City of Alexandria's Semi-Annual Report ATG-Oronoco Site Summary July 1, 2024 to December 31, 2024

This Semi-Annual Report summarizes site remedial activities for the former Alexandria Town Gas – Oronoco manufactured gas plant site (ATG-Oronoco) as described in Appendices A, B, and C of the Consent Decree between Potomac Riverkeeper Network and the City of Alexandria, Virginia, as filed January 9, 2024 in the U.S. District Court for the Eastern District of Virginia (Case No. 1:22-cv-00506-CMH-WEF).

March 1, 2025

City of Alexandria Transportation & Environmental Services Office of Environmental Quality 2900 Business Center Drive Alexandria, VA 22314

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Acronyms / Abbreviations

ATG Alexandria Town Gas
City City of Alexandria
CIPP Cured-in-Place Pipe

DEQ Department of Environmental Quality
DNAPL Dense non-aqueous phase liquid

ft Feet

ft bgs Feet below ground surface

LSS Lee Street Square commercial/office townhouse complex

MGP Manufactured Gas Plant NAPL Non-aqueous phase liquid

PAH Polycyclic Aromatic Hydrocarbons

RTN Robinson Terminal North

Site Alexandria Town Gas (ATG)-Oronoco Site
TarGOST Tar-specific Green Optical Screening Tool
USEPA United States Environmental Protection Agency

VRP Voluntary Remediation Program

1 Introduction

This Semi-Annual Report summarizes site activities at the former Alexandria Town Gas – Oronoco (ATG-Oronoco) Manufactured Gas Plant site (the "Site") in accordance with the Consent Decree between Potomac Riverkeeper, Inc. and the City of Alexandria, entered by the United States District Court for the Eastern District of Virginia on January 9, 2024. This summary covers the period from July 1, 2024 to December 31, 2024. The Site of the former manufactured gas plant (MGP) is in the Old Town section of the City of Alexandria, Virginia, at the southeast corner of North Lee and Oronoco Streets (Figure 1). The Site boundaries also include the Oronoco Street right-of-way (R/W) from the North Lee/Oronoco Street intersection, eastward to the Potomac River. Since 2000, the City has been implementing a long-term remediation plan for the Site in coordination with the Virginia Department of Environmental Quality's Voluntary Remediation Program (VRP Site No. 00241). The actions documented in this Semi-Annual Report complement the City's long-standing remediation plan and, together, are intended to remediate the effects of historical pollution at the Site as soon as practicable.

1.1 Site Background

The ATG-Oronoco Voluntary Remediation Program (VRP) Site occupies an approximately 1-acre group of privately owned parcels at the corner of Oronoco and North Lee Streets in Old Town Alexandria (see **Figure 1**). The City operated the ATG MGP near the corner of North Lee and Oronoco Streets between 1851 and 1946. After closing, most of the ATG plant was demolished and the remaining buildings were repurposed by various businesses until the mid-1970s. In 1977, the former MGP property, including the last two remaining MGP buildings, was redeveloped into the Lee Street Square commercial/office townhouse complex (LSS), which now occupies the Site. In 1975, just prior to the redevelopment of the former MGP Site, a 44-inch x 72-inch-diameter arch-style stormwater pipeline was installed beneath the centerline of Oronoco Street adjacent to the former MGP Site to improve drainage and flood control in the area.

The surrounding urban area is occupied by a mixture of commercial and residential properties bordering the west bank of the Potomac River. The VRP Site boundaries also encompass the bordering City-owned public rights-of-way along Oronoco Street, from the intersection of North Lee Street to the end of Oronoco Street. However, in some cases, Site-related impacts extend beyond these boundaries to areas beneath adjoining private property and public rights-of-way, including the river bottom at the Oronoco Outfall.

Figure 2 presents a full site layout, including the VRP Site boundary and remedial activities and systems that have been installed prior to the Consent Decree.

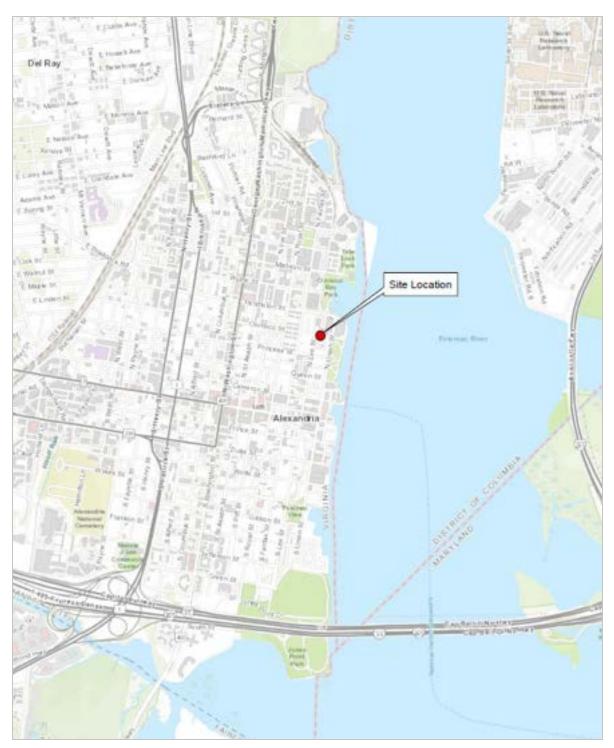


Figure 1 - Site Location

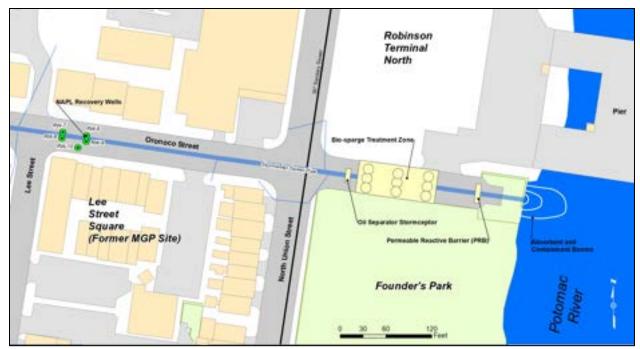


Figure 2 - Site Layout with Remedial Systems

1.2 Scope of Work

The City of Alexandria Office of Environmental Quality (OEQ) oversees ongoing remedial operations at the Site. The operations focus on reducing contaminant mass at the source area and reducing or eliminating off-site discharges through the stormwater outfall located at the foot of Oronoco Street.

The remedial activities discussed in this report include:

- 1. Implementation of an Upland Remediation Program, to include:
 - a. Completion of an in-well heating study on two existing recovery wells
 - b. Completion of a non-aqueous phase liquid (NAPL) mapping subsurface exploration program using the Tar-Specific Green Optical Scanning Tool (TarGOST) technology
 - Using the TarGOST data, installation of additional NAPL recovery wells in the source area
 - d. Completion of a recovery frequency study following the installation of new wells
 - e. Summary of NAPL recovery from existing wells and new wells installed following the TarGOST survey
- 2. Implementation of a Pipe Integrity and Inspection Program, to include:
 - a. Cured-In-Place Pipe (CIPP) rehabilitation of the existing storm sewer on Oronoco Street
 - b. Pipe inspections and repairs (if required)
 - c. Ongoing outfall inspection and boom maintenance program

ATG-Oronoco Site Summary July 1, 2024 to December 31, 2024

- 3. Implementation of a Pier Removal and Sediment Remediation Program, to include:
 - a. Removal of the Robinson Terminal North (RTN) pier
 - b. Sediment sampling for total Polycyclic Aromatic Hydrocarbons (PAHs) in the vicinity of the RTN pier
 - c. Remediation of sediment underneath the RTN pier, if warranted

The following sections summarize activities pursuant to the above outlined scope completed during the second half of 2024 (July 1 through December 31), starting from the effective date of the Consent Decree, as well as preparatory actions taken prior to this period.

2 Upland Area Remediation Program Summary

The upland remediation program's goal is to recover legacy contaminants from the former MGP, commonly referred to as "free product" or NAPL, in the subsurface so that it does not reach the storm sewer pipe that discharges to the Potomac River. Prior to the Consent Decree and as part of the VRP, the City installed recovery wells to collect and remove free product from the subsurface. The Consent Decree requires the City to continue its efforts to recover free product in the upland area.

2.1 Recovery Well Installation

Five new recovery wells (designated RW-11, RW-12, RW-13, RW-14, and RW-15) were installed the weeks of August 19th and 26th, 2024. Each of the wells is four inches in diameter with five-foot long stainless steel screens and a five-foot sump located below the screened interval. Each well is screened from about 17 feet to 22 feet below ground surface, corresponding to the depth zone of highest NAPL saturation.

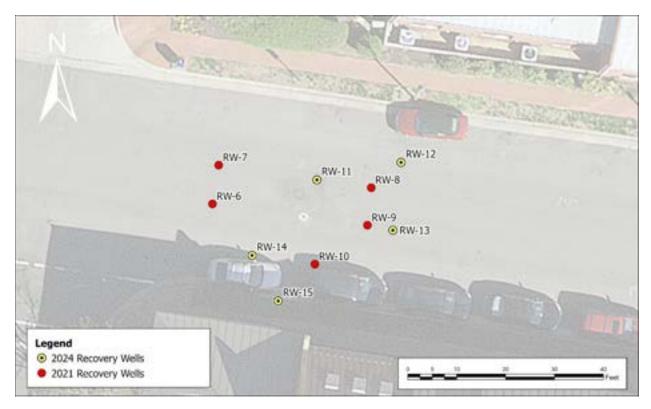


Figure 3 - Locations of New NAPL Recovery Wells

2.2 Recovery Frequency Study

The City started a NAPL recovery frequency study in December 2024 with data collection anticipated to be completed in February 2025. The study's purpose will be to better understand NAPL infiltration rates and responses to recovery so that short-term recovery rates can be optimized without compromising long-term recovery. These results will be reported separately (anticipated by end of March 2025) and will be summarized in future Semi-Annual Reports.

2.3 NAPL Recovery

Free product was gauged and/or collected from recovery wells RW-6 through RW-10 during the second half of 2024 on a bi-weekly basis until December 2, 2024 when a recovery frequency study began on the newly installed wells RW-11 through RW-15 (data collection for this study will conclude in February 2025). **Tables 1 and 2** below summarize recovery activity from the prior existing and newly installed recovery wells. Product was not present in wells RW-7, RW-8, RW-9, RW-10, RW-11, or RW-14 during the second half of 2024. Product was intermittently present in wells RW-6 and RW-9 and consistently present in wells RW-12, RW-13, and RW-15. Total recovered free product per event significantly increased in December as recovery shifted to the new recovery wells RW-12, RW-13, and RW-15. Recovery is anticipated to maintain at a higher level in 2025 due to the new recovery wells installed in August 2024. Total site product recovery from July 1 through the end of December 2024 is 75.5 gallons (19.5 gallons from recovery wells RW-10 and 56 gallons from wells RW-11 through RW-15). Records of free product recovery activities are attached in the maintenance logs presented in **Appendix 1**.

Table 1 - Summary of Free Product Recovery Existing Wells - 2nd Half 2024

Date	Product recovered from RW-6 (gallons)	RW-6 Product Thickness (ft)	Product recovered from RW-7 (gallons)	Product recovered from RW-8 (gallons)	Product recovered from RW-9 (gallons)	RW-9 Product Thickness (ft)	Product recovered from RW-10 (gallons)	Product recovered By Event (gallons)
7/17/2025	1.5	1.84	0	0	0	0	0	1.5
7/25/2025	1.5	2.34	0	0	0	1.63	0	1.5
8/6/2025	1.5	0.92	0	0	0	0	0	1.5
9/3/2025	1	0.75	0	0	1	0	0	2
9/20/2025	1.5	2.07	0	0	1	1.84	0	2.5
10/3/2025	1.5	1.57	0	0	1.5	2	0	3
10/23/2025	0	0	0	0	2	1.98	0	2
11/25/2025	1.5	2.62	0	0	2	1.79	0	3.5
12/13/2025	2	2.51	0	0	0	0	0	2
Totals			0	0	7.5		0	19.5

Note: Recovery wells were not fully accessible during the pipe rehabilitation and only one recovery event was completed in November.

Table 2 - Summary of Free Product Recovery New Wells - 2nd Half 2024

Date	Product recovered from RW-11 (gallons)	Product recovered from RW-12 (gallons)	Product recovered from RW-13 (gallons)	Product recovered from RW-14 (gallons)	Product recovered from RW-15 (gallons)	Product recovered By Event (gallons)
12/2/2024	0	3	0.5	0	2.5	6
12/4/2024	0	2.5	2.5	0	2.5	7.5
12/6/2024	0	2	2.5	0	2.5	7
12/9/2024	0	2.5	2.5	0	2.5	7.5
12/13/2024	0	2.5	1.5	0	2.5	6.5
12/17/2024	0	2.5	Not Acc	cessible	3	5.5
12/20/2024	0	3	2	0	3.5	8.5
12/23/2024	0	2.5	2.5	0	2.5	7.5
Totals	0	20.5	14	0	21.5	56

Note: Wells RW-13 and RW-14 were not accessible during the 12/17 event due to conflicts with construction activities

3 Pipe Integrity and Inspection Program Summary

The pipe program is designed to rehabilitate the Oronoco Street storm sewer to prevent the intrusion of pollutants from the Site into the pipe. The Consent Decree requires that the pipe be rehabilitated by March 31, 2025. Rehabilitation was done by installation using the cured-in-place pipe (CIPP) liner process. Following the installation of the CIPP liner, the City is required to do annual pipe inspections to ensure that CIPP liner is intact without defects that would allow intrusion of free or dissolved product into the pipe.

The Consent Decree also requires the City to implement an outfall monitoring and maintenance program, similar to the program the City follows under the VRP. The requirements include weekly or biweekly inperson inspections at the outfall, continuously available electronic monitoring of the outfall, and maintaining the existing containment system at the outfall. In addition, the Consent Decree requires routine water quality testing of the storm sewer and outfall following completion of the pipe rehabilitation.

3.1 Cured-in-Place Pipe Relining

The City has completed the installation of 420 linear feet of CIPP for the 72"x44" arch pipe starting from manhole 92A (more than 50 feet upstream of manhole 92) and ending at manhole 93. This included cleaning, pre- and post-construction CCTV, and grouting of the area where the product was seeping into the pipe. The inversion and curing of the CIPP was completed on 11/7/2024 and the ends were cut on 11/11/2024. The pipe cleanout and post-construction CCTV was completed on 12/17/2024. The downstream pipe between manhole 93 and the outfall that discharges into the Potomac River was also cleaned. The Completion Report for this work is included in Appendix 2.

3.2 Pipe Inspections

As part of the Consent Decree, the City must conduct annual inspections of the storm sewer pipe along Oronoco Street from the outfall to at least 25 feet upstream of the planned CIPP lining. Annual inspections must be conducted once per calendar year and may not be conducted less than 10 months apart or more than 14 months apart. The inspections must include the pipe, manholes and lateral connections and be performed by a licensed/certified professional. Separate from the annual inspections, inspections are also required if there is evidence of a potential new source of NAPL intrusion into the pipe. CCTV inspection was completed on 12/17/2024 from manhole 92A to the outfall, along with the incoming stormwater lateral connections. The CCTV files were transmitted under separate cover.

3.3 Outfall Monitoring and Maintenance

The Consent Decree requires both in-person and electronic monitoring of the outfall. In-person monitoring is conducted weekly for visible sheens and to check on the containment system. Pictures are taken and notes are made as to observations and any work performed. Copies of these inspection reports are provided in Appendix A. The Consent Decree allows for a reduction in outfall monitoring from weekly to

every two weeks if no sheens are observed for 12 consecutive weeks, or when the City completes installation of a webcam pursuant to Paragraph 6 of Appendix B of the Consent Decree, whichever is earlier. The City currently monitors the outfall on a weekly basis and will notify PRKN of any plan to move from weekly to biweekly inspections.

The City also installed a webcam that allows for electronic monitoring at the outfall site. The camera was installed and the link to the live feed was provided to PRKN on April 5, 2024, within 90 days of the Consent Decree effective date. City staff typically check the camera on weekdays and incidences of sheens are recorded. Notification of observed sheens are provided to PRKN within 10 days of observance.

The City is required to install a containment system at the outfall and implement a maintenance program. The booms are required to be repaired/replaced within 30-90 days of damage to the booms depending on the type of damage. The City's contractor provides maintenance including boom repairs and replacement of absorbents and in-pipe sweeps, as needed. A log of maintenance activities is appended to this report as **Appendix 1**. **Table 3** below summarizes in-person inspection and maintenance activities.

As reported in the prior semi-annual report, spotty sheens with an aged appearance and limited in size were observed at the outfall starting in January 2024. Initial sheens were of an aged/spotty nature and thought to be due to residual NAPL in the pipe. However, these sheens then became larger in appearance and indicated a possible new source of NAPL intrusion, prompting the City to have the pipe inspected by CCTV. CCTV of the pipe was conducted March 18, 2024, which revealed a small amount of active coal tar intrusion at Manhole 92. On May 14, 2024, the City provided its corrective action plan to address the intrusion, which called for pipe grouting at the area of NAPL intrusion prior to the lining. The grouting was completed by the CIPP lining contractor on August 12, 2024, about 8 weeks ahead of the pipe lining. Additional sheens were observed following the grouting due to residual NAPL in the pipe until the pipe CIPP rehabilitation, pipe cleanout and CCTV were completed in November - December 2024. During the pipe rehabilitation sheens were observed twice in November 2024 and were contained inside the coffer dam at the outfall. Sheens during the rehabilitation are attributed to residual NAPL in the pipe prior to final cleaning of the pipe.

Table 3 - Summary of Outfall Inspection/Maintenance - 2nd Half 2024

Date	Inspect	Repair/ Replace	Comments
7/2/2024	×		No sheen, heavy storm debris present
7/9/2024	Х	Х	Spotty sheen, debris removal with USACoE support
7/17/2024	Х		Moderate sheen
7/25/2024	Х	Х	Moderate sheen, partial boom replacement
7/30/2024	Х		No sheen
8/6/2024	Х	Х	No sheen, outer boom re-anchored, absorbent boom replaced
8/12/2024	Х		Moderate sheen
8/22/2024	Х		Spotty sheen
8/28/2024	Х		No sheen
9/3/2024	Х		No sheen
9/12/2024	Х	Х	Spotty sheen (minor), replaced sweep in manholes 92 and 93
9/17/2024	Х		No sheen
9/24/2024	Х	Х	No sheen, absorbent boom replaced
10/3/2024	Х		Spotty sheen
10/7/2024	Х	Х	No sheen, storm debris cleaned out from outfall
10/16/2024	Х		No sheen
10/23/2024	Х		No sheen
10/29/2024	Х		No sheen
11/4-8/2024	Х		Pipe relining and cleaning, coffer dam in place at outfall
11/11-15/2024	Х		Pipe relining and cleaning, coffer dam in place at outfall
11/18/2024	Х		Manhole 92A replacement underway, limited sheen inside coffer dam, no sheen outside
11/25/2024	Х		Pipe relining and cleaning, coffer dam in place at outfall, no sheen
12/4/2024	Х		Pipe relining and cleaning, coffer dam in place at outfall, no sheen
12/9/2024	Х		Pipe relining and cleaning, coffer dam in place at outfall, no sheen
12/17/2024	Х		Pipe relining and cleaning, coffer dam in place at outfall, no sheen
12/23/2024	Х	Х	Coffer dam fully removed, No sheen

3.4 Water Quality Testing

The City is required to conduct quarterly sampling at Manhole 93 and at the outfall for the following constituents: naphthalene, benzene and total petroleum hydrocarbons within detection limits low enough to detect exceedances as stated in the Consent Decree. Field parameters including temperature, pH and total dissolved solids will also be collected and a description of each sample recorded, noting any NAPL sheen. The first sample will be collected during the first quarter of 2025 (before March 31, 2025) and results will be provided in the next semi-annual report.

4 Robinson Terminal North Pier Removal and Sediment Remediation Program Summary

The goal of the pier removal and sediment remediation program is to quantify and remediate, if warranted, contaminated Potomac River sediments. To achieve these goals, a series of steps need to take place including (and in order): removal and/or stabilization of the Robinson Terminal North (RTN) pier by RTN East LLC, development of a sediment sampling plan, application of and receipt of necessary permits, completion of sediment sampling in accordance with the sampling plan, and development of a sediment sampling report and sediment remediation plan, and implementation of the sediment remediation plan. While the Consent Decree includes dates and milestones for achieving the relevant goals, these dates and timelines may need to be adjusted dependent on factors outside the City's control, primarily the work to be done by others and approvals from outside third parties.

4.1 Pier Removal

The Consent Decree requires the City to ensure that the privately owned RTN pier is removed and/or stabilized so that the area around and under the pier is ready for sampling by September 25, 2025. This requirement is consistent with the City's preexisting actions to ensure the owner, RTN East LLC, implements appropriate measures to secure the hazardous pier structure. A small portion of the site is currently occupied by AlexRenew as part of the RiverRenew combined sewer tunnel construction but their occupancy is located at the Pendleton Street combined sewer outfall and does not impact access to the pier. The City has executed an agreement with the RTN pier owner that obligates the owner to commence the pier removal/stabilization project as soon as practicable after February 28, 2025. Along with removing/stabilizing the pier, the owner is also required to remove the debris accumulated under the pier within 30 days of the completion of the removal/stabilization. Currently, the owner of the RTN pier has reported to the City that it is working on a pier demolition plan to submit to the City for approval and is also working on preparing permits to be submitted to other government agencies, including the United States Army Corps of Engineers, the Virginia Marine Resources Commission, the Virginia Department of Environmental Quality. A permit must also be submitted to the National Park Service if the removal of the pier and debris impacts the river bottom.

4.2 Sediment Sampling

The City has agreed in the Consent Decree to collect sediment samples at approximately 68 locations as shown on Figure 1 of the Consent Decree. The sediment samples will be analyzed for total polycyclic aromatic hydrocarbons (PAHs) as defined by the Wisconsin Department of Natural Resources Guidance with the sum of the 18 PAHs normalized to 1% total organic carbon.

In accordance with the VRP program, the City will submit a sediment sampling work plan to VDEQ for approval in early 2025. The draft sediment sampling work plan has been prepared and will be submitted to VDEQ as soon as internal reviews are complete. In addition, the City will submit any applications for necessary approvals or permits no later than March 28, 2025. The sediment sampling will be completed as soon as practicable, but no later than 45 days after removal/stabilization of the pier or from the date the City receives all necessary permits/approvals to conduct the sampling, whichever is later.

Once the sampling is completed, the City will prepare a report with the sampling data. The report shall be submitted to PRKN within 30 days of the receipt of the sampling data by the City.

4.3 Sediment Remediation

If the sediment sampling discussed above reveals probable effect concentrations exceeding 22.8 mg/kg total PAHs as defined in the Wisconsin Department of Natural Resources guidance, then the City will prepare a sediment remediation plan. The plan will include an analysis of and selection among various remedial alternatives, including a dredging and capping alternative. The plan would be due to PRKN and to VDEQ within 60 days of finalization of the sampling report. Once VDEQ approves the plan, the City would submit applications for permits within 45 days of approval. In terms of schedule, the City must initiate any remediation actions required by the finalized plan by July 1, 2026, and a completion report shall be submitted within 90 days of completion of any remedial action(s).

Appendices

Appendix 1 Operations and Maintenance Logs

Date:
July 9, 2024 6:30 AM
Personnel:
Shelby Dyer
Weather and Tide Conditions:
Outfall Boom Material:
Replacement needed
Outfall Water Conditions:
SPOTTY sheen
Outfall Odors:
SLIGHT odor
Additional Outfall Notes:
Will be doing debris clean up at outfall with Will Lamb and Army Core of Engineers. Below are before and after photos.

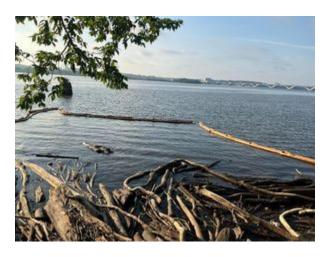
July 9, 2024 6:30 AM

Outfall Photo #1:



Outfall Photo #4:





Outfall Photo #3:



July 9, 2024 6:30 AM

System O&M Data

Bldg Temp:	Comp Hours:	Coolant:
84	32,435.8	ОК
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
0	0	0
BSW-1 Press	BSW-4 Press	BSW-7 Press
7	1	0
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
0	0	0
BSW-2 Press	BSW-5 Press	BSW-8 Press
0	1	0
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
0	0	0
BSW-3 Press	BSW-6 Press	BSW-9 Press
0	0	4.5
	System Notes:	

System running normal.

July 17, 2024 8:16 AM
Personnel:
Shelby Dyer
Weather and Tide Conditions:
Outfall Boom Material:
Replacement needed
Outfall Water Conditions: MODERATE sheen
Outfall Odors:
NO odor

Additional Outfall Notes:

Replace soft boom soon.

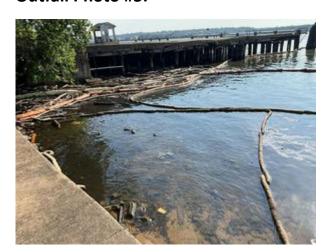
Date:

July 17, 2024 8:16 AM

Outfall Photo #1:



Outfall Photo #3:



Outfall Photo #2:



Outfall Photo #4:



July 17, 2024 8:16 AM

System O&M Data

Bldg Temp:	Comp Hours:	Coolant:
93	32,515.6	Coolant Added
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
	0	0
BSW-1 Press	BSW-4 Press	BSW-7 Press
	7	9
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
0	0	0
BSW-2 Press	BSW-5 Press	BSW-8 Press
7	7.5	8.5
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
0	0	0
BSW-3 Press	BSW-6 Press	BSW-9 Press
8.5	9	4

System Notes:

Date:
July 25, 2024 9:00 AM
Personnel:
Shelby Dyer, RP Meredith
Weather and Tide Conditions:
Outfall Boom Material:
Replacement needed
Outfall Water Conditions:
MODERATE sheen
Outfall Odors:
NO odor
Additional Outfall Notes:
Went to install new boom but that purchase from vendor was defective when Inner boom wa

installed. No further installment of boom was done due to defective boom. Boom installment

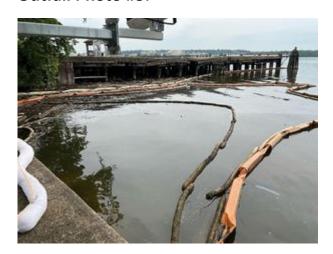
will be rescheduled asap.

July 25, 2024 9:00 AM

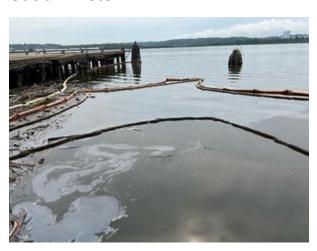
Outfall Photo #1:



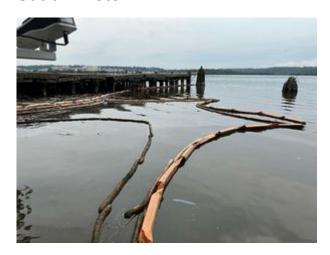
Outfall Photo #3:



Outfall Photo #2:



Outfall Photo #4:



July 25, 2024 9:00 AM

System O&M Data

Bldg Temp:	Comp Hours:	Coolant:
86	0	ОК
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
0	0	0
BSW-1 Press	BSW-4 Press	BSW-7 Press
0	0	0
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
0	0	0
BSW-2 Press	BSW-5 Press	BSW-8 Press
0	0	0
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
0	0	0
BSW-3 Press	BSW-6 Press	BSW-9 Press
0	0	0
	System Notes:	

System is down.

August 6, 2024 8:40 AM
Personnel:
Shelby Dyer, RP Meredith
Weather and Tide Conditions:
Outfall Boom Material:
Repairs needed
Outfall Water Conditions:
NO sheen
Outfall Odors: NO odor
Additional Outfall Notes: Crew will do repairs to outer boom.

Date:

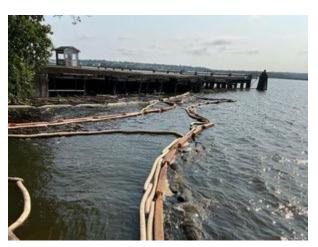
August 6, 2024 8:40 AM

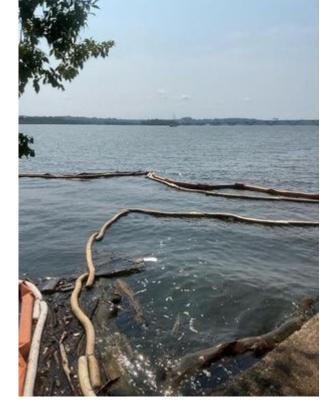
Outfall Photo #1:



Outfall Photo #4:







Outfall Photo #3:

August 6, 2024 8:40 AM

System O&M Data

Bldg Temp:	Comp Hours:	Coolant:
82	0	ОК
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
0	0	0
BSW-1 Press	BSW-4 Press	BSW-7 Press
0	0	0
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
0	0	0
BSW-2 Press	BSW-5 Press	BSW-8 Press
0	0	0
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
0	0	0
BSW-3 Press	BSW-6 Press	BSW-9 Press
0	0	0
	System Notes:	

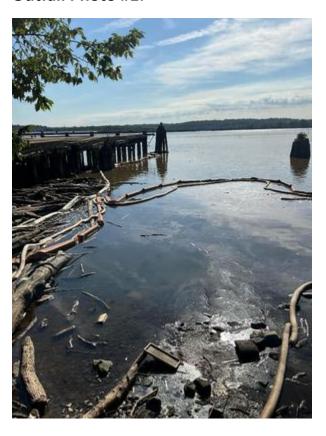
System in standby

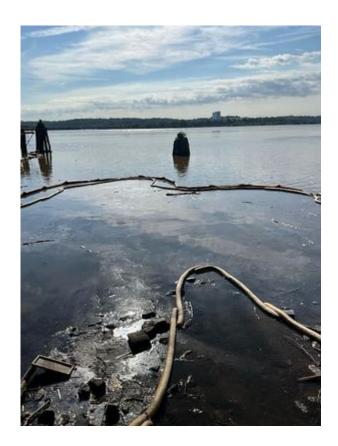
August 12, 2024 8:27 AM
Personnel:
Shelby Dyer
Weather and Tide Conditions:
Outfall Boom Material:
Good, no action
Outfall Water Conditions: MODERATE sheen
Outfall Odors: SLIGHT odor
Additional Outfall Notes: Moderate sheen at back side of containment at outer boom.

Date:

August 12, 2024 8:27 AM

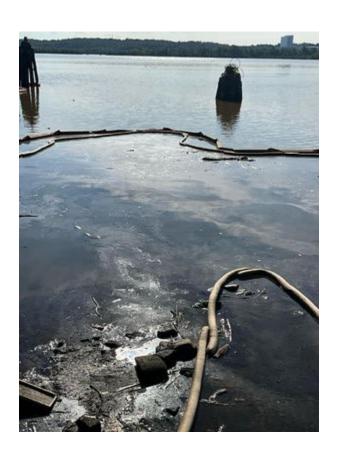
Outfall Photo #1:



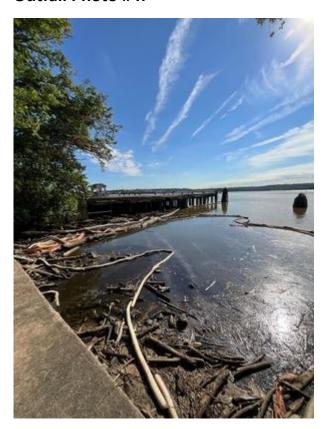


Outfall Photo #3:

Outfall Photo #2:



Outfall Photo #4:



August 12, 2024 8:27 AM

System O&M Data

Bldg Temp:	Comp Hours:	Coolant:
74	0	ОК
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
0	0	0
BSW-1 Press	BSW-4 Press	BSW-7 Press
0	0	0
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
0	0	0
BSW-2 Press	BSW-5 Press	BSW-8 Press
0	0	0
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
0	0	0
BSW-3 Press	BSW-6 Press	BSW-9 Press
0	0	0
	System Notes:	System is down. Will

troubleshoot

Personnel:			
Shelby Dyer			
Weather and Tide Conditions:			
Outfall Boom Material:			
Repairs needed			
Outfall Water Conditions:			
SPOTTY sheen			
Outfall Odors:			
NO odor			
Additional Outfall Notes:			
Need to straighten up outer and hard boom nearest pier.			

Date:

August 22, 2024 6:39 AM

August 22, 2024 6:39 AM

Outfall Photo #1:



Outfall Photo #3:



Outfall Photo #2:



Outfall Photo #4:



August 22, 2024 6:39 AM

System O&M Data

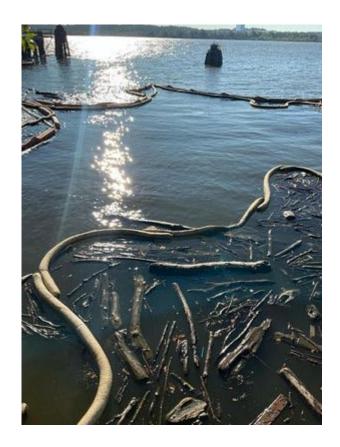
Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	Compressor off. Scheduling Ingersoll Rand for maintenance review

Date:

September 3, 2024 7:30 AM

Outfall Photo #1:





Outfall Photo #3:

Outfall Photo #2:



Outfall Photo #4:



September 3, 2024 7:30 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	
	System down.	

Date:
September 12, 2024 8:14 AM
Personnel:
Shelby Dyer, RP Meredith
Weather and Tide Conditions:
Outfall Boom Material:
Replacement needed
Outfall Water Conditions:

Outfall Odors:

SPOTTY sheen

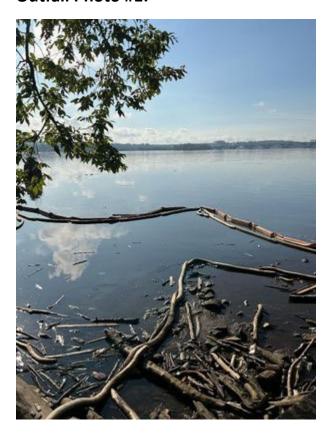
SLIGHT odor

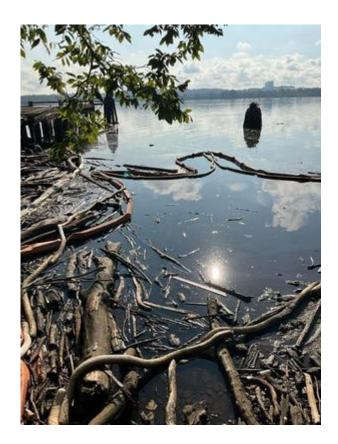
Additional Outfall Notes:

Will need to replace boom soon. Both inner and outer.

September 12, 2024 8:14 AM

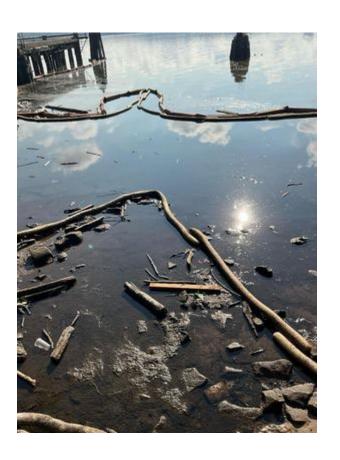
Outfall Photo #1:



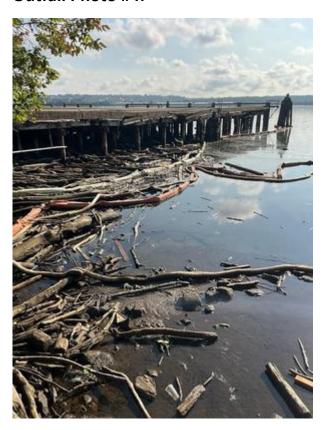


Outfall Photo #3:

Outfall Photo #2:



Outfall Photo #4:



September 12, 2024 8:14 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
D3W-2 F1655	D3W-3 F1655	D3W-0 FIESS
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System down.	systems logic with EOS
	Compressor ok, seems to be power issue to	Research, may need electrician to check
System Notes:	compressor,	breaker.
-	troubleshooting with	

Date:
September 20, 2024 8:00 AM
Personnel:
Shelby Dyer, RP Meredith, David Sabean
Weather and Tide Conditions:
Outfall Boom Material:
Replacement needed
Outfall Water Conditions:
NO sheen

Outfall Odors:

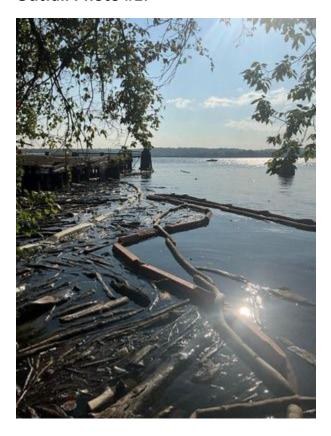
Additional Outfall Notes:

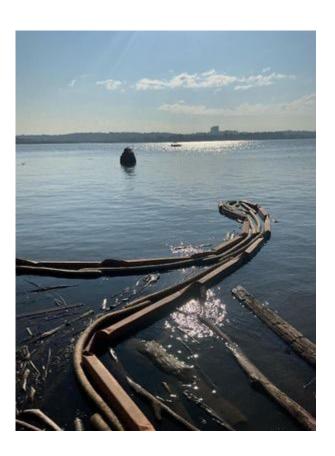
Did repair on hard curtain.

NO odor

September 20, 2024 8:00 AM

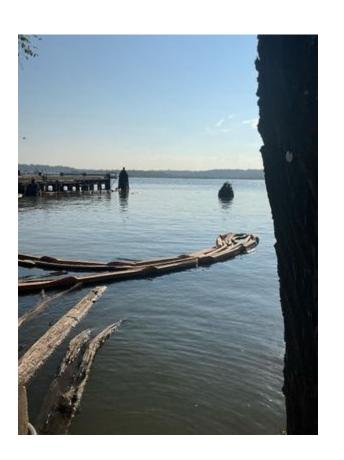
Outfall Photo #1:



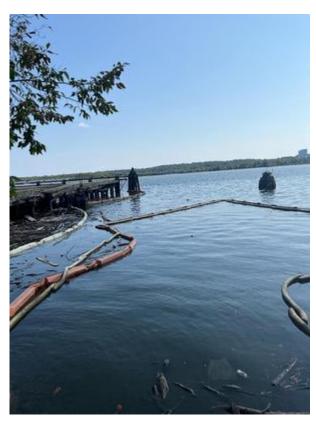


Outfall Photo #3:

Outfall Photo #2:



Outfall Photo #4:



September 20, 2024 8:00 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	Technician worked on
	-	system but was not fixed.
		System still down

October 3, 2024 8:27 AM
Personnel:
Shelby Dyer
Weather and Tide Conditions:
Outfall Boom Material:
Good, no action
Outfall Water Conditions:
SPOTTY sheen
Outfall Odors: NO odor
Additional Outfall Notes:
Lots of debris. Will do clean up on 10-7-24.

Date:

October 3, 2024 8:27 AM

Outfall Photo #1:



Outfall Photo #3:



Outfall Photo #2:



Outfall Photo #4:



October 3, 2024 8:27 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	
	System still down.	

Date:
October 23, 2024 8:13 AM
Personnel:
Shelby Dyer
Weather and Tide Conditions:
Outfall Boom Material:
Good, no action
Outfall Water Conditions:
NO sheen
Outfall Odors:
NO odor
Additional Outfall Notes:

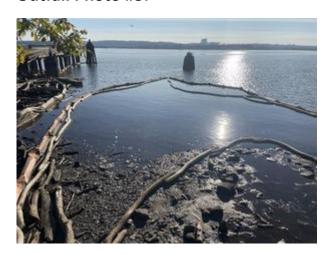
Site observation of site and product recovery of old wells only. Did measure new wells also but did not pump. New wells will be pumped on 10-29-24.

October 23, 2024 8:13 AM

Outfall Photo #1:



Outfall Photo #3:



Outfall Photo #2:



Outfall Photo #4:



October 23, 2024 8:13 AM

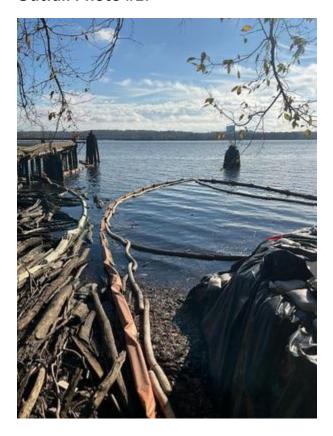
Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
DOW 2 FL	DOW 6 FL	DCM O EL
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
DOW-O FIESS	DSW-0 FIESS	D3W-3 F1E33
	System Notes:	
	-	
	System still down.	

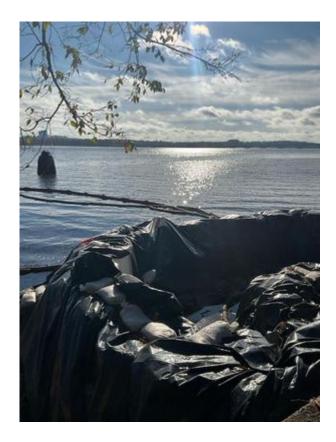
November 11, 2024 9:16 AM
Personnel:
Shelby Dyer
Weather and Tide Conditions:
Outfall Boom Material:
Good, no action
Outfall Water Conditions:
NO sheen
Outfall Odors:
NO odor
Additional Outfall Notes:
Lining crew has dam built around outfall.

Date:

November 11, 2024 9:16 AM

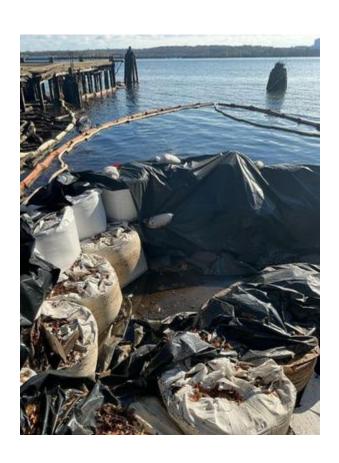
Outfall Photo #1:



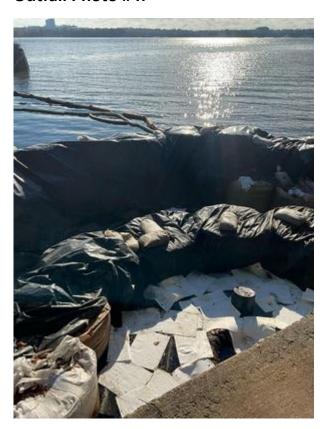


Outfall Photo #3:

Outfall Photo #2:



Outfall Photo #4:



November 11, 2024 9:16 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
DSW-1 Press	DSW-4 Press	bsw-/ Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
2000 200000	2011 2 1 1 200	
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	Treatment system still down.

November 21, 2024 9:14 AM
Personnel:
Shelby Dyer
Weather and Tide Conditions:
Outfall Boom Material:
Good, no action
Outfall Water Conditions:
NO sheen
Outfall Odors:
NO odor
Additional Outfall Notes: None. Site observation.
None. Site observation.

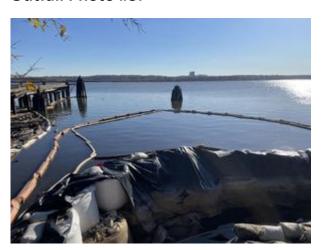
Date:

November 21, 2024 9:14 AM

Outfall Photo #1:



Outfall Photo #3:



Outfall Photo #2:



Outfall Photo #4:



November 21, 2024 9:14 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	
	System still down.	

Date:
November 25, 2024 9:12 AM
Personnel:
Shelby Dyer
Weather and Tide Conditions:
Outfall Boom Material:
Good, no action
Outfall Water Conditions:
NO sheen
Outfall Odors:
SLIGHT odor
Additional Outfall Notes: None

November 25, 2024 9:12 AM

Outfall Photo #1:



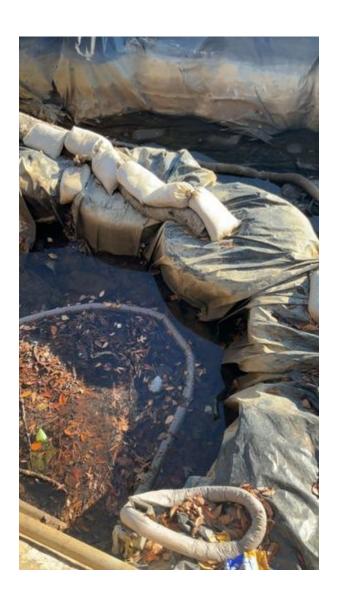
Outfall Photo #2:



Outfall Photo #3:



Outfall Photo #4:



November 25, 2024 9:12 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	
	System still down.	

Date:	
December 13, 2024 9:14 AM	
Personnel:	
Shelby Dyer	
Weather and Tide Conditions:	
Outfall Boom Material:	
Good, no action	
Outfall Water Conditions:	
NO sheen	
Outfall Odors:	
NO odor	
Additional Outfall Notes:	
None	

December 13, 2024 9:14 AM

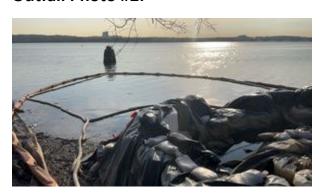
Outfall Photo #1:



Outfall Photo #3:



Outfall Photo #2:



Outfall Photo #4:



December 13, 2024 9:14 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	
	System down.	

Date:
December 17, 2024 9:30 AM
Personnel:
Personner:
Shelby Dyer
Weather and Tide Conditions:
Outfall Dague Matarial
Outfall Boom Material:
Good, no action
Outfall Water Conditions:
NO sheen
NO SHEETI
Outfall Odors:
NO odor
Additional Outfall Notes:
None
Notice

December 17, 2024 9:30 AM

Outfall Photo #1:



Outfall Photo #3:



Outfall Photo #2:



Outfall Photo #4:



December 17, 2024 9:30 AM

Bldg Temp:	Comp Hours:	Coolant:
Pressures and Flows		
BSW-1 Flow	BSW-4 Flow	BSW-7 Flow
BSW-1 Press	BSW-4 Press	BSW-7 Press
BSW-2 Flow	BSW-5 Flow	BSW-8 Flow
BSW-2 Press	BSW-5 Press	BSW-8 Press
BSW-3 Flow	BSW-6 Flow	BSW-9 Flow
BSW-3 Press	BSW-6 Press	BSW-9 Press
	System Notes:	
	System still down.	

Appendix 2 Pipe Rehabilitation Closure Report



Mr. Tafesse Gyes, P.E., CCM

City of Alexandria

Alexandria, VA 22314

Construction Operations Manager

Department of Project Implementation 301 King Street, Room 3200

To:

7 Saint Paul Street 17 Floor Baltimore, MD 21202

Tel: 410-637-1700

Project name:

Oronoco St Storm Pipe Rehabilitation

Project ref: 60734134

From:

Moubin Al-Malla, PE

Date:

January 16, 2025

Memorandum

Subject: Oronoco St Storm Sewer Rehabilitation Completion Report

We have reviewed Am Liner East's submittals and performed a post-installation evaluation for the 72"x44" cured-in-place pipe (CIPP). To the best of our knowledge and in accordance with the Oronoco St. Storm Pipe Rehabilitation Contract (Contract) documents and City of Alexandria requirements, AECOM hereby certifies that the submittals and the installation of the CIPP liner at Oronoco St is acceptable. AECOM also certifies that all materials used on the project meet the Contract requirements and the documentation provided by Am-Liner is complete. No corrective actions were taken or needed.

Attached below are the post-installation CCTV reports, curing log, CIPP testing results, ITCP-CIPP certificates, and inspection daily reports by our ITCP-certified inspectors.

Let me know if you have any questions.

Moubin Al-Malla

Thanks.

Moubin Al-Malla, P.E., CCM

Project Manager

AECOM

Post-Installation CCTV Reports



Inspection report

Date: 12/17/2024	Work Order: 00000	Weather: Dry Weather/Wet Grou	Surveyed By: nd TFE-PO	Certificate Number: U-0518-07030193	Pipe Segment Ref.: MH 92 - MH 93
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	Heavy Cleaning	Downstream	3.0	343.8 '	343.8 '

City:	ALEXANDRIA	Drainage Area:		Upstream MH:	MH 92
Street:	119 ORONOCO ST	Media Label:	005	Up Rim to Invert:	15.0
Location Code:	Secondary roads, non-numbered suburban/rural	Flow Control:	Not Controlled	Downstream MH:	MH 93
Location Details:		Sheet Number:	5	Down Rim to Invert:	0.0
Pipe shape:	Arched	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	72 x 72 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Corrugated Metal Pipe	Purpose:	Post Rehabilitation Survey	Joints failed:	0
Lining Method:	Cured in Place	Owner:	ALEXANDRIA		

Additional Info:

1:2595	Distance	Code	Observation	1			Counter	Photo	Grade
MH 92									
	0.0	АМН	Manhole / M	H 92			00:00:00	MH 92S_7272 9cb0-a640	
	0.0	MWL	Water Level,	5% of the vert	ical dimension		00:00:30	MH 92S_4e66f 5b3-d2ff-4	
	194.7	TB LFW			o'clock, dia/heigh m 2 o'clock to 4 o		00:09:00	MH 92S_c02d 2b53-7e83 MH 92S_504d 7627-5429	S 3
	342.1	MGO	Miscellaneou	us General Obs	servation / AEP		00:16:28	МН	
		00					00:16:38	92S_0c5f5 bdb-d9d8- MH	
	343.8	AMH	Manhole / M	H 93			00.10.30	IVII	
MH 93	343.8	АМН	Manhole / M	H 93			00.10.36	92S_1db2 1938-dc0f-	
MH 93	343.8 QMR	AMH QOR	Manhole / M	H 93 MPR	OPR	SPRI	00.16.36	92S_1db2 1938-dc0f-	OPRI



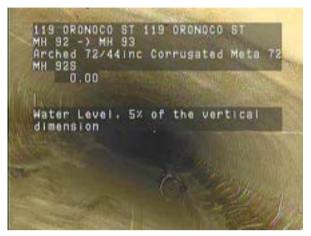
Section Pictures - 12/17/2024 - MH 92 - MH 93

City Street Date Lateral Segment Reference Section No.

ALEXANDRIA 119 ORONOCO ST 12/17/2024 MH 92 - MH 93 5



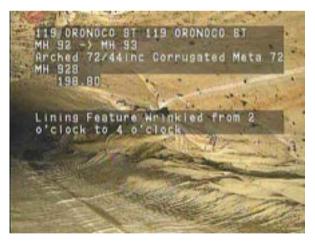
MH 92S_72729cb0-a640-4e53-90c0-1743c39029c5_20241217_1 50639_001.jpg, 00:00:00, 0.00ft Manhole / MH 92



MH 92S_4e66f5b3-d2ff-4064-9af0-281aa0fa8c32_20241217_150 732_622.jpg, 00:00:30, 0.00ft Water Level, 5% of the vertical dimension



MH 92S_c02d2b53-7e83-4915-8b29-dfc666e74a32_20241217_15 1620_348.jpg, 00:09:00, 194.70ft Tap Break-in/Hammer at 3 o'clock, dia/height: 12inch



MH 92S_504d7627-5429-4aae-b9b3-36b4a63c8dbe_20241217_1 51656_026.jpg, 00:09:16, 198.80ft Lining Feature Wrinkled from 2 o'clock to 4 o'clock



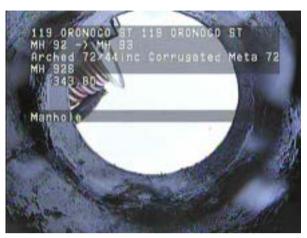
Section Pictures - 12/17/2024 - MH 92 - MH 93

City Street Date Lateral Segment Reference Section No.

ALEXANDRIA 119 ORONOCO ST 12/17/2024 MH 92 - MH 93 5



MH 92S_0c5f5bdb-d9d8-44ff-85b3-bc40fab2d1bb_20241217_152 416_249.jpg, 00:16:28, 342.10ft Miscellaneous General Observation / AEP



MH 92S_1db21938-dc0f-4716-a16c-9695e7ac3009_20241217_15 2428_101.jpg, 00:16:38, 343.80ft Manhole / MH 93

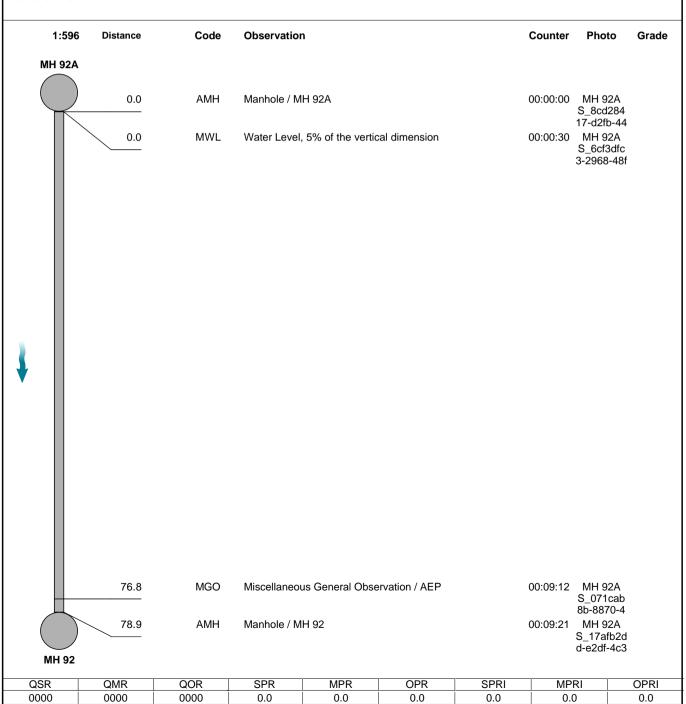


Inspection report

Date: 12/17/2024	Work Order: 00000	Weather: Dry Weather/Wet Grou	Surveyed By: nd TFE-PO	Certificate Number: U-0518-07030193	Pipe Segment Ref.: MH 92A - MH 92
Year laid:	Pre-cleaning:	Direction:	Pipe Joint Length:	Total Length:	Length Surveyed:
	Heavy Cleaning	Downstream	3.0	78.9 '	78.9 '

City:	ALEXANDRIA	Drainage Area:		Upstream MH:	MH 92A
Street:	200 ORONOCO ST	Media Label:	004	Up Rim to Invert:	15.2
Location Code:	Secondary roads, non-numbered suburban/rural	Flow Control:	Not Controlled	Downstream MH:	MH 92
Location Details:		Sheet Number:	4	Down Rim to Invert:	15.0
Pipe shape:	Arched	Sewer Use:	Stormwater Pipe	Total gallons used:	0.0
Pipe size:	44 x 72 "	Sewer Category:	SEC	Joints passed:	0
Pipe material:	Corrugated Metal Pipe	Purpose:	Post Rehabilitation Survey	Joints failed:	0
Lining Method:	Cured in Place	Owner:	ALEXANDRIA		

Additional Info:





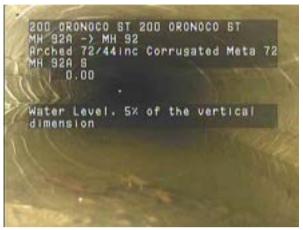
Section Pictures - 12/17/2024 - MH 92A - MH 92

 City
 Street
 Date
 Lateral Segment Reference
 Section No.

 ALEXANDRIA
 200 ORONOCO ST
 12/17/2024
 MH 92A - MH 92
 4



MH 92A S_8cd28417-d2fb-445a-90b6-560c1da47ee2_20241217_1311 16_835.jpg, 00:00:00, 0.00ft Manhole / MH 92A



MH 92A S_6cf3dfc3-2968-48f1-9e7c-a680d4cd103c_20241217_13115 0_550.jpg, 00:00:30, 0.00ft Water Level, 5% of the vertical dimension



MH 92A S_071cab8b-8870-44a9-900b-d8acf657cc20_20241217_1503 12_896.jpg, 00:09:12, 76.80ft Miscellaneous General Observation / AEP



MH 92A S_17afb2dd-e2df-4c3d-a063-f4c8d0588fc7_20241217_13353 0_225.jpg, 00:09:21, 78.90ft Manhole / MH 92

Curing Log

Date of Sheet Job Name	8-Nov-2	-		Installed by:	1.JUN	CO			Installed	Liste:		
Job Number	Oronoco	St										
The state of the s	22-24											
Street/Location	100 Oro		h. 10. 00									
Run Details Comment/Note	Mn 92A	to Mh 92	to Mh 93									
Comment/Note												
Liner Size	53 in x 3	IS mm										
Run Length	414 ft	- Hall		179	Inven	sion						
Wet-Out Length	419 ft			-6	4461	Г		Due	Length =	****		
Liner Tube Press	120000000000000000000000000000000000000			14 ft		-		rout	ca gar	41411		-
Ideal Pressure	8.1 psi			100								
Min Pressure	6.2 psi							53 ir	x 38 mm	Liner		
Max Cold Pressur								11/1/19/10	ut Length		1	
Max Hot Pressure											-	
Pressure is pressu	ire in liner t	ube					Drop in S	Sewer Run	0.0 ft	Sew	er Slope =	0.00%
CURING TEMPER	ATURE &	1.										
Steam liner until s	kin tempera	iture read	hes Temper	ature A belo	w. (Skin t	emperat	ture is the	rmocoupl	e tempera	itures)		
After Temperature		continue	steaming fo	or the Post T	emperatu	ine A tim	e shown	below.	Mark Sales	Section.		
Curing Paramete	f8	See House		Pla	nned	A	ctual	Comme	ints			
Temperature A				13	30°F							
Time to reach Ten	perature A											
	-	7.77						_				
	A SIBBITION	y ume		1.5	hours			-		_		
- cost restiputatione												
COOL DOWN TE	MPERATUR		77.	t cool down:	Cool dov	wn for th	e hours s	hown bel	ow and to	the temp	perature st	hown be
COOL DOWN TEI After Post Temper	MPERATUR ature A sta		77.		Cool dov		e hours s	hown bel	0.00	the temp	perature st	hown bel
COOL DOWN TEI After Post Temper Cool Down Parar	MPERATUR ature A ste neters		77.	Pla					0.00	the temp	perature st	hown bei
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For: Applied Felts Tube

Trial Version

Job Nam	Sheet	6-Nov-	24		installed by	r. T. JON	NES		-	Instalk	ed Date:	- Salavie		
P4922104500	N. C. C. C.	Orono	co St							- In second		-		
Job Num		22-24												
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Run Deta	alis .	Mh 92/	A to Mh 92	2 to Mh 93										
Commen	//Note		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,											
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Run Leng	gth	414 ft				Inver	rsion							En
Wet-Out	Length	419 ft			-	1991	r		0.0				reng.	d
	be Pressi				14 ft		-		Hu	n Length	414 ft			MH
Ideal Pres		8.1 psi			34.11		-		_					
Min Press		6.2 psi			-	-	_		84.1					
	Pressure									n x 38 mr				
	Pressure								Wet-0	Out Lengti	1 = 419 f	1		
	is pressur							Description		-	7			
CURING	TEMPER/	TURE &	1		_			Crop in	sewer Ru	0.0 ft	Sew	ver Slope =	0.00%	
				bas Tamas	olum 5 bala								,	
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CIPP Testing Results

Test Report:

3159

Client:

Amliner East

Address:

601 Jack Enders Blvd.

Berrwille, VA 22611

Date of Order:

11/20/2024

BOYLE Project No: 07-122

Summary of CIPP B **Flexural Testing**



Sample Number:

P240508

Date Received:

11/27/2024

Rec'd Condition:

Good

Cert. #2800.01

ACCREDITED Testing Laboratory

CLIENT-SUPPLIED INFORMATION:

Project:

Oronoco

Project No:

24-22

Liner Manufacturer: Type of Resin:

Material ID:

Contractor:

Sample Identification:

Plate 1 Sample Location: Plate 1

Liner Section:

Diameter (in):

Thickness (mm):

Date Sampled:

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Determination of flexural strength and modulus of elasticity in accordance with ASTM D790.

Thickness determination is in accordance with ASTM D5813, Section 8.1.2.

Material was conditioned in accordance with ASTM D618.

Specimens are sawn out of each liner received.

Compilation of test results (mean values):

		Flexural Modulus	Flexural Strength	Wall Thickness			
Sample Number	Date of Test	of Elasticity	at Break	CI	PP	To	tal*
	(psi)	(psi)	(in)	(mm)	(in)	(mm)	
P240508	12/3/2024	843,000	12,100	1.51	38.3	1.54	39.0

 CIPP Thickness: this is the structural layer of CIPP products. E-modulus is calculated from the CIPP wall thickness.
 Total Thickness: The entire thickness is recorded per ASTM 03567, Section 6.0. This provides the customer information about the total wall thickness and serves as a quality measure ensuring the additional processing materials are included in the final product.

none Notes:

The data provided by the client can affect the validity of the report.

This test report consists of a one page summary, a one page detail (test record:

and a CIPP Thickness Verification. The test results relate solely to the items tested as received. This test report

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Report Date: 12/4/2024

> Charles G. Boyle Quality Manager

Reviewed by: David Harris



Dec 3, 2024

Report No. 3159

Flexural Properties of Plastics

Test Date 03-Dec-24 Testing Machine SSTM-20KN 0921537

Customer Name Amliner East

Operator JM

Boyle Sample ID P240508

Field ID Plate 1

Span 19.5

Boyle Job # 07-122

Project Oronoco

Client Job# 24-22

Sample Location Plate 1

Load Cell S/N (TVI114897), Units (Lbs.)

5000

Crosshead Speed (Inches / min) or Rate

0.64

Displacement Sensor

XHD_100 (XHD100)

Preload Value (-Lbs)

0.5

Test No	Specimen ID	Width (in)	Depth (in)	Max Force (lbs)	Flex Str.at Yield	Flex Str. (psi)	Flex Mox (psi)
14242	1	2.133	1.507	2,246	11,885	13,563	858,524
14243	2	2.107	1.520	1,978	10,152	11,882	779,467
14244	3	2.010	1.483	1,775	8,578	11,748	820,676
14245	4	2.080	1.487	1,899	12,065	12,080	872,662
14246	5	2.080	1.500	1,818	10,188	11,362	882,258
	Mean	2.082	1.499	1,943	10,574	12,127	842,717
	Median	2.080	1.500	1,899	10,188	11,882	858,524
- 0	Std Dev	0.046	0.015	186	1,437	845	42,416
9	Maximum	2.133	1.520	2,246	12,065	13,563	882,258
	Minimum	2.010	1.483	1,775	8,578	11,362	779,467
	Range	0.123	0.037	471	3,488	2,201	102,791

Date: 12-3-24



CIPP Thickness Verification

Boyle Laboratories, LLC 4340 Taggart Creek Rd, Suite G Charlotte, NC 28208

Client Name:	Amliner East	Job No.: 07-12	2
Location of Project:	Oronoco		
Test Performed by:	JM	Test Date:	11/27/2024

		Wall Th	ickness		
	CI	PP*	Total*		
P240508	in.	mm	in.	mm	
Thickness 1	1.500	38.10	1.530	38.86	
Thickness 2	1.510	38.35	1.540	39.12	
Thickness 3	1.570	39.88	1.600	40.64	
Thickness 4	1,510	38.35	1.540	39.12	
Thickness 5	1.490	37.85	1.520	38.61	
Thickness 6	1.500	38.10	1.530	38.86	
Thickness 7	1.470	37.34	1.500	38.10	
Thickness 8	1,500	38.10	1.530	38.86	
Avg Thickness	1.506	38.26	1.536	39.02	
STDEV	0.029	0.730	0.029	0.730	

Non-Structural Deduct 0.030

Notes:

Felt based CIPP contain multiple layers. In addition to felt and resin, there may also be additional layers of glass and an inner coating.

Therefore, two (2) wall thickness measurements are recorded.

- 1. CIPP: this is the structural layer of the CIPP products. E-modulus is calculated from the CIPP wall thickness.
- 2. Total Thickness: The entire thickness is recorded per ASTM D 3567, Section 6.0. This provides the customer information about the total wall thickness and serves as a quality measure ensuring the additional processing materials are included in the final product.

Signature:

Charles G. Boyle Quality Manager

- Measurements are taken in inches to three decimal points.
- Eight (8) locations are measured for thickness around the test specimen.
- 3. The average of the 8 measurements is calculated to obtain the reported thickness of the test specimen.

Cert. #2800.01 - Testing Laboratory

Quality Control Procedure:

ITCP-CIPP Certificates



OF COMPLETION

PROUDLY PRESENTED TO

Shawn Coleman



-

Certification Number: C0048151-052024

Expiration Date: 5/24/2029





CERTIFICATE OF COMPLETION



THIS CERTIFICATE IS PROUDLY PRESENTED TO

Thomas Johnson

Certificate Number: CIPP-0520-0401184

Sheila Joy

Sheila Joy Executive Director Cure-In-Place Pipe Since 2020 Issued: 05/19/2020 Expires: 05/18/2025



Note: The user is not an employee, agent or partner of NASSCO. The user acknowledges and agrees that NASSCO does not supervise or control the user and that NASSCO shall not be responsible for any acts or omissions of the user.

Inspection Daily Reports

INSPECTOR'S DAILY REPORT

Date:	10-24-2024	Page No:1 Of3
Project Name:	City Of Alexandria Inspection Services	Project No: <u>60734134</u>
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sunny PM	Temperature: High: 66 Low: 59

CONTRACTOR: (Am-Liner) (Triangle Contracting)

CONTRACTOR TIME: 8:00 am

INSPECTOR TIME: 9:00 am

INSPECTION ACTIVITY:

During today's inspection. I spoke with Tony (Foreman for Triangle Contracting) who advised me that no work would be started today, like originally thought to be. The only task for today was to off load tools and bring in machinery for the excavation. Tony Advised me that excavation would begin tomorrow 10-25-2024.

VISITORS: N/A

ISSUES: N/A

NOTE: N/A

ITEMS REQUIRING FOLLOW-UP:

N/A

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco St		Aecom	60734134	Engineering	5.25 hrs	
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)			HOURS	
	TC	Bobcat (ME-03)	Bobcat (ME-03)			





PHOTO #3

INSPECTOR'S DAILY REPORT

Date:	10/25/2024	Page No:1 Of5
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Thomas Johnson	
Weather:	Sunny AM Sunny PM	Temperature: High: 69 Low: 44
CONTRACTOR:	Triangle	
CONTRACTOR '	TIME: 8:00 a.m.	
INSPECTOR TIN	1E: 9:30 a.m.	
INSPECTION AC	CTIVITY: Remove and Replace storm water r	manhole MH92A for CIPP lining access.
Manhole92A w	as removed.	

<u>VISITORS:</u> Brian Whiteley-City of Alexandria Inspector III, Washington Gas and Utility Locator

ISSUES: During the manhole removal, contractor exposed an unknown utility pipe which STOPPED work.

NOTE: Due to unknown utility found during excavation, Triangle needed to verify pipe owner and the active status. If pipe is active it will need to be rerouted to allow work to be completed. If abandoned the utility owner or contractor (if permitted) will remove the pipe. Utility locator could not verify asset and it wasn't in their records. Washington Gas was on site to verify that this asset was not theirs. Dominion Energy was to be contacted to verify ownership but waiting to hear back.

ITEMS REQUIRING FOLLOW-UP:

Dominion Energy to visit site and verify any ownership of utility. Unknown utility to be removed or rerouted.

Trench box placement pending a utility removal or rerouting.

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS
91Oronoco Street, Alexandria, VA 22314		AECOM	NA	Engineering	8	
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				HOURS
1	Triangle	Komatsu Excavator (Used a	Komatsu Excavator (Used at all times during Inspection)			
1	Triangle	Bobcat Mini Skid Steer (on	Bobcat Mini Skid Steer (on-site but wasn't used during Inspection)			8















INSPECTOR'S DAILY REPORT

Date:	<u>10/28/2024</u> Page No:1 Of5
Project Name:	City of Alexandria Inspection Services Project No: 60734134
Inspector:	Thomas Johnson
Weather:	Sunny AM Sunny PM Temperature: High: 69 Low: 44
CONTRACTOR:	Triangle Contracting L.L.C.
CONTRACTOR	ГІМЕ: 8:00 a.m.
INSPECTOR TIM	1E: 9:30 a.m.
INSPECTION AC	CTIVITY: Remove unknown utility manhole at MH92A and install smaller trench box.
Unknown utilit	y hindering trench box installation was removed.
Unused Verizo	n conduit was uncovered and slightly damaged (Utility locator did not previously find this

Verizon conduit).

VISITORS: UtiliQuest (remarked/verified utilities), AM Liner (dropped off equipment for lining task)

ISSUES: During the further excavation, an unused PVC Verizon conduit was damaged but will be repaired.

NOTE: Triangle Contracting verified unknown utility conduit to be abandoned. After various utility owners verified the unknown utility was not their asset, Triangle performed a test cut to see if it in use by cutting small opening on top of pipe. The pipe was determined to be abandoned and was removed from the excavation. This allowed for the trench box installation.

NOTE: The smaller trench box was required due to several utilities crossing or within close proximity to the excavation.

ITEMS REQUIRING FOLLOW-UP:

Trench box installation.

Cut and remove the vertical corrugated section of storm water manhole MH92A for lining access. Smaller trench box to be delivered to site.

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS	
91Oronoco	91Oronoco Street, Alexandria, VA 22314		AECOM	NA	Engineering	8
	С	ONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)			HOURS	
1	Triangle	Komatsu Excavator (Used at all times during Inspection)				8
1	Triangle	Bobcat Mini Skid Steer 1770 (on-site but wasn't used during Inspection)			8	
1	Triangle	Bobcat Mini Excavator E42 (on-site but wasn't used during Inspection)			8	
NA	AM Liner	Various lining equipment was delivered to site			NA	





PHOTO #3











INSPECTOR'S DAILY REPORT

Date:	10-29-2024	Page No:1 Of4
Project Name:	City Of Alexandria Inspection Services	Project No: <u>60617941</u>
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sunny PM	Temperature: High: 67 Low: 42
CONTRACTOR:	(Am- Liner) (Triangle Contracting)	

CONTRACTOR TIME: 8:00am

INSPECTOR TIME: 8:40

INSPECTION ACTIVITY:

<u>VISITORS:</u> City Of Alexandria Project Manager (Brian)

ISSUES:

NOTE: Other visitors to the site included:

- Stantec- There scope of work included product recovery, pumping out the recovery well.
- Reliable Onsite Services- There scope of work was to service the porter potty's on site.

ITEMS REQUIRING FOLLOW-UP:

[&]quot;Installing Trench Box

[&]quot;Leveling out soil for trench box installation

[&]quot;Removing Steel Frame from inside manhole.

[&]quot; Making Sand bags for cofferdam

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS	
91 Oronoco St Alexandria, Va 22314			Aecom	60617941	Engineering	10
	C	ONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)			
	Am-Liner	Liner JCB Loadall 512-56 (11587582)				8
	TC Komatsu (EH-01) (PC-210-LC)				8	
	TC Bobcat (SS-09)					8
	TC Bobcat (ME-03)				8	
	TC	Komatsu EH-18 (PC-36 LC)			0	
	TC Komatsu EH- (PC-36 LC Lemac bucket attachments) (x2)				0	



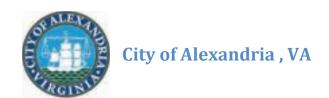


PHOTO #3









INSPECTOR'S DAILY REPORT

Date:	<u>10/30/2024</u> Pa	ge No:1 Of5				
Project Name:	City of Alexandria Inspection Services	Project No: 60734134				
Inspector:	Thomas Johnson					
Weather:	Sunny AM Sunny PM Ter	mperature: High: <u>78</u> Low: <u>51</u>				
CONTRACTOR:	Triangle Construction, L.L.C.					
CONTRACTOR TIME: 8:00 a.m.						
INSPECTOR TIM	ME: 10:00 a.m.					
INSPECTION AC	CTIVITY: Cut corrugated vertical access pipe down t	o storm water pipe crown. Install a larger tem-				

porary vertical pipe for liner installation. Install cofferdam at the outfall to Potomac River.

<u>VISITORS:</u> Brian Whitley (CoF Inspector), Mel Willet, Michael Wadding (AM Liner), Moubin (AECOM)

ISSUES: No issues noted

NOTE: Triangle Contracting installed trench box and place metal plates for shoring of the trench walls. After trench box was installed Triangle Contracting cut away the vertical corrugated metal access pipe, sections at a time down to the crown of the storm water line. AM Liner would temporarily install a larger diameter vertical pipe to allow for liner installation. The liner would be installed on the week of 11/4/2024. Downstream at the outfall, Triangle Contraction was preparing to install a cofferdam to inhibit any debris or chemicals from entering directly into the Potomac River. While on site crew was filling the large sand bags for the cofferdam construction.

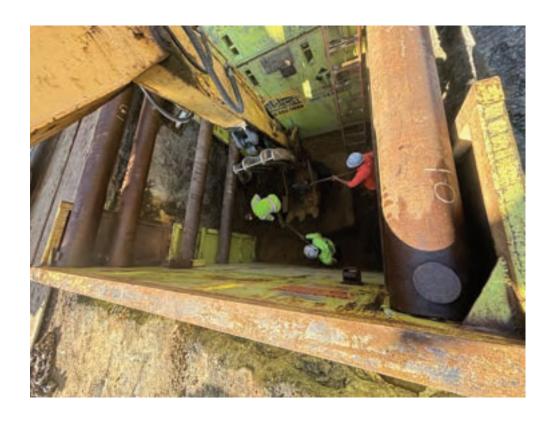
ITEMS REQUIRING FOLLOW-UP:

Cofferdam Installation.

Install vertical pipe for lining task.

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS
91Oronoco Street, Alexandria, VA 22314		AECOM	NA	Engineering	8	
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				HOURS
1	Triangle	Komatsu Excavator 210 (U	Komatsu Excavator 210 (Used at all times during Inspection)			
1	Triangle	Robcat Mini Skid Steer 1770 (on-site but wasn't used during Inspection)				NA
1	Triangle	Bobcat Mini Excavator E42 (on-site but wasn't used during Inspection)			NA	
1	AM Liner	JCB Loadall Forklift 512-56 (on-site but wasn't used during Inspection)			NA	















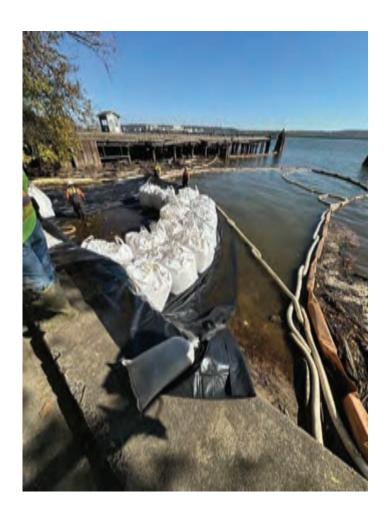
Date:	10-31-2024	Page No:	Of	4
Project Name:	City Of Alexandria Inspection Services	Pr	oject No: <u>6073</u> 4	1134
Inspector:	Shawn Coleman			
Weather:	Sunny AM Sunny PM	Temperature:	High:79	Low: <u>64</u>
INSPECTION ACT The Contractors The Contractors The Contractors The Contractors	ME: 8:35 am			
VISITORS:				
ISSUES: N/A				
NOTE:				

ITEMS REQUIRING FOLLOW-UP:

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS	
91 Oronoco	91 Oronoco St Alexandria Va			NA	Engineering	10	
	C	ONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.		
	OWNER	OWNER DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
1	Am-Liner	JCB LOADALL (11587582	2) (512-56)			8	
1	TC	Bobcat (SS09-T770)				8	
1	1 TC Bobcat (E-42) (ME-03)						
1	1 TC Komatsu (EH-01) (PC 210-LC)						
1	1 TC Komatsu (EH-18) (PC 360 LC)						











Date:	11-01-2024				Page No:	_1O	of	3	
Project Name:	City Of Alexa	ndria I	nspection S	ervices	P	roject No:	60734	1134	
Inspector:	Shawn Colem	an							
Weather:	Sunny	AM	Sunny	PM	Temperature:	High:	80_	Low:	54

CONTRACTOR: Shawn Coleman

CONTRACTOR TIME: 8:00 am

INSPECTOR TIME: 9:00 am

INSPECTION ACTIVITY:

- •Pumps and floats set up at cofferdam
- Triangle contracting will pump out excess water that collected in the cofferdam overnight.
- •Set-Up tent over man-hole for the liner
- •Triangle Contracting will be hauling off equipment from the worksite today (Komatsu EH-01 PC-210-LC) (Bobcat ME-03)

VISITORS:

ISSUES:

NOTE: United rentals came for an electrical repairing of the JCB Loadall, also to drop off floats for the cofferdam. United rentals also brought out pumps to pump out excess water that collected in the cofferdam overnight.

"Curated Events setup the 20x7 tent over the Wet-out Conveyor

ITEMS REQUIRING FOLLOW-UP:

+

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco	91 Oronoco St Alexandria Va 22314			NA	Enginerring	10
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	TC Bobcat (E-42) (ME-03					4
	TC	(Komatsu EH-18) (PC 360	LC)			4
	Am-Liner JCB LOADALL (11587582) (512-56)					









Date:	11/04/2024	Page No:1 Of5
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Thomas Johnson	
Weather:	Sunny AM Sunny PM	Temperature: High: 66 Low: 40
CONTRACTOR:	Triangle Construction, L.L.C.	
CONTRACTOR	ГІМЕ: 8:00 а.m.	
INSPECTOR TIM	1E: 9:00 a.m.	
INSPECTION AC	CTIVITY: Clean and CCTV storm water pipes. P cleaning and CCTV. Perform water sa	1 0 11

VISITORS: Brian Whitley (City of Fairfax Inspector), Phillip Giuliani (AM Liner), Rob Brooks (MDVP)

<u>ISSUES:</u> Inflow at the cofferdam location due to high tide and cofferdam seal at outfall structure. Triangle Contracting had excavator and bobcat vandalized overnight. No significant damage noted.

NOTE: Triangle Contracting attempted to seal the leak at the cofferdam. Leak was from water entering through the dry stacked stone at the base of outfall. MDVP cleaned and performed CCTV for the upstream pipes. The outfall pipe could not be cleaned or CCTV'd until low tide. AM Liner completed water sampling at the outfall during the pipe cleaning.

ITEMS REQUIRING FOLLOW-UP:

Cofferdam repair and reseal.

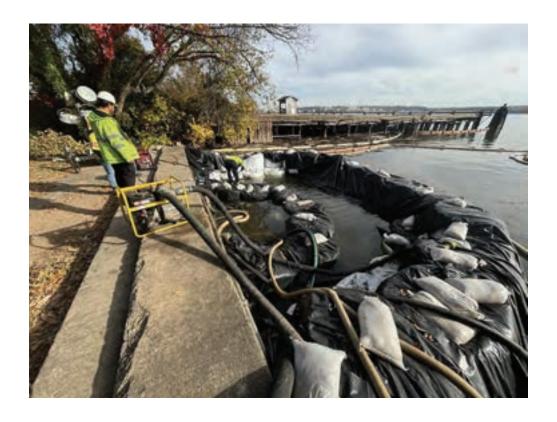
Clean and CCTV the outfall pipe during low tide.

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS	
91Oronoco	Street, Alexa	ndria, VA 22314	AECOM	NA	Engineering	8	
	C	ONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.		
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
1	Triangle	Komatsu Excavator 210 (U	Komatsu Excavator 210 (Used at all times during Inspection)				
1	1 Triangle Bobcat Mini Skid Steer 1770 (on-site but wasn't used during Inspection)						
1	Triangle	Bobcat Mini Excavator E42	2 (on-site but was	n't used durin	g Inspection)	NA	
1	1 AM Liner JCB Loadall Forklift 512-56 (on-site but wasn't used during Inspection)						
1	1 MDVP CCTV box truck					8	
1	MDVP	Jetter truck				8	















Date:	11-05-2024	Page No:1 Of4
Project Name:	City of Alexandria Inspection Services	Project No: <u>60734134</u>
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sunny PM	Temperature: High: <u>78</u> Low: <u>55</u>

CONTRACTOR: (Am-Liner) (Triangle Contracting)

CONTRACTOR TIME: 8:00 am

INSPECTOR TIME: 9:00 am

INSPECTION ACTIVITY:

- Am Liner was supposed to receive delivery of resin today, however the the delivery was pushed back to 11-06-2024
- Am liner continued assembly of the liner tower today
- Am liner assembled the liner on the liner tower
- Am Liner will be installing boards for the back stop at the intersection of Union St & Oronoco St
- Reliable Onsite Services arrived on site today to pump out the porter potty on site
- Night work cancelled due to resin delay

VISITORS: (Al Malla Moubin Aecom) (Phillip Giuliani Am Liner) (Brian Whiteley City of Alexandria)

+

ISSUES:

NOTE: Triangle Contracting leaving job site at 10:00 Am

ITEMS REQUIRING FOLLOW-UP:

Receiving of resin delivery tomorrow 11-06-2024 Back stop installation 11-06-2024

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS
91 Orono	91 Oronoco St Alexandria, Va 22314			NA	Engineeing	10
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					HOURS
	Am-Liner	JCB LOADALL 11587582	512-56			5
	TC	Bobcat (SS-09)				N/A
	TC Komatsu EH-18 (PC-36 LC)					N/A

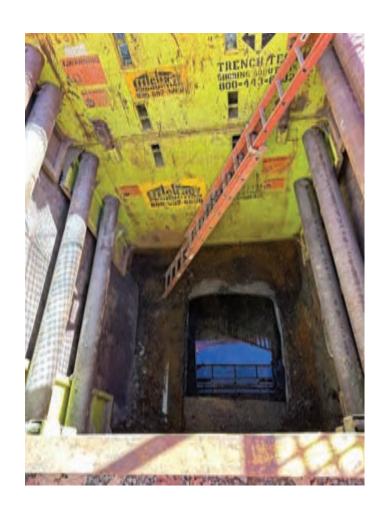




PHOTO #3







Date:	11-06-2024	Page No:1 Of4
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sunny PM	Temperature: High: 83 Low: 62

CONTRACTOR: Am -Liner

CONTRACTOR TIME: 8:00 Am

INSPECTOR TIME: 9:00 Am

INSPECTION ACTIVITY:

- Am liner installed back stop at the intersection of Oronoco St & Union St
- Am liner received resin this morning
- Am liner performed calibration today
- Am Liner performed wet out process today
- Am liner will start the liner inversion today

<u>VISITORS:</u> (Tafesse City of Alexandria) (Erin Cater City of Alexandria) (Al Moubin AECOM)

ISSUES:

NOTE: Continued Visitors... (Transportation and environmental services)

ITEMS REQUIRING FOLLOW-UP:

Follow up on Am-Liner inversion time table on 11-07-2024

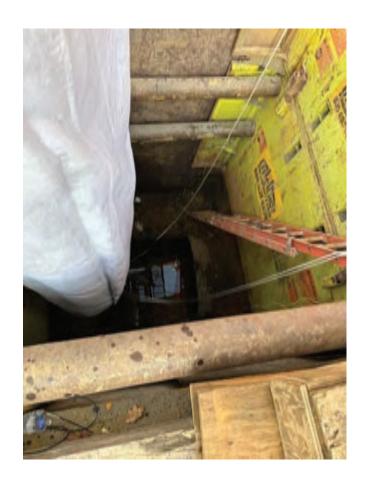
	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco	91 Oronoco St Alexandria, Va 22314			NA	Engineering	10
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	DAY. INDICAT	E HOURS USED.	
	OWNER DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				HOURS	
	Am Liner	JCB LOAD ALL (11587582) (512-56)				











Date:	11/6 - 11/7/20	24			Page No:	_1C	of		
Project Name:	City of Alexa	ndria Iı	nspection Se	ervices	P	roject No:	6073	4134	
Inspector:	Tom Johnson								
Weather:	Warm	AM	Warm	PM	Temperature	High:	83	Low:	62

CONTRACTOR: Am -Liner

CONTRACTOR TIME: 8:00 PM

INSPECTOR TIME: 7:00 PM

INSPECTION ACTIVITY:

• Am liner performed the entire liner inversion

• Am liner started the curing process

<u>VISITORS:</u> Phil & Izzy Guiliani (AmLiner), Brian Whitley (City of Alexandria)

ISSUES: No issues during the night work

NOTE: NA

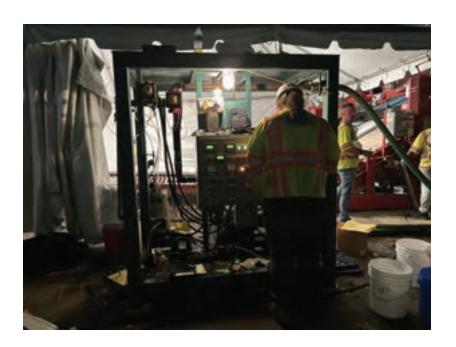
ITEMS REQUIRING FOLLOW-UP:

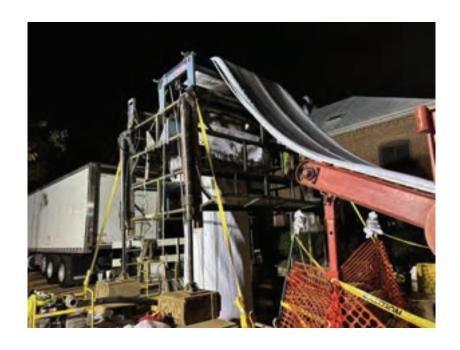
Follow up on the liner curing process and CCTV timetable.

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco St Alexandria, Va 22314			AECOM	NA	Engineering	8
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				HOURS	
	Am Liner	JCB LOAD ALL (1158758	2) (512-56)			8



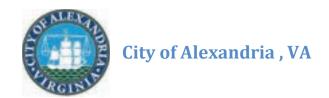












Date:	11-07-2024	Page No:1 Of4			
Project Name:	City of Alexandria Inspection Services	Project No: 60734134			
Inspector:	Shawn Coleman				
Weather:	Sunny AM Sunny PM	M Temperature: High: <u>84</u> Low: <u>64</u>			

CONTRACTOR: Am-Liner

CONTRACTOR TIME: 8:00 am

INSPECTOR TIME: 9:00 am

INSPECTION ACTIVITY:

- Am liner has complete the completed the liner inversion
- Am liner has started the process of curing the liner
- Am liner has completed the process of curing the liner
- Am liner has started the cool down stage of the liner

<u>VISITORS:</u> (Transportation and Environmental Services) (City Of Alexandria fire Dept.) (Hazardous Materials Response Unit) (Deputy Chief of fire)

ISSUES: Residents in the area complained of a strong foul odor in the area.

NOTE:

The fire department.,Ems, and Hazardous materials response unit responded on scene of the complaints of a strong odor. Styrene was found to be the cause of the odor, due to the curing of the liner in progress. Am-Liner was asked to produce the MSDS, but was unable to supply the MSDS on demand. Also the fire department . asked Am Liner to produce a styrene gas detector, but was unable to supply the detector on demand. The MSDS and Detector were eventually produced by Am-Liner while all agencies were still on scene.

ITEMS REQUIRING FOLLOW-UP:

Follow up with the cool down time table,

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco St Alexandria, Va 22314		AECOM	NA	Engineering	10	
	CONSTRUCTION EQUIPMENT ON JOB SITE TODAY. INDICATE HOURS USED.					
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				









PHOTO #5

Date:	11/7 - 11/8/2024	Page No:1 Of5
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Tom Johnson	
Weather:	Warm AM Warm PM	Temperature: High: 81 Low: 61

CONTRACTOR: Am -Liner

CONTRACTOR TIME: 8:00 PM

INSPECTOR TIME: 7:00 PM

INSPECTION ACTIVITY:

• Am liner performed curing of the liner

<u>VISITORS:</u> Phil (AmLiner), Brian Whitley (City of Alexandria)

ISSUES: No issues during the night work

NOTE: NA

ITEMS REQUIRING FOLLOW-UP:

Follow up on the liner curing process, remaining outfall pipe segment cleaned and CCTV timetable.

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco St Alexandria, Va 22314			AECOM	NA	Engineering	8
	CONSTRUCTION EQUIPMENT ON JOB SITE TODAY. INDICATE HOURS USED.					
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				HOURS
	Am Liner	JCB LOAD ALL (11587582) (512-56)				













PHOTO #7

Date:	11-08-2024	Page No:1 Of3
Project Name:	City of Alexandria Inspection Services	Project No: 60734133
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sunny PM	Temperature: High: 64 Low: 55
CONTRACTOR:	Am-Liner	
CONTRACTOR	FIME: 8:00	
INSPECTOR TIM	IE: 9:00 Am	
INSPECTION AC	TIVITY: ocess of CIPP will be occurring all day toda	y.
VISITORS: ISSUES: NOTE:		

ITEMS REQUIRING FOLLOW-UP:

Follow up on the cool down process on 11-09-2024 (Has the cooling process ended)

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS			
91 Oronoco St Alexandria, Va 22314			AECOM	NA	Engineering	10		
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	DAY. INDICAT	E HOURS USED.			
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
	Am Liner	JCB LOADALL 11587582	JCB LOADALL 11587582 512-56					







Date:	11-09-2024	Page No: 1 Of3
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sunny PM	Temperature: High: 60 Low: 46
INSPECTION AC	ГІМЕ: 8:00 Am ИЕ: 9:00 Am	

VISITORS:

ISSUES: The liner was more difficult to cut than normal which caused the cutting to be broken down into Services.

ITEMS REQUIRING FOLLOW-UP:

Am-Liner was not able to cut the entire liner from the manhole due to the liner being more thicker than normal. Am Liner will continue to cut the liner on Monday morning.

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS		
91 Oronoco St Alexandria, Va 22314			AECOM	NA	Engineering	6	
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	DAY. INDICAT	E HOURS USED.		
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	Am Liner	JCB LOADALL 512-56 11	JCB LOADALL 512-56 11587582				







Date:	11/11/2024				Page No:	<u> </u>		
Project Name:	City of Alexand	ria In	spection Service					
Inspector:	Tom Johnson							
Weather:	Sunny	AM	Cool	_ PM	Temperature:	High:	Low:	55
CONTRACTOR:	Am -Liner							
CONTRACTOR 7	TIME: 8:00 PM							

INSPECTOR TIME: 7:00 PM

INSPECTION ACTIVITY:

• Am liner performed curing of the liner

<u>VISITORS:</u> Phil Guilianni (AmLiner), Shelby Dyre (Stantec)

ISSUES: None

NOTE: Stantec was performing well samples today. Liner was manually being cut away from pipe openings. This work was safely performed.

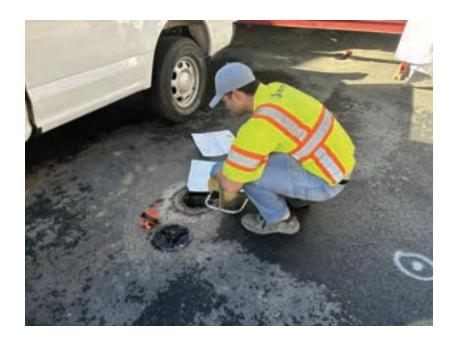
ITEMS REQUIRING FOLLOW-UP:

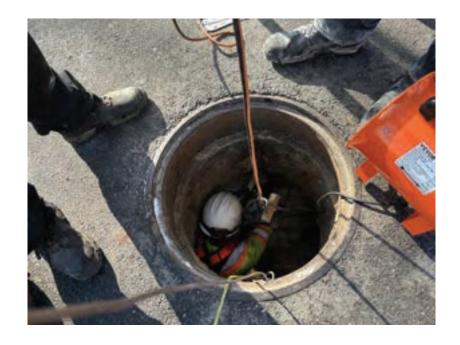
CCTV timetable for project completion and remaining downstream pipe segment needs to be cleaned before CCTV. New manhole Installation.

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS		
91 Oronoco St Alexandria, Va 22314			AECOM	NA	Engineering	8	
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.		
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	Am Liner	JCB LOAD ALL (1158758	JCB LOAD ALL (11587582) (512-56)				















11-12-2024	Page No:	1	Of	4	
City Of Alexandria Inspection Services		Proje	ect No: 6073	4134	
Shawn Coleman					
Sunny AM Sunny PM	Temperatu	ıre: I	High: <u>64</u>	Low: _	45
Am-Liner					
ГІМЕ: 8:00 Am					
ME: 9:00 Am					
CTIVITY:					
l begin disassembling the liner roller. er will be removed from the worksite today.		hole.			
	City Of Alexandria Inspection Services Shawn Coleman Sunny AM Sunny PM Am-Liner TIME: 8:00 Am CTIVITY: begin removing the liner tower equipment of begin disassembling the liner roller. er will be removed from the worksite today.	City Of Alexandria Inspection Services Shawn Coleman Sunny AM Sunny PM Temperatu Am-Liner TIME: 8:00 Am TE: 9:00 Am CTIVITY: begin removing the liner tower equipment over the man begin disassembling the liner roller.	City Of Alexandria Inspection Services Shawn Coleman Sunny AM Sunny PM Temperature: Am-Liner TIME: 8:00 Am CTIVITY: begin removing the liner tower equipment over the manhole. begin disassembling the liner roller. er will be removed from the worksite today.	City Of Alexandria Inspection Services Shawn Coleman Sunny AM Sunny PM Temperature: High: 64 Am-Liner TIME: 8:00 Am TE: 9:00 Am CTIVITY: begin removing the liner tower equipment over the manhole. begin disassembling the liner roller. er will be removed from the worksite today.	City Of Alexandria Inspection Services Project No: 60734134 Shawn Coleman Sunny AM Sunny PM Temperature: High: 64 Low: _ Am-Liner TIME: 8:00 Am ETIVITY: begin removing the liner tower equipment over the manhole. begin disassembling the liner roller. er will be removed from the worksite today.

ITEMS REQUIRING FOLLOW-UP:

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS		
91 Oronoco St Alexandria, Va 22314			AECOM	NA	Engineering	10	
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	i Day. Indicat	E HOURS USED.		
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	Am Liner	JCB LOADALL (512-56)	(11587582)			8	









PHOTO #5

Date:	11/13/2024	Page No:1 Of5
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Thomas Johnson	
Weather:	Mostly Sunny AM NA PM	Temperature: High: <u>56</u> Low: <u>36</u>

CONTRACTOR: Triangle Construction

CONTRACTOR TIME: 8:00 a.m.

INSPECTOR TIME: 9:00 a.m.

INSPECTION ACTIVITY:

Preparing manhole segments for new installation.

VISITORS: AMLiner

ISSUES: No issues

NOTE: NA

ITEMS REQUIRING FOLLOW-UP:

Manhole installation.

CCTV

Cofferdam removal

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS		
91Oronoco Street, Alexandria, VA 22314			AECOM	NA	Engineering	8		
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.			
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
1	Triangle	Komatsu Excavator (Used a	Komatsu Excavator (Used at all times during Inspection)					
1	Triangle	Bobcat Mini Skid Steer 177	70 (on-site but wa	sn't used duri	ng Inspection)	0		













PHOTO #7

Date:	11-14-2024	Page No:1 Of	3				
Project Name:	City of Alexandria Inspection Services	Project No: 60734	134				
Inspector:	Shawn Coleman						
Weather:	<u>Cloudy</u> AM <u>Cloudy</u> PM	Temperature: High: <u>54</u>	Low: <u>41</u>				
CONTRACTOR: Triangle Contracting CONTRACTOR TIME: 8:00 Am INSPECTION ACTIVITY: • Triangle Contracting will be hand digging and prepping the manhole for the pouring of the base for the new manhole that will be installed next week. • Am liner will also be onsite to assist with Triangle Contracting							
VISITORS: City ISSUES: NOTE:	Of Alexandria.						

ITEMS REQUIRING FOLLOW-UP:

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS		
91 Oronoco St 22314			AECOM	NA	Engineering	10	
	C	ONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.		
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	TC	Komatsu PC 360 LC					
	TC	Bobcat S300 SS-03					
	Am Liner	JCB LOADALL 512-56 11587582					







Date:	11-15-2024	Page No:1 Of3
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	Cloudy AM Cloudy PM	Temperature: High: <u>57</u> Low: <u>47</u>
CONTRACTOR:	Triangle Contracting	
CONTRACTOR T	IME: 8:00 Am	
INSPECTOR TIM	E: 10:30 Am	
INSPECTION ACT	ΓΙVITY:	
Triangle Contract for the manhole		e to prepare for the pouring of the concrete base

<u>VISITORS:</u> City Of Alexandria Inspector (Brian Whiteley)

ISSUES:

NOTE: Triangle Contracting was instructed to clean up the debris from the manhole chipping to get proper fitment to install the doghouse. The contractor successfully removed the debris from the worksite.

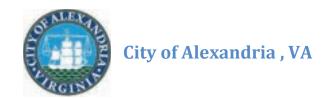
ITEMS REQUIRING FOLLOW-UP:

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS	
91 Oronoco St Alexandria Va, 22314		Aecom	NA	Engineering	8	
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	i Day. Indicat	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	TC	Komatsu PC 360 LC				
	TC	Bobcat SS-03				









Date:	11/18/2024				Page No:	<u>1</u> Of	4
Project Name:	City of Alexand	dria Ins	spection Servi	ces	Pr	oject No: <u>60734</u>	134
Inspector:	Thomas Johnson	on					
Weather:	Overcast	AM	NA	PM	Temperature:	High: <u>64</u>	Low: <u>48</u>
CONTRACTOR:	First Call Envi	ronmen	ital, AMLiner	, Triang	le Construction		
CONTRACTOR	ГІМЕ: 8:00 a.m	l .					
INSPECTOR TIME: 9:00 a.m.							
INSPECTION AC	CTIVITY:						
Triangle Constr	Triangle Construction was cleaning within the trench box for new manhole installation.						

<u>VISITORS:</u> Phil Giuliani (AmLiner)

ISSUES: No issues noted

NOTE: NA

ITEMS REQUIRING FOLLOW-UP:

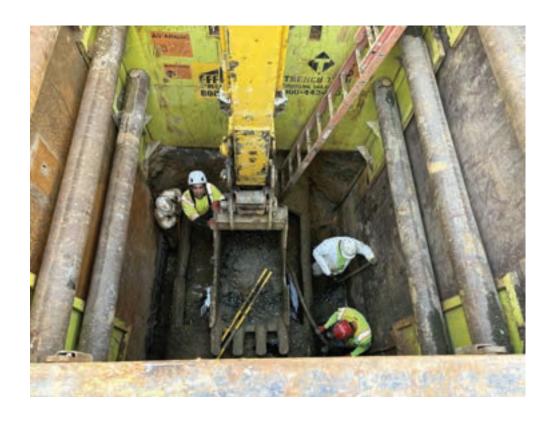
Manhole 92A installation and back-fill.

Complete the removal of cofferdam sandbags.

CCTV and clean downstream pipe once tide subsides (low tide).

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS	
91Oronoco Street, Alexandria, VA 22314		AECOM	NA	Engineering	8	
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
1	Triangle	Komatsu Excavator				
1	Triangle	Bobcat Mini Skid Steer 1770 (not in use)				

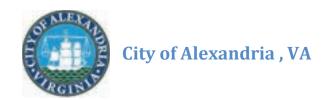












Date:	11-19-2024	Page No:1 Of3
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	<u>Cloudy</u> AM <u>Cloudy</u> PM	Temperature: High: <u>62</u> Low: <u>50</u>

CONTRACTOR: Triangle Contracting

CONTRACTOR TIME: 9:00 Am

INSPECTOR TIME: 10:00 Am

INSPECTION ACTIVITY:

- Triangle Contracting originally planned to pour the concrete for the manhole base today, however the pouring was delayed due to manhole fitment issues. The pouring will be scheduled for a later date.
- Triangle Contracting will be digging/leveling out the corners of the manhole on both sides to prepare for the manhole installation

<u>VISITORS:</u> City Of Alexandria (Nafesse, and Brian Wheately)

<u>ISSUES:</u> The contractor had issues with the doghouse installment due to fitment issues which prevented further manhole installation attempts.

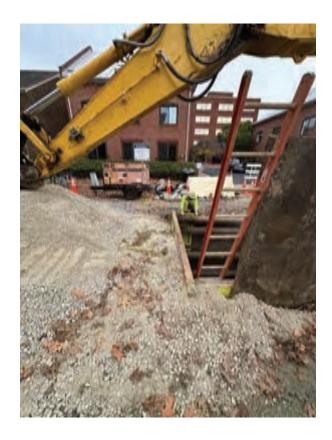
NOTE:

ITEMS REQUIRING FOLLOW-UP:

Follow up with contractor to see what reconfiguration plans have been made to install the manhole

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS	
91 Oronoco St Alexandria, Va 22314		AECOM	NA	Engineering	10	
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	TC	Komatsu EH-18				
	TC Bobcat S300 SS-03					8
	Am Liner JCB 512-56					0







ITEMS REQUIRING FOLLOW-UP:

INSPECTOR'S DAILY REPORT

Date:	11-20-2024	Page No:1 Of3
Project Name:	Ciry Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	<u>Cloudy</u> AM <u>Cloudy</u> PM	Temperature: High: 66 Low: 40
INSPECTION AC	FIME: 9:00 Am IE: 9:10 Am	nhole this morning
VISITORS: ISSUES: NOTE:		

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco st Alexandria Va 22314			AECOM	NA	Engineering	5.25
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	TC	Komatsu EH-18				
	TC Bobcat SS-03 S300					0
	Am Liner JCB 512-56					0





PHOTO #3

Date:	11-21-2024	Page No: Of					
Project Name:	City of Alexandria Inspection Services	Project No: 60734134					
Inspector:	Shawn Coleman						
Weather:	Sunny AM Sunny PM	Temperature: High: 55 Low: 50					
CONTRACTOR:	Triangle Contracting - Am Liner						
CONTRACTOR	ГІМЕ: 9:00 Am						
INSPECTOR TIM	1E: 9:30 Am						
INSPECTION ACTIVITY: "Triangle Contracting will be cleaning out the sides of the manhole & inside the manhole. Debris & mud filled the sides of the manhole from the rain washout that occurred the night before. "Triangle contracting will also be moving manhole to the other side of the street to prepare for thru-way for traffic.							
VISITORS:							
<u>ISSUES:</u>							
NOTE:							

ITEMS REQUIRING FOLLOW-UP:

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS	
91 Oronoco St Alexandria Va 22314			Aecom	NA	Engineering	10	
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.		
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	TC	Komatsu Eh-18 (PC 360 L	Komatsu Eh-18 (PC 360 LC)				
	TC	Bobcat S300 (SS-03)					







Date:	12-02-2024 Page No:	1 Of4
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sunny PM Temperat	ure: High: <u>40</u> Low: <u>37</u>
CONTRACTOR TIMESPECTION ACCUMENT Triangle Conmunication Western Western Construction (Construction) (Constructi		ader bars (6x13) in preparation to
VISITORS: City ISSUES: NOTE:	y of Alexandria (Brian Whitely)	

ITEMS REQUIRING FOLLOW-UP:

Nusbaum Welding and Excavation installed/welded two spreader bars today and should finish installing the remaining bars tomorrow.

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS	
91 Oronoco St Alexandria, Va 22314			Aecom	NA	Engineering	10	
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	DAY. INDICAT	E HOURS USED.		
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
	TC	Komatsu PC 360 LC	Komatsu PC 360 LC				
	TC	Bobcat SSO3 S300					









PHOTO #5

Date:	12-03-2024	Page No:1 Of4
Project Name:	City Of Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sumny PM	Temperature: High: 45 Low: 40

CONTRACTOR: Triangle Contracting

CONTRACTOR TIME: 9:00 Am

INSPECTOR TIME: 9:45 Am

INSPECTION ACTIVITY:

- The Contractor (Nusbaum Excavation and Paving) will be cutting out the remaining spreader bars inside the trench box.
- The manhole will be installed today

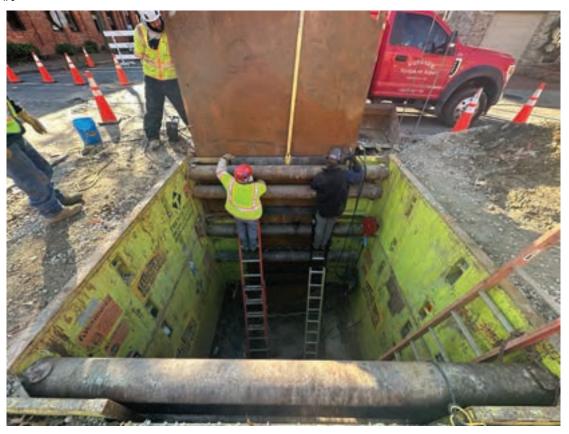
<u>VISITORS:</u> Brian Whitely (City of Alexandria)

ISSUES: Manhole did not fit inside the hole.

<u>NOTE:</u> The sides of the manhole would not fit over the pipe. The manhole edges had to be reconfigured (cut to size) in order to properly got over the pipe.

ITEMS REQUIRING FOLLOW-UP:

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco St Alexandria Va 22314			Aecom	NA	Engineering	10
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	DAY. INDICAT	E HOURS USED.	
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	TC	Komatsu (PC 360 LC) (EH-18)				
	TC	Bobcat (SS-03 S300)				







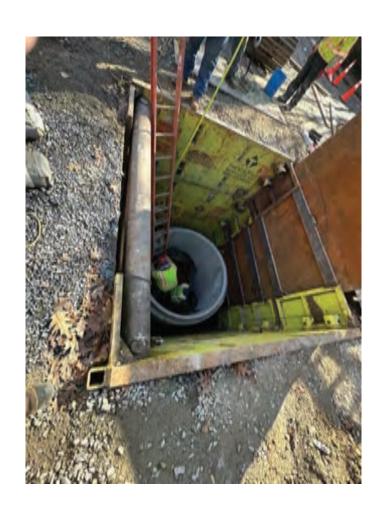


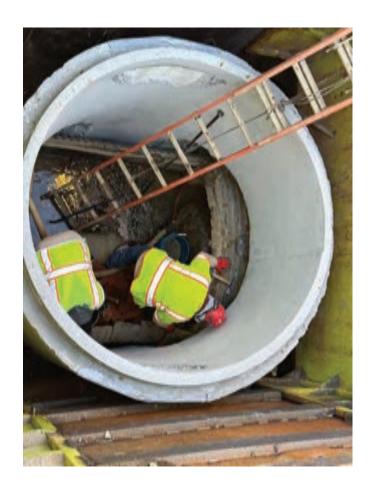


Date:	12-04-2024	Page No:	Of	3		
Project Name:	City of Alexandria Inspection Services	Pı	roject No: <u>60734</u>	134		
Inspector:	Shawn Coleman					
Weather:	Sunny AM Sunny PM	Temperature:	High: <u>47</u>	Low: 40		
CONTRACTOR: CONTRACTOR TIMESPECTOR TIMESPECTION ACCURACY	IE: 9:30 Am					
 Triangle Contracting will be installing the Manhole today, The sides of the manhole was cut in order to fit over the pipe l. Triangle Contracting will be building a stable base around the manhole to ensure a solid foundation for the manhole cover and frame. ensuring proper support and preventing any potential settling or movement of the structure. 						
VISITORS: Bria	n Whitely (City of Alexandria) (Stantec)					
<u>ISSUES:</u>						
NOTE:						

ITEMS REQUIRING FOLLOW-UP:

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS	
91 Oronoco St Alexandria Va 22314			Aecom	NA	Engineering	10	
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	DAY. INDICAT	E HOURS USED.		
	OWNER	DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
	TC	Komatsu PC 360 LC (Eh-1	Komatsu PC 360 LC (Eh-18)				
	TC	Bobcat S300 (SS-03)					







Date:	12/05/2024				Page No:	1 Of			
Project Name:	City of Alexan	City of Alexandria Inspection Services Project No: 60734134							
Inspector:	Thomas Johnson	on							
Weather:	Sunny	AM	Sunny	PM	Temperature:	High:51	Low:	_44	
CONTRACTOR:	Triangle and A	M Lin	er						
CONTRACTOR TIME: 8:00 a.m.									

INSPECTOR TIME: 9:30 a.m.

INSPECTION ACTIVITY: Clean, backfill and Replace storm water manhole MH92A.

Concrete manhole segments added and backfilled.

Trench box remained in place.

<u>VISITORS:</u> Philip Guilliani (AmLiner)

ISSUES: Tidal surge backs debris in pipe outfall.

NOTE: Contractor plans to be completed on 12/13/2024.

ITEMS REQUIRING FOLLOW-UP:

Final pipe cleaning and Post CCTV Inspection Continue resetting new manhole.

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS		
91Oronoco Street, Alexandria, VA 22314			AECOM	NA	Engineering	8	
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.		
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
1	Triangle	Komatsu Excavator (Used a	Komatsu Excavator (Used at all times during Inspection)				
1	Triangle	Bobcat Mini Skid Steer (on	Bobcat Mini Skid Steer (on-site but wasn't used during Inspection)				











Date:	12/09/2024	Page No: Of 5
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Thomas Johnson	
Weather:	Mostly Sunny AM NA PM	Temperature: High: <u>56</u> Low: <u>36</u>
CONTRACTOR:	Triangle Construction	
CONTRACTOR T	ГІМЕ: 8:00 a.m.	
INSPECTOR TIM	IE: 9:00 a.m.	
INSPECTION AC	TIVITY:	
Cleaning the ni	oe for MH92A and surrounding area within tr	rench box for new manhole installation

<u>VISITORS:</u> First Call Environmental

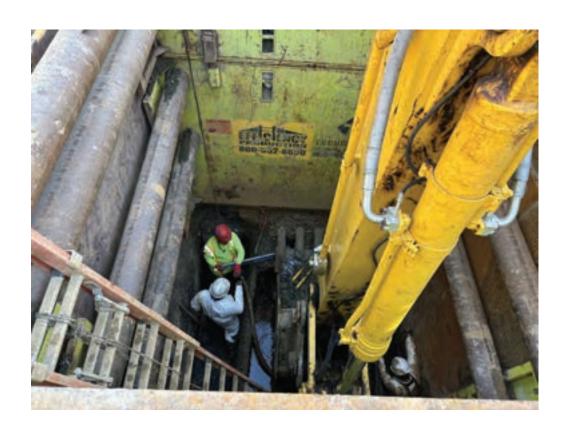
ISSUES: Dirt entered storm water line from rehabilitation work (currently being cleaned).

NOTE: NA

ITEMS REQUIRING FOLLOW-UP:

Manhole installation.

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS	
91Oronoco Street, Alexandria, VA 22314			AECOM	NA	Engineering	8	
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.		
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
1	Triangle	Komatsu Excavator (Used a	Komatsu Excavator (Used at all times during Inspection)				
1	Triangle	Bobcat Mini Skid Steer 177	70 (on-site but wa	sn't used duri	ng Inspection)	0	















Date:	12-10-2024	Page No:1 Of4
Project Name:	City Of Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	<u>Cloudy</u> AM <u>Cloudy</u> PM	Temperature: High: <u>56</u> Low: <u>50</u>
CONTRACTOR:	Triangle Contracting - Am Liner	

CONTRACTOR TIME: 9:00 Am

INSPECTOR TIME: 10:00 Am

INSPECTION ACTIVITY:

"Contractor will be tying in connection today on the opposite side of the manhole

<u>VISITORS:</u> Brian Whitely (City Of Alexandria) (Hillis Carness Inspector)

ISSUES:

NOTE: Contractor did not backfill and pull trench box out of the manhole today

ITEMS REQUIRING FOLLOW-UP:

[&]quot;Contractor plans on back filling and pulling the trench box out of the manhole today

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS
91 Oronoco St Alexandria Va 22314			Aecom	Na	Engineering	10
	C	CONSTRUCTION EQUIPMENT	ON JOB SITE TOI	DAY. INDICAT	E HOURS USED.	
	OWNER DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					HOURS
	TC	Komatsu (PC 360 LC EH-18)				
	TC Bobcat (S300 SS-03)					0



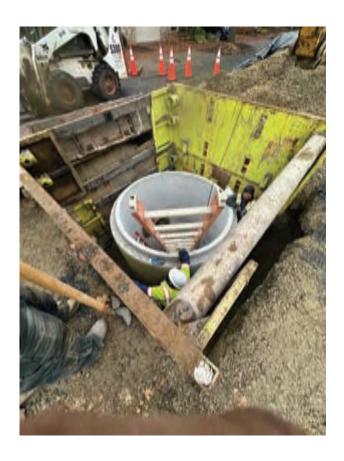
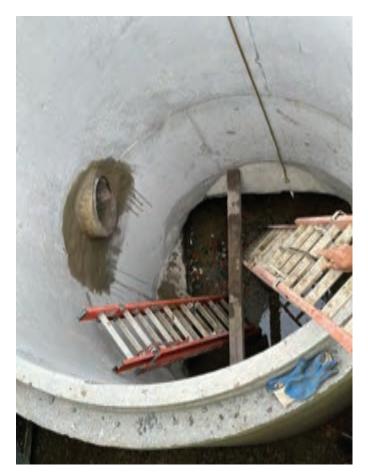
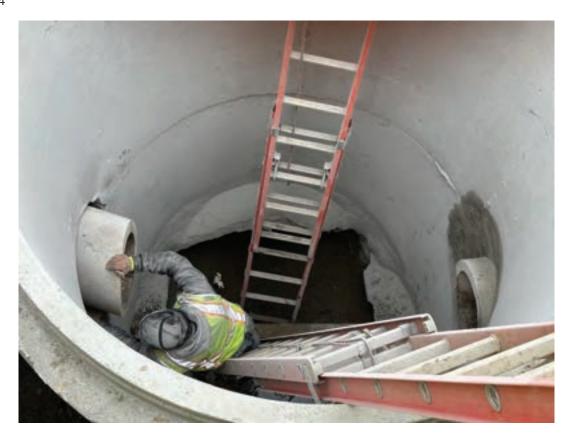


PHOTO #3







Date:	12-12-2024	Page No:1 Of4
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Shawn Coleman	
Weather:	Sunny AM Sunny PM	Temperature: High: 40 Low: 36
Contractor wilContractor wilContractor wilContractor wil	Il be adjusting manhole frame and installing Il be removing the trench box today out of the backfilling the hole today Il be removing the steel plates Il be shipping of equipment today Il be bring in paving equipment today.	-
ISSUES:	h (City of Alexandria) Tafesse (City of Ale	
NOTE:		

ITEMS REQUIRING FOLLOW-UP:

WORK LOCATION			EMPLOYER	NUMBER	TRADE	HOURS	
91 Oronoco St Alexandria Va 22314			Aecom	Na	Engineering	10	
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.		
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)				
	TC	Komatsu (PC 360 LC) (EH-18)					
	TC Bobcat (S300 SS-03)					2	
	TC Komatsu (BW 120 SL) (AR-01)					0	
						_	

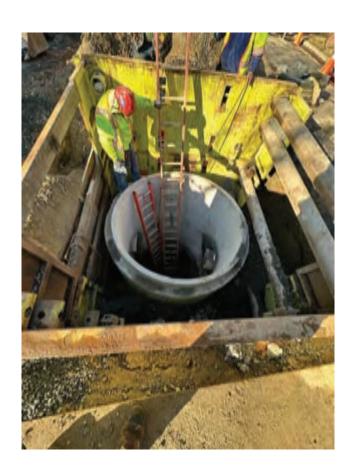




PHOTO #3







Date:	12/13/2024	Page No:	Of	4			
Project Name:	City of Alexandria Inspection Services Project No: 60734134						
Inspector:	Thomas Johnson						
Weather:	Mostly Sunny AM NA PM	Temperature	High: <u>71</u>	Low: <u>43</u>	_		
CONTRACTOR:	Triangle Construction, Stantec						
CONTRACTOR T	FIME: 8:00 a.m.						
INSPECTOR TIME: 9:30 a.m.							
INSPECTION ACTIVITY:							
	forming water well sampling for petroleum. eaning site and waiting for temporary cold pa	tch to place ar	ound new manho	ole MH92A.			

<u>VISITORS:</u> Shelby Dire (Stantec), Tony (Triangle Construction)

ISSUES: No issues noted

NOTE: Any equipment not in use was moved to location near water at the end of Orinoco Street.

ITEMS REQUIRING FOLLOW-UP:

Temporarily cold patch asphalt around new manhole.

Removal of cofferdam.

CCTV and clean pipes.

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS		
91Oronoco Street, Alexandria, VA 22314			AECOM	NA	Engineering	8		
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.			
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
1	Triangle	Komatsu Excavator (Used a	Komatsu Excavator (Used at all times during Inspection)					
1	Triangle	Bobcat Mini Skid Steer 1770						











Date:	12/17/2024	Page No:1 Of4
Project Name:	City of Alexandria Inspection Services	Project No: 60734134
Inspector:	Thomas Johnson	
Weather:	Overcast AM NA PM	Temperature: High: <u>68</u> Low: <u>51</u>

CONTRACTOR: T.F.E. Resources, AMLiner

CONTRACTOR TIME: 8:00 a.m.

INSPECTOR TIME: 9:00 a.m.

INSPECTION ACTIVITY:

T.F.E. Resources was cleaning and performing CCTV.

AMLiner was overseeing the work.

Stantec was performing wet well sampling.

<u>VISITORS:</u> Phil Giuliani (AmLiner), Shelby Dyre (Stantec)

ISSUES: No issues noted

NOTE: T.F.E Resources had taken over Inspection and cleaning services from MDVP.

MDVP refused to do the work prior to today, when scheduled.

ITEMS REQUIRING FOLLOW-UP:

Removal of cofferdam.

CCTV and clean downstream pipe once tide subsides (low tide).

	WORK	LOCATION	EMPLOYER	NUMBER	TRADE	HOURS		
91Oronoco Street, Alexandria, VA 22314			AECOM	NA	Engineering	8		
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.			
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
1	Triangle	Komatsu Excavator (not in	Komatsu Excavator (not in use)					
1	Triangle	Bobcat Mini Skid Steer 1770 (not in use)						

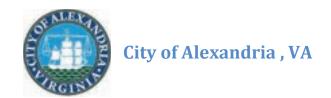












Date:	12/20/2024	Page No:1 Of5					
Project Name:	City of Alexandria Inspection Services	Project No: 60734134					
Inspector:	Thomas Johnson						
Weather:	Overcast AM NA PM	Temperature: High: 64 Low: 48					
CONTRACTOR: Petroleum Management, AMLiner, Triangle Construction CONTRACTOR TIME: 8:00 a.m. INSPECTOR TIME: 9:00 a.m. INSPECTION ACTIVITY: Triangle Construction was removing the cofferdam. Petroleum Management was cleaning the remaining downstream pipe and filtering water in pipe. AMLiner was overseeing the work.							

<u>VISITORS:</u> Phil Giuliani (AmLiner)

ISSUES: No issues noted

NOTE: Petroleum Management was filtering the water inside the pipe for any remaining petroleum by-products.

ITEMS REQUIRING FOLLOW-UP:

Complete the removal of cofferdam sandbags.

CCTV and clean downstream pipe once tide subsides (low tide).

WORK LOCATION		EMPLOYER	NUMBER	TRADE	HOURS			
91Oronoco Street, Alexandria, VA 22314			AECOM	NA	Engineering	8		
	(CONSTRUCTION EQUIPMENT	ON JOB SITE TO	DAY. INDICAT	E HOURS USED.			
	OWNER		DESCRIPTION OF CONSTRUCTION EQUIPMENT USED TODAY (INCLUDE MAKE AND MODEL)					
1	Triangle	Komatsu Excavator	Komatsu Excavator					
1	Triangle	iangle Bobcat Mini Skid Steer 1770 (not in use)						
1	1 Triangle BOMAG Mini Steamroller (not in use)					0		













