

HRSD 1434 Air Rail Avenue Virginia Beach, VA 23455

April 30, 2025

# TABLE OF CONTENTS

1. INTF	RODUCTION AND PURPOSE	1-1
2. MAJ	OR COMPLIANCE ACHIEVEMENTS	2-1
2.1	Flow, Pressure, and Rainfall Monitoring Program	2-1
	2.1.1 Ongoing System Monitoring	2-1
2.2		
	2.2.1 Implementation of the Condition Assessment Plan	
	2.2.2 Rehabilitation Action Plan Implementation	
2.3		
2.4	3 , 1 , , , , , , , , , , , , , , , , ,	
	2.4.1 Implementation of MOM Program	
	2.4.2 Quantitative Performance Measures	
2.5	3	
004	2.5.1 RWWMP Progress	
	O Emergency Response Plan	
2.6		
2.7	* * * * * * <b>F</b> * * *	
2.8	,	
2.9	, ,	
	2.9.1 Annual Report	
0.47	2.9.2 Quarterly Reports	
	0 Summary of Submittals	
3. COM	IPLIANCE DEADLINES AND MILESTONES	3-1
4. CON	IDITION ASSESSMENT ACTIVITIES	
4.1	Gravity Main	4-1
4.2	Force Main	
4.3	1 0	
4.4	Prompt Repairs	4-1
5. SYS	TEM PERFORMANCE	5-1
5.1	STP Performance	5-1
5.2	HRSD Conveyance System Performance	5-1
5.3	Capacity Related SSOs	5-1
6. PLAI	NNED ACTIVITIES	6-1
6.1		
	6.1.1 Implementation of the FPR Monitoring Plan	
	6.1.2 Capacity Related SSOs	
6.2	Condition Assessment Plan	
	6.2.1 Implementation of the Condition Assessment Plan	
	6.2.2 Rehabilitation Action Plan	

6.3	Interim System Improvements	6-1
6.4	Management, Operations, and Maintenance Program	6-1
	6.4.1 Implementation of MOM Program	6-1
	6.4.2 Quantitative Performance Measures	6-2
6.5	Regional Wet Weather Management Plan	6-2
6.6	SSO Emergency Response Plan	6-2
6.7	Consultation with Localities	6-2
6.8	Public Participation	6-2
7. FORI	ESEEABLE ISSUES RELATED TO UPCOMING COMPLIANCE DEADLINES AND MILESTONES	7-1
8. SIGN	NIFICANT ISSUES THAT REQUIRE A CHANGE IN THE CONSENT DECREE REQUIREMENTS	8-1
	ITIFICATION OF CHANGES IN KEY PERSONNEL DIRECTLY RESPONSIBLE FOR COMPLIANCE	9-1
APPEN	IDIX A: INTERIM SYSTEM IMPROVEMENTS AND REHABILITATION ACTION PLAN PROJECT RIFICATION OF COMPLETION	
	le 2-1. Rehabilitation Action Plan Phase Status	
Tab	le 2-2. Summary of Consent Decree Submittals	2-5
Tab	le 4-1. Summary of Prompt Repairs	4-1
Tab	le 5-1. Detailed Listing of HRSD Treatment Plant Unusual Discharges (July 1 to December 31, 2024)	5-2
Tab	le 5-2. Detailed Listing of HRSD Capacity Related SSOs (July 1 to December 31, 2024)	5-5

#### 1. INTRODUCTION AND PURPOSE

On February 23, 2010, HRSD entered into an Amended Consent Decree ("Consent Decree") with the United States of America and the Commonwealth of Virginia for the purpose of fulfilling the objectives of the Clean Water Act and the Virginia State Water Control Law. This Consent Decree has been amended six times by agreement of all parties in 2011, 2013, 2014, 2017, 2022, and 2024. The Fifth Amendment outlines the approved Integrated Plan, which was signed by the Hon. Arenda L. Wright Allen on February 8, 2022. In December 2014, the Special Order by Consent (SOC) with the DEQ and thirteen localities was modified and HRSD is no longer part of that order. HRSD and the Agencies entered into the Sixth Amendment to the Consent Decree on January 19, 2024 that made a number of changes to a range of projects and activities.

The approved Integrated Plan requires HRSD to perform, among other things, the following tasks:

- Implement a flow, pressure, and rainfall monitoring program;
- Coordinate with the Localities to develop a Regional Hydraulic Model;
- Prepare a plan for and conduct a condition assessment program;
- Construct specified interim system improvements;
- Develop and implement a Sanitary Sewer Overflow (SSO) Response Plan;
- Develop a Regional Wet Weather Management Plan in consultation with the Localities;
- Update and implement a Management, Operations and Maintenance (MOM) Program; and
- Prepare and submit a variety of periodic and event-driven reports
- Rehabilitation Action Plan projects
- High Priority Projects
- Aquifer Replenishment Program (ARP) also known as SWIFT
- Microbial Source Tracking

This Semi-Annual Report is submitted pursuant to Section XVII of the Consent Decree. HRSD has prepared this Semi-Annual Report in accordance with the above requirements to apprise the EPA (representing the United States of America) and the DEQ (representing the Commonwealth of Virginia) of steps taken toward meeting the obligations of the Consent Decree. Specifically, this Semi-Annual Report summarizes the work and activities undertaken by HRSD from July 1, 2024, through December 31, 2024, and the planned work for the remainder of FY 2025.

### 2. MAJOR COMPLIANCE ACHIEVEMENTS

# 2.1 Flow, Pressure, and Rainfall Monitoring Program

#### 2.1.1 Ongoing System Monitoring

Following the completion of the Consent Decree required 12-month flow, pressure, and rainfall monitoring period on March 11, 2011, HRSD continues to maintain a wide-scale monitoring network. Regular manual data review has been conducted and unreliable data has been flagged in the system. In the first six months of FY 2025, HRSD has added or removed the following meters:

Site	Location	Measurement	Added/ Removed
MMPS-125	HRSD SP - City Park PS	Flow	Removed
MMPS-023	HRSD PCV - Williamsburg TP Influent PCV	Flow_30in	Added
MMPS-023	HRSD PCV - Williamsburg TP Influent PCV	Flow_36_NF-192	Removed
MMPS-125	HRSD SP - City Park PS	Pressure	Removed
MMPS-149	HRSD SP - Luxembourg Avenue PS	Pressure	Removed
MMPS-157	HRSD SP - Park Avenue PS	Pressure	Removed
MMPS-299	HRSD SP - Courthouse Interim PRS	Pressure	Removed
MMPS-009	HRSD SF - Elbow Rd	Rain Gauge	Removed
MMPS-108	HRSD SF - Hickory_EOL	Rain Gauge	Added
MMPS-149	HRSD SP - Luxembourg Avenue PS	Rain Gauge	Removed
MMPS-211	HRSD SF - Cedar Rd @ Dominion Blvd	Rain Gauge	Added
MMPS-259	CHES PS - Chesapeake PS 238	Rain Gauge	Removed
MMPS-332	HRSD SP - Elbow Rd PRS	Rain Gauge	Added

A portal to allow access for the Localities to the HRSD flow, pressure, and rainfall data from the FPR sites was developed and implemented in February 2009 and continues to be used and enhanced. In addition, a data historian has been installed and is being used to store and view HRSD FPR data.

#### 2.2 Condition Assessment Plan

#### 2.2.1 Implementation of the Condition Assessment Plan

#### 2.2.1.1 Condition Assessment Field Activities

HRSD has completed all Consent Decree required Condition Assessment Field Activities per the Preliminary Condition Assessment Report prior to the completion milestone of October 31, 2013. See Section 4 of this report for details on the Condition Assessment Field Activities.

#### 2.2.1.2 Prompt Repairs

HRSD continues to implement a program to identify and address HRSD's collection system infrastructure deficiencies found during the course of condition assessment field activities that require prompt attention (as defined in the approved Condition Assessment Plan). Defects are evaluated to determine if they:

- Pose an immediate threat to the environment;
- Pose an imminent threat to the health and safety of the public;
- Create operational problems that may result in SSOs; or
- Contribute to substantial inflow to the system.

If such a defect is identified through the inspection process, it is assessed to determine the appropriate repair necessary. See Section 4 of this report for details on the Condition Assessment Program Prompt Repair status.

#### 2.2.2 Rehabilitation Action Plan Implementation

The approved Rehabilitation Action Plan contains 61 projects plus the FCAR Table 3-10 projects to be completed in three phases. Table 2-1 shows the status of the Plan phases through December 31, 2024. One project in Phase 1 (CE-R3) and one in Phase 2 (GN-R11) were cancelled with EPA/DEQ approval.. Additionally, VIP-R6 was moved from Phase 1 to Phase 2 on April 7, 2020.

	Table 2-1. Rehabilitation Action Plan Phase Status									
Phase	Number of Projects Completed	Total Number of Projects	Estimated Cost of Completed Projects	Estimated Total Cost of All Projects in Phase						
0	10	10	\$28,178,596	\$28,178,596						
1	19	19	\$76,646,832	\$76,646,832						
2	9	31	\$44,169,914	\$435,258,455						

Projects completed this period are included in Appendix A project certifications and are as follows:

- AT-R3, Shipps Corner Interim PRS and Shipps Corner PRS Modifications
- BH-R11, West Ave and 35 St FM
- GN-R4, NS Gravity Sewer Improvements
- VIP-R1, Central Norfolk Area Gravity Sewer Improvements Phase II
- VIP-R2, Norview Estabrook Division I FM replacement Phase II, Section 2
- VIP-R14, Norview-Estabrook Division I 12-Inch Force Main Replacement
- FCAR-Table 3-10 Ivy Home Shell Road

# 2.3 Interim System Improvements (ISI)

Appendix 5 to the Consent Decree lists thirty-three projects that are required to be completed within 8 years of the Date of Entry of the Consent Decree. The modification to the Consent Decree in FY 2013 has added eighteen (18) new projects for a total of fifty-one (51). Modification No. 3 which was entered by the court in August 2014 added two (2) projects and removed eight (8), leaving a total of forty-five (45) Interim System Improvement projects. HRSD has completed all of these projects.

# 2.4 Management, Operations, and Maintenance (MOM) Program

#### 2.4.1 Implementation of MOM Program

HRSD continues to implement its MOM Program. This includes details pertaining to management, operations, and maintenance of nearly all aspects of HRSD's system, including quantitative performance measures, implementation of continuous improvement initiatives, and special programs coordinated in the region such as the HR FOG.

Per the Consent Decree, HRSD is required to perform an initial audit and evaluation of their Management, Operations, and Maintenance (MOM) Program "one year after approval of the Regional Wet Weather Management Plan (RWWMP) and every three years thereafter, to evaluate any changes and/or deficiencies in the MOM Program and steps to respond to them. Revisions, as appropriate, will be made as the results of the audit and evaluation and other circumstances indicate".

HRSD has met and exceeded this requirement. HRSD staff meet at least semi-annually to audit and review the MOM metrics to ensure that we are meeting or exceeding our targets. The latest update to the HRSD MOM program was completed in July 2024.

#### 2.4.2 Quantitative Performance Measures

The revised MOM Program, approved on September 27, 2011, included many performance measures to help HRSD understand the performance of program elements. Paragraph 34 of the Consent Decree established a list of six specific measures that are subject to stipulated penalties, including: gravity sewer main inspection, air release valve preventative maintenance, gravity sewer cleaning, pumping station annual preventative maintenance, back-up generator annual preventative maintenance, and non-invasive force main inspection near drinking water supply reservoirs. Work has continued to implement and track these performance measures and the results will be presented in the FY 2025 Annual Report. HRSD is on track to meet or exceed all the performance measures identified in Paragraph 34 of the Consent Decree.

# 2.5 Regional Wet Weather Management Plan

HRSD submitted an updated Regional Wet Weather Management Plan (RWWMP) on June 29, 2020. The fifth amendment to the Consent Decree, that incorporated the RWWMP, was approved by the court on February 8, 2022. The RWWMP features an Adaptive Regional Plan (ARP) comprising of four phases. Phase 1 includes the \$700 million that HRSD will spend by 2025 in Interim System Improvements, Rehab Action Plan projects, Condition Assessment (including prompt repairs), and planning associated with development of the RWWMP Plan. Phase 2 includes the \$214 million in Round 1 High-Priority Projects, and \$10 million Microbial Source Tracking Program. Phase 3 consists of an additional \$196 million in Round 2 High-Priority Projects and \$10 million for the continued Microbial Source Tracking Program. Phase 4 is a performance assessment upon completion of the work in Phases 2 and 3. This analysis will take place between 2040 and 2043 and will culminate in submittal of a Performance Assessment for the review and approval of EPA and DEQ by March 31, 2043. The High-Priority Projects will reduce SSO volume during the 5-year peak flow event by 69%. The fifth amendment includes the schedule for wastewater system improvements that accommodates the Aquifer Replenishment Program (ARP) program. HRSD is planning on investing over \$1.1 billion by 2032 on the ARP program. The RWWMP provides for the ARP to be implemented through 2032. Finally, the RWWMP provides that if HRSD truncates or abandons the ARP prior to 2032 then EPA can require HRSD to accelerate spending on the RWWMP to offset the avoided investment in the ARP program. HRSD continues to evaluate the most optimal approach to implementing the ARP program given HRSD's financial constraints, evolving regulatory requirements, and the unprecedented inflationary pressures we are experiencing. The sixth modification to the Consent Decree provides non-material schedule

extensions, streamlined data purging, refined scope adjustments, revised inspection procedures, and new sequencing of High Priority Projects which collectively demonstrate HRSD's commitment to delivering environmental benefits for the region at the best value.

#### 2.5.1 RWWMP Progress

Phase I progress is described in Table 2-1.

Phase II progress includes microbial source tracking efforts and the initiation of most Round 1 HPP projects.

Phase III progress includes the initiation of a Round 2 HPP project.

Phase IV is scheduled to commence in 2040.

The Aquifer Replenishment Program (ARP) consists of multiple HRSD Sustainable Water Initiative For Tomorrow (SWIFT) projects. The James River SWIFT Facility, James River Treatment Plant Advanced Nutrient Reduction Improvements, Nansemond Treatment Plant Advanced Nutrient Reduction Improvements, and the Nansemond SWIFT Facility projects are in the construction phase.

# **SSO Emergency Response Plan**

The annual review of the approved Sanitary Sewer Overflow (SSO) Response Plan to the EPA and DEQ is underway. Any resulting changes to the Plan will be submitted to the EPA/DEQ. The previously approved plan continues to be implemented by HRSD and is posted to the <a href="https://www.HRSD.com">www.HRSD.com</a> website.

#### 2.6 Coordination with Localities

There was a wide variety of coordination activities in the first half of FY 2025 amongst HRSD and the localities. These activities included:

- One Capacity Team Meeting was held with the Localities to review progress;
- HRSD.com continues to be updated to provide documents to the regional Capacity Team; and,
- Copies of the Quarterly Reports and Annual Report were provided from HRSD to the Localities on the HRSD.com website.

# 2.7 Public Participation

HRSD held its annual information meeting on February 4, 2025 and published a newsletter during the month on February 25, 2025. Information and approved plans continue to be posted to HRSD's website, which is accessible to the public.

# 2.8 Post-RWWMP Implementation Monitoring and Performance Assessment

No action has been performed for this item as it is a later requirement of the Consent Decree.

# 2.9 Reporting

#### 2.9.1 Annual Report

HRSD completed an FY 2024 Annual Report as required by the Consent Decree, and submitted it to the EPA and DEQ on October 31, 2024.

# 2.9.2 Quarterly Reports

HRSD completed two Quarterly Reports as required by the Consent Decree, and submitted them to the EPA and DEQ on December 4, 2024 and March 5, 2025.

# **2.10 Summary of Submittals**

Table 2-2 summarizes the status of the documentation that HRSD has submitted to the EPA and DEQ under the Consent Decree in the first half of FY 2025.

Table 2-2. Summary of Consent Decree Submittals						
Consent Decree Submittal	Submittal Date					
FY2024 Annual Report	October 31, 2024					
FY 2025 Quarterly Report 1	December 4, 2024					
FY 2025 Quarterly Report 2	March 5, 2025					

# 3. COMPLIANCE DEADLINES AND MILESTONES

In the first half of FY 2025, all deliverables were submitted on or before their due dates and all milestones were met. HRSD has requested schedule extensions for several RAP Phase 2 projects. EPA and DEQ are currently reviewing the request.

### 4. CONDITION ASSESSMENT ACTIVITIES

HRSD has continued with its Condition Assessment Program as required by Section VII, Paragraph 25 of the Consent Decree, in FY 2025 with significant progress made in many aspects of the program. The following subsections describe the progress made in each aspect.

#### 4.1 Gravity Main

All gravity sewer main inspections were completed by the November 2011 milestone.

#### 4.2 Force Main

All force main inspections were completed by the October 2013 milestone.

# 4.3 Pumping Facilities

All pump station inspection work was completed by the November 2011 schedule deadline.

# 4.4 Prompt Repairs

Through the Condition Assessment Program, HRSD has identified 85 defects in the HRSD sanitary sewer system (primarily gravity sewer pipe and manholes) which have been deemed to be Prompt Repairs. These defects have been grouped into larger repair work orders and are currently in various stages of planning, design, or construction. Eighty-three (83) have been completed. The following Table 4-1 provides details on all known Prompt Repairs as of December 31, 2024.

	Table 4-1. Summary of Prompt Repairs							
Name	Location	Jurisdiction	Line Number	Summary of defect	Number of Defects	Status		
41st Street	41st Street east of intersection with Jefferson Ave; between MHs NG- 112-12175 and NG- 112-11783	Hampton	NG-112	Pipe lining failure	1	Complete		
Beach Road	West side of Beach Road opposite intersection with Wade Road between MH NG- 088-0 and NG-088- 155.	Hampton	NG-088	Pipe connection at manhole needs repair	1	Complete		
Beach Road	West side of Beach Rd. between intersection with Bonneville Dr. and Catalina Drive between MH NG- 088-1654 and NG- 088-1863	Hampton	NG-088	Lateral connection to mainline needs repair	4	Complete		

Table 4-1. Summary of Prompt Repairs								
Name	Location	Jurisdiction	Line Number	Summary of defect	Number of Defects	Status		
	Approximately in front of 112 Beach Rd between MH NG-088-0636 and NG-088-0970	Hampton	NG-088	Mainline pipe defects				
	Beach Rd. approximately 170 ft. south of Wade Rd. intersection West side of Beach	Hampton	NG-088	Manhole defects				
	Road opposite intersection with Hall Road. Between MHs NG-088-1260 and NG-088-1316	Hampton	NG-088	Mainline punctured by another utility directional drilling				
	North King St.	Hampton	NG-078	Manhole defects				
Various Manholes	E. Pembroke Ave. at Washington St.	Hampton	NG-084	Manhole defects	3	Complete		
Maintoido	Bainbridge Blvd. between Beech St. and Wilton St.	Norfolk	SG-153	Manhole defects				
Jefferson Ave	Jefferson Ave. between 40th St and 41st St	Newport News	NG-114	Mainline pipe defects	2	Complete		
Concidentive	Jefferson Ave between 39th and 40th St	Newport News	NG-114	Mainline pipe defects				
	Newtown Rd. at Virginia Beach Blvd (ne corner of intersection)	Virginia Beach	SG-112	Manhole defects and mainline pipe defects		Complete		
Newtown Road	Newtown Rd. approx. 415 ft. north of Princess Anne Rd.	Virginia Beach	SG-113	Manhole defects	3			
	Newtown Rd. at Elam Ave.	Virginia Beach	SG-113	Manhole defects				
	West Mercury Blvd	Hampton	NG-099	Mainline pipe defects				
Mercury Blvd	West Mercury Blvd	Hampton	NG-057	Mainline pipe defects	3	Complete		
	West Mercury Blvd; near Beechwood Rd.	Hampton	NG-057	Mainline pipe defects		r		
	North Hope Street	Hampton	NG-160	Pipe lining failure				
Various Repairs	Old Atlantic Avenue; near intersection with Liberty Street	Chesapeake	SG-148	Pipe lining failure	3	Complete		
	South of Steamboat Creek PS	Norfolk	SG-102	Manhole defects				

		Table 4-1. Sumr	mary of Promp	t Repairs		
Name	Location	Jurisdiction	Line Number	Summary of defect	Number of Defects	Status
Witchduck	South Witchduck Road	Virginia Beach	SF-141	Corroded FM bolts	1	Complete
Pin Oak Rd	Pin Oak Road; Residential neighborhood	Newport News	NG-175	Mainline Pipe Defects	1	Complete
	Bainbridge Blvd near I-464	Norfolk	SG-145	Mainline Pipe Defects		
Bainbridge Blvd	Bainbridge Blvd near I-464 just upstream of PS	Norfolk	SG-145	Mainline Pipe Defects	2	Complete
Shell Rd -	Shell Road	Hampton	NG-141	Mainline Pipe Defects	2	Complete
Hampton	Harris Creek Road	Hampton	NG-086	Mainline Pipe Defects	2	Complete
Pearl Street	Pearl Street near Ligon Street near I- 464/I-262 Interchange	Norfolk	SG-202	Mainline Pipe Defects	2	Complete
Pearl Street	Pearl Street near Ligon Street near I- 464/I-262 Interchange	Norfolk	SG-202	Mainline Pipe Defects	2	Complete
Deep Creek	Deep Creek force main on suction side of Deep Creek PRS	Chesapeake	SF-143	FM defects	1	Complete
Wythe Lagoon	Wythe Lagoon Siphon	Hampton	NG-151	Siphon defects	1	Complete
Pump Station Hatches	Ingleside Road Pump Station	Norfolk	PS#148	Wet Well Hatch	1	Complete
Pump Station Wet Wells	Rodman Ave Pump Station Wet Well	Portsmouth	PS#145	Wet Well Defects	1	Complete
Luxemburg Ave	Influent line to Luxemburg Avenue pump station.	Norfolk	SPS-113	Defect at manhole connection	1	Complete
Gowrie and	Manhole near creek at end of Gowrie Avenue	Norfolk	SG-068	Manhole defects	2	Complete
Farragut	Manhole near creek at end of Farragut Avenue	Norfolk	SG-068	Manhole defects		·
	Outside of 33 <sup>rd</sup> street Pump Station	Newport News	33 <sup>rd</sup> Street	Mainline pipe defects		33rd Street and 31st Street
Shipyard Sewer	31st Street	Newport News	31st Street	Mainline pipe defects	3	repairs have been completed. The
	38th Street	Newport News	38 <sup>th</sup> Street	Mainline pipe defects		remaining projec is in construction
Chesterfield	Gravity influent to Chesterfield PS	Norfolk	SG-207	Mainline pipe defects	2	Complete
Blvd	Gravity influent to Chesterfield PS	Norfolk	SG-207	Mainline pipe defects	_	23pioto
State Street FM	Force main at State St Pump Station	Norfolk	SF-097	Thin wall	1	Complete
Berkley Avenue	Manholes on Berkley Avenue	Norfolk	SG-098	Manhole defects	2	Complete

		Table 4-1. Summ	nary of Promp	t Repairs		
Name	Location	Jurisdiction	Line Number	Summary of defect	Number of Defects	Status
	Manholes on Berkley Avenue	Norfolk	SG-098	Manhole defects		
Newmarket	Orcutt Avenue and Paul street at influent to Newmarket Creek PS	Newport News	NG-127	Manhole Defects	2	Complete
Creek	Orcutt Avenue and Paul street at influent to Newmarket Creek PS	Newport News	NG-127	Pipeline defects	2	Complete
Laskin Road	Laskin Road Force Main	Virginia Beach	SF-135	Hit by third party	1	Complete
Elizabeth River	East side of Elizabeth River Crossing	Chesapeake	SF-143	Thin wall	1	Complete
14 <sup>th</sup> Street	Manhole at Jefferson Ave and 14 <sup>th</sup> street	Newport News	NG-130X	Manhole Defect	1	Complete
Army Base	Baker Street and Hampton Blvd	Norfolk	SF-003	Pipeline defect	1	Complete
Mercury and Orcutt Intersection	W Mercury Blvd	Hampton	NG-127	Manhole Defect	1	Complete
Claremont Avenue Discharge	Harbor Lane and 14 <sup>th</sup> Street	Newport News	NG-130	Pipeline Defect	1	Complete
Boat Harbor Outlet	Jefferson Avenue and 25th Street	Newport News	NG-169	Pipeline Defect	1	Complete
Hickman Branch	Factory Street	Portsmouth	SG-193	Pipeline Defect	1	Complete
Terminal Avenue	Terminal Avenue	Newport News	NG-125	Pipeline Defect	1	Complete
Swannanoa and Summerset	Intersection of Swannanoa Drive and Summerset Drive	Portsmouth	SF-206	Pipeline Defect	1	Complete
Orcutt Avenue Liner	Orcutt Avenue and 79th Street	Hampton / Newport News	NG-127	Pipeline Defect	1	Complete
Bay Shore Lane	Bay Shore Lane	Hampton	NG-095	Manhole Defects	7	Complete
Warwick Blvd	Warwick Blvd	Newport News	NG-130	Pipeline Defect	1	Complete
Warwick and Woodhaven	Warwick Blvd to Thorncliff Drive	Newport News	NF-015	Pipeline Defect	1	Complete
Woodland Avenue	Woodland Avenue and Ballentine Blvd	Norfolk	SG-089	Manhole Defects	6	Complete
Indian River Road	Indian River Road near Campostella	Norfolk	SF-106	Pipeline Defect	1	Complete
Powhatan Ave	Powhatan Ave	Norfolk	SG-044	Manhole Defect	1	Complete

Table 4-1. Summary of Prompt Repairs								
Name	Location	Jurisdiction	Line Number	Summary of defect	Number of Defects	Status		
Euclid Road	Euclid Road and Southern Blvd	Virginia Beach	SF-197	Pipeline Defect	1	Complete		
Dovercourt Road	Dovercourt Road	Norfolk	SPS-108	Manhole Defect	1	Complete		
Beach Road South	Beach Road between Catalina Drive and Westlawn Drive	Hampton	NG-088	Pipeline Defect	1	Complete		
Hampton Institute	Hampton Institute Pump Station	Hampton	NPS-211	Pipeline Defect	1	In Construction		
Portsmouth Blvd	Portsmouth Blvd	Newport News	NG-125	Pipeline Defect	1	Complete		
Boat Harbor Influent	Terminal Avenue Junction Box	Newport News	NG-125	Pipeline Defect	1	Complete		
Mercury/Big Bethel Manhole	Intersection of Mercury Blvd. and Big Bethel Road	Hampton	NG-057	Manhole Defect	1	Complete		
Berkley Trunk Sewer Section S	State Street	Norfolk	SG-202	Pipeline Defect	1	Complete		
Copeland PS Discharge FM	Copeland Pump Station	Newport News	NF-113- 2539, NF- 113-93255 to vault	Corroded appurtenances on pipeline	1	Complete		
Shingle Creek Siphon	Shingle Creek PS	Suffolk	SG-191- 21795 to SG- 191-21788	Pipe Defect	1	Complete		
Western Branch Sewers – State Hwy	APM Terminals Blvd	Portsmouth	SF-038	Force Main blockage	1	Complete		
Bainbridge Blvd Gravity Sewer	Bainbridge Blvd & Holly Avenue	Chesapeake	SG-149-4932 to SG-149- 4897	Pipe Defect	1	Complete		
Shore Drive FM	Shore Dr. / Indian Hill Rd.	Virginia Beach	SF-019	Pipeline / Joint Failure	1	Complete		
Great Bridge FM Gate Valve	AT1147-2 Valve Replacement	Chesapeake	SF-178 / AT1147-2	Inoperable valve	1	Complete		
JRTP Piping	PC#4 to PC Distribution Chamber	Newport News	PCE (PC#4)	Pipeline Failure	1	Complete		
Suffolk FM	Wilroy Rd. / Burnetts Mill Creek Crossing	Suffolk	SF-190	Pipeline Defect	1	Complete		
WBTP Piping	PC Splitter Box to PC #1	Williamsburg	PCI (PC#1)	Pipeline Defect	1	Complete		

	Table 4-1. Summary of Prompt Repairs								
Name	Location	Jurisdiction	Line Number	Summary of defect	Number of Defects	Status			
Great Bridge Boulevard FM	Great Bridge Blvd. / Willow Point Arch	Chesapeake	SF-164	Pinhole Leak	1	Complete			
IDTO D: :	111 City Farm		NPW	Segmental Replacement	1	Complete			
JRTP Piping	Road	Newport News	PCI	Segmental Rehab + Upstream Structure	1	Scheduling			
WBTP Piping	300 Ron Springs Drive	Williamsburg	NPW	Segmental Replacement	1	Complete			
Big Bethel FM	3711 Big Bethel Rd	Hampton	NF-024	Descale, CCTV, CIPP	1	Complete			
Monroe Place FM	Monroe Place and Magnolia Ave	Norfolk	SF-041	Segmental Replacement	1	Complete			

It is important to note that some Prompt Repairs were discovered after the FCAR and are being addressed under HRSD's ongoing MOM Program.

#### 5. SYSTEM PERFORMANCE

#### 5.1 STP Performance

Table 5-1 provides details on the unusual discharges from July 1 to December 31, 2024. Six of the sixteen occurrences were Non-Potable Water (NPW) or fully treated effluent.

### **5.2 HRSD Conveyance System Performance**

For the reporting period of July 1 through December 31, 2024, HRSD experienced zero capacity-related sanitary sewer overflows (SSOs) from its system, two releases from damage caused by others, and four releases related to infrastructure. All of these events are detailed in the Sanitary Sewer Overflow Reporting System (SSORS) and a summary is available in Table 5-2.

# 5.3 Capacity Related SSOs

As part of the Third Amended Consent Decree, Paragraph 88.a. requires the Semi-Annual Report to include "a discussion of the cause, significance, and response to any wet weather or capacity related SSO that occurred in the Region [sic] SS System." As discussed with and accepted by EPA/DEQ, HRSD will provide information related to these events in the Annual Reports rather than the Semi-Annual Reports.

# Table 5-1. Detailed Listing of HRSD Treatment Plant Unusual Discharges (July 1 to December 31, 2024)

Date	Location	Description/Cause	Duration of Event (minutes)	Corrective Action	Estimated Quantity Discharged (gallons)	Estimated Quantity to State Waters (gallons)	Type of Overflow	Receiving Water	Comments
8/5/2024	Nansemond	2 inch non potable water line broke due to heavy equipment being rolled over top of pipe. While digging to repair that line an npw line next to the broken one got hit and broke.	238	Contractors used a temporary plug to stop the flow until the line was fixed.	2500	200	Non-Potable Water (NPW)	Ground	
8/12/2024	James River	While excavating, a contractor hit the gravity thickener (GT) supernatant line. HRSD staff immediately shut down the primary pumps and chlorinated effluent pump to stop the flow to the GT. A sump pump was then placed in the excavation, and the contents were pumped back into the treatment plants flow via primary clarifier #4. An estimated 2,000 gallons of GT supernatant spilled into the excavation. An estimated 1,900 gallons was recovered.	10	Contractor fused the high-density polyethylene (HDPE) line back together to repair.	2000	100	GT Supernatant	Ground	
8/15/2024	Williamsburg	Operator was making rounds and noticed Sodium Hypochlorite inside the chemical containment area at Odor Station B. The Operator walked around the containment area where the chemical feed line traveled up the wall on the outside. The Operator found the hose from the tank fill line separated from the transfer pipe and immediately secured the pump. At that point the chemical had already soaked into the soil. On call staff was notified and promptly removed the contaminated soil from the area.	5	Approximately 13 cubic feet of contaminated soil was removed from the site and placed in a storage container to be picked up by Potomac Environmental.	20	1	Sodium Hypochlorite	Ground	
8/20/2024	Nansemond	Contractors left vent line on plant drain cleanout open so when drain on #1 primary clarifier was opened it overflowed onto the ground and entered storm drain.	4	Drain line was closed. Vac truck vacuumed up approximately 1500 gallons. Approximately 200 gallons were lost to storm drain. Flow to storm drain was restricted due to silt fence around the drain. Contractor dug up contaminated dirt around drain and dirt will be properly disposed of.	1700	200	Primary Clarifying Influent (PCI)	Storm Water Pond	
9/9/2024	Nansemond	A contractor hit a chlorinated Non-potable water (NPW) line while digging with an excavator.	7	Valve on NPW line in excavation site was closed to stop flow. Contractors will repair the line. A pump was used to remove as much water as possible and directed to the process tank. The remainder was lost to the ground.	4000	2000	Non-Potable Water (NPW)	Ground	
9/16/2024	James River	The plant experienced a brief loss of utility power which caused the generator to start. Utility power was available within a couple of minutes and the system switched back automatically. The rapid transition of power cycling resulted in the NPW pumps turning off and on quickly creating a water hammer effect. The pressure surge from the water hammer pushed a unrestrained pipe slightly out of a mechanical flange allowing NPW to spray out around the flange.	6	The portion of the NPW line was secured and the pipe and flange was repaired.	3000	2000	Non-Potable Water (NPW)	Ground to Storm Drain	

Table 5-1. Detailed Listing of HRSD Treatment Plant Unusual Discharges (July 1 to December 31, 2024)

Date	Location	Description/Cause	Duration of Event (minutes)	Corrective Action	Estimated Quantity Discharged (gallons)	Estimated Quantity to State Waters (gallons)	Type of Overflow	Receiving Water	Comments
10/25/2024	Nansemond	The sanitary well submersible pump was not properly sealed against the well discharge line, which caused the well to overflow.	15	The wet well was pumped down, pumps were removed from the wetwell, an O-ring for the pump was replaced, and the discharge line was cleaned out.	100	100	Sanitary Well Overflow	Ground/soil	
10/26/2024	Nansemond	A 4 inch PVC line slipped out of a PVC coupling that was discovered to be cracked. The resulting spill filled up an excavation site with non-potable water (NPW).	15	Plant staff immediately closed the NPW cutoff valve to secure the flow and removed NPW from excavation via a vacuum trailer, and repaired the 4 inch PVC pipeline.	11000	1000	Non-Potable Water (NPW)	Ground	
10/31/2024	Nansemond	A 1/2" PVC pipe broke on the discharge side of the centrate feed pump, allowing centrate to free flow onto the floor.  Approximately 50 gallons left the building through the roll-up door. Additionally, less than 5 gallons of the total quantity made it to the stormwater drain nearby.	8	The discharge valve of the Struvite Recovery Facility (SRF) feed pump was secured and the leak stopped immediately. The broken PVC pipe was repaired.	50	50	Centrate	Ground, storm water drain	
12/3/2024	Nansemond	During a planned shutdown of the plant 54" nitrified recycle line contractors put plastic under the area being drained. A sump pump was used to return lost flow into the process. Some of the flow went over the plastic and was absorbed into the ground under the pipe and was unrecoverable.	415	Pumped as much flow as possible to the process and recovered as much of the lost flow as possible.	2000	300	Aeration Effluent (ARE)	Ground	
12/6/2024	VIP	PVC pipe broke for the Raw Wastewater supply to the research pilot plant. Raw Wastewater Influent (RWI) was heading into the storm drain. One section of the heat trace was not turned on and the weather made the PVC brittle. The pipe did not freeze. Water hammer may have caused the problem.	15	Plant staff immediately turned off the pumps that charge the line leading to the pilot. The storm drain in the area was covered and the standing wastewater was pumped into the plant drain. Estimated 160-240 gallons.	240	190	Raw Wastewater	Ground	
12/9/2024	Nansemond	NPW (chlorinated) began pouring into the pump room of the return building through a wall penetration (with a link seal) for a NPW pipe. That line was isolated and the flow continued to pour into the building. Another NPW line was isolated to see if the flow into the building would stop. It was discovered the morning of 12/10 that the flow was continuing to enter the building. After trouble shooting and digging up an isolation valve it was discovered that isolating a 4 inch NPW line entering the basement of the building was the source of the flow. The line is about 15 feet underground and in a place inaccessible with equipment to dig up the line to find the exact break. It is going to be abandoned in place and a new line run to the building. NPW was never visually observed spilling on the ground but due to the placement of the line and water entering the building it can be assumed that NPW did soak into the ground. Estimating ~10000 gallons entering the building and recovered, and an estimate for NPW lost to the ground ~3000 gallons. Neither the location of the break in the pipe nor the amount of time broken prior to water entering the building can be determined and makes this very hard to estimate actual amounts lost.	1655	NPW line to building secured and being abandoned in place.	13000	3000	Non-Potable Water (NPW)	Ground	

Table 5-1. Detailed Listing of HRSD Treatment Plant Unusual Discharges (July 1 to December 31, 2024)

Date	Location	Description/Cause	Duration of Event (minutes)	Corrective Action	Estimated Quantity Discharged (gallons)	Estimated Quantity to State Waters (gallons)	Type of Overflow	Receiving Water	Comments
12/12/2024	Nansemond	Contractors accidentally hit a sodium hydroxide line in a double wall containment. While repairing the line approximately 100 gallons of caustic leaked out and onto the ground.	30	Contractors removed all contaminated soil, which will be disposed of at a chemical receiving facility.	100	0	Sodium Hydroxide	Ground	
12/14/2024	Nansemond	HRSD employees were using Non-Potable Water hoses to clean a tank. When they shut the hoses off and walked downstairs, they found an underground NPW line broken in the ground at the bottom of the stairway. The isolation valve for the NPW line was immediately secured. Approximately 350 gallons of NPW soaked into the ground.		The isolation valve for the NPW line was secured at 0738. Approximately 350 gallons soaked into the ground	350	350	Non-Potable Water (NPW)	Ground	
12/20/2024	Nansemond	A buried ferric chloride line broke and leaked ~65 gallons of ferric chloride onto the ground. This break occurred due to a large excavation which is supporting construction efforts causing an increased strain on the pipe.	0	Plant staff excavated and recovered what they were able to. Due to the break occurring close to the wall of a building, and the area being surrounded by a large excavation, it is unsafe to continue excavating in attempt to recover what leaked down the foundation of the building. Plant staff monitored the hole to ensure the maximum amount was recovered.	65	10	Ferric Chloride	Ground	
12/30/2024	Williamsburg	A 6-inch underground scrubber blow down line from odor control station B is broken and leaking into a nearby open top storm drain. The water is getting in through a 2-inch ground water weep hole on the inside of the chamber.	30	Sandbags were place on the inside of the storm drain to stop it from reaching the outfall. A sump pump with a float switch is maintaining the leak until the line break can be found and repaired.	150	150	Spent Scrubbant	Ground	

<sup>\*</sup>NPW (non-potable water) is fully treated and chlorinated final effluent.

Table 5-2. Detailed Listing of HRSD Capacity Related SSOs (July 1 to December 31, 2024)

Date and Time of Incident	Location	Sewer System Component	Potential Receiving Waters	Spilled in Jurisdiction	SSO Classification	Description of Incident from SSORS	SSO Duration	Action Taken and Explanation of SSO	Discharge Quantity	Amount Reaching State Waters	DEQ IR	Comment
8/6/2024 3:00:00 PM	79 East College Place	NF-133-887	Ground to Hampton River	Hampton	Infrastructure	During a site visit HRSD staff noticed a sinkhole in the ground. After further investigation it was determine that the sink hole was over top of HRSD's 30-inch Reinforced Concrete Cylinder Pipe and there was missing pipe wall on the top of the pipe observed. There was evidence on the ground around the sinkhole of a past spill but not one during or recent to the site visit. The amount released can not be quantified.	0 hour(s) 0 minute(s)	Constructed a temporary containment system and pumped flow into a manhole near the failure. HRSD has active construction activities via CIP projects in the area to remove this line from service.	Quantity could not be estimated as it was not an active spill	Quantity could not be estimated as it was not an active spill	SSORS# 2025-T- 106463	
9/19/2024 1:16:00 PM	3711 Big Bethel Road	NF-024-2400	Ground/ Ditch	York	Damage by Others	Contractor was performing conduit install via boring when they struck the HRSD force main (FM) and punctured the side of HRSD's pipe. The contractor did not take the necessary excavation precautions as required by VA 811 law.	10 hour(s) 4 minute(s)	Isolated the force main and diverted flow from YRTP to JRTP to perform repair. A 30x12 saddle was installed over the 1" hole, which was then backfilled and paved. The site was cleaned up, and lime was applied to areas contaminated with wastewater.	15,100	750	SSORS# 2025-T- 106478	
9/26/2024 10:49:00 AM	9373 Guinea Road	NF-184-2088	Ground/ Ditch to Thorntons Creek	Gloucester	Damage By Others	Bridgeman Civil (BC) was performing work at YR6617 in preparation for planned valve replacement work. A piece of heavy equipment ran over the 2" vent pipe connected to YR6617-3 resulting in a failure.	8 hour(s) 1 minute(s)	Bridgeman Civil (BC) utilized pump and haul trucks to contain sewage and completed repair. The site was cleaned.	5,052	505	SSORS# 2025-T- 10648	
11/19/2024 9:30:00 AM	1136 Lawnes Neck Dr	LPT1013-2, Air Vent	Ground/ ditch to Lawnes Creek/ James River	Isle of Wight	Infrastructure	Interceptor Crews were performing maintenance activities; when they were removing the blow-off tube, a PVC glued coupling came undone, resulting in a spill.	3 hour(s) 0 minute(s)	HRSD staff inserted a DC plug to slow the leak until the Vactor truck arrived. A repair was completed, the site was cleaned of debris, and lime was applied to affected areas.	350	300	SSORS# 2025-T- 106503	
12/18/2024 11:34:00 AM	Northeast corner of the intersection of Monroe Place and Magnolia Run	SF-041-9069	gutter pan to storm inlet to Lafayette River	Norfolk	Infrastructure	We received a call from the contractor working on the LASSI pump station project that sewage was coming out of the pavement at the intersection of Monroe Place and Magnolia Run. They noticed on a site visit related to the project.	2 hour(s) 16 minute(s)	The forcemain causing the problem was serving only Richmond Crescent PS and discharged to a manhole approximately 10 feet away from the apparent point of failure. Staff shut off Richmond Crescent PS and called a pump and haul contractor. When the spill stopped, Interceptors mobilized and exposed the forcemain. The condition of the forcemain was in poor condition and showed significant wall loss. A section of pipe was replaced.	850	750	SSORS# 2025-T- 106525	
12/31/2024 3:40:00 PM	1000 Cedar Road	SF-209-7025	Gutter pan draining to stormwater pond/ Bells Mill Creek	Chesapeake	Infrastructure	A line fracture allowed approximately 138 gallons of raw wastewater to spill onto the road and into adjacent gutter pan before it was contained.	15 hour(s) 50 minute(s)	Spill was contained and is being pumped continuously until repairs can be completed. On 01/01/2025, HRSD crews open cut Cedar Road and installed a repair clamp on the damaged pipe. Flow was contained 12/31/2024 04:49 PM with the release ending 1/1/25 at 7:30AM. Pump and haul and sandbags were used to contain the release.	1,000	138	SSORS# 2025-T- 10653	

#### 6. PLANNED ACTIVITIES

HRSD will be continuing the overall program outlined in the Consent Decree in the remainder of FY 2025. The following sub-sections provide specifics on this work.

#### 6.1 Flow, Pressure, and Rainfall Monitoring Program

# **6.1.1 Implementation of the FPR Monitoring Plan**

Although not required by the Consent Decree, HRSD intends to continue to collect data from flow, pressure, and rainfall sensors in FY 2025, and plans to continue to operate a portal to allow access for the Localities to the HRSD flow, pressure, and rainfall data from the FPR sites HRSD will continue regular modifications of the network and delete and/or relocate some monitoring points as determined to be most efficient and effective to meet on-going operational requirements.

#### **6.1.2 Capacity Related SSOs**

HRSD will continue to coordinate with Localities following capacity-related SSOs in the Localities system. This will include coordinating with the Locality to review the occurrence, assist with evaluation of the problem, and, if practicable, help the Locality with interim or final solutions to mitigate the LOP.

HRSD will continue to provide post-storm synopses and annual post-SSO analyses to EPA and DEQ.

#### **6.2 Condition Assessment Plan**

#### **6.2.1 Implementation of the Condition Assessment Plan**

#### **6.2.1.1 Prompt Repairs**

HRSD will continue to implement action plans to address the Prompt Repairs identified.

#### 6.2.2 Rehabilitation Action Plan

In the remainder of FY 2025, HRSD will continue implementing the approved Rehabilitation Action Plan.

# **6.3 Interim System Improvements**

All interim system improvement projects have been completed.

# 6.4 Management, Operations, and Maintenance Program

#### **6.4.1 Implementation of MOM Program**

HRSD will continue to implement its MOM Program in FY 2025.

#### **6.4.2 Quantitative Performance Measures**

In the second half of FY 2025, HRSD will continue tracking the performance measures to determine how HRSD is implementing the program. This will include the list of six measures that are subject to stipulated penalties per Paragraph 34 of the Consent Decree. Progress on these measures will be documented in the FY 2025 Annual Report.

# 6.5 Regional Wet Weather Management Plan

The RWWMP (Integrated Plan) was approved on February 8, 2022 and implementation will continue throughout FY 2025.

# 6.6 SSO Emergency Response Plan

HRSD will continue to implement the approved plan and review annually as required. If review results in changes to the plan, the plan will be revised and submitted for approval.

#### 6.7 Consultation with Localities

HRSD will continue to actively participate and facilitate a wide variety of consultation activities in FY 2025 amongst the regional parties. These activities included:

- One meeting of the Capacity Team is planned with others as needed, to discuss issues related to the Consent Decree;
- HRSD.com will be updated to provide documents to the regional Capacity Team; and,
- Copies of the Quarterly Reports and Semi-Annual Report will be provided from HRSD to the Localities on the HRSD.com website.
- Meet with the regional Director of Utilities monthly.

# 6.8 Public Participation

HRSD will continue to hold annual information meetings and publish newsletters by the anniversary of the Date of Entry. Information and approved plans continue to be posted to HRSD's website which is accessible to the public.

# 7. FORESEEABLE ISSUES RELATED TO UPCOMING COMPLIANCE DEADLINES AND MILESTONES

HRSD continues to experience significant headwinds in completing a handful of Consent Decree projects. Real estate acquisition, railroad easement permitting, and lengthy locality approvals have created extended design phases beyond what could be reasonably anticipated by HRSD. HRSD sent a Force Majeure Notice on August 6th, 2024 identifying unanticipated delays which will likely impact our ability to meet certain Rehab Action Plan (RAP) Phase II completion deadlines. HRSD received a response from the Agencies on September 27, 2024 and provided additional details to EPA/DEQ on Feb 26, 2025 and received confirmation that the request was under review. HRSD believes that its requested changes constitute minor modifications.

# 8. SIGNIFICANT ISSUES THAT REQUIRE A CHANGE IN THE CONSENT DECREE REQUIREMENTS

None noted.

# 9. IDENTIFICATION OF CHANGES IN KEY PERSONNEL DIRECTLY RESPONSIBLE FOR COMPLIANCE ACTIVITIES

None noted.

# APPENDIX A: INTERIM SYSTEM IMPROVEMENTS AND REHABILITATION ACTION PLAN PROJECT VERIFICATION OF COMPLETION



January 27, 2025

#### Rehabilitation Action Plan Projects Verification of Completion

As required by Section VIII of the Third Amended Consent Decree dated May 30, 2015, a set of Rehabilitation Action Plan projects have been identified that must be completed according to the schedule in that document. For capital projects in excess of \$1,000,000, Paragraph 87a of the Consent Decree requires that verification be made by a Professional Engineer that the project was completed satisfactorily.

Through January 22, 2025, the following project has been completed satisfactorily and consistent with the scope provided to the EPA and DEQ in the Consent Decree:

Ref No.	CIP No.	<u>Project Name</u>	Project Cost	Completion Date
AT-R3	AT011510 and AT011520	Shipps Corner Interim PRS and Shipps Corner PRS Modifications	\$ 5,002,548	October 10, 2024

Hereby verified by

leffrey Scarano, PE (No. 044143)

Director of Design and Construction, Special Projects Hampton Roads Sanitation District

PO Box 5911, Virginia Beach, VA 23471-0911 • 757.460.2261 • Fax 757.363.7917



As required by Section VIII of the Third Amended Consent Decree dated May 30, 2015, a set of Rehabilitation Action Plan projects have been identified that must be completed according to the schedule in that document. For capital projects in excess of \$1,000,000, Paragraph 87a of the Consent Decree requires that verification be made by a Professional Engineer that the project was completed satisfactorily.

Through March 31, 2025 the following projects have been completed satisfactorily and consistent with the scope provided to the EPA and DEQ in the Consent Decree:

Ref No.	CIP No.	Project Name	Project Cost	Completion Date
BH-R11	BH014000	West Ave & 35 St FM	\$\$2,084,213.00	June 28, 2023

Hereby verified by

Jeffrey Layne, PE (No. 0402032946)

Director of Design and Construction, North Shore



As required by Section VIII of the Third Amended Consent Decree dated May 30, 2015, a set of Rehabilitation Action Plan projects have been identified that must be completed according to the schedule in that document. For capital projects in excess of \$1,000,000, Paragraph 87a of the Consent Decree requires that verification be made by a Professional Engineer that the project was completed satisfactorily.

Through August 19, 2024 the following projects have been completed satisfactorily and consistent with the scope provided to the EPA and DEQ in the Consent Decree:

Ref No.	<u>CIP No.</u>	Project Name	Project Cost	Completion Date
GN-R4	GN014900	NS Gravity Sewer Improvements	\$12,254,456	July 10, 2024

Hereby verified by

Jeffiel Jyne PE (No. 040 032946)

Director of Design and Construction, North Shore





As required by Section VIII of the Third Amended Consent Decree dated May 30, 2015, a set of Rehabilitation Action Plan projects have been identified that must be completed according to the schedule in that document. For capital projects in excess of \$1,000,000, Paragraph 87a of the Consent Decree requires that verification be made by a Professional Engineer that the project was completed satisfactorily.

Through December 31, 2024, the following projects have been completed satisfactorily and consistent with the scope provided to the EPA and DEQ in the Consent Decree:

Ref No. VIP-R1	<u>CIP No.</u> VP017110	<u>Project Name</u> Central Norfolk Area Gravity Sewer Improvements Phase I	<u>Project Cost</u> \$122,178	<u>Completion Date</u> 11/19/2024
VIP-R1	VP017120	Central Norfolk Area Gravity Sewer Improvements Phase II	\$6,112,548	11/19/2024
VIP-R2	VP010910	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 1 (Norfolk Fairmount Park Phase IX)	\$1,156,261	8/21/2024
VIP-R2	VP010920	Norview Estabrook Division I 18-Inch Force Main Replacement Phase II, Section 2	\$4,427,945	8/21/2024
VIP-R14	VP016500	Norview-Estabrook Division I 12-Inch Force Main Replacement	\$4,732,235	7/23/2024

Hereby verified by

Laura Kirkwood, PE (No. 0402057866)

Director of Design and Construction, South Shore



As required by Section VIII of the Third Amended Consent Decree dated May 30, 2015, a set of Rehabilitation Action Plan projects have been identified that must be completed according to the schedule in that document. For capital projects in excess of \$1,000,000, Paragraph 87a of the Consent Decree requires that verification be made by a Professional Engineer that the project was completed satisfactorily.

Through March 31, 2025 the following projects have been completed satisfactorily and consistent with the scope provided to the EPA and DEQ in the Consent Decree:

Ref No.	CIP No.	Project Name	Project Cost	Completion Date
FCAR- Table 3- 10	BH014500	Ivy Home-Shell Road	\$371,817.48	April 4, 2024

Hereby verified by

Jeffrey/Layne, PE (No. 9402032946)

Director of Design and Construction, North Shore