year guarantee period.
Status of Construction	Construction is complete.
Date of Anticipated Completion	Achievement of Full Operation occurred on December 14, 2012.
Project Cost Incurred During Reporting Period	Project costs incurred during the reporting period were approximately $1,612.

1.C.2 Rack 25 Separation Project

Activities Undertaken During Reporting Period	Project is complete. Project close out at the end of the one-year guarantee period.
Status of Construction	Construction is complete.
Date of Anticipated Completion	Achievement of Full Operation occurred on December 14, 2012.
Project Cost Incurred During Reporting Period	No project costs were incurred during the reporting period.

1.C.3. Rack 21 Separation Project

Activities Undertaken During Reporting Period	Completed 60% Plan Review. Sewer cleaning and inspection is complete, as well as geotechnical investigation.
Status of Construction	Construction will begin within six (6) years of November 13, 2009 (Date of Lodging).
Date of Anticipated Completion	Construction on Rack 21 will be complete within 8 years of November 13, 2009 (Date of Lodging).
Project Cost Incurred During Reporting Period	Project costs incurred during the reporting period were approximately $95,370.

1.C.4 Rack 13 Separation Project

Activities Undertaken During Reporting Period	Plans were put out to bid. Project is on hold.
Status of Construction	Construction on Rack 13 will begin within six (6) years of November 13, 2009 (Date of Lodging).
Date of Anticipated Completion	Construction on Rack 13 will be complete within 8 years of November 13, 2009 (Date of Lodging).
Project Cost Incurred During Reporting Period	Project costs incurred during the reporting period were approximately $7,723.

1.C.5 Rack 30 Separation Project

Activities Undertaken During Reporting Period	Continued design and preparation of construction plans and documents.
Status of Construction	Construction on Rack 30 will begin within 6 years of November 13, 2009 (Date of Lodging).
Date of Anticipated Completion	Construction on Rack 30 will be complete within 8 years of November 13, 2009 (Date of Lodging).
Project Cost Incurred During Reporting Period	Project costs incurred during the reporting period were approximately $33,070.

Section 2: CSO and WPCS Control Measures

2.A Status of Document Preparation

Table 2-1 shows the current status of documents as listed in Table 1 in Paragraph 17 of the Consent Decree. Documents listed in **bold** have been completed as of the end date of this reporting period.

Table 2-1 Status of Document Preparation

Document	Consent Decree Due Date	Date Submitted or *Date of Anticipated Completion*
Updated NFA and supplement	November 30, 2009	November 25, 2009
Preliminary Report on Modeling to Predict Size and Number of Overflows	January 15, 2010	January 13, 2010
Preliminary Report on Cost/Benefit Comparison to Predict Sizes and Number of Overflows	March 15, 2010	March 12, 2010
CSO Control Measure Cost/Benefit Tables at Appendix 2 of Attachment A	May 15, 2010	May 14, 2010
Updated Financial Capability Information	May 15, 2010	May 14, 2010
Post-Construction Monitoring Program	August 15, 2010	August 16, 2010
Proposed Long Term Control Plan Update	August 15, 2010	August 16, 2010
Proposed Long Term Control Plan Update Report	August 15, 2010	August 16, 2010
Final Long Term Control Plan Update	October 15, 2010	October 15, 2010 Revised: February 28, 2011
Final Long Term Control Plan Update Report	October 15, 2010	October 15, 2010 Revised: February 28, 2011 Revised: November 15, 2011 USEPA Approved: November 16, 2011 Ohio EPA Approved: April 11, 2012 Withdrawn: December 17, 2013
Report on Revising WPCS Control Measure(s) if Akron achieves 130 MGD through secondary treatment using step feed	October 15, 2016	*October 15, 2016*
Report on Revising WPCS Control Measure(s) if Akron constructs the WPCS Contingency Project	October 15, 2017	*October 15, 2017*

On December 17, 2013 the Long Term Control Plan ("LTCP") Update was withdrawn due to significant prolonged delay in the entry of the proposed Consent Decree. In addition, the City has requested the opportunity to participate in the USEPA's Integrated Planning (IP) process. The USEPA's Integrated Planning Framework (IPF) guidance allows communities the flexibility to implement projects according to a schedule that is based on achieving the greatest benefits in the early plan years rather than on a solely regulatory-driven project selection and scheduling process. The Consent Decree was entered on January 17, 2014.

The City submitted an initial "proof of concept" report to USEPA September 30, 2014. In a November 17, 2014 letter to the City, the USEPA indicated that USEPA "does not view the

process as one in which EPA approves or disapproves an IP. Rather, an IP that is developed in accordance with the IP Framework may be the basis for remedy development or, as in Akron's case, a request for Consent Decree modification (where the remedy for addressing CSOs and other wet weather issues has been addressed in an approved LTCP Update that is incorporated into an entered Consent Decree).

While continuing to discuss the USEPA's interpretation of the USEPA IPF June 2012 guidance document, the City continued work to submit a final IP report to USEPA by the end of April 2015. The following summarizes the IP activities during this reporting period:

- Continued LTCP project optimization activities, including:
  - Conducting additional flow monitoring
  - Initiating recalibration of the hydraulic modeling based on the latest flow monitoring data
  - Identifying potential "green infrastructure" opportunities
  - Modeling the impacts of identified alternative LTCP projects versus originally defined LTCP projects
- Conducting IP Stakeholder Group meetings and workshops (see Section 2.G), including:
  - Obtaining stakeholder input on benefit criteria and associated importance weightings
  - Reviewing the potential range of green infrastructure alternatives
  - Discussing specific project details with affected subgroups of stakeholders

Affordability Analysis

The IP team completed a baseline financial capability assessment (FCA) of the 2010 LTCP updated with costs for 2014. The current state of affordability as evaluated under 1997 EPA Guidance for the City's residential customers was compared with the FCA completed in 2011. Calculations of the residential indicator (RI) and financial capability indicators were prepared that show a higher cost per household given the escalation in the 2010 LTCP costs and required projects.

Meetings held with City Staff confirmed assumptions used in the analysis regarding 2014 operation and maintenance costs, annual debt service payments, capital improvements in addition to L TCP costs, among other socio-economic characteristics of the City's retail service area. A final baseline report was submitted to EPA on July 16, 2014. A conference call with USEPA Region 5 and its financial expert addressed questions raised regarding the baseline FCA report.

Subsequent analysis provided in an enhanced methodology FCA report supported a more accurate and complete picture of the City's financial capability, as encouraged by 1997 EPA Guidance. A report submitted to EPA on September 11, 2014 included analysis that properly accounts for income distribution, individual neighborhoods, and actual bills of the City's service area. Using a Weighted Average Residential Index (WARi™), income skew in the City is resolved and is easily applied to each neighborhood or census tract. The WARi approach uses actual customer billing data calculated for each census tract resulting in a more accurate depiction of the real financial impacts of individual households in neighborhoods over time as rates increase. This new index concludes that LTCP program costs will have a disproportionate burden on lower and fixed income households in the City.

In a meeting with USEPA Region 5 on November 20, 2014, both baseline and enhanced methodology FCA analyses were discussed and critiqued. USEPA's primary message was that the City's Master Meter customer information must be included in the calculations of

affordability. Since that meeting, the IP team has been working with the City and its Master Meter customers to compile the financial and customer data for inclusion in the FCA calculations.

2.B Progress Towards Completing Milestones in Approved LTCP Update

Progress towards completing milestones, including status of progress toward Achievement of Full Operation, for each of the WPCS and CSO Control Measures set forth in the approved LTCP Update (withdrawn December 17, 2013) is provided in Table 2-2. The Consent Decree was entered January 17, 2014.

Table 2-2 Status of Progress and Cost Incurred During Reporting Period For Control Measures Set Forth in Approved LTCP Update

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
1	Rack 3	Storage Basin(s)	Bidding of Control Measure – June 30, 2018 Achievement of Full Operation – November 30, 2020.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.
2	Rack 5 & 7	Storage Basin(s)	Bidding of Control Measure – October 31, 2015 Achievement of Full Operation – October 31, 2017.	The Integrated Plan Long Term Control Plan Optimization was initiated in October 2014 to identify and evaluate opportunities and other alternative solutions for CSO reduction.	Project costs incurred during the reporting period were approximately $15,411
3	Racks 10 and 11	Storage Basin(s)	Bidding of Control Measure – June 30, 2018 Achievement of Full Operation – December 31, 2020.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.
4	Rack 12	Storage Basin(s)	Bidding of Control Measure – November 30, 2014 Achievement of Full Operation – October 31, 2017.	Completed Final Design Phase. Advertised for Proposals. Received proposals from Construction Manager at Risk.	Project costs incurred during the reporting period were approximately $298,833.
5	Rack 14	Storage Basin(s)	Bidding of Control Measure – October 30, 2014 Achievement of Full Operation – April 30, 2017.	Completed Final Design Phase. Advertised for proposals. Received proposals from Construction Manager at Risk.	Project costs incurred during the reporting period were approximately $294,332.
6	Rack 15	Storage Basin(s)	Bidding of Control Measure – November 30, 2013 Achievement of Full Operation – October 31, 2015.	Construction NTP issued July 14, 2014.	Project costs incurred during the reporting period were approximately $536,102.
7	Rack 22	Storage Basin(s)	Bidding of Control Measure – October 31, 2015 Achievement of Full Operation – December 31, 2017.	The Integrated Plan Long Term Control Plan Optimization was initiated in October 2014 to identify and evaluate Green Infrastructure (GI) opportunities and other alternative solutions for CSO reduction.	Project costs incurred during the reporting period were approximately $13,311.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
8	Rack 26 and 28	Storage Basin(s)	Bidding of Control Measure – October 31, 2021 Achievement of Full Operation – December 31, 2022.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.
9	Rack 27 and 29	Storage Basin(s)	Bidding of Control Measure – January 31, 2018 Achievement of Full Operation – December 31, 2019.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.
10	Rack 36	Storage Basin(s)	Bidding of Control Measure – October 31, 2015 Achievement of Full Operation – October 31, 2017.	The Integrated Plan Long Term Control Plan Optimization was initiated in October 2014 to identify and evaluate Green Infrastructure (GI) opportunities and other alternative solutions for CSO reduction.	Project costs incurred during the reporting period were approximately $11,622.
11	Racks 4, 16, 17, 18, 19, 20, 23, 24, 37	Ohio Canal Tunnel – Construct a 28-foot internal diameter tunnel, 5,500 feet in length, or any other combination of diameter and length that achieves the design criteria.	Bidding of Control Measure – April 30, 2014 Achievement of Full Operation – December 31, 2018.	Final design of tunnel progressed to 95% complete at December 2014. OCI system elements of 36” Water Main relocation and Lower Cuyahoga Interceptor lining projects were advertised and construction is underway.	Project costs incurred during the reporting period were approximately $6,930,271

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
11a	Racks 16, 17, 18, 19, 20, 23, 24	Ohio Canal Tunnel – BioACTIFLO™ Ballasted Flocculation Unit or equivalent technology that meets the Design and Performance Criteria and Disinfection.	Bidding of Control Measure – April 30, 2024 Achievement of Full Operation – October 31, 2027.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.
12	Racks 32, 33, 34, 35	Northside Interceptor Tunnel – Construct a 20-foot internal diameter tunnel, 10,000 feet in length or any other combination of diameter and length that achieves the design criteria.	Bidding of Control Measure – April 30, 2023 Achievement of Full Operation – December 31, 2026.	The final Advanced Facility Plan was submitted May 28, 2014.	No costs were incurred during this reporting period.

Row #	Upgrade Phases	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
13a	WPCS Phase 1	WPCS	Upgrade conventional secondary treatment capacity to 130 MGD by implementing step feed operation in Train 6, as described in Paragraph 10.a of the Consent Decree.	Bidding of Control Measure – October 31, 2011 Achievement of Full Operation – October 15, 2013.	The progress during reporting period for the WPCS Phase 1 – Upgrade of the WPCS is reported in Section 1.A of this Semi Annual Report.	Project costs incurred during the reporting period were approximately $94,077
13b	WPCS Phase 1	WPCS	Upgrade conventional secondary treatment capacity to 130 MGD by performing the upgrades identified in the Consent Decree in Section V.10.C.	Bidding of Control Measure – January 15, 2016 Achievement of Full Operation – October 15, 2017.	Not required. No activities were undertaken during this reporting period. Completed in item 13a above.	No costs were incurred during this reporting period.
14	WPCS Phase 1 BioACTIFLO™ Wet Weather Treatment Pilot Study (the "Pilot Study")	WPCS	Conduct the Pilot Study in accordance with Exhibit 1 to this Long Term Control Plan Update.	Pilot Study Start Date – May 1, 2012 Pilot Study Completion Date – November 30, 2013 Pilot Study Report submitted to EPA by December 31, 2013.	Awaiting approval letter for the final report.	No costs were incurred during this reporting period.
15	WPCS Phase 2 – Part 1	WPCS	Upgrade conventional secondary treatment capacity to 170 MGD	Bidding of Control Measure – February 28, 2019 Achievement of Full Operation – December 31, 2021.	Basis of design report for final clarifiers completed.	Costs are being updated now.

Row #	Upgrade Phases	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
16	WPCS Phase 2 – Part 2	WPCS	Install BioACTIFLO™ ballasted flocculation to treat all flow that does not receive conventional secondary treatment. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure – April 30, 2017 Achievement of Full Operation – April 30, 2019.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.
17	Alternative Plan A – Phase 2 – Part 1	WPCS	Upgrade conventional secondary treatment capacity to achieve the minimum sustained capacity specified in Alternative Plan A approved by USEPA	Bidding of Control Measure – February 28, 2019 Achievement of Full Operation – December 31, 2021.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.
18	Alternative Plan A – Phase 2 – Part 2	WPCS	Install BioACTIFLO™ ballasted flocculation to achieve the minimum capacity specified in Alternative Plan A approved by USEPA. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure – April 30, 2017 Achievement of Full Operation – April 30, 2019.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.

Row #	Upgrade Phases	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
19	Alternative Plan B – Phase 2 – Part 1	WPCS	Upgrade conventional secondary treatment capacity to achieve the minimum sustained capacity specified in Alternative Plan B approved by USEPA.	Bidding of Control Measure – December 31, 2019 Achievement of Full Operation – December 31, 2021.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.
20	Alternative Plan B – Phase 2 – Part 2	WPCS	Install BioACTIFLO™ ballasted flocculation to achieve the minimum capacity specified in Alternative Plan B approved by USEPA. In addition, all flows receiving BioACTIFLO™ shall receive disinfection.	Bidding of Control Measure – April 30, 2017 Achievement of Full Operation – April 30, 2019.	No activities were undertaken during this reporting period.	No costs were incurred during this reporting period.

Row #	Control Measure Location	Description	Critical Milestones	Progress During Reporting Period	Costs Incurred During Reporting Period
(2) Collection System Measures					
21	Parallel Relief Interceptor and Pump Station	Installation of parallel relief sewer between Survey Station 88+00 and the WPCS and associated pump station to convey wastewater to WPCS	Bidding of Control Measures: Parallel Relief Interceptor – July 31, 2015 Pump Station – November 30, 2015 Achievement of Full Operation – November 30, 2017.	Cap replacement pilot project completed.	Project costs incurred during the reporting period were approximately $948,908.
22	Main Outfall Sewer	Perform inspections and rehabilitation consistent with the Main Outfall Sewer Supplement to the Approved CMOM Program as outlined in Section VII of the Consent Decree.	Full Operation shall be maintained consistent with the Main Outfall Sewer Supplement to the Approved CMOM Program.	Substantial completion occurred September 22, 2014.	Project costs incurred during the reporting period were approximately $358,966.

2.C Project Cost Incurred

Project costs incurred by the City during the reporting period for each of the WPCS and CSO Control Measures set forth in the approved LTCP Update are provided in Table 2-2. The City incurred additional costs for regulatory support, design management, program controls, technical and right of way support and program management of approximately $5,380,908 during the reporting period.

2.D Status of Implementation of the Post-Construction Monitoring Program

The Post Construction Monitoring Program was submitted on August 15, 2010, in the revised Long Term Control Plan on February 29, 2011, and a revised Program was submitted for review on December 14, 2012. No construction of control measures was completed during the reporting period; therefore no post construction monitoring activities were initiated

2.E Listing of All CSO Discharges

CSO discharges from each CSO Outfall for the period July 1, 2014 through December 31, 2014 are listed in Appendix B. The listing also provides data on the depth and duration of rainfall at each of the City's 13 rain gauges. Racks 8, 9, 25, 30, 31, 38 and 39 are not included in the table. Racks 8, 9, 25 and 39 were separated on May 21, 2012, July 27, 2004, April 26, 2012 and August 18, 2000, respectively. Racks 30 and 31 have been consolidated with Rack 40 into the Cuyahoga Street Storage Facility. Rack 38 is a diversion chamber that routes flow within the combined sewer system.

2.F Status of Development of the Supplemental Compliance Plan

As of this reporting period, the Supplemental Compliance Plan is not required.

2.G Status of Public Participation Plan Implementation

The City of Akron continued its public participation program with regular updates to the Integrated Plan Stakeholders (IPS) – formerly known as the CSO Community Action Group (CAG). During the reporting period the following IP Stakeholder group meetings were held:

- IP Stakeholders Group Meeting (8-12-14)
- IP Stakeholders Group Meeting (10-29-14)
- IP Benefit Criteria Importance Weighting Session (10-29-14)
- Akron IP Stakeholder Subcommittee: Business and Industry (10-30-14)
- Akron IP Stakeholder Subcommittee: Community Engagement and Stewardship (10-30-14)
- Akron IP Stakeholder Subcommittee: Green Infrastructure (10-30-14)

The City's public participation efforts also included presentations made at the following events and public meetings during the reporting period:

- Cascade Village R15 Groundbreaking Ceremony (9-12-14)
- Hickory Street Community Meeting (9-29-14)
- Ward 10 Community Meeting (10-14-14)
- Ward 8 Community Meeting (10-15-14)
- Ward 5 Community Meeting (10-16-14)

- Ward 6 Community Meeting (10-16-14)
- Cascade Village Neighborhood Night Out Event (10-24-14)
- Ward 3 Community Meeting (11-13-14)
- Construction Match Making Event (11-18-14)
- Ward 2 Community Meeting (11-19-14)
- Construction Workforce Pre-Apprenticeship Outreach Program (11-24-14)
- Ward 9 Community Meeting (12-2-14)
- The Akron Zoo's Storm Water Management Tour (12-9-14)
- Construction Workforce Pre-Apprenticeship Outreach Program (12-15-14)

Copies of presentations are included in Appendix C.

The City of Akron has posted updated CSO information to its updated Akron CSO Program website (www.akronwaterwaysrenewed.com). Figure 2-1 represents the home page view of Akron's new CSO Program website.

The City of Akron has also established a Facebook page for the Akron CSO Program. The link for this page is www.facebook.com/akronwaterwaysrenewed. Figure 2-2 represents the Facebook page for the program.

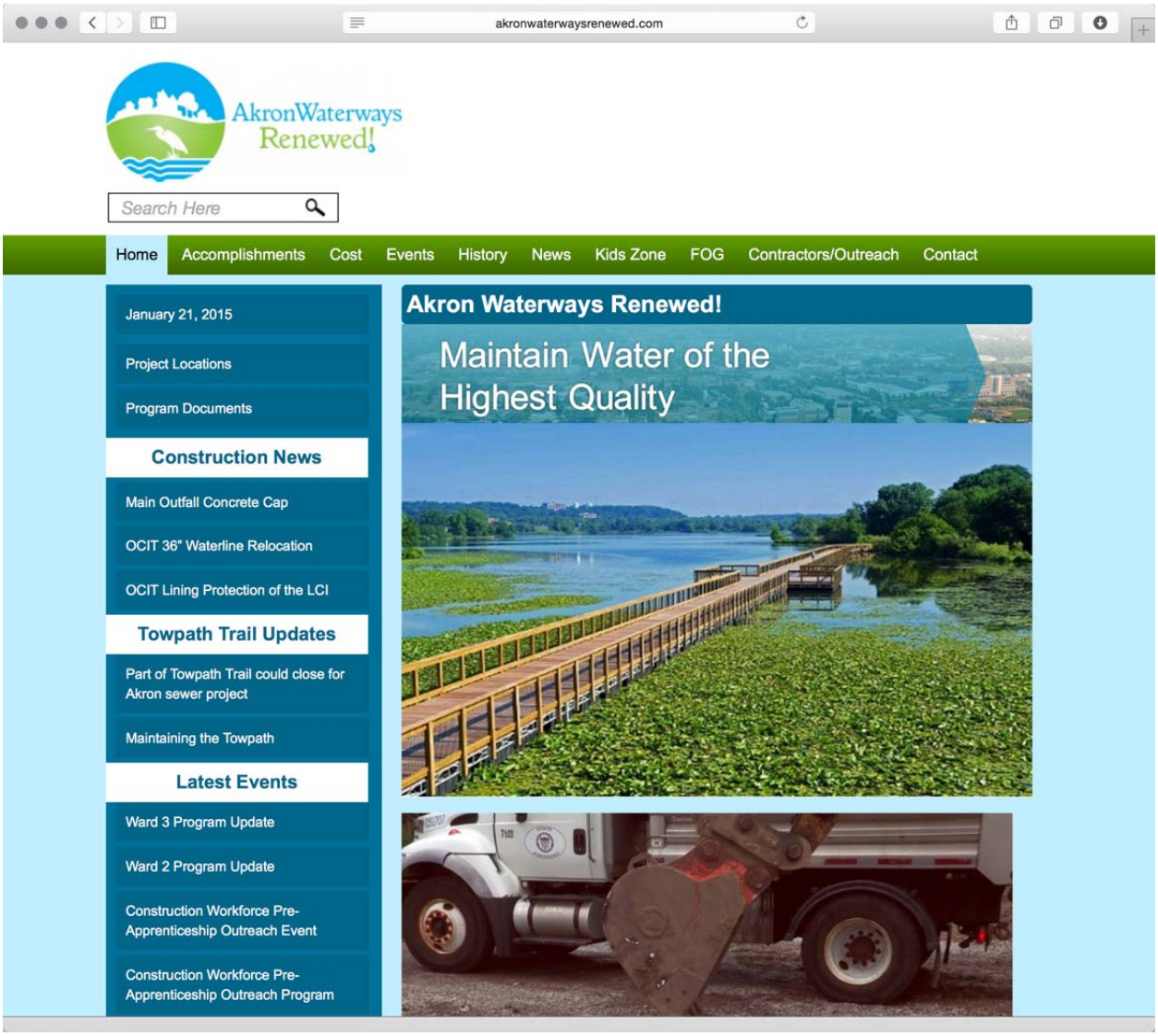

Figure 2-1 New City of Akron CSO Program Website

Figure 2-2 Akron Waterways Renewed Facebook page

Section 3: CMOM, Grease Control, and Emergency Response Programs

General:

A. In previous Semi Annual Reports, the City provided an explanation as to the steps the City is undertaking regarding buried manholes and the USEPA concurred with the City's approach. In accordance with the approved approach:

1. The City continues to locate and raise buried manholes as they are identified.
2. In the May 13, 2013 conference call between the City and USEPA regarding the Semi Annual Report for July – December 2012, the City noted that not all buried manholes will be able to be raised prior to December 31, 2014 based on the date of their discovery. For those manholes that will not be raised to grade prior to December 31, 2014, an inspection will be completed from inside of the sewer segment for the first five-year cleaning and inspection cycle.

   The City and USEPA have discussed buried manholes and inaccessible sewer segments in several technical conference calls and in a June 20, 2014 letter to the USEPA, the City requested removal of certain manholes and sewer segments that will be abandoned after 2014 from the City's CMOM cleaning and inspection cycle. This letter also requested postponement of cleaning and inspection until the end of 2015 of known inaccessible sewer system assets to allow time for the necessary construction work and until the end of 2016 the postponement of cleaning and inspection of additional inaccessible sewer system segments discovered during the completion of the current cleaning/inspection cycle in 2014. However, USEPA required, after review and approval, all necessary construction, cleaning and inspection of all inaccessible sewer segments discovered in 2014 be completed by the end of 2015.

   Table 3-1a identifies the inaccessible sewer segments submitted in the July – December 2013 Semi Annual Report that have since been cleaned and inspected. .

   Table 3-1b identifies the inaccessible sewer segments submitted in the January – June 2014 Semi Annual Report that have since been cleaned and inspected.

   Table 3-1c identifies the inaccessible sewer segments discovered during this reporting period and a description of the proposed construction solution or strategy for establishing access, cleaning and inspection.

   Table 3-1d identifies the inaccessible manholes and a description of the proposed solution or strategy for inspection. Most of the manholes on this list are located on segments identified as inaccessible and these will be addressed in conjunction with the segment.

Table 3-1a Sewer Segments from the Inaccessible List (Submitted in July – December 2013 Semi Annual Report) that have since been cleaned and inspected.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution or Resolution
406615	852 Delia Ave	12	Vitrified Clay Pipe	172.7	Buried manhole has been raised. Asset was cleaned and inspected on 6/16/14.
408841	608 Spicer St	8	Vitrified Clay Pipe	222.7	Manholes have been located. Asset was cleaned and inspected on 8/6/14.
413257	Rhodes Ave & Bartges St	20	Vitrified Clay Pipe	475	Asset has been investigated and determined to be abandoned. Asset to be removed from cleaning/inspection program. No further action necessary.
423296	295 First Merit Circle	8	Vitrified Clay Pipe	362.9	Asset has been investigated and determined to be abandoned. Asset to be removed from cleaning/inspection program. No further action necessary.
425750	131 N Summit St	10	Vitrified Clay Pipe	172.1	Asset has full cleaning and CCTV credit. The contractor was able to complete a reverse inspection from the downstream manhole on 8/5/14 to complete inspection of the entire asset.
403905	295 First Merit Circle	8	Vitrified Clay Pipe	139.2	Asset has been investigated and determined to be abandoned. Asset to be removed from cleaning/inspection program. No further action necessary.
411611	160 Opportunity Pkwy	6	Vitrified Clay Pipe	108.7	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.
403462	160 Opportunity Pkwy	6	Vitrified Clay Pipe	80.9	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.
422952	115 W Cedar St	8	Vitrified Clay Pipe	174.5	Asset has been investigated and determined to be abandoned. Asset to be removed from cleaning/inspection program. No further action necessary.
423868	172 W Bowery St	15	Vitrified Clay Pipe	102.1	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.
427076	281 Locust St	8	Vitrified Clay Pipe	154.9	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.
403811	44 E Exchange	8	Cast Iron Pipe	298	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.
425754	Furnace St	10	Vitrified Clay Pipe	288.5	Performed point repair of offset joint 75’ from downstream manhole 302015. Completed cleaning and inspection on 8/6/14.
424920	275 S High St	6	Vitrified Clay Pipe	239.6	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution or Resolution
424923	275 S High St	6	Vitrified Clay Pipe	148.6	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.
752445	10 N Main St	6	Vitrified Clay Pipe	0	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.
752446	10 N Main St	6	Vitrified Clay Pipe	0	Asset has been investigated and determined to be private sewer lateral. Asset to be removed from cleaning/inspection program. No further action necessary.
412312	Arbutus Ct	8	Vitrified Clay Pipe	237.4	Downstream manhole has been raised by City. Asset was cleaned & inspected on 8/26/14.
			Total	**3,377.8**	

Table 3-1b Sewer Segments from the Inaccessible List (Submitted in January – June 2014 Semi Annual Report) that have since been cleaned and inspected.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution or Resolution
422937	Division St	8	Unknown	254	Cleaning and inspection was complete on 12/5/14 from MH 301308 downstream of this segment.
			Total	**254**	

Table 3-1c Sewer Segments Needing Access to Complete Inspection/Cleaning (July-December 2014 reporting period)

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
421978	113 Hall St	8	Vitrified Clay Pipe	298.2	Downstream manhole 303334 is buried. Plan to locate and raise manhole.
366937	615 Blanche St	15	Vitrified Clay Pipe	202.2	Tire iron and rebar wedged in sewer. Plan to perform point repair to remove obstructions.
418912	879W Thornton St	8	Vitrified Clay Pipe	359.9	Cleaning and inspection not possible due to offset joint and steep grade. Plan to perform point repair at offset joint.
415203	1656 SW 13th St	8	Unknown	94.5	Both access manholes are buried. Plan to locate and raise manhole(s).
419379	1455 East Ave	12	Vitrified Clay Pipe	451.8	Unable to complete cleaning and inspection due to sewer diameter change and buried upstream manhole 288382. Plan to raise buried manhole or construct new manhole at location of size change.
404713	709 Sharon St (Viewland Terrace Easement)	8	Unknown	59.8	Both access manholes are buried. Plan to locate and raise manhole(s).
420177	673-709 Viewland Terrace (Easement)	8	Unknown	120.1	Both access manholes are buried. Plan to locate and raise manhole(s).
420175	673-709 Viewland Terrace (Easement)	8	Unknown	121.5	Both access manholes are buried. Plan to locate and raise manhole(s).
420386	670-686 Viewland Terrace (Easement)	8	Vitrified Clay Pipe	157.3	Unable to complete cleaning and inspection due to offset joint and buried upstream manhole 289063. Plan to locate and raise upstream manhole.
765700	670-686 Viewland Terrace (Easement)	8	Vitrified Clay Pipe	72.6	Unable to complete inspection because crawler cannot navigate the steep grade of sewer from downstream manhole 765699 and cannot fit into the invert of upstream manhole 289067 due to the bend of the sewer. Approximately 40' remains to be inspected. Plan to modify upstream manhole to allow access.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
366881	1135 Herman Ave	15	Unknown	16.8	Upstream manhole 291619 is buried and downstream location is a junction chamber. Plan to locate and raise upstream manhole.
411815	611 W. Wilbeth Rd (Easement)	8	Vitrified Clay Pipe	269.3	Both access manholes are buried. Plan to locate and raise manhole(s).
411436	1050-1030 Eagon St	8	Vitrified Clay Pipe	650.6	Segment has no downstream access. Cannot clean against the flow from upstream manhole 287188 due to the risk of flooding adjacent steel fabricator warehouses in close proximity to the segment. Plan to construct downstream manhole(s).
414274	1544 S Hawkins Ave	6	Vitrified Clay Pipe	102.7	Unable to complete inspection from upstream manhole 287692 due to offset joint. Segment has no downstream access. Plan to install a downstream manhole.
404052	1511-1529 Overlook Ave	8	Vitrified Clay Pipe	148.6	Unable to complete inspection from downstream manhole 289189 due to steep grade of sewer. Upstream manhole 289400 is buried. Plan to locate and raise upstream manhole.
420238	2065 Manchester Rd.	10	Vitrified Clay Pipe	355.2	Downstream manhole 289411 is buried. Cannot clean backward against the flow from upstream manhole 289400 due to risk of flooding bathrooms of nearby office building. Plan to locate and raise downstream manhole.
419748	620 Indian Trail (Easement)	8	Vitrified Clay Pipe	140.7	Both manholes are buried in heavily wooded easement area. Plan to clear out easement area, construct access road, and locate and raise manhole(s).
419752	620 Indian Trail (Easement)	8	Vitrified Clay Pipe	224.8	Both manholes are buried in heavily wooded easement area. Plan to clear out easement area, construct access road, and locate and raise manhole(s).
412773	809 W. Waterloo Rd (Easement)	12	Vitrified Clay Pipe	264.9	Downstream manhole 288949 is buried next to railroad track. Plan to coordinate with railroad company to locate and raise buried manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
401710	630 Koerber Ave (Easement)	12	Vitrified Clay Pipe	310.7	Unable to complete cleaning and inspection due to sag in the sewer. Unable to access downstream manhole 288973. Plan to perform point repair at sag location and install access drive for downstream manhole.
413907	659 Allenford St	8	Vitrified Clay Pipe	301.2	Unable to complete cleaning and inspection due to sag in the sewer. Unable to access downstream manhole 288973. Plan to perform point repair at sag location and install access drive for downstream manhole.
420452	473-463 Harvey Ave	8	Vitrified Clay Pipe	228.5	Pipe defects prevent completion of inspection. Sewer is flowing okay. Plan to perform point repair(s).
418862	443-437 Russell Ave	8	Vitrified Clay Pipe	261	Pipe diameter changes from 8" to 12" part way through segment. 12" portion of sewer has pipe defects preventing completion of inspection. Sewer is flowing okay. Plan to replace 12" portion of sewer.
400964	309 Sandhurst (Easement)	24	Vitrified Clay Pipe	464.8	Asset is located at the bottom of a steep ravine with no access and parallels Sand Run Creek. Plan to utilize existing bench areas along ravine to install access road for cleaning and inspection equipment access.
400966	341-371 Mowbray (Easement)	24	Vitrified Clay Pipe	276.4	Asset is located at the bottom of a steep ravine with no access and parallels Sand Run Creek. Plan to utilize existing bench areas along ravine to install access road for cleaning and inspection equipment access.
401930	441 Mowbray Road (Easement)	24	Vitrified Clay Pipe	193	Asset is located at the bottom of a steep ravine with no access and parallels Sand Run Creek. Plan to utilize existing bench areas along ravine to install access road for cleaning and inspection equipment access.
426193	600 Earl St (Easement)	36	Vitrified Clay Pipe	45.4	This segment is adjacent to the Little Cuyahoga River at the base of a steep rocky hill. Neither manhole is accessible. Plan to clear easement area and install access road.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
367547	600 Earl St (Easement)	54	Brick	370.1	Upstream manhole 304769 is buried and downstream manhole 304579 is under an awning in the entry way of a hardware store. Plan to construct a new manhole approximately 100' upstream of manhole 304579.
741081	1931 Gregg Rd (Easement)	15	Vitrified Clay Pipe	207.3	Both access manholes are buried in heavily wooded easement area. Plan to clear easement area and install an access road to locate and raise buried manhole(s).
741082	1931 Gregg Rd (Easement)	15	Vitrified Clay Pipe	207	Both access manholes are buried in heavily wooded easement area. Plan to clear easement area and install an access road to locate and raise buried manhole(s).
741083	1920 Gregg Road (Easement)	18	Vitrified Clay Pipe	130.3	Both access manholes are buried in heavily wooded easement area. Plan to clear easement area and install an access road to locate and raise buried manhole(s).
741084	1920 S.Gregg Rd (Easement)	18	Vitrified Clay Pipe	348	Both access manholes are buried in heavily wooded easement area. Plan to clear easement area and install an access road to locate and raise buried manhole(s).
741085	2029 S Plaza Dr - 1920 Gregg Ave (Easement)	18	Vitrified Clay Pipe	630.6	Both access manholes are buried in heavily wooded easement area. Plan to clear easement area and install an access road to locate and raise buried manhole(s).
741086	2011-2025 Plaza Dr (Easement)	18	Vitrified Clay Pipe	282.8	Both access manholes are buried in heavily wooded easement area. Plan to clear easement area and install an access road to locate and raise buried manhole(s).
741097	2021 S. Plaza Drive (easement)	8	Vitrified Clay Pipe	8.7	Asset has no upstream access point and buried downstream manhole. Plan to clear easement area and install an access road to locate and raise buried manhole.
741093	1951 S. Gregg Ave (Easement)	8	Vitrified Clay Pipe	6.1	Asset has no upstream access point and buried downstream manhole. Plan to clear easement area and install an access road to locate and raise buried manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
741094	1951 S. Gregg Ave (Easement)	8	Vitrified Clay Pipe	6.7	Asset has no upstream access point and buried downstream manhole. Plan to clear easement area and install an access road to locate and raise buried manhole.
741095	1951 S. Gregg Ave (Easement)	8	Vitrified Clay Pipe	18.9	Asset has no upstream access point and buried downstream manhole. Plan to clear easement area and install an access road to locate and raise buried manhole.
741096	1920 S. Gregg Ave (Easement)	8	Vitrified Clay Pipe	6.4	Asset has no upstream access point and buried downstream manhole. Plan to clear easement area and install an access road to locate and raise buried manhole.
411847	1655 S Main St (Bridgestone Headquarters Complex)	8	Vitrified Clay Pipe	201.1	Unable to complete cleaning and inspection due to risk of doing further damage to broken pipe. Sewer is flowing okay. Plan to perform point repair of broken pipe.
419991	1655 S Main St (Bridgestone Headquarters Complex)	8	Vitrified Clay Pipe	258.4	Unable to complete cleaning and inspection due to risk of doing further damage to broken pipe. Sewer is flowing okay. Plan to perform point repair of broken pipe.
413200	1746 Marigold Ave. (Easement)	8	Vitrified Clay Pipe	318.1	Segment has no upstream access. Unable to complete cleaning and inspection due to heavy roots and potential of a basement backup through floor drain of nearby house during cleaning process. Plan to construct an upstream manhole.
435801	783-807 Waterloo Rd.	8	Vitrified Clay Pipe	262.2	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace at least 150' section of broken and fractured pipe.
433983	1400 S. Arlington St (Easement)	12	Vitrified Clay Pipe	164.9	Segment has a sag. Plan to replace at least 40' section to eliminate sag.
433935	1178 -1198 S. Arlington along E. Wilbeth Rd.	8	Vitrified Clay Pipe	244.5	Downstream manhole 309242 is buried. Cannot clean against flow from upstream manhole 308692 due to risk of sewer backup into nearby buildings. Plan to locate and raise downstream manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
425900	1200-1230 S. Arlington St.	10	Vitrified Clay Pipe	289.8	Metal object wedged in joint prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair to remove object.
423588	68 W Exchange St	8	Unknown	138.7	Concrete at 9.8' upstream of manhole 300842. Plan to perform point repair and remove chunks of concrete from upstream manhole.
427104	230 W Center St	8	Vitrified Clay Pipe	303.7	Pipe defects and brick wedged in sewer prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace sewer.
426086	S Main St at E Mill St	12	Vitrified Clay Pipe	314.3	Pipe defects prevent completion of cleaning and inspection of sewer. Sewer is flowing okay. Plan to replace sewer.
426677	77 E Mill St	12	Vitrified Clay Pipe	51.9	Bend in sewer 41.6' downstream of manhole 301465 prevents completion of inspection from this direction. Manned entry required to place crawler into downstream manhole 303646 to perform reverse inspection. Heavy steam and high temperature in manhole prevents manned entry. Plan to coordinate with Akron Energy Systems with solution of steam lines in area to allow access.
413386	West of 102 Charles St (Easement)	8	Vitrified Clay Pipe	53.9	Downstream manhole 301849 is buried and segment has defect 22' from upstream manhole 301848 preventing completion of inspection. Sewer is flowing okay. Plan to perform point repair and locate and raise manhole 301849.
413389	West of 102 Charles St (Easement)	8	Vitrified Clay Pipe	44.9	Upstream manhole 301849 is buried. Slope of segment is too great for crawler to climb from downstream manhole 301850. Plan to locate and raise upstream manhole.
429184	166 N Union Street	8	Vitrified Clay Pipe	430.6	Segment has no upstream access. Pipe defect prevents completion of cleaning and inspection from downstream manhole 305376 due to risk of further damaging pipe. Sewer is flowing okay. Plan to perform point repair and install upstream manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
729665	165 N Union Street	8	Vitrified Clay Pipe	37.1	Segment has no downstream access. Offset joint 17.3' from upstream manhole 729789 prevents completion of inspection. Plan to perform point repair of offset joint and install downstream manhole.
369872	683 E Exchange Street	8	Vitrified Clay Pipe	300.8	Defect 47.5' upstream of manhole 312209 prevents completion of inspection. Sewer is flowing okay. Plan to perform point repair and install upstream manhole if necessary.
425042	95 Arch Street	8	Vitrified Clay Pipe	50.2	Segment has no downstream access. Offset joint 16' from upstream manhole 301619 prevents completion of inspection. Plan to perform point repair and install downstream manhole if necessary.
423705	520 N. Arlington (Easement)	18	Unknown	302.1	Downstream manhole 302157 is at the base of a steep rocky hill next to the Little Cuyahoga River with no access. Defect in sewer 141.2' from upstream manhole 302267 prevents completion of inspection. Sewer is flowing okay. Plan to perform point repair on sewer.
426195	520 N. Arlington (Easement)	18	Vitrified Clay Pipe	357.6	Both manholes are buried next to Little Cuyahoga River at the base of a steep rocky hill with no access. Plan to perform point repair of upstream segment 423705 (see above segment) to gain access to this sewer.
431080	16 S. Arlington Street	8	Unknown	327.2	Segment has no downstream access. Unable to clean from upstream manhole 308979 due to risk of sewer backups in adjacent buildings. Plan to construct downstream manhole(s).
731330	16 S. Arlington Street	15	Unknown	91.2	No access available. Plan to construct manholes to allow access to sewer.
426396	750 E Tallmadge Ave	8	Vitrified Clay Pipe	298.4	Unable to complete cleaning and inspection due to concrete in sewer. Inspected 48.4' from downstream manhole 304814 and 109.5' from upstream manhole 302296. Sewer is flowing okay. Plan to replace portion of sewer affected by concrete.
431028	1144 E Market	8	Unknown	547.2	Pipe defect prevents completion of inspection. Sewer is flowing okay. Plan to replace sewer.
430045	60 Goodyear Blvd	8	Unknown	280.6	Unable to complete cleaning and inspection due to offset joint and pipe defects. Sewer is flowing okay. Plan to perform point repairs.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
370294	241-293 Martha Ave (Easement)	15	Unknown	157.1	Upstream manhole 312728 is raised 15' above ground level on the side of a hill and downstream manhole 312727 is next to railroad track with no utility road access. Plan to lower upstream manhole and construct access road to allow cleaning truck access.
428006	1606 Newton St	8	Vitrified Clay Pipe	196.4	Unable to complete cleaning and inspection due to pipe defect 134.2' from upstream manhole 310068. Sewer is flowing okay. Plan to perform point repair.
433584	2363 Bellfield Ave	8	Vitrified Clay Pipe	25.3	Both access manholes are buried. Plan to locate and raise manholes.
432069	2423 Mogadore Rd - 2350 Gilchrist Rd (Easement)	8	Vitrified Clay Pipe	96.5	Upstream manhole 311356 is buried. Segment has defect in pipe 59' from downstream manhole 297971. Sewer is flowing okay. Plan to perform point repair and locate and raise upstream manhole if necessary.
430639	2942 Albrecht Ave	8	Vitrified Clay Pipe	351.2	Concrete in sewer 73.7' from downstream manhole 311847. Sewer is flowing okay. Plan to perform point repair.
516970	752 Abington Rd	8	Vitrified Clay Pipe	270.2	No upstream access. Downstream location is a clean out. Plan to install manhole(s).
367602	47 E State St	8	Vitrified Clay Pipe	42.9	No access available. Plan to construct manhole(s).
429058	1896 Buchholzer Blvd	15	Vitrified Clay Pipe	58.5	No access available. Plan to construct manhole(s).
424260	294 S High St	6	Vitrified Clay Pipe	197.4	Upstream and downstream locations are cleanouts. Plan to construct manhole(s).
424262	272 S High St	6	Vitrified Clay Pipe	218.2	Upstream and downstream locations are cleanouts. Plan to construct manhole(s).
426687	1 S Main St	24	Vitrified Clay Pipe	24.3	Segment has no downstream access. Manned entry required to place crawler into upstream manhole 301447 to perform inspection. Heavy steam and high temperature in manhole prevents manned entry. Plan to coordinate with Akron Energy Systems with solution of steam lines in area to allow access.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
366801	650 Parkdale - 1157 Laurel (Along Russel St)	24	Vitrified Clay Pipe	220.5	Segment has a sag. Plan to perform point repair to eliminate sag.
367367	73 College -277 E Mill St	27	Brick Egg 27 x 18	589.8	Segment contains loose and missing brick. Halted cleaning operation due to evidence that cleaning operation was dislodging loose bricks. Sewer is flowing okay. Plan to perform necessary point repairs and install liner.
368777	420 Lookout Ave (Easement)	27	Reinforced Concrete Pipe	332.6	Segment is inaccessible at the bottom of a steep embankment on the west side of Route 8 in a heavily wooded area. Plan to install access road to provide access for cleaning operation.
368776	420 Lookout Ave (Easement)	27	Reinforced Concrete Pipe	20.7	Segment is inaccessible at the bottom of a steep embankment on the west side of Route 8 in a heavily wooded area. Plan to install access road to provide access for cleaning operation.
746222	Canton Rd near I-76	33	Segmental Block	23.1	Downstream manhole 746221 is inaccessible in heavy brush at the bottom of a ridge. Upstream manhole 297994 is located on I-76 shoulder. Plan to install access road to downstream manhole or perform I-76 lane closure.
369727	1339 Techway Dr (Easement)	78	BRICK	307.5	Unable to clean & inspect segment as it is currently being impacted by a construction project. Construction contractor plans to complete cleaning and inspection after completion of construction project.
431911	1175 - 1259 Geo. Washington Blvd (Easement)	27	Vitrified Clay Pipe	289	Upstream manhole 310133 is buried. Unable to remove rock in sewer near upstream manhole. Sewer is flowing okay. Plan to locate and raise manhole to allow removal of rock.
431913	1175 - 1259 Geo. Washington Blvd (Easement)	27	Vitrified Clay Pipe	27	Both manholes are buried. Plan to locate and raise manhole(s).
431915	1175 - 1259 Geo. Washington Blvd (Easement)	27	Vitrified Clay Pipe	339	Both manholes are buried. Plan to locate and raise manhole(s).

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
431917	1175 - 1259 Geo. Washington Blvd (Easement)	27	Vitrified Clay Pipe	19.8	Both access manholes are inaccessible. Plan to construct access road to provide cleaning equipment access.
431919	1175 - 1259 Geo. Washington Blvd (Easement)	27	Vitrified Clay Pipe	116.1	Both access manholes are inaccessible. Plan to construct access road to provide cleaning equipment access.
453162	850 Cuyahoga St (Easement)	72	Reinforced Concrete Pipe	624.3	Upstream manhole 303515 is in a densely wooded area and is not accessible by cleaning truck. The downstream location is an outfall into the Cuyahoga River. Plan to clear easement area and install access road to manhole 303515.
429967	2474 Triplett Blvd (Easement)	24	Vitrified Clay Pipe	110.4	Both access manholes are inaccessible. Plan to clear wooded easement area and construct access road to provide cleaning equipment access.
429969	738 Canton Rd (Easement)	24	Vitrified Clay Pipe	416.2	Downstream manhole 311234 is inaccessible in a heavily wooded area. Unable to reverse clean against the heavy flow from the upstream manhole. Plan to clear easement area and construct an access road to the downstream manhole.
429936	700 Shadybrook Dr (Easement)	33	Brick	275.2	Manholes are in wooded area behind apartment complex along Springfield Lake Outlet Creek. Plan to clear easement area and construct access road.
729228	241 - 250 N Howard (Easement)	63	Brick	159.5	Upstream manhole 747618 is on the bank of the Little Cuyahoga River and downstream location is a junction chamber. Plan to construct an access road to manhole 303728 downstream of this asset to allow cleaning access.
416075	1133 Taylor Street	8	Vitrified Clay Pipe	109.6	Offset joint and size reduction 2.9' from upstream manhole 289470 and bend 4' from downstream manhole 291705 prevent completion of inspection. Plan to perform point repairs.
367096	404-382 Howe St	12	Vitrified Clay Pipe	332.7	Pipe defects prevent completion of inspection. Sewer is flowing okay. Plan to perform point repair.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
411728	817 -847 Raymond St	6	Vitrified Clay Pipe	176.2	Unable to complete cleaning and inspection due to pipe defects. Sewer is flowing okay. Plan to perform point repairs and install liner.
412378	382 - 970 Bartges Street	15	Vitrified Clay Pipe	434.9	Segment has no downstream access point. Unable to reverse clean against heavy flow from the upstream manhole. Plan to install manhole at downstream location.
366412	484 West Market Street	15	Vitrified Clay Pipe	9.2	Unable to remove bricks in sewer at downstream drop connection. Segment has no downstream access. Sewer is flowing okay. Plan to install downstream manhole to allow removal of bricks.
424728	199 Bowery Street	6	Vitrified Clay Pipe	127.4	Concrete in sewer 15.7' from upstream manhole 300848 and 10.9' from downstream manhole 300849 prevents completion of inspection. Sewer is flowing okay. Plan to perform point repairs.
427096	244 W. Exchange St (located on Wabash Ave)	8	Vitrified Clay Pipe	231.8	Downstream manhole 303203 is buried. Intruding tap 53.1' from upstream manhole 300858 prevents completion of inspection. Plan to locate and raise buried manhole.
429503	190 S. Maple Street	8	Vitrified Clay Pipe	16.6	Segment has no downstream access. Pipe defects 7.3' from upstream manhole 303217 prevented completion of cleaning and inspection due to risk of further damaging the segment. Sewer is flowing okay. Plan to perform point repair and construct downstream manhole if necessary.
422042	46 S. Valley Street	8	Vitrified Clay Pipe	206.2	Pipe defects prevent completion of cleaning and inspection due to risk of further damaging sewer. Sewer is flowing okay. Plan to perform point repair(s).
427197	44 - 50 Bates Street	6	Vitrified Clay Pipe	233.6	Segment alignment changes that prevent completion of inspection. Plan to replace sewer.
427274	138 - 132 Shelby Avenue	8	Vitrified Clay Pipe	233.1	Upstream manhole 301377 is buried. Unable to complete inspection from downstream manhole due to offset joint. Plan to perform point repair at offset joint and raise buried manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
418591	273 Bellewood Avenue	6	Vitrified Clay Pipe	199	Bend in segment 4.7' upstream of manhole 291996 prevents completion of cleaning. Cannot clean against flow from upstream manhole due to risk of sewer backup into nearby buildings. Plan to perform point repair at bend to allow cleaning access and install manhole if necessary.
425307	40-48 S.Summit Street	8	Vitrified Clay Pipe	407.1	Segment has no downstream access. A brick is wedged in the sewer 83.6' downstream of manhole 301468. Sewer is flowing okay. Plan to perform point repair and install new manhole if necessary.
413384	38 Charles Street	8	Vitrified Clay Pipe	371.9	Segment has pipe defects, holes and alignment changes. Sewer is flowing okay. Plan to replace sewer.
423403	44 - 76 York Street	8	Vitrified Clay Pipe	305	Sewer reduces from 21" to 8" diameter 27.71' upstream of manhole 303857. Offset joint at this location prevents completion of cleaning and inspection. Plan to install new manhole at location of size change.
408843	446 Spicer Street	8	Vitrified Clay Pipe	199.7	Segment has no downstream access. Bend in upstream manhole 291537 invert prevents crawler access into sewer. Plan to perform point repair at upstream manhole and install downstream manhole if necessary.
403109	2829 Ridgewood Road	6	Vitrified Clay Pipe	24	Segment has no downstream access. Offset joint 4.8 from upstream manhole 294619 prevents completion of cleaning and inspection. Plan to perform point repair at location of offset joint.
407683	576 - 586 Inverness Road	8	Vitrified Clay Pipe	267.6	Downstream access manhole 294735 is buried. Defect 73.5' downstream from manhole 294738 prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to locate and raise downstream manhole and perform point repair.
405834	222 N. Revere Road	8	Vitrified Clay Pipe	243.4	Segment has no upstream access. Bend in sewer 40.3' upstream of manhole 295105 prevents completion of cleaning and inspection. Plan to install manhole(s) to allow upstream access.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
405655	1021 Saint Michaels Ave (Pump Station)	15	Vitrified Clay Pipe	49.6	Downstream location is a pump station with no inspection access. Bend in upstream manhole 295652 invert prevents crawler access into sewer. Plan to repair manhole 295652.
402536	1913 Parkgate Avenue (Easement)	18	Vitrified Clay Pipe	310.9	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
407740	1009 Thorndale Drive	8	Vitrified Clay Pipe	144.1	Segment is surcharged due to heavy flow in downstream 42" trunk sewer. Plan to set up bypass pumping for trunk sewer to allow cleaning and inspection of this segment.
407744	10150 Thorndale Drive	8	Vitrified Clay Pipe	28.4	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
402480	400 Kildare Road	15	Vitrified Clay Pipe	12.5	Segment is surcharged. Plan to set up bypass pumping to allow cleaning and inspection of this sewer.
405244	1730 - 1702 Liberty Drive	8	Vitrified Clay Pipe	332	Concrete in the invert of upstream manhole 296480 prevents cleaning and inspection access. Sewer is flowing okay. Plan to repair upstream manhole.
401538	915 Nome Ave - 916 Hawkins Avenue (Easement)	8	Vitrified Clay Pipe	241	Segment has no downstream access. Unable to clean against flow from upstream manhole 296307. Plan to install downstream manhole.
408061	1454 - 1460 Delia Avenue	8	Vitrified Clay Pipe	326.6	Unable to perform cleaning due to risk of further damaging defect at 12.9' upstream of manhole 296358. Sewer is flowing okay. Plan to perform point repair.
407834	940 Thorndale Drive	8	Vitrified Clay Pipe	72.2	Segment has no upstream access. Crawler is unable to navigate alignment change 2' upstream of manhole 296238. Plan to perform point repair at alignment change and install upstream manhole if necessary.
400868	1688 Dominion Drive	8	Vitrified Clay Pipe	114.2	Upstream location is a cleanout. Crawler is unable to navigate bend in sewer 4' upstream of manhole 296601. Plan to install manhole(s).
410596	800 Newcastle Drive (Easement)	8	Vitrified Clay Pipe	312.2	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
401057	1508 Tiffany Circle (Easement)	12	Unknown	39.3	Upstream manhole 297446 is inaccessible on a hillside near a waterway. Downstream end of segment does not have an access point. Plan to construct an access road to the upstream manhole and install a downstream access manhole if necessary.
408336	1211 W. Market Street	10	Vitrified Clay Pipe	160.6	Crawler cannot navigate alignment change 76.2' downstream of manhole 297749. High water level 15.5' upstream of manhole 297746 prevents completion of reverse inspection. Plan to perform bypass pumping to allow completion of cleaning and inspection.
764924	1160 Winhurst Drive (Easement)	8	Vitrified Clay Pipe	351.9	Downstream manhole 764923 is buried. Defect at 155.1' from upstream manhole 297800 prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair and locate and raise downstream manhole if necessary.
405945	549 W. Market Street	8	Vitrified Clay Pipe	84.5	Segment has no downstream access. Alignment change 1.5' downstream of manhole 299192 prevents completion of cleaning and inspection. Plan to construct downstream manhole.
407098	630 - 608 W. Market Street	12	Vitrified Clay Pipe	463.8	An object is wedged in a lateral 214.5' from downstream manhole 299204 preventing completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
406761	555-545 Royal Avenue (Easement)	8	Vitrified Clay Pipe	251.5	Downstream manhole 298629 is buried in a heavily wooded residential backyard. Cannot clean against the flow from upstream manhole due to risk of sewer backup in nearby houses. Plan to clear easement area and install access road to locate and raise the downstream manhole.
409155	633 Poulsen Spur (Easement)	12	Vitrified Clay Pipe	104.8	Both access manholes are in a heavily wooded area. Existing access road is not adequate to handle vehicles the size of a cleaning truck. Plan to improve and repair existing access road to allow cleaning access.
406555	660 Poulsen Spur (Easement)	12	Vitrified Clay Pipe	149.6	Segment has no downstream access point. Unable to clean against flow from upstream manhole. Plan to install a downstream manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
476361	130-79 Oviatt Place	8	Vitrified Clay Pipe	324.1	Segment has no upstream access point. Steep grade of sewer and pipe defect prevents completion of cleaning and inspection from downstream manhole. Sewer is flowing okay. Plan to perform a point repair and install an upstream manhole.
421854	200 W Market Street	12	Vitrified Clay Pipe	272.8	Pipe defect prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair(s) and install liner.
427233	200 W Market Street	12	Vitrified Clay Pipe	431.6	Downstream manhole 301290 is buried. Pipe defect at 211.5' downstream of manhole 300897 prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to raise downstream manhole and perform a point repair.
427338	324 W. Market Street	8	Vitrified Clay Pipe	394	Segment has no downstream access. Unable to reverse clean against the flow from upstream manhole 300890. Plan to install downstream manhole.
427175	77 W. Market Street	12	Unknown	132.1	Segment has no downstream access and upstream access manhole 301270 is buried. Plan to locate and raise the upstream manhole and construct a new downstream manhole
427237	164 - 174 W. Market Street	12	Unknown	205.1	Both access manholes are buried. Plan to locate and raise manhole(s).
427239	118 W Market Street	12	Unknown	320.7	Both access manholes are buried. Plan to locate and raise manhole(s).
427241	118 W Market Street	12	Unknown	283.3	Both access manholes are buried. Plan to locate and raise manhole(s).
422931	192 Division Street (Easement)	8	Vitrified Clay Pipe	225.4	Both access manholes are buried. Plan to locate and raise manhole(s).
522238	721 Hickory St (Towpath Trail Easement)	10	Vitrified Clay Pipe	9.4	Segment has no upstream access and downstream access manhole is buried. Plan to locate and raise manhole.
410669	440-400 W Market Street	15	Vitrified Clay Pipe	487	Upstream manhole 299371 is buried. Pipe defect prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair and locate and raise upstream manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
522023	440 W Market Street	12	Reinforced Concrete Pipe	11	Segment has no downstream access point and upstream manhole 299365 is buried. Plan to locate and raise buried manhole.
522201	474-460 W Market Street	15	Vitrified Clay Pipe	454.2	Segment has no upstream access. Downstream manhole 299371 is buried. Plan to locate and raise downstream manhole.
408980	285-255 Wyant Road (Easement)	8	Vitrified Clay Pipe	349.5	Pipe defect prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
402355	270 Sand Run Road (Easement)	6	Vitrified Clay Pipe	150.6	Downstream manhole 295421 is buried. Encrustation prevents crawler access from upstream manhole and potential for flooded basements. Sewer is flowing okay. Plan to locate and raise manhole.
762726	469 W Cedar St (located on Maple St)	10	Reinforced Concrete Pipe	151.9	Downstream manhole 762724 is buried and upstream location is a clean out. Plan to locate and raise manhole.
414173	475 S High Street	18	Vitrified Clay Pipe	106.5	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace sewer.
414805	475 S High Street	18	Vitrified Clay Pipe	305.4	Downstream manhole 290781 is buried. Compacted debris prevents completion of inspection from upstream manhole. Sewer is flowing okay. Plan to locate and raise downstream manhole and remove hardened debris.
414807	475 S High Street	18	Vitrified Clay Pipe	110.7	Defects in both access manholes prevent access to sewer. Sewer is flowing okay. Repair manhole(s) to allow access.
419530	451 S High Street	18	Vitrified Clay Pipe	121.8	Upstream manhole 290781 is buried. Compacted debris prevents completion of inspection from downstream manhole. Sewer is flowing okay. Plan to locate and raise upstream manhole and remove hardened debris.
419532	475 S High Street	18	Vitrified Clay Pipe	26	Defects in both access manholes prevent access to sewer. Sewer is flowing okay. Repair manhole(s) to allow access.
414443	East side of 285-283 S Main St (Maiden Lane Alley east side of buildings)	6	Vitrified Clay Pipe	211	Upstream access manhole 301198 is buried and downstream location is a clean out. Plan to locate and raise the upstream manhole and construct a manhole at the downstream location.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
426134	275-265 S Main St (Maiden Lane Alley east side of buildings)	6	Vitrified Clay Pipe	170.7	Both access manholes are buried. Plan to locate and raise manhole(s).
425016	207-171 S Main St (Alley east side of buildings)	8	Vitrified Clay Pipe	260.7	Segment has no downstream access. Unable to clean from upstream manhole 301247 due to risk of sewer backups in adjacent buildings. Plan to construct downstream manhole(s).
425019	207-171 S Main St (Alley east side of buildings)	8	Vitrified Clay Pipe	211.9	Segment is located in a narrow alleyway. Unable to clean from access manholes due to proximity to buildings. Plan to construct downstream manhole to allow cleaning from street.
426061	137-121 S Main St (Alley east side of buildings)	8	Vitrified Clay Pipe	425.9	Defect in upstream manhole 301445 prevents upstream access. Sewer is flowing okay. Plan to repair upstream manhole and perform point repair.
426090	121 S Main St (Alley east side of buildings)	8	Vitrified Clay Pipe	60.7	Segment has no downstream access. Defect prevents completion of inspection from upstream manhole. Sewer is flowing okay. Plan to perform point repair and install downstream manhole if necessary.
420729	480-552 Swartz Rd.	8	Vitrified Clay Pipe	315.8	Both access manholes are buried. Plan to locate and raise manhole(s).
727844	1318 Manchester Rd (located on Longview Ave)	8	Vitrified Clay Pipe	27.7	Grade change in sewer prevents completion of inspection. Plan to install manhole at location of grade change
415500	558-572 Lakeview Ave	8	Vitrified Clay Pipe	287.9	Offset joint prevents completion of inspection. Plan to perform point repair.
403873	2076-2060 Manister Ct (Easement)	8	Vitrified Clay Pipe	347.4	Pipe defects prevented completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repairs.
747206	463-475 Beulah Ave	8	Vitrified Clay Pipe	323.9	Upstream manhole 289418 is buried. Plan to locate and raise manhole.
420206	1770 Leighton Ave (Easement)	8	Vitrified Clay Pipe	256	Upstream manhole 289091 is buried. Unable to fit crawler into invert of downstream manhole 289101. Plan to modify downstream manhole invert to allow access.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
415502	1917-1925 SW 6th St (Easement)	8	Vitrified Clay Pipe	71.3	Segment has no upstream access. Downstream manhole 289091 is buried. Plan to locate and raise manhole.
410095	77 Leonard St	8	Vitrified Clay Pipe	25	Segment has no access points. Plan to construct manhole(s).
411373	2462 SW 27th St	8	Vitrified Clay Pipe	111.7	Both manholes are buried. Plan to locate and raise manhole(s).
419730	670-658 Arbutus Ct	8	Vitrified Clay Pipe	200.1	Both manholes are buried. Plan to locate and raise manhole(s).
401575	367 Edgewood St	8	Vitrified Clay Pipe	385.5	Segment has no downstream access. Bend in line prevents completion of inspection from upstream manhole. Plan to construct manhole.
415148	865 Princeton St	8	Vitrified Clay Pipe	144	Downstream access point is a lamphole. Steep grade of sewer prevents completion of cleaning and inspection from upstream manhole. Plan to construct manhole.
366016	152 Carroll St	10	Vitrified Clay Pipe	16.5	Segment has no downstream access. Metal object wedged in line. Sewer is flowing okay. Plan to construct manhole and perform point repair if necessary.
435947	2845 Mineral Rights (Wheeling & Lake Erie RR yard along Roosevelt Ditch)	10	Vitrified Clay Pipe	199.9	Unable to complete cleaning and inspection due to object wedged in sewer. Sewer is flowing okay. Plan to perform point repair.
432065	2844 Mineral rights (Easement north of I-76)	8	Vitrified Clay Pipe	187.8	Upstream manhole 297996 is buried. Heavy flow in sewer prevented completion of inspection from downstream manhole 311355. Plan to raise manhole.
522317	981 Rocky Ridge Rd	10	Vitrified Clay Pipe	27.1	Both manholes are buried. Plan to locate and raise manhole(s).
476357	129 Oak Park Dr	8	Vitrified Clay Pipe	175.9	Ladder rung is wedged in sewer preventing completion of cleaning and inspection. Plan to perform point repair.
425485	142 Jesse Ave	8	Vitrified Clay Pipe	167.3	Segment has no downstream access. Unable to clean against the flow from the upstream manhole due to risk of sewer backups in adjacent buildings. Plan to install manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
402563	691-675 Payne Ave	8	Vitrified Clay Pipe	259.6	Concrete in segment prevents completion of cleaning and inspection. Plan to perform point repair.
403732	694-670 Crosby St	12	Vitrified Clay Pipe	351.2	Downstream access point is a lamphole. Unable to clean against the flow from the upstream manhole due to risk of sewer backups in adjacent buildings. Plan to install manhole.
476396	Archwood & Landon	24	Vitrified Clay Pipe	279.7	Sewer contains tar-like material requiring remediation. Plan to address removal of tar-like substance to allow completion of cleaning and inspection.
427537	190 N. Union Street (Easment)	8	Vitrified Clay Pipe	257.1	Segment has no upstream access. Repair needed to use downstream manhole for access.
433466	133 S. Arlington Street	8	Vitrified Clay Pipe	42.2	Segment has no upstream access. Crawler is unable to fit in manhole 309205 invert. Plan to modify manhole invert and install upstream access manhole if necessary.
499131	1155 Bruce Road	10	PVC	10.2	Segment has no upstream access. Downstream access manhole 309015 is buried. Plan to locate and raise manhole.
433243	1150 E. Waterloo Road	6	Vitrified Clay Pipe	46.7	Segment has no upstream access. Pipes defect prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair and install upstream manhole if necessary.
432450	1480 E. Archwood Avenue	12	Vitrified Clay Pipe	224	Sewer aligment changes prevented completion of cleaning and inspection. Plan to install new manhole(s).
424279	203 Hickory Street	8	Vitrified Clay Pipe	11	Both access manholes are fenced off inside a construction zone. Plan to perform cleaning and inspection after the completion of the construction project.
424281	203 Hickory Street	8	Vitrified Clay Pipe	115.8	Both access manholes are fenced off inside a construction zone. Plan to perform cleaning and inspection after the completion of the construction project.
427209	203 Hickory Street	8	Vitrified Clay Pipe	107	Both access manholes are fenced off inside a construction zone. Plan to perform cleaning and inspection after the completion of the construction project.
408654	200 Wyant Road	8	Unknown	209.9	Both access manholes are buried. Plan to locate and raise manhole(s).
422371	169 W. Bartges Street	12	Vitrified Clay Pipe	287.8	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to reverse flow of upstream asset and perform abandonment of this segment.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
422373	169 W. Bartges Street	8	Vitrified Clay Pipe	16.6	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace sewer.
416150	1200 Firestone Pkwy.	15	Vitrified Clay Pipe	287.6	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace sewer.
421616	1200 Firestone Pkwy.	15	Vitrified Clay Pipe	113.9	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace sewer.
438326	408 Wellington Avenue	18	Vitrified Clay Pipe	537.5	Unable to complete cleaning and inspection due to concrete in sewer. Inspected 379.8' from downstream manhole 312670. Sewer is flowing okay. Plan to replace portion of sewer affected by concrete.
365541	165 N Case Avenue	18	Vitrified Clay Pipe	323.2	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace sewer.
415892	41 S High Street	12	Vitrified Clay Pipe	254.4	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace sewer.
436655	Interstate 76 / Route 8 Interchange (Easement)	8	Vitrified Clay Pipe	143.3	Segment has no downstream access. Unable to complete inspection from upstream manhole 308362 due to steep grade of sewer 108.3' downstream of manhole. Plan to construct downstream access manhole.
427541	287 Arch Street	8	Vitrified Clay Pipe	11.1	Segment has no upstream access. Bend in sewer prevents completion of inspection from downstream manhole 302072. Sewer is flowing okay. Plan to construct manhole(s).
421804	342. Union Place	8	Vitrified Clay Pipe	70.2	Downstream access manhole 302007 is buried. Plan to locate and raise manhole.
423577	2207 Goodyear Boulevard	6	Vitrified Clay Pipe	146.4	Segment has no upstream access. Pipe defect prevents completion of inspection. Sewer is flowing okay. Plan to perform point repair and install upstream access if necessary.
415097	1220 Lakeshore Boulevard	8	Vitrified Clay Pipe	38.7	Upstream access manhole 289447 is buried. Plan to locate and raise manhole.
419492	374 Ira Avenue	8	Vitrified Clay Pipe	100.6	High water level prevented completion of inspection. Plan to perform bypass pumping to allow competion of inspection.
400933	193 Hyde Avenue	8	Vitrified Clay Pipe	214.2	Segment has no downstream access. Sag prevents completion of inspection from upstream manhole. Plan to perform point repair to eliminate sag and construct manhole if necessary.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
410489	442 Bell Street	8	Vitrified Clay Pipe	152.8	Segment has no upstream access. Bend in sewer prevents completion of inspection from downstream manhole 299155. Sewer is flowing okay. Plan to construct manhole(s).
406224	385 West Wood Place	8	Vitrified Clay Pipe	52.5	Segment has no upstream access. Bend in sewer prevents completion of inspection from downstream manhole 299178. Sewer is flowing okay. Plan to construct manhole(s).
732087	787 Dayton Street (Easement)	15	Vitrified Clay Pipe	15.9	Segment has no point of access. Plan to install manhole(s)
747622	39 S. Case Avenue	48	Segmental Block	40.7	Segment has no upstream access. Pipe defect prevents completion of cleaining and inspection. Sewer is flowing okay. Plan to perform point repair.
745219	331 N. Howard Street	12	Unknown	73.2	High water level prevented completion of cleaning and inspection. Plan to plug upstream asset 745220 to allow completion of cleaning and inspection.
745220	331 N. Howard Street	12	Unknown	10.6	High water level prevented completion of cleaning and inspection. Plan to plug sewer in upstream manhole 743786 to allow completion of cleaning and inspection.
425983	380 Turner Street	8	Unknown	164.1	Segment has no point of access. Plan to install manhole(s)
522531	359 Turner Street	8	Vitrified Clay Pipe	39.4	Segment has no point of access. Plan to install manhole(s)
425972	359 Turner Street	8	Unknown	162.9	Segment has no point of access. Plan to install manhole(s)
522527	418 Butler Avenue	8	Vitrified Clay Pipe	41.8	Segment has no point of access. Plan to install manhole(s)
729804	518 Gage Street	8	Vitrified Clay Pipe	8.7	Steep grade of sewer prevents completion of cleaning and inspection. Plan to construct manhole.
419019	261 Thornton Street	8	Vitrified Clay Pipe	14.1	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to replace sewer.
421754	1058 River Street	15	Unknown	883.5	Upstream and downstream manholes are 883.5' apart. Plan to construct additional manhole(s) to facilitate cleaning and inspection.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
423538	1140 River Street	15	Unknown	315.4	Segment has no downstream access. Plan to construct manhole.
424356	1313 Onondago Avenue	8	Unknown	186	Segment has no downstream access. Plan to install manhole.
425081	38 S. Adams Street	6	Vitrified Clay Pipe	240.6	Access manhole is buried. Plan to locate and raise manhole.
425169	491 Moody Street	8	Vitrified Clay Pipe	52	Segment has no upstream access. Plan to construct manhole.
426740	75 Arch Street	8	Vitrified Clay Pipe	267.5	Upstream access point is a clean out. Plan to install manhole at clean out location.
427468	249 Dayton Plaza	8	Unknown	172	Pipe defect prevented completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
430179	131 Innovation Way	8	Vitrified Clay Pipe	305.8	Access manhole is buried. Plan to locate and raise manhole.
432862	15 S. Case Avenue	15	Vitrified Clay Pipe	200.4	Segment has no upstream access. Plan to construct manhole.
436612	745 E. Market Street	8	Vitrified Clay Pipe	129.6	Access manhole is buried. Plan to locate and raise manhole.
436854	182 Beaver Street	18	Unknown	339.2	Segment has no upstream access. Plan to construct manhole.
438381	247 Annadale Avenue	8	Unknown	47.8	Segment has no upstream access. Plan to construct manhole.
731818	385 Windsor Street	8	Vitrified Clay Pipe	67.1	Pipe defect prevented completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
366663	240 Carroll St (Easement)	12	Vitrified Clay Pipe	21.1	Asset located on University of Akron property. City to coordinate cleaning and inspection with University of Akron.
418985	240 Carroll St (Easement)	8	Vitrified Clay Pipe	40.5	Asset located on University of Akron property. City to coordinate cleaning and inspection with University of Akron.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
423552	929 Johnston Street	8	Vitrified Clay Pipe	272.6	Segment has no point of access. Plan to install manhole(s)
423990	300 W. Market Street	8	Vitrified Clay Pipe	338.2	Upstream manhole 300898 is buried. Sewer size reduction prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to locate and raise manhole.
413595	750 S. Main Street (Easement)	8	Vitrified Clay Pipe	406	Obstruction prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
424916	142 Aetna Street (Easement)	8	Vitrified Clay Pipe	57.1	Obstruction prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
424925	142 Aetna Street (Easement)	8	Vitrified Clay Pipe	33.7	Obstruction prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
436436	127 Goodyear Boulevard (Easement)	12	Vitrified Clay Pipe	297.5	Both access manholes are buried. Plan to locate and raise manhole(s).
436438	127 Goodyear Boulevard (Easement)	12	Vitrified Clay Pipe	263.7	Both access manholes are buried. Plan to locate and raise manhole(s).
436541	127 Goodyear Boulevard (Easement)	8	Cast Iron Pipe	86.4	Both access manholes are buried. Plan to locate and raise manhole(s).
436548	127 Goodyear Boulevard (Easement)	12	Vitrified Clay Pipe	303.9	Both access manholes are buried. Plan to locate and raise manhole(s).
403065	2552 BRICE Road (Easement)	8	Unknown	123.5	Both access manholes are buried. Plan to locate and raise manhole(s).
401766	266 Foxwood Drive (Easement)	8	Vitrified Clay Pipe	105.7	Both access manholes are buried. Plan to locate and raise manhole(s).
402338	607 Reynolds Avenue (Easement)	8	Vitrified Clay Pipe	230.4	Segment has no point of access. Plan to install manhole(s)
365486	289 Merriman Road	24	Vitrified Clay Pipe	22.1	Cleaning and inspection was not completed due to size change in sewer segment. Plan to clean and inspect large section with different equipment.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
404023	444 S. Maple Street	8	Unknown	199.8	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
409722	409 Silver Street	8	Vitrified Clay Pipe	208.5	Obstruction prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
426030	498 Cuyahoga St (Easement)	39	Vitrified Clay Pipe	49.2	Segment has no downstream access. Upstream manhole 300885 is buried. Plan to locate and raise buried manhole.
413620	676 S Broadway St	8	Vitrified Clay Pipe	144.7	Obstruction prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
424623	135 Fir Hill	8	Vitrified Clay Pipe	114.1	Bend in line prevented completion of cleaning and inspection. Plan to install new manhole.
432226	1175 George Washington Blvd (Easement)	8	Vitrified Clay Pipe	13.6	Segment has no upstream access. Downstream manhole 3010128 is buried. Plan to locate and raise buried manhole.
414126	151 Dartmore Ave	10	Vitrified Clay Pipe	21.2	Segment has no downstream access. Upstream manhole 289828 is buried. Plan to locate and raise buried manhole.
764933	151 Dartmore Ave	10	Vitrified Clay Pipe	316.5	Downstream manhole 289828 is buried. Plan to locate and raise buried manhole.
413393	3710 Manchester Rd	8	Vitrified Clay Pipe	29.4	Upstream access point is a lamphole. Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to install new manhole.
400600	1230 Yukon Ave	8	Vitrified Clay Pipe	242.1	Pipe defects prevented completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repairs.
419444	531-611 South St	8	Vitrified Clay Pipe	146.4	Segment has no upstream access point. Upstream manhole 289203 is buried. Plan to locate and raise manhole.
419442	531-611 South St	8	Vitrified Clay Pipe	53.2	Downstream manhole 289202 is buried. Pipe defect prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to locate and raise manhole and perform point repair.
420450	462 Harvey St	8	Vitrified Clay Pipe	329.5	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
420454	462 Harvey St	8	Vitrified Clay Pipe	204	Pipe defects prevent completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
420380	2035 SW 6th St	8	Unknown	149	Upstream access point is a clean out. Pipe defects prevented completion of cleaning and inspection from downstream manhole 289060. Sewer is flowing okay. Plan to perform point repair.
413922	490 Wingerter St	6	Vitrified Clay Pipe	110.2	Segment has no upstream access. Obstruction prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
413964	490 Wingerter St	10	Vitrified Clay Pipe	189.6	Obstruction prevents completion of cleaning and inspection. Sewer is flowing okay. Plan to perform point repair.
415738	1565 Rudd St	6	Vitrified Clay Pipe	86.4	Segment has no upstream access. Plan to construct manhole.
368366	Ohio & Erie Canal Towpath Trail (Easement)	12	Vitrified Clay Pipe	83.9	Segment has no downstream access. Upstream manhole 303411 is buried. Plan to locate and raise manhole.
368367	Ohio & Erie Canal Towpath Trail (Easement)	12	Vitrified Clay Pipe	94.6	Downstream manhole 303411 is buried. Heavy flow in sewer prevents completion of cleaning and inspection. Plan to locate and raise manhole.
731342	545 N Arlington St (Easement)	57	Brick	65.4	Segment has no point of access. Plan to install manhole(s).
727717	545 N Arlington St (Easement)	54	Brick	142.1	Segment has no upstream access. Downstream manhole 304769 is buried. Plan to install manhole(s).
368238	Highbridge Trail (Easement)	24	Segmental Block	9.8	Flow in sewer prevents completion of cleaning and inspection. Plan to perform bypass pumping to allow completion of cleaning and inspection.
368239	Highbridge Trail (Easement)	10	Vitrified Clay Pipe	19.8	Flow in sewer prevents completion of cleaning and inspection. Plan to perform bypass pumping to allow completion of cleaning and inspection.
427330	445 Memorial Pkwy (Easement)	15	Unknown	161.6	Segment has no downstream access. Upstream manhole 300887 is inaccessible. Plan to construct access road to facilitate cleaning and inspection from upstream manhole.
427327	445 Memorial Pkwy (Easement)	15	Unknown	68.3	Downstream manhole 745153 is inaccessible. Flow in sewer prevent cleaning and inspection from upstream manhole 745153. Plan to construct access road to facilitate cleaning and inspection.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
763545	445 Memorial Pkwy (Easement)	15	Unknown	125.1	Upstream and downstream manholes are inaccessible. Plan to construct access road to downstream manhole 300887 to facilitate cleaning and inspection.
403248	2177 Ridgewood Rd	8	Vitrified Clay Pipe	33.9	Segment has no upstream access. Broken pipe prevented completion of cleaning and inspection from downstream manhole 294746. Plan to perform point repair.
402577	19 N Balch St	8	Vitrified Clay Pipe	252.9	Upstream access point is a lamphole. Offset joint prevented completion of cleaning and inspection from downstream manhole 299387. Plan to perform point repair.
415897	150 Furnace St	8	Vitrified Clay Pipe	296.7	Pipe defects prevent completion of cleaning and inspection. Plan to replace sewer.
423688	100 N High St	8	Vitrified Clay Pipe	208.2	Segment has no upstream access point. Intruding tap prevented completion of inspection. Plan to install manhole.
426098	170 Locust St	8	Vitrified Clay Pipe	183.3	Upstream manhole 521965 is buried. Pipe defects prevent completion of cleaning and inspection from downstream manhole. Plan to locate and raise upstream manhole and perform point repair(s).
521926	139 Wills Ave	8	Vitrified Clay Pipe	210.3	Bend in line prevented completion of cleaning and inspection. Plan to install new manhole.
426888	15 N Maple St	8	Vitrified Clay Pipe	379.5	Upstream manhole 301287 is buried. Offset joint at size change location prevented completion of cleaning and inspection. Plan to perform point repair and locate and raise manhole.
429288	357 N Howard St	10	Vitrified Clay Pipe	65.4	Segment has no upstream access point. Offset joint prevented completion of cleaning and inspection from upstream manhole 301529. Plan to perform point repair.
415894	243 Furnace St	8	Vitrified Clay Pipe	249.6	Pipe defects prevent completion of cleaning and inspection. Plan to replace sewer.
423189	351 E North St	8	Vitrified Clay Pipe	171.8	Segment has no upstream access point. Bend in sewer prevent completion of cleaning and inspection. Plan to install manhole(s).
425745	243 Furnace St	8	Vitrified Clay Pipe	158.3	Pipe defects prevent completion of cleaning and inspection. Plan to replace sewer.
429067	166 N Union St	8	Vitrified Clay Pipe	24.8	Segment has no downstream access point. Unable to clean backward against the flow due to risk of sewer backup in nearby buildings. Plan to install manhole.

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
402628	1120 W Exchange St	6	Vitrified Clay Pipe	345.1	Offset joint at sewer diameter change location prevented completion of cleaning and inspection. Plan to install manhole at location of size change.
746760	27 Ridge St	12	PVC	34.3	Segment has no upstream access point. Steep grade of sewer prevented completion of inspection from downstream manhole 303710. Plan to install manhole.
401483	104 S Portage Path	8	Vitrified Clay Pipe	327.2	Offset joint prevented completion of cleaning and inspection. Plan to perform point repair.
422924	121 N Walnut St	12	Vitrified Clay Pipe	277.4	Segment has no downstream access point. Unable to clean backward against the flow due to risk of sewer backup in nearby buildings. Plan to install manhole.
427293	280 Rockwell Ct	8	Vitrified Clay Pipe	250.8	Sag in sewer prevents completion of cleaning and inspection. Plan to perform point repair to remove sag.
423899	89 N Main St	8	Unknown	148	Downstream manhole is inaccessible near railroad track. Plan to coordinate with railroad company to faciliatate cleaning and inspection.
763953	42 N High St	8	Unknown	75	Segment has no downstream access. Plan to construct manhole.
763954	42 N High St	6	unknown	32.1	Segment has no upstream access. Plan to construct manhole.
425267	355 S Union St	8	Vitrified Clay Pipe	308.2	Intruding tap prevents completion of cleaning and inspection from upstream manhole 305368. Size reduction prevents completion of cleaning and inspection from downstream manhole 303809. Plan to install manhole to facilitate inspection and cleaning.
410339	545 Stratford Ave	8	Vitrified Clay Pipe	68	Segment has no upstream access point. Steep grade of sewer prevented completion of inspection from downstream manhole 298728. Plan to install manhole.
423477	98 E Glenwood Ave	8	Vitrified Clay Pipe	492.7	Segment has no upstream access point. Plan to install manhole to facilitate cleaning and inspection.
425559	35 N Valley St	8	Unknown	402	Segment has no upstream access. Pipe defect prevented completion of cleaning and inspection from downstream manhole 300913. Plan to perform point repair.
421802	345 Union Pl	8	Vitrified Clay Pipe	108.5	Pipe defects prevented completion of cleaning and inspection. Plan to perform point repair(s).

Asset ID	Address	Sewer Size	Material	Segment Length (feet)	Proposed Construction Solution
428667	233 W North St	8	Unknown	180.6	Pipe defect prevented completion of cleaning and inspection. Plan to perform point repair.
423594	207 E Market St	8	Unknown	318.8	Pipe defect prevented completion of cleaning and inspection. Plan to perform point repair.
522027	98 Mount View Ave	8	Unknown	101.3	Pipe defect prevented completion of cleaning and inspection. Plan to perform point repair.
429259	224 W Exchange St	8	Vitrified Clay Pipe	53.3	Upstream manhole 303202 is buried. Pipe defects prevent completion of cleaning and inspection from downstream manhole 303201. Plan to locate and raise manhole.
429261	224 W Exchange St	12	Unknown	129	Downstream manhole 303199 is buried. Pipe defects prevent completion of cleaning and inspection from upstream manhole 303201. Plan to locate and raise manhole.
429165	224 W Exchange St	12	Unknown	320.9	Upstream manhole 303199 is buried. Pipe defects prevent completion of cleaning and inspection from downstream manhole 239316. Plan to locate and raise manhole.
409904	302 W Exchange St	12	Vitrified Clay Pipe	597.5	Pipe defect prevented completion of cleaning and inspection. Plan to perform point repair.
			Total	**57,986.3**	

Table 3-1d Inaccessible Manholes Needing Inspection (July-December 2014 reporting period)

Manhole Asset ID	GIS Underground Map	Proposed Solution
287165	2210514	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
288663	2285503	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
288664	2285503	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289033	2300503	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289034	2300503	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
288370	2270508	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289063	2300504	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
302070	2435518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
302157	2450519	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
302614	2540518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
304365	2435520	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
309236	2465500	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
309521	2495512	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
310114	2540497	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.

Manhole Asset ID	GIS Underground Map	Proposed Solution
310131	2540498	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
310133	2540498	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
310134	2540498	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
310135	2540498	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
310136	2540498	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
310918	2570510	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
311147	2585510	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
311148	2585510	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
311356	2600511	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301483	2390518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
304369	2435521	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
741012	2450495	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
741014	2450495	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
741015	2450495	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
741016	2435495	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.

Manhole Asset ID	GIS Underground Map	Proposed Solution
309015	2480494	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289138	2300506	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
291562	2285514	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289190	2300508	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289203	2300509	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289534	2315513	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
294650	2135531	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
294976	2135528	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
294978	2135528	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
298315	2315518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289418	2315504	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289436	2315505	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289091	2300505	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289409	2315503	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289410	2315503	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.

Manhole Asset ID	GIS Underground Map	Proposed Solution
298505	2330518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
299371	2345520	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
303411	2360529	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
299427	2345527	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
299410	2345528	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
303334	2360519	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
300898	2360519	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
288949	2300499	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
289828	2345501	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
290287	2360505	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
290781	2375513	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301521	2390519	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301290	2375519	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301293	2375519	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301294	2375519	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.

Manhole Asset ID	GIS Underground Map	Proposed Solution
301287	2375519	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301270	2375518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
521965	2360517	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301304	2375520	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301377	2375525	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
302010	2420518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
309464	2495509	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301481	2390518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
309610	2510504	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
309520	2495512	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
309526	2495512	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
309519	2495512	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
312728	2495513	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
308844	2450514	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
304769	2465518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.

Manhole Asset ID	GIS Underground Map	Proposed Solution
309704	2510511	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
762724	2330518	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
301198	2375515	Manhole is buried. Cannot perform internal manhole inspection because adjacent segment(s) are inaccessible. When inaccessible segement(s) are resolved, manholes will be inspected.
288713	2285504	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
289997	2345512	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
293440	2255532	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
295607	2195539	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
296992	2255531	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
302765	2525520	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
304891	2465528	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
310380	2555494	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
302415	2495520	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
296569	2240531	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
297444	2270533	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
309465	2495509	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.

Manhole Asset ID	GIS Underground Map	Proposed Solution
302309	2465530	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
742983	2345539	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
742982	2330539	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
297439	2270533	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
310378	2555494	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
297004	2255531	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
297470	2270536	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
289127	2300506	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
289871	2345505	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
287201	2225500	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
287529	2255501	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
290771	2375512	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
291228	2405496	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
301306	2375520	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
303601	2390529	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.

Manhole Asset ID	GIS Underground Map	Proposed Solution
304151	2420525	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
291533	2405514	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
297358	2270530	Sewer system defects prevent completion of manhole inspection. Manhole will be repaired and inspected in 2015.
308209	2420500	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
291231	2405496	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
307610	2420497	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
298750	2345518	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
291806	2330514	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
309705	2510511	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
312758	2495514	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
302938	2540516	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
308633	2435510	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
308180	2420499	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
302044	2435516	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
303675	2390518	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
763564	2525509	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.

Manhole Asset ID	GIS Underground Map	Proposed Solution
764413	2225528	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
764794	2570513	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
290347	2360508	Manhole is buried. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
302766	2525520	Manhole is inaccessible. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
289648	2330507	Manhole is inaccessible. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
304970	2495526	Manhole is inaccessible. CCTV video footage of adjacent segment is insufficient to perform internal manhole inspection. Manhole will be inspected in 2015.
Total	**126**	

3.A List of all SSO and CSS Releases During Reporting Period

Appendix D provides a list of SSOs and CSS Releases, including Building/Property Backups, during the reporting period.

3.B System Inspection

Table 3-2 on Page 60 provides the number of miles and percent of system inspected during the reporting period.

3.C Manhole Inspection

Table 3-3 on Page 60 provides the number and percent of manholes inspected during the reporting period.

3.D System Cleaning

The number of miles and percent of system cleaned during the reporting period is provided in Table 3-4 Page 60.

3.E List of Defects

The comprehensive list of defects identified in Akron's system, identifying acute defects, and a schedule to repair the defects (including date repaired if the defect has already been repaired) are included in Appendices E and F.

Table 3-2 System Inspection

	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
Period	**Miles Inspected**	**Percentage Inspected**	**Miles Inspected**	**Percentage Inspected**	**Miles Inspected**	**Percentage Inspected**	**Miles Inspected**	**Percentage Inspected**
July 1 – December 31, 2014	99	11.7*	132.2	15.6*	736.7	86.9*	835.7†	98.6*

* Based on 848 miles in system. The total system mileage of 848 has been revised from what was submitted in the approved CMOM program (887.5 mi), due to updates to the City of Akron's GIS system.

† The remaining 12.3 miles is found on the inaccessible list (previously reported in the July – December 2013 and January – July 2014 reports and also found in Table 3-1c of this report).

Table 3-3 Manhole Inspection

	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
Period	**Manholes Inspected**	**Percentage Inspected**	**Manholes Inspected**	**Percentage Inspected**	**Manholes Inspected**	**Percentage Inspected**	**Manholes Inspected**	**Percentage Inspected**
July 1 – December 31, 2014	481	2.5*	4,957	26.3*	18263	96.8*	18,744†	99.3*

* Based on 18,870 manholes in system. The total number of manholes in the system of 18,870 has been revised from what was submitted in the approved CMOM program (19,508), due to updates to the City of Akron's GIS system.

† The remaining 126 manholes are associated with the sewer segments found on the inaccessible list (previously reported in the July – December 2013 and January – July 2014 reports and also found in Table 3-1c of this report).

Table 3-4 System Cleaning

	Current Reporting Period		Previous Year		Previous Five Years		Accumulative Totals	
Period	**Miles of System Cleaned**	**Percentage of System Cleaned**	**Miles of System Cleaned**	**Percentage of System Cleaned**	**Miles of System Cleaned**	**Percentage of System Cleaned**	**Miles of System Cleaned**	**Percentage Cleaned**
July 1 – December 31, 2014	80.2	9.5*	158	18.6*	755.5	89.1*	835.7†	98.6*

* Based on 848 miles in system. The total system mileage of 848 has been revised from what was submitted in the approved CMOM program (887.5 mi), due to updates to the City of Akron's GIS system.

† The remaining 12.3 miles is found on the inaccessible list (previously reported in the July – December 2013 and January – July 2014 reports and also found in Table 3-1c of this report).

3.F Maintenance and Training Activities

1. Pump station and force main preventive maintenance activities were conducted in accordance with Item 2.E of the approved CMOM program.

2. 481 manholes were inspected during the period beginning July 1, 2014 through December 31, 2014, and none were documented to have signs of heavy infiltration.

3. The following sewer construction and rehabilitation projects were completed or are on-going within the City of Akron during the reporting period:

    a) Cook Street Emergency (File 2014-049-00)
        - Abandoned 110 LF of 8-inch VCP sanitary sewer.
        - Constructed 70 LF of 8-inch VCP sanitary sewer.
        - Constructed a new sanitary sewer manhole.

    b) Main Outfall Cap (File 2012-052-01)
        - Replaced 106 LF of brick arch cap with cast in place concrete walls and precast concrete top as a demonstration for a possible means to increase capcity.

    c) Kingswood – Rocky Hollow Improvements (File 2012-022-00)
        - Reconstructed 583.5 LF of 12-inch sanitary sewer with truss pipe.
        - Constructed four new sanitary sewer manholes.
        - Reconstructed one sanitary sewer manhole.

    d) Mud Run Trunk Sewer Lining MRPS-CD (File 2012-011-00)
        - Reconstructed 1,322 LF of existing 36-inch sanitary sewer by CIPP method (lining).
        - Reconstructed 3,276 LF of existing 33-inch sanitary sewer by CIPP method (lining).
        - Rehabilitated 39 existing sanitary sewer manholes by lining.
        - Constructed one new sanitary sewer manholes.
        - Constructed one new sanitary junction chamber.
        - Installed 28 cleanouts.
        - Lined four new manholes that were installed prior to July 1, 2014.

    e) Akron Main Outfall Rehabilitation (File 2011-035-00)
        - Rehabilitated 6,066 LF of brick main outfall sewer exterior surface by resealing and reinforced ‘shotcrete’.
        - Rehabilitated 2,737 LF of concrete main outfall sewer exterior surface by resealing and reinforced ‘shotcrete’.
        - Repaired concrete on two structures.
        - Adjusted three existing manholes.

    f) Englewood Sewer (File 2008-045-01)
        - Constructed 2,384.83 LF of 57-inch sanitary sewer.
        - Constructed 153.7 LF of 12-inch sanitary sewer.
        - Constructed 149 LF of 8-inch sanitary sewer.
        - Constructed nine new sanitary sewer manholes.

g) Englewood Avenue Reconstruction (File 2008-045-00)
- Reconstructed 684 LF of existing 8-inch sanitary sewer by CIPP method (lining).
- Reconstructed 710 LF of existing 10-inch sanitary sewer by CIPP method (lining).
- Reconstructed 656 LF of existing 12-inch sanitary sewer by CIPP method (lining).

h) Woodmere Emergency (File 2014-060-00)
- Reconstructed 104 LF of existing 12-inch sanitary sewer.
- Reconstructed 24 LF of existing 8-inch sanitary sewer.
- Reconstructed one existing sanitary manhole.

i) CSO Rack 15 Manhole Emergency
- Reconstructed two sanitary sewer manholes.

j) Johns & Mary Emergency (File 2014-057-00)
- Reconstructed 745 LF of existing 15-inch sanitary sewer.
- Reconstructed three existing sanitary sewer manholes.

4. Root control program activities were conducted in accordance with Item 2.K of the approved CMOM program. The Root List, part of the overall Trouble Spot List, requires more frequent attention than the system wide maintenance activities. The City's approach is to inspect each of these root list locations on a modified schedule, and provide cleaning only when it is determined those pipes are in need of maintenance.

   In July 2013, the City of Akron contracted with Duke's Root Control Incorporated to conduct a pilot chemical root control program for sanitary sewer assets 402255, 402456, 406262, 418222, 432377, and 435635. In July 2014, an inspection of these lines revealed root growth. These inspection results were given to the contractor that performed the process and these lines were retreated in September 2014 as part of the contractor's warranty and will be re-inspected in December 2014/January 2015. The City will use these inspection results to determine if it is more effective and economical to use this approach versus mechanical cutting, performed by in-house crews, thereby freeing up resources to perform other proactive, system work.

   The Trouble Spot List now includes (1) the root list, (2) the grease list, and (3) since the initiation of the Root Cause Analysis (RCA) process in April 2013, segments that contained a mainline blockage resulting in an overflow. The City intends to provide a more focused and more frequent inspection and cleaning cycle for trouble spot areas. These areas are cleaned and inspected pursuant to the City's Standard Operating Procedure ("SOP") for Trouble Spots. The current procedures for addressing trouble spots is to first CCTV the trouble spot location and then determine if cleaning is required. Depending upon the trouble spot segment, the City currently performs inspection and cleaning pursuant to 6 month, 1 year, 1½ year, 2 year, 2½ year or 5 year cycles. The trouble spot is then scheduled for a re-inspection on a cycle determined by the method defined in the City's SOP for Trouble Spots. As of December 31, 2014, the City had approximately 23.4 miles of sewer included in the Trouble Spot List. The amount of sewer subject to more frequent cleaning and inspection varies on a continuous basis as sewers are added to or removed from the list as determined by the City's SOP. Under the Root Cause Analysis Program, at a minimum, if there are no other apparent steps to take to reduce the risk of a recurring overflow, the sewer asset is scheduled for re-

inspection in one-half (½) the time since the last inspection. A work order is initiated as part of the RCA process.

5. Training activities were conducted on the following topics. Date of training and number of employees receiving training are indicated in Table 3-6.

Table 3-6 Training Activities

Date	Course Title/Description	Number of Employees Trained
7/14-18/2014	Utility Driver Safety: Road Rules	43
8/5-9/2014	A Foot Closer to Safety	38
8/19/2014	2014 Fire Extinguisher Training	3
9/9-12/2014	Home and Work Safety	46
10/1, 10/2, 10/3, 10/6, 10/7, 10/8, 10/9, 10/15, 10/16/2014	Snow & Ice Training (Refresher and Full)	46
11/17 – 11/21/2014	Heavy Equipment Safety	43
12/8, 12/10, 12/11, 12/12, 12/15/2014	Accident Reporting	37

3.G Grease Control Program

In accordance with Grease Control provisions in the approved CMOM program, this program includes inspection and/or cleaning of the known trouble spots on the "Speed Rodder List."

3.G.1 List of SSOs and CSS Releases Caused by Fats, Oils, and Grease (FOG)

Table 3-7 Releases Caused by Fats, Oils and Grease

Date	Location	Type of Release (SSO, Rack, Property backup)	Add to FOG Trouble Spot List
8/27/2014	222 Shawnee Path	Property Backup	Yes
10/6/2014	1601 Idlewood	Property Backup	Yes
11/10/2014	808 Silvercrest	Property Backup	Yes
12/13/2014	328 S. Main	Property Backup	Yes

3.G.2 List of FOG Trouble Spots

A complete list of FOG Trouble Spots inspected and/or cleaned during the reporting period is included in Appendix G.

As stated in previous semi-annual reports, to optimize the current schedule for the cleaning of locations suspected to have recurring grease accumulation, in 2013, the City began the inspection of each grease location on or around the next scheduled cleaning cycle to determine if significant grease accumulation has occurred. Based on the findings of the CCTV inspection, the frequency of cleaning at each grease location is adjusted accordingly. With the improvements initiated to control FOG at the source, it is anticipated that scheduled cleaning will be less efficient than periodic inspection, and cleaning only when needed.

As stated in 3.F.4 above, the City is now inspecting all trouble spot locations (Root, FOG, or as a result of the RCA process) that may require more frequent cleaning than the remainder of the system, at or near the next scheduled cycle date, or modified cycle based on previous inspection results. Based on the findings of the inspection, the pipe is cleaned or the inspection cycle is modified to provide more efficient maintenance activities.

3.G.3 FOG and Food Service Establishments (FSEs)

As a result of a joint collaborative effort with the Summit County Public Health Department (SCPHD), through annual inspections of FSEs by SCPHD, the City of Akron has been in contact with several FSEs concerning their efforts to reduce the discharge of FOG into the public sewer system. Direct contact was made with FSEs through a December 11, 2012 mailing of approximately 990 FOG educational brochures. All parties involved have worked diligently on corrective actions for those FSEs that are found in violation of the revised ordinance. In addition, the City of Akron is working closely with new or remodeled FSEs to explain the new FOG requirements regarding grease interceptor devices and cleaning frequencies.

3.G.4 FOG Education Efforts Undertaken During Reporting Period

The following educational efforts were undertaken and completed during the reporting period:

A. The City of Akron CSO Program Team developed a CSO Website (http://akronwaterwaysrenewed.com) which includes a FOG page identifying the effects of fats, oils, and grease discharged into the sewer system and things property owners can do to prevent aforementioned discharges. The website has a “hit-counter” (527 hits as of 1/20/2015) to quantify the number of people who have visited the site.

B. See 3.G.3 above.

Section 4: Mud Run Pump Station

4.A Status of Mud Run Study and Report of Findings

Status of Study and Report of Findings

No activity during this reporting period. The Report of Findings was submitted to USEPA on January 15, 2012.

Date of Report Completion

No activity during this reporting period. Report of Findings submitted on January 15, 2012, per the Consent Decree.

Project Cost Incurred During Reporting Period

Report complete. No costs incurred during the reporting period.

4.B Status of Mud Run Pump Station Remedial Report

Status of Remedial Report

The following was completed on the Remedial Report during the reporting period:

1. The final Remedial Report with all comments addressed and requested revisions made was submitted to USEPA on January 25, 2013.

2. Tentative approval of the revised Remedial Report was given by the USEPA on January 31, 2013.

3. A teleconference was held on April 3, 2013 with the USEPA. Additional comments and questions on the Remedial Report were received during the teleconference.

4. Responses to the additional comments and questions were sent to the USEPA on May 9, 2013 and were discussed with and approved by the USEPA on a teleconference on May 13, 2013.

5. The final Remedial Report with all requested revisions was submitted for review and approval on August 13, 2013.

6. A force majeure event letter dated February 3, 2014 was sent to the USEPA regarding the lack of written approval regarding the Remedial Report.

7. Email notification of the Remedial Report Approval letter (dated February 26, 2014) was received on March 3, 2014. The letter also contained additional questions and requests for clarifications regarding the force majeure event letter dated February 3, 2014.

Date of Report Completion

The Remedial Report was completed on October 15, 2012. Additional comments were received after completion and were included in the revised Remedial Report submitted on August 13, 2013. Final written approval dated February 26, 2014 was received via email on March 3, 2014.

Project Cost Incurred During Reporting Period

Project costs incurred during the reporting period were approximately $28,749.

4.C Status of Mud Run Pump Station Design and Construction of Projects

Projects Status

Table 4-1 shows the current status of the Mud Run Pump Station design projects. Table 4-2 shows the current status of the Mud Run Pump Station construction projects. However, the Final Remedial Report has yet to be approved to begin the proposed improvements.

Table 4-1 Status of Mud Run Pump Station Design and Construction Projects

Project	Status
Mud Run Trunk Sewer Lining	Design complete.
Sevilla Trunk Sewer Reconstruction	Design 60% complete
Mud Run Pump Station Improvements	Design complete
Mud Run Storage Basin Improvements	Design complete
Mud Run District Capacity Improvements	Design complete
Mud Run District Infiltration/Inflow Improvements	Design 40% complete

Table 4-2 Status of Mud Run Pump Station Construction Projects

Project	Status
Mud Run Trunk Sewer Lining	95% Complete
Sevilla Trunk Sewer Reconstruction	Bid Summer 2015
Mud Run Pump Station and Storage Basin Improvements***	5% complete***
Mud Run District Capacity Improvements***	Bid November 2014***
Mud Run District I/I Repairs	Bid Fall 2015
Mud Run District I/I Rehabilitation	Bid Winter 2015
NOTE: *** projects indicate those required for CD compliance.	

The Mud Run Trunk Sewer Lining project is approximately 95% complete in construction. Most of the proposed manholes and reconstructed manholes are complete. The lining of the trunk sewer is continuing and nearly complete. Lateral lining is also progressing.

The Mud Run Pump Station and Storage Basin project was awarded near the end of June. The water line installation and cinder removal is complete.

Anticipated Date of Report Completion

The Report of Findings was completed on January 15, 2012. The Remedial Report was submitted on August 13, 2013. Approval of the Remedial Report was on February 26, 2014. The projects marked with *** will require an Achievement of Full Operation date of October 15, 2015 to be in compliance with the Consent Decree. The other projects are not required to be completed by October 15, 2015 since the anticipated I/I reductions were not used in determining the required storage basin capacity to meet the Consent Decree requirements.

Project Cost Incurred During Reporting Period

Project costs incurred during the reporting period were approximately $3,457,949.

Section 5: Supplemental Environmental Project

The City's third and final payment to the Supplemental Environmental Project (SEP) escrow account was made during the January – July 2011 reporting period. No additional SEP payments are due; therefore no payments were made during the current reporting period.

Section 6: Other Necessary Information

No additional information is being presented at this time.