

HRSD Commission Meeting Agenda
10:00 a.m. – June 28, 2022

In-person for Commissioners and essential staff at
1434 Air Rail Avenue, Virginia Beach, VA 23455

Electronic attendance via Zoom for all others

Public participation and observation of all HRSD Commission and committee meetings is available electronically via Zoom due to space limitations. To receive a link for virtual attendance/observation or to request accommodations to attend the meeting in-person, please send your request to Jennifer Cascio at jcascio@hrsd.com or by phone to 757.460.7003. Requests must be received by noon one business day prior to the meeting.

<u>No.</u>	<u>Topic</u>	<u>Resource</u>
	Call to Order	Elofson
	Roll Call of HRSD Commission	Cascio
1.	Consent Agenda	Bernas
a.	Approval of Minutes	
b.	Contract Awards	
c.	Task Orders	
d.	Contract Change Orders	
e.	HRSD Use of Existing Competitively Awarded Contract Vehicle	
2.	Capital Improvement Program Internal Labor FY-2023	Husselbee
3.	46th Street Diversion Sewer Rehabilitation/Replacement Additional Appropriation, Contract Award (>\$200,000), Task Order (>\$200,000)	Husselbee
4.	Conceptual Project Development (FY-2023) New CIP and Initial Appropriation	Girardi
5.	Central Environmental Laboratory Expansion and Rehabilitation Alternative Project Delivery	Husselbee
6.	Eastern Shore Infrastructure Improvements – Transmission Force Main Phase I Property Acquisition – Eastern Shore Coalition Against Domestic Violence, Incorporated Property Acquisition – Town of Exmore, Eastern Shore, Virginia	Husselbee
7.	Jefferson Avenue Interceptor Force Main Replacement Phase III Easement Acquisition - 12130 Jefferson Avenue, Newport News, Virginia 23602	Husselbee

<u>No.</u>	<u>Topic</u>	<u>Resource</u>
8.	Middlesex Collection System – Cooks Corner Additional Appropriation and Contract Award (>\$200,000)	Husselbee
9.	Nansemond SWIFT Facility Initial Appropriation, Alternative Project Delivery, Task Order (>\$200,000)	Husselbee
10.	Small Communities Collection System Rehabilitation Phase III Initial Appropriation, Construction Contract Award (>\$200,000)	Husselbee
11.	COVID-19 Wastewater Surveillance Study Update	Curtis
12.	Election of Officers	Levenston
13.	Unfinished Business	Bernas
14.	New Business	Bernas
15.	Commissioner Comments	Elofson
16.	Public Comments – A request to make public comments during the meeting via Zoom or written comments to be read into the minutes should be submitted to Jennifer Cascio by email to jcascio@hrsd.com or by phone to 757.460.7003 and must be received by noon one business day prior to the meeting.	Cascio
17.	Informational Items	Bernas
	a. Management Reports	
	b. Strategic Planning Metrics Summary	

Next Regular Commission Meeting Date: **July 26, 2022 at 2389 G. Avenue, Newport News**

AGENDA ITEM 1. – June 28, 2022

Subject: Consent Agenda

Recommended Action: Approve the Consent Agenda.

Brief: The items listed below are presented on the following pages for Commission action.

a. Approval of Minutes

The draft minutes of the previous Commission Meeting were distributed electronically prior to the meeting.

b. Contract Awards

1.	Architectural / Mechanical / Electrical Services		\$8,000,000
2.	Atlantic Pressure Reducing Station Reliability Modifications		\$400,000
3.	Data Domain Backup and Recovery Hardware, Software, Installation, Training, Maintenance and Support Services		\$83,861 \$691,066
4.	Infrared Thermographic Inspection Services		\$387,140
5.	Real Estate Legal Counsel	JBWK Pender & Coward	\$500,000 \$500,000
6.	Real Estate Services	JMT Timmons	\$6,000,000 \$6,000,000

c. Task Orders

1.	Boat Harbor Treatment Plant Pump Station Conversion		\$5,282,939
2.	Cybersecurity Practice and Procedure Initiative		\$335,000
3.	SWIFT Program Management (James River SWIFT Design-Build Projects)		\$9,881,619
4.	York River Treatment Plant Primary Clarifier Influent and Effluent Pipe Rehabilitation		\$227,300

d. Contract Change Orders

1.	Fleet Management		\$81,135
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e. HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award

1.	Williamsburg Treatment Plant Administration Building Renovation		\$220,956
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CONSENT AGENDA ITEM 1.b.1. – June 28, 2022

Subject: Architectural / Mechanical / Electrical Services
Contract Award (>\$200,000)

Recommended Action: Award a professional services annual contract for Architectural / Mechanical / Electrical Services to Guernsey Tingle Architects, P.C. to become effective July 1, 2022 with a maximum allowable limit of \$2,500,000 per single task and accumulated \$8,000,000 per year with four years annual renewal options.

Type of Procurement: Competitive Negotiation

A Public Notice was issued on March 21, 2022. One firm submitted a proposal on April 19, 2022, and the firm was determined to be responsive and deemed fully qualified, responsible, and suitable to the Professional Services Selection Committee (Committee) and to the requirements in the Request for Proposals (RFP). One firm was short-listed, interviewed, and technically ranked as listed below:

Proposer	Technical Points	Recommended Selection Ranking
Guernsey Tingle Architects, P.C.	86	1

The Committee recommends award to Guernsey Tingle, whose professional qualifications and proposed services best serve the interest of HRSD. Guernsey Tingle has held this annual services contract for the past 10 years; therefore, there are no concerns about only receiving one response to the RFP.

Contract Description: This contract is an agreement for architectural, mechanical and electrical professional services to be provided on a task-by-task basis to service the entire organization. Funding for the requested services will be from the Engineering Department Contractual Services budget or from the Capital Improvement budget associated with identified capital projects. The workforce categories, rates, handling costs for subconsultants, and direct reimbursable costs were negotiated for the first contract year of the renewable contract.

CONSENT AGENDA ITEM 1.b.2. – June 28, 2022

Subject: Atlantic Pressure Reducing Station Reliability Modifications
Contract Award (>\$200,000)

Recommended Action: Award a contract to Sherwood Logan in the amount of \$400,000.

CIP Project: CE011827

Regulatory Requirement: None

Budget	\$9,733,130
Previous Expenditures and Encumbrances	(\$9,059,121)
Available Balance	<hr/> \$674,009

Type of Procurement: Sole Source

All parts and services were previously approved as a sole source with Flygt Pumps in August 2018. Sherwood Logan is the sole distributor of Flygt pumps in Maryland and Virginia.

Project Description: This project made reliability improvements to the existing Atlantic Pressure Reducing Station (PRS) including new pumps, interior piping and valves, electrical system, controls, access platforms, and modifications to the yard piping. Structural and general mechanical modifications as well as interior building modifications to isolate and protect sensitive electrical equipment were completed. This project is substantially complete.

Project Justification: The project is needed to ensure reliable operation of this PRS in support of the planned Chesapeake-Elizabeth Treatment Plant (CETP) closure and diversion of flow to the Atlantic Treatment Plant and for the ultimate Regional Wet Weather Management Plan (RWWMP). This PRS runs daily now that CETP is closed. Improvements to the pumping and ancillary equipment were required to address persistent pump ragging issues that hindered past operation.

Contract Description and Analysis of Cost: This contract is an agreement for the purchase of one dry pit submersible pump to serve as a spare at the Atlantic PRS. The size of the pump limits the number of vendors who can service the pump and the lead time on parts and replacements place this important station at risk. The cost of the pump is comparable to those purchased under the construction contract.

CONSENT AGENDA ITEM 1.b.3. – June 28, 2022

Subject: Data Domain Backup and Recovery Hardware, Software, Installation, Training, Maintenance and Support Services
Contract Award (>\$200,000)

Recommended Actions:

- a. Award a contract to CDW LLC in the amount of \$83,861 for Data Domain Backup and Recovery Hardware, Software, Installation and Training.
- b. Award a blanket purchase contract for Data Domain Backup and Recovery Software Maintenance and Support Services to CDW LLC in the estimated amount of \$354,806 for three years with two annual renewal options and an estimated cumulative value in the amount of \$691,066.

Regulatory Requirement: None

Type of Procurement: Competitive Negotiation

A Public Notice was issued on March 4, 2022. Six firms submitted proposals on March 30, 2022, and five firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the requirements in the Request for Proposals. Three firms were short-listed, interviewed, and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
CDW LLC DBA CDW Government LLC		1
Achieve 1 LLC		2
EPlus Technology, Inc.		3

The Committee recommends award to CDW LLC, whose professional qualifications and proposed services best serve the interest of HRSD.

HRSD Estimate:

\$400,000/3 years

Contract Description and Analysis of Cost: This contract is an agreement for installation, implementation and annual support of a data domain backup and recovery solution. This solution will be to replace/upgrade the end-of-life Dell/EMC backup and recovery infrastructure at HRSD. The replacement solution will provide performance and efficiency in snapshotting, recovery, replication, and deduplication. The solution will also provide simplified management of all backup and recovery operations, modern security methods for protecting backups from damage, and robust reporting and analytics with simplified methods of capacity forecasting.

The cost for this purchase is based on final negotiated costs with the Offeror.

This work is in accordance with the Procurement Commission Adopted Policy.

CONSENT AGENDA ITEM 1.b.4. – June 28, 2022

Subject: Infrared Thermographic Inspection Services
Contract Award (>\$200,000)

Recommended Action: Award a blanket purchase contract for Infrared Thermographic Inspection Services to Vick Companies Inc DBA Infralogix in the estimated amount of \$77,428 for year one with four annual renewal options and an estimated cumulative value in the amount of \$387,140.

Regulatory Requirement: The infrared thermographic inspection services are part of the Management, Operations, and Maintenance (MOM) Program.

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Procurement Department advertised and solicited bids directly from potential bidders. The project was advertised on May 19, 2022 and two bids were received on June 3, 2022. The bids received are listed below:

Bidder	Bid Amount
Vick Companies Inc DBA Infralogix	\$77,428
Seam Group LLC	\$82,650

HRSD/Engineer Estimate: \$78,807

HRSD evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder Vick Companies Inc DBA Infralogix in the amount of \$77,428.

Contract Description and Analysis of Cost: This contract is an agreement for infrared thermographic inspection services for all HRSD equipment associated with treatment and collection (plants, pump stations and main office). Equipment includes, but is not limited to, panels, transformers, switch gears, motor control centers, VFDs, etc. The contract is to establish preventative maintenance that allows HRSD to identify problem areas and areas of concern with equipment before any failures occur. This increases the life of the equipment and reduces cost by maintaining the equipment instead of having to purchase new if failed.

This work is in accordance with the Procurement Commission Adopted Policy.

CONSENT AGENDA ITEM 1.b.5 – June 28, 2022

Subject: Real Estate Legal Counsel
Contract Award (>\$200,000)

Recommended Actions:

- a. Award a contract for Real Estate Legal Counsel services to Jones, Blechman, Woltz, and Kelly PC in the estimated amount of \$100,000 for year one with four annual renewal options and an estimated cumulative value in the amount of \$500,000.
- b. Award a contract for Real Estate Legal Counsel services to Pender & Coward in the estimated amount of \$100,000 for year one with four annual renewal options and an estimated cumulative value in the amount of \$500,000.

Regulatory Requirement: None

Type of Procurement: Competitive Negotiation

A Public Notice was issued on March 25, 2022. Two firms submitted proposals on April 13, 2022, and all firms were determined to be responsive and deemed fully qualified, responsible, and suitable to the Professional Services Selection Committee (Committee) and to the requirements in the Request for Proposals. Two firms were short-listed, interviewed, and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
Jones, Blechman, Woltz and Kelly PC	93	1
Pender & Coward	82	1

The Committee recommends awards to both proposers: Jones, Blechman, Woltz and Kelly PC and Pender & Coward, whose professional qualifications and proposed services best serve the interest of HRSD.

Contract Description and Analysis of Cost: These contracts are for both firms to provide general and specific legal advice and counsel to HRSD staff related to matters of real estate law on a task by task basis. The firms will prepare legal opinions, reports, and advice when necessary. Review and assist in preparation of resolutions, contracts of sale, deeds, other conveyances, and other related documents for real estate transactions. Tasks will be assigned to each firm based on their expertise, availability, and experience in similar assignments. Actual authorization will be addressed through individual Task Orders or Amendments. Funding for this work will be from the HRSD Operating Budget and/or the Capital Improvement Budget. The cost for these services is comparable to rates used by other firms for similar efforts.

This work is in accordance with the Procurement Commission Adopted Policy.

CONSENT AGENDA ITEM 1.b.6. – June 28, 2022

Subject: Real Estate Services
Contract Award (>\$200,000)

Recommended Actions:

- a. Award a professional services annual contract agreement for Real Estate Services with Johnson, Mirmiran & Thompson (JMT), to become effective July 1, 2022, with a maximum allowable limit of \$1,000,000 per single task and accumulated \$6,000,000 per year with four annual renewal options.
- b. Award a professional services annual contract agreement for Real Estate Services with Timmons Group, to become effective July 1, 2022, with a maximum allowable limit of \$1,000,000 per single task and accumulated \$6,000,000 per year with four annual renewal options.

Type of Procurement: Competitive Negotiation

A Public Notice was issued on February 14, 2022. Five firms submitted proposals on March 16, 2022, and all five firms were determined to be responsive and deemed fully qualified, responsible and suitable to the requirement in the Request for Proposals. Four firms were short-listed, interviewed and technically ranked as listed below:

Proposers	Technical Points	Recommended Selection Ranking
Johnson, Mirmiran & Thompson (JMT)	90	1
Timmons Group	90	1
KDR Real Estate Services, Inc.	71	2
O.R. Colan Associates, LLC	66	3

The Selection Committee recommends award to two firms (JMT and Timmons Group) whose professional qualifications and proposed services best serve the interest of HRSD. Two firms are recommended due to their close technical ranking and the anticipated workload in coming years. The workforce categories, rates, handling costs for sub-consultants and direct reimbursable costs were negotiated for the first contract year of the renewable contract. This contract will become effective on July 1, 2022.

Contract Description: This firm will provide assistance in areas such as land and easement acquisition, complex real estate transactions and consultation, appraisals and leasing. The Professional Services Agreement establishes billing rates and reimbursement methods. Actual authorization will be addressed through individual Task Orders and Amendments. Funding for this work will be from the Engineering Department Operating Budget and/or the Capital Improvement Budget.

CONSENT AGENDA ITEM 1.c.1. – June 28, 2022

Subject: Boat Harbor Treatment Plant Pump Station Conversion
Task Order (>\$200,000)

Recommended Action: Approve a task order with Rummel, Klepper & Kahl, LLP in the amount of \$5,282,939.

CIP Project: BH015700

Regulatory Requirement: Integrated Plan – SWIFT

Budget	\$74,718,760
Previous Expenditures and Encumbrances	(\$2,105,293)
Available Balance	\$72,613,467

Contract Status:	Amount
Original Contract with Rummel, Klepper & Kahl, LLP	\$859,523
Total Value of Previous Task Orders	\$1,016,128
Requested Task Order	\$5,282,939
Total Value of All Task Orders	\$6,299,067
Revised Contract Value	\$7,158,590
Engineering Services as % of Construction	4.1%

Project Description: The Boat Harbor Treatment Plant will be converted to a pumping station, including equalization and headworks facilities while remaining in operation for wastewater treatment during conversion. The new infrastructure will be designed to meet HRSD's resiliency standards and consider remote operation and access in future conditions including sea level rise. This project is a critical component to the effort to close the Boat Harbor Treatment Plant and must be completed by December 2025.

The attached [map](#) depicts the project location.

Project Justification: The James River Waste Load Allocation (WLA) requires HRSD to continue reducing the mass of nutrients discharged from associated treatment plant outfalls. The planned reduction of nutrients is largely completed through implementation of the SWIFT program. The SWIFT master planning effort has determined that advanced water treatment and injection at Boat Harbor has significant physical limitations including site availability and resiliency to sea level rise. In addition, a financial analysis indicates there is significant long term cost savings associated with consolidating wastewater treatment and SWIFT facilities at Nansemond Treatment Plant. This project will allow HRSD to further reduce the amount of nutrients contributed to the James River basin. Upgrades to the Nansemond Treatment Plant to accommodate the additional flow will be completed under a separate capital improvement project.

Task Order Description: This task order will provide detailed design and pre-construction services. The detailed design will include drawings and specification sufficient for procurement and construction of the pump station, storage facilities, and piping connections to the existing collection system. The design effort will include development of an opinion of probable construction cost and a sustainability plan update. Pre-construction services will provide support from project advertisement through recommendation for award.

Analysis of Cost: The cost for this task order is based on a detailed, bottoms-up estimate of labor hours and direct costs required to execute the agreed-upon scope of work. The proposed level of effort is considered appropriate for the required level of design, which is expected to include 450 drawings and 79 specification sections. The current opinion of probable construction cost for this project is \$130,000,000. This is higher than the CIP budget and includes increased costs for site work, escalation, and market conditions. The ratio of design fee to current construction cost estimate is 4.1 percent, which is below the design/construction ratio on several other HRSD pump station and treatment plant projects. The proposed level of effort is considered to be appropriate for a project of this size and complexity.

<u>Schedule:</u>	Design	June 2022
	Bid	January 2023
	Construction	April 2023
	Project Completion	December 2025



Boat Harbor Treatment Plant Pump Station Conversion CIP BH015700

June 2022



CONSENT AGENDA ITEM 1.c.2. – June 28, 2022

Subject: Cybersecurity Practice and Procedure Initiative
Task Order (>\$200,000)

Recommended Action: Approve a task order with Reliaquest LLC in the amount of \$335,000.

CIP Project: AD012500

Regulatory Requirement: None

Budget	\$15,500,000
Previous Expenditures and Encumbrances	(\$3,256,800)
Available Balance	<u>\$12,243,200</u>

Contract Status:	Amount
Original Contract with Reliaquest LLC	\$1,366,000
Total Value of Previous Change Orders	\$262,000
Total Value of Previous Task Orders	\$1,537,000
Requested Task Order	\$335,000
Total Value of All Task Orders	\$1,872,000
Revised Contract Value	\$3,500,000

Project Description: This project will provide for the development of a sustainable comprehensive framework for secure computing and data management utilizing a variety of hardware, software, and professional contractual services.

Project Justification: IT staff has coordinated an IT security and vulnerability assessment. This project will address the assessment's recommendations for minimizing risk exposure.

Task Order Description: This task order was for Privileged Access Management (PAM) Phase 2: Roadmap to define a policy and provide HRSD with a roadmap and/or recommendations for PAM tool selection including integration considerations and to define prioritization of capabilities from the PAM solution. This task order was issued to Reliaquest in August 2021 and was determined at the time to be part of the original contract award cost that were approved at the January 26, 2021, Commission meeting. During a recent review of the contract this task order was identified as a separate task that was not part of the original awarded contract amount and requires Commission approval as a task order.

Analysis of Cost: The cost for this task order is based on the negotiated hourly rates and programs under the Managed Security Provider Services Agreement.

Schedule:	PER	07/2019
	Design	03/2021
	Bid	06/2025
	Construction	06/2025
	Project Completion	06/2025

CONSENT AGENDA ITEM 1.c.3. – June 28, 2022

Subject: SWIFT Program Management (James River SWIFT Design-Build Projects)
Task Order (>\$200,000)

Recommended Action: Approve a task order with AECOM in the amount of \$9,881,619.

CIP Project: GN016320

Regulatory Requirement: Integrated Plan – SWIFT

Budget	\$80,000,000
Previous Expenditures and Encumbrances	(\$26,506,630)
Available Balance	\$53,493,370

Contract Status:	Amount
Original Contract with Name of Engineer/Contractor	\$5,264,440
Total Value of Previous Task Orders	\$20,964,370
Requested Task Order	\$9,881,619
Total Value of All Task Orders	\$30,845,989
Revised Contract Value	\$36,110,429
Engineering Services as % of Construction	1.85%

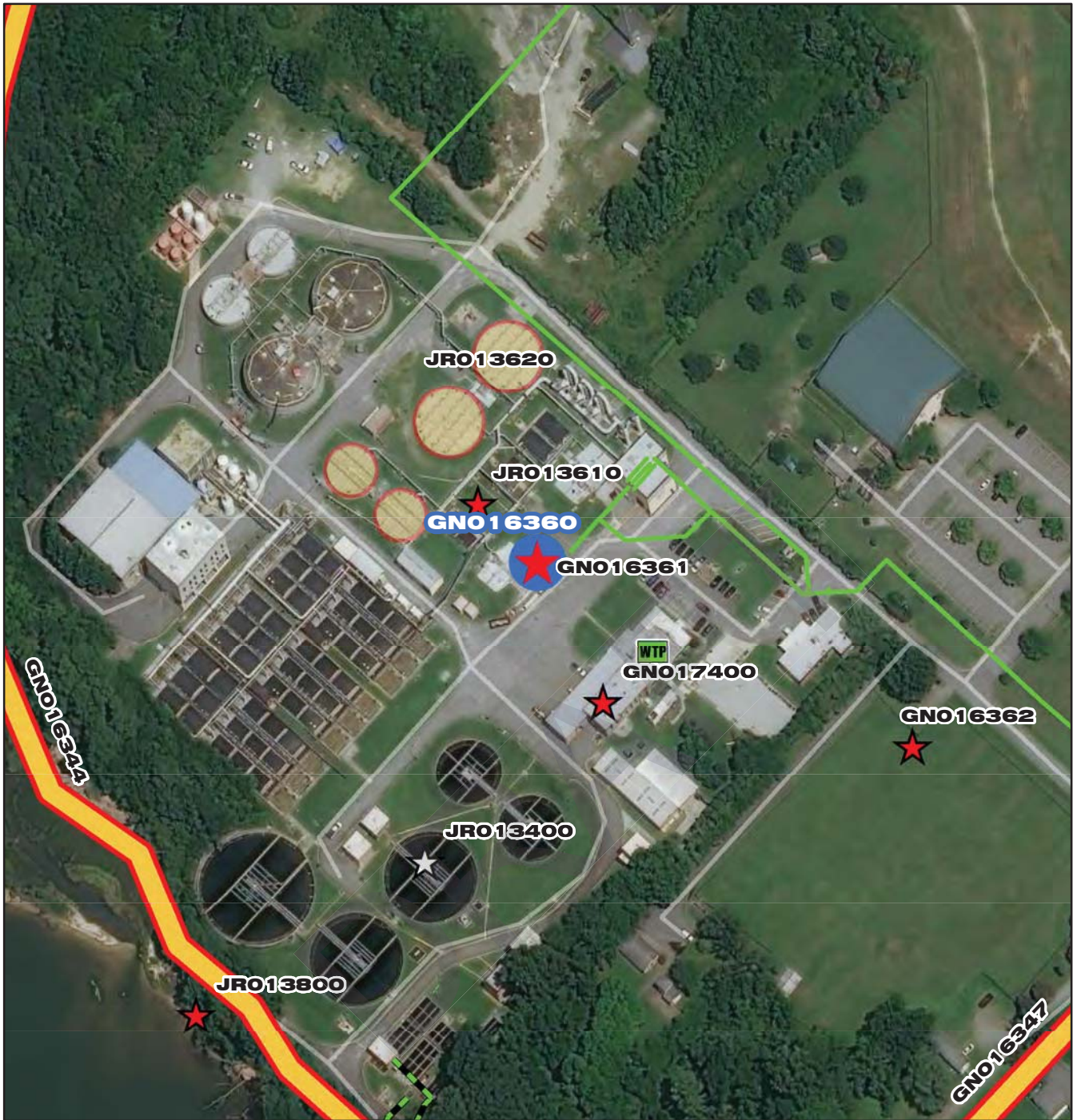
Project Description: The SWIFT Full Scale Implementation Program (FSIP) Management team is managing the delivery of the advance water treatment facilities to take HRSD's already highly treated wastewater and produce SWIFT Water. The Program Management team is also delivering conveyance, wastewater treatment plant improvements, and other such projects to support full scale SWIFT implementation. The Program Management team will implement the processes, procedures, and systems needed to design, procure, construct, permit, manage, and integrate the new SWIFT related assets.

Project Justification: The James River SWIFT Facility (GN016360) project is needed to reduce nutrients entering the Chesapeake Bay to meet current waste load regulations, augment the groundwater supply, reduce the rate of ground subsidence, protect groundwater from saltwater intrusion and support Virginia's economy. The James River Treatment Plant (JRTP) Advanced Nutrient Reduction Improvements (JR013400) project will implement the advanced secondary treatment improvements, including nutrient reduction measures, will be required to provide stable source water quality that meets the influent requirements of the full scale SWIFT Facility at the JRTP.

Task Order Description: This task order will provide Owner's Consultant Services during the construction phase of the combined GN016360 and JR013400 projects. HRSD will rely on the Owner's Consultant (OC) / On-Site Representative (OSR) team to be a key part of the Owner's team in the field. Due to the complexity and size of the project, the OSR team will provide on-site observation, frequent review of the design-builder's quality plans, safety plans, schedule updates, and progress documentation. The OSR team will provide technical and Subject Matter Expert support for HRSD's review of specific submittals, payment applications, claims, change management discussions, and support of start-up, as needed. As the design-builder submits, Operations & Maintenance Manuals and equipment data, the OSR team will support HRSD maintenance staff by providing initial completeness reviews. The expected duration of this project phase and task order is 52 months, which aligns with the project schedule. The attached [map](#) depicts the project location.

Analysis of Cost: The cost for this task order is based on a detailed negotiated scope of work for OC / OSR services and will be billed on a Time & Materials basis. The budget estimate for the total scope of work was developed on an annual basis in relationship to the expected construction activities for each year. The description of tasks and associated effort (staff hours) per year are reasonable considering the size and complexity of the project and the support requested by HRSD. The budget rates used to develop the estimate align with the rate structure within the Professional Services Agreement with AECOM for SWIFT Full Scale Implementation, as approved for FY2022. The budget rates were escalated annually to reflect the five-year duration of the scope of services. Actual rates will be subject to approval under the Agreement annually. This ratio (1.85 percent) of OSR fees to the contract cost limit (CCL) compares well with other OC support fees approved for other HRSD design build projects at this phase (approval of Stipulated Price). The other HRSD design build projects had OC services fees which ranged from 0.7 percent to 1.8 percent of the total contract value.

Schedule: Project Completion October 2026

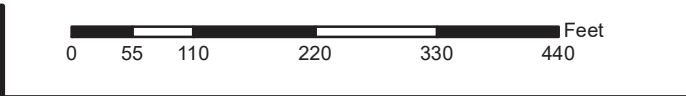


GNO16360

- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- HRSD Treatment Plant
- HRSD Pressure Reducing Station
- HRSD Pump Station



GNO 1 6360

James River SWIFT Facility

N
W — E
S

CIP Location

CONSENT AGENDA ITEM 1.c.4. – June 28, 2022

Subject: York River Treatment Plant Primary Clarifier Influent and Effluent Pipe Rehabilitation Task Order (>\$200,000)

Recommended Action: Approve a task order with Rummel, Klepper & Kahl, LLP in the amount of \$227,300.

CIP Project: YR014800

Regulatory Requirement: None

Budget	\$4,756,000
Previous Expenditures and Encumbrances	(\$106,813)
Available Balance	\$4,649,187

Contract Status:	Amount
Original Contract with Name of Engineer/Contractor	\$106,813
Total Value of Previous Task Orders	\$0
Requested Task Order	\$227,300
Total Value of All Task Orders	\$227,300
Revised Contract Value	\$334,113
Engineering Services as % of Construction	4.6%

Project Description: This project will repair or replace corroded, primary clarifier influent and effluent, cylinder pipes from distribution chamber #1 to the aeration tanks. There are nine pipes varying in diameter from 36-inch to 72-inch. A bypass pipeline and pumping may be required to maintain treatment plant operations.

The attached [map](#) depicts the project location.

Project Justification: On September 17, 2020, the 60-inch concrete, cylinder pipe between the headworks and primary clarifier distribution chamber #1, in service since 1984, failed during a significant rain event due to corrosion. The break resulted in a spill of approximately 6.8 million gallons. The break prompted inspection of piping from primary clarifier distribution chamber #1 to the aeration tanks. These pipes are of the same construction, years of service, and operating conditions. The resulting inspection revealed corrosion and broken off sections of concrete at the crown of the pipes, like the failed 60-inch pipe.

Task Order Description: This task order will provide design and preconstruction phase services. A fee of \$227,300 was negotiated with Rummel, Klepper & Kahl, LLP. and is comparable to other projects of similar size and complexity.

Analysis of Cost: The task order for Rummel, Klepper & Kahl, LLP has been reviewed and is reasonable. The fee for design and preconstruction phase services 3.1%. The rate is comparable to other projects of similar size and complexity.

Schedule:	Design	July 2022
	Bid	January 2023
	Construction	April 2023
	Project Completion	April 2024



YRO14800

- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- HRSD Treatment Plant
- HRSD Pressure Reducing Station
- HRSD Pump Station



YRO 14800

York River Treatment Plant Primary Clarifier Influent and Effluent Pipe Rehabilitation



CIP Location



CONSENT AGENDA ITEM 1.d.1. – June 28, 2022

Subject: Fleet Management
Contract Change Order (>25% or \$50,000)

Recommended Action: Approve a change order with Hall Automotive in the amount of \$81,135.

CIP Project: GN017700

Regulatory Requirement: None

Budget	\$1,200,000
Previous Expenditures and Encumbrances	(\$1,092,179)
Available Balance	\$107,221

Contract Status:	Amount	Cumulative % of Contract
Original Contract with Name	\$173,235	
Total Value of Previous Change Orders	\$0	0%
Requested Change Order No. 1	\$81,135	
Total Value of All Change Orders	\$81,135	47%
Revised Contract Value	\$254,370	

Project Description: This project will provide for replacement of aging fleet vehicles and purchase of additional vehicles to meet the needs of the organization.

Change Order Description: This change order includes the increased cost to purchase five Ford Transit Vans which were originally priced as 2022 models. These are now being produced as 2023 models due to the Ford manufacturing plant stopping production of the 2022 models before our order was able to be fulfilled.

Analysis of Cost: The cost of this change order is based on the difference between the 2022 model and the new 2023 model pricing for the Ford Transit Vans. Due to the current market conditions automotive resellers are not willing to guarantee pricing until the vehicle is in production. Hall Automotive has absorbed as much of the price increase as possible.

CONSENT AGENDA ITEM 1.e.1. – June 28, 2022

Subject: Williamsburg Treatment Plant Administration Building Renovation
 HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award
 (>\$200,000)

Recommended Actions:

- a. Approve the use of the Sourcewell Cooperative Contract No. 121919-STI for Office and Classroom Furniture, Workstation Systems, Seating, Storage and Architectural Walls.
- b. Approve the use of the Global Equalis Cooperative Contract No. EQ-052920-01F for Global Furniture.
- c. Award a contract to Creative Office Environments of Richmond LLC in the amount of \$220,956.

HRSD Estimate: \$220,956

CIP Project: WB012900

Regulatory Requirement: None.

Budget	\$3,563,815
Previous Expenditures and Encumbrances	(\$3,279,791)
Available Balance	\$284,024

Project Description: This project will renovate the existing 1960's Administration Building at the Williamsburg Treatment Plant.

Project Justification: This project will provide much needed office space for plant staff; refurbish the conference room; and create additional workshop space.

Contract Description and Analysis of Cost: This contract is for the purchase of various office furniture including desks, chairs, and work surfaces. This will be a single contract award to procure multiple items found under both cooperative contracts held by Creative Office Environments. By utilizing the cooperative contracts through Sourcewell and Global Equalis, HRSD is receiving approximately a 50% cost savings.

<u>Schedule:</u>	PER	01/01/2020
	Design	07/01/2020
	Bid	04/02/2021
	Construction	07/02/2021
	Project Completion	08/01/2022

AGENDA ITEM 2. – June 28, 2022

Subject: Capital Improvement Program Internal Labor FY-2023
Initial Appropriation

Recommended Action: Appropriate total project funding in the amount of \$3,600,000.

CIP Project: GN018100

Regulatory Requirement: None

Project Description: This project will account for internal labor necessary to implement the Capital Improvement Program (CIP). Labor costs are from those individuals working in either the Engineering or Operations Departments tasked with implementing the CIP.

Project Justification: This project will cover internal labor for FY-2023.

Schedule: Labor hours will be charged to this CIP project as incurred over the FY.

AGENDA ITEM 3. – June 28, 2022

Subject: 46th Street Diversion Sewer Rehabilitation/Replacement
Additional Appropriation, Contract Award (>\$200,000), Task Order (>\$200,000)

Recommended Actions:

- a. Appropriate additional funding in the amount of \$707,651.
- b. Award a contract to Tidewater Utility Construction, Inc. (TUC) in the amount of \$9,419,297.
- c. Approve a task order with Ramboll Americas Engineering Solutions, Inc. (Ramboll) in the amount of \$770,850.

CIP Project: BH014600**Regulatory Requirement:** Rehab Action Plan Phase 2 (2025 Completion)

Budget	\$11,470,682
Previous Expenditures and Encumbrances	(\$1,488,186)
Available Balance	\$9,982,496
Proposed Contract Award to Contractor	(\$9,419,297)
Proposed Task Order to Engineer/Contractor	(\$770,850)
Proposed Contingency	(\$500,000)
Project Shortage/Requested Additional Funding	(\$707,651)
Revised Total Project Authorized Funding	<u>\$12,178,333</u>

Contract Status with Task Orders:	Amount
Original Contract with Engineer	\$307,740
Total Value of Previous Task Orders	\$1,171,449
Requested Task Order	\$770,850
Total Value of All Task Orders	\$1,942,299
Revised Contract Value	\$2,250,039
Engineering Services as % of Construction	23.8%

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. The project was advertised on April 23, 2022, and two bids were received on May 25, 2025. The bids received are listed below:

Bidder	Bid Amount
Tidewater Utility Construction, Inc.	\$9,419,297
Bridgeman Civil, Inc.	\$9,642,560

Engineer Estimate: \$6,354,350

The design engineer, Ramboll, evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder, TUC, in the amount of \$9,419,297.

Project Description: This project consists of the construction of sanitary sewer flow diversions at four City of Newport News gravity sewer connections (46th Street, 38th Street, 34th Street and 31st Street) which currently contribute flow to the sewer trunk line located on the Huntington Ingalls-Newport News Shipyard (HII-NNS) property. The work includes the construction of approximately 500 linear feet of 42-inch steel casing pipe and 24-inch City gravity sewer by Microtunnel installation, the construction of approximately 1,800 linear feet of gravity sewer, installation and rehabilitation of sewer laterals, the construction of a lift station including approximately 420 linear feet of 2-inch force main and the abandonment of approximately 1,100 linear feet of gravity sewer ranging in size from 4-inches to 24-inches in diameter. The project also includes replacing approximately 1,000 linear feet of primarily 20-inch force main and abandonment of approximately 1,160 linear feet of primarily 20-inch HRSD force main. Additionally, four Newport News Waterworks (NNWW) water main offsets are included. This project will divert all public flow away from the HII-NNS property.

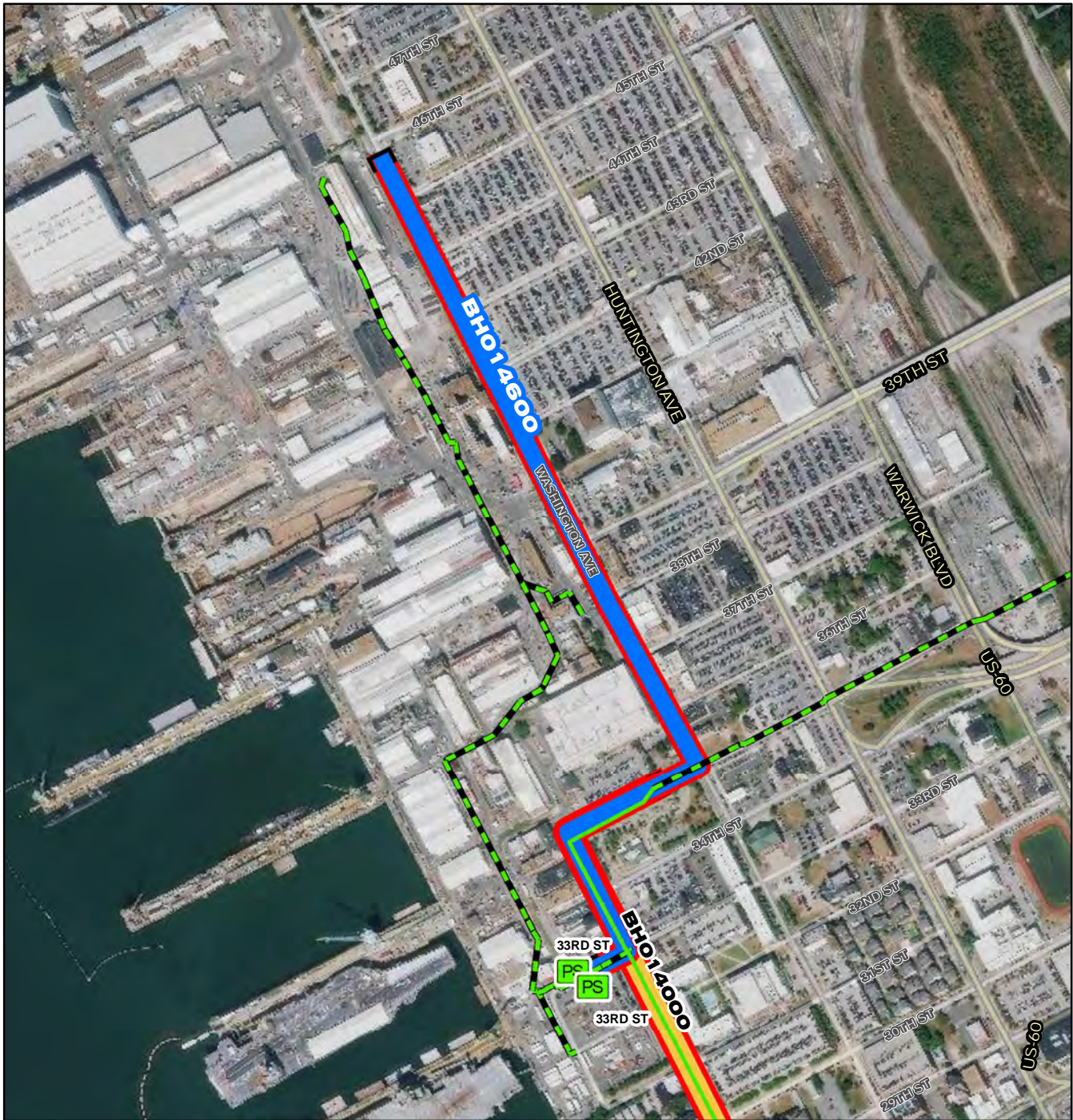
The attached [Map](#) depicts the project location.

Project Justification: This project will address long standing conditional, access, encroachment and jurisdictional issues related to the James River Diversion Sewer – 46th Street constructed in 1945 under the Federal Works Agency, Docket No. VA 44-264. Responsibility for maintenance and operation was assigned to HRSD in 1950 with an expiration of responsibilities in 1979 according to the easement granted to the United States of America by the City of Newport News and subsequently assigned to HRSD. Upon expiration of the easement in 1979, responsibility for maintenance and operation of the gravity line has been in question. This project will eliminate public flow from entering private property and address gravity sewer pipe condition issues.

Task Order Description and Analysis of Cost: This task order will provide the required construction administration and inspection services for the subject project. A fee of \$770,850 was negotiated with Ramboll and is approximately 7.7% of the construction cost. The fee proposal is comparable to other projects of similar size and complexity.

Funding Description: The original CIP project estimate did not foresee the current market conditions as they relate to inflation, labor shortages and long lead times for materials. This request includes a 5.3% contingency to accommodate any unforeseen conditions. Additional appropriation is being requested for construction contract award and construction phase services. The amount for this work exceeds the balance available for this CIP project by \$707,651.

Analysis of Cost: Two bids were received and evaluated based upon the requirements of the Invitation for Bid. TUC is the apparent low bidder with a bid amount of \$9,419,297. The Engineer's estimate is lower than the bids received due to sub-contractor and vendor reluctance to provide final pricing on materials until orders are submitted. Thus, construction costs continue to increase until the time of bid. The design engineer, Ramboll, evaluated the bids and recommends award to the lowest responsive and responsible bidder, TUC, in the amount of \$9,419,297. Ramboll's construction cost estimate was approximately 33% lower than the low bid. The majority of the cost differential was attributed to three bid items: Microtunneling, Submersible Grinder Lift Station, and the installation of deep (14 -16 feet) gravity sewer. The location of this project coupled with an unstable market which is driving contractors to include escalation factors in the bid to account for any future cost impacts are understood to be primary factors in the cost differential between the Engineer's estimate and the low bid.

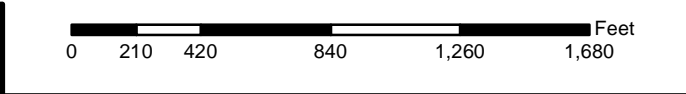


BHO 14600

- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- HRSD Treatment Plant
- HRSD Pressure Reducing Station
- HRSD Pump Station



BHO 14600

46th Street Diversion Sewer Rehabilitation Replacement

N
W E
S

CIP Location

Hampton

AGENDA ITEM 4. – June 28, 2022

Subject: Conceptual Project Development (FY-2023)
New CIP and Initial Appropriation

Recommended Actions:

- a. Approve a new CIP project.
- b. Appropriate total project funding in the amount of \$413,000.

CIP Project: GN018400

Regulatory Requirement: None

Project Description: This pilot project will utilize current on call General Engineering Services contracts for conceptual project development to more accurately determine a scope and budget for a CIP need. This project will serve as a proof of concept showing if investment in development of a project concept early will provide benefits to future planning and delivery. The following potential CIP requests will make up the work in this pilot program:

- Willoughby Pump Station Study
- Providence Creek Force Main Study
- Plume Street Pump Station Study
- Williamsburg FOG System Improvements
- Williamsburg Clarifier Effluent Improvements

The expected deliverables of the pilot work will be a project charter, project scope development, project alternative concepts, alternative concept review, and an initial project cost and schedule estimate. The pilot work will not include any preliminary engineering or design of the chosen alternatives.

Project Justification: The Operations, Engineering and Finance Departments have formed a cross-departmental team to look at ways of improving CIP project planning and delivery. A general consensus is that it is difficult to plan for project concepts that have not reached a preliminary level of development and change significantly over time. This pilot project will be a way to show if proactive investment of funds for the purpose of conceptual project development before its included in the CIP will enable better planning outcomes for funding, resources, overall schedule, and prioritization. The intent of the cross-departmental team is to ensure that we are delivering the right projects at the right time.

<u>Schedule:</u>	Pre-Planning	July 2022
	Project Completion	June 2023

AGENDA ITEM 5. – June 28, 2022

Subject: Central Environmental Laboratory Expansion and Rehabilitation
Alternative Project Delivery

Recommended Action: Approve the Construction Management project delivery method for the Central Environmental Laboratory Expansion and Rehabilitation project.

CIP Project: AD012600

Regulatory Requirement: None

Project Description: This project will expand and renovate the existing Central Environmental Laboratory (CEL). The project includes demolition of the empty, former Technical Services Division (TSD) and Pretreatment and Pollution Prevention (P3) spaces and expansion of the CEL on the site through construction of a multi-story mixed laboratory and administrative wing to the existing CEL. The project also includes renovating a significant portion of the CEL.

The attached [Map](#) depicts the project location.

Project Justification: In January 2021, HRSD commissioned the firm of CDM Smith to perform a needs assessment and feasibility assessment of the existing Central Environmental Laboratory. The study considered laboratory space, facilities, space utilization, laboratory functions and equipment, current and future analytical needs to consider long-term staffing, new laboratory technologies and the ability to support the SWIFT initiative, future regulatory compliance and research initiatives projected through year 2045. The Study concluded the existing CEL cannot accommodate future space needs through 2025 and, at a minimum, an additional 18,000 square feet of space is needed to meet all studied 2025 scenarios.

Brief: A task order was approved with the design firm of CDM Smith at the December 2021 Commission meeting for preliminary engineering report (PER) development. While the PER phase is still progressing, work to date has shown the complexity of the project. The project meets the Code of Virginia's "complex project" requirement to accommodate an accelerated schedule, difficult site location and intricate phasing.

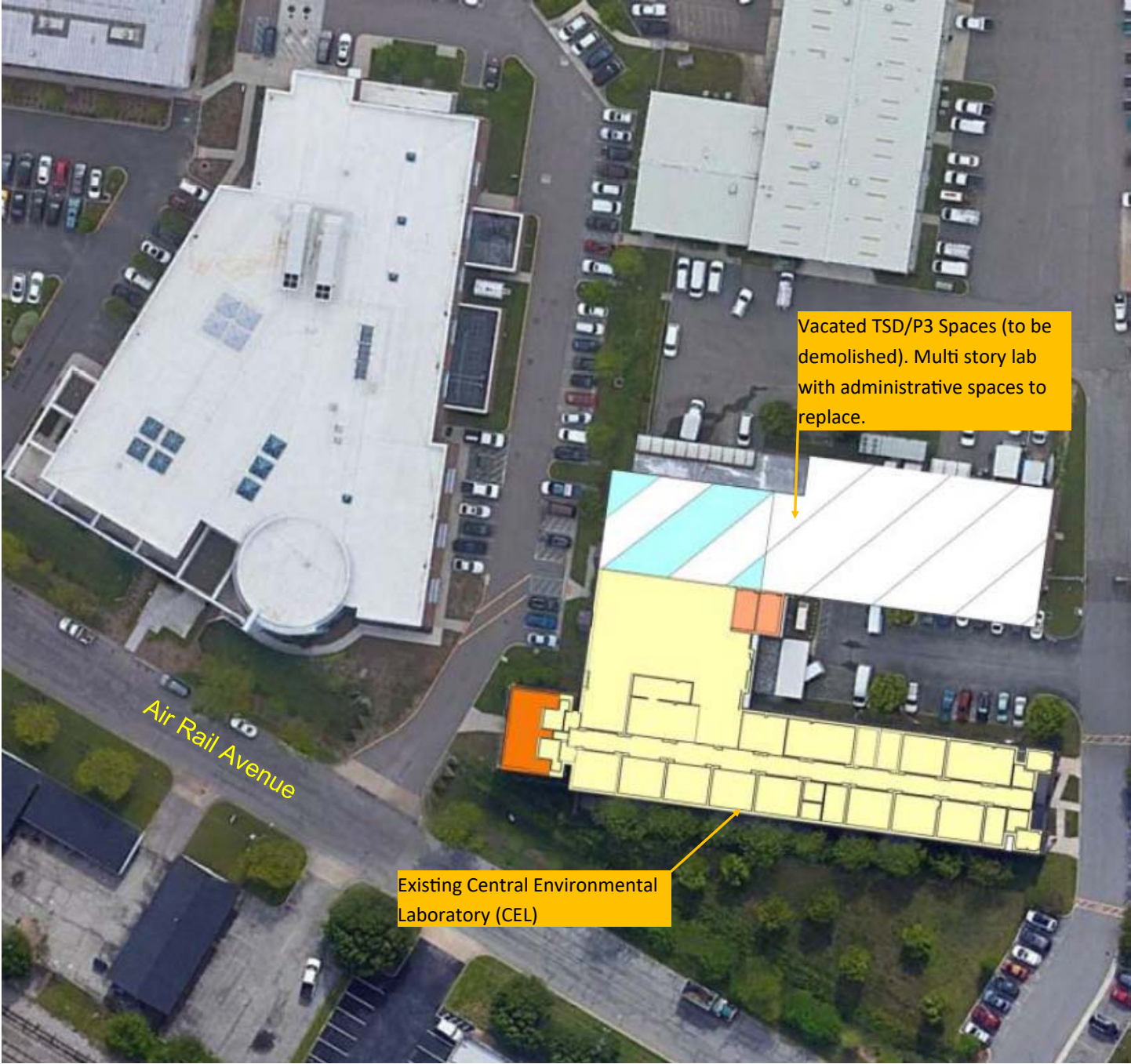
A Construction Management delivery process is more advantageous than a sealed competitive bid for this project for the following reasons:

1. The Construction Management delivery method can be utilized to better control schedule. During the renovation and expansion, the CEL must continue to function at its current level. Controlling schedule and site activities, while dealing with limitations of a tight site, will minimize disruptions to the CEL and other work centers on the South Shore Campus;
2. The Construction Management delivery method will allow for contractor input during design and assist HRSD and CDM Smith with constructability reviews, value engineering workshops for build to budget, work around unavailable or long delivery times and identify risks and mitigation strategies;
3. The Construction Management delivery method will facilitate a single responsible construction entity to carefully manage the diverse and numerous subcontractors required to perform the work and to remain adaptable to changes in construction activities;
4. The Construction Management delivery method will consider early procurement packages for long lead materials and equipment and storage until time of installation;

5. The Construction Management delivery method will allow the ability to pivot for trade construction packages, materials, and market uncertainties as the design progresses to the stage where a Guaranteed Maximum Price (GMP) can be established.

The Virginia Public Procurement Act states that for Construction Management project delivery, the Construction Manager is to be procured and under contract no later than the completion of the schematic phase of design. The desired advertisement of the Request for Qualifications (RFQ) is July 2022 to align with the availability of the draft PER to share with the short-listed Construction Management firms.

<u>Schedule:</u>	Begin RFQ/RFP process	July 2022
	PER/Conceptual Design Complete	October 2022
	Selection of Construction Management Firm	November 2022
	90% Design Development/Guaranteed Maximum Price (GMP)	September 2023



Vacated TSD/P3 Spaces (to be demolished). Multi story lab with administrative spaces to replace.

Existing Central Environmental Laboratory (CEL)

Air Rail Avenue

AGENDA ITEM 6. – June 28, 2022

Subject: Eastern Shore Infrastructure Improvements – Transmission Force Main Phase I
Property Acquisition – Eastern Shore Coalition Against Domestic Violence, Incorporated
Property Acquisition – Town of Exmore, Eastern Shore, Virginia

Recommended Actions:

- a. Approve the purchase of property located at 12 and 14 Hartman Avenue, Onancock, Accomack County, Virginia, Tax Map #: 085A3A3000000600 and associated acquisition cost of \$7,000 in accordance with the terms and conditions of the Purchase Agreement with Eastern Shore Coalition Against Domestic Violence, Incorporated, (Seller) and authorize the General Manager to execute same, substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary and further authorize the General Manager to execute the forthcoming deed of bargain and sale upon approval of legal counsel.
- b. Approve the acceptance of two parcels of real property deeded from the Town of Exmore for no consideration, located along Carolyn Street, and known as Lots nine (9) and ten (10), Exmore, Northampton County, Virginia, Tax Map Numbers: 010A203030000009 and 010A203000000010, to be used for a pump station within the Town Exmore.

CIP Project: ES010100

Project Description: This project will provide for the abandonment of the wastewater treatment plant in the Town of Nassawadox by taking advantage of unused capacity at the Onancock Treatment Plant. A pump station will be built in the Town of Nassawadox in order to abandon the Town's wastewater treatment plant and a pump station will be built in the [Town of Exmore](#) to receive additional flow. HRSD will replace the [Hartman Avenue](#) Pump Station due to additional flow being added to the existing station in the Town of Onancock. A pipeline will be constructed to connect and convey the flows from various towns starting at Nassawadox and north onto Onley.

These acquisitions allow for the construction and installation of the two new pump stations that will be required, as part of this project effort, to assist with capacity and conveyance of flow to the Onancock Treatment Plant.

Additional agreements and easement acquisitions will be required and negotiations are currently underway for these needed properties.

Attachments: The [Purchase Agreement](#) for the future Hartman Avenue Pump Station site was reviewed by HRSD staff and legal counsel. Upon approval and closing, the conveyance deed will be recorded. The [deed](#) for the two Town of Exmore parcels that will be utilized for the future Exmore Pump Station were also reviewed by HRSD staff and legal counsel.

Analysis of Cost: The acquisition cost of \$7,000 for property located at 12 and 14 Hartman Avenue reflects sales of similar nature in the area and negotiated purchase price with the owner.

TAX MAP NO.: 085A3A000000600
KPCTA FILE:
PROJECT: Eastern Shore Infrastructure Improvements – Transmission Force Main, Phase 1
ROUTE/STREET: 155 Market Street
CITY/COUNTY: Onancock, VA 23417

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT (this “Agreement”) made this _____ day of _____ 2022, by and between, **EASTERN SHORE COALITION AGAINST DOMESTIC VIOLENCE, INCORPORATED**, whose mailing address is ~~155~~ *P.O. Box 3*, Market Street, Onancock, VA 23417 (“Landowner/Seller”), and **HAMPTON ROADS SANITATION DISTRICT** (“HRSD”), a political subdivision of the Commonwealth of Virginia, located at 1434 Air Rail Avenue, Virginia Beach, Virginia 23455, the (“Buyer”). Collectively, Buyer and Seller shall be referred to as the “Parties.”

RECITALS

- A. Seller is the owner in fee simple absolute of a certain parcel of property described as LOT A, as, 0.230 acres, a portion of Parcel: 85A3-A-6, located at **12 and 14 Hartman Avenue** in the Town of Onancock, Virginia such property being more particularly described in Exhibit A and shown on Exhibit B, both of which are attached to and made a part of this Agreement (the “Property”).
- B. HRSD desires to purchase the Property from the Seller for the purpose of the Eastern Shore Infrastructure Improvements–Transmission Force Main, Phase 1.
- C. Seller is willing to sell the Property to HRSD subject to the terms and conditions set forth in this Agreement.
- D. These recitals are incorporated by this reference into this Agreement.

NOW, THEREFORE, in consideration of the purchase price and the mutual promises contained in this Agreement, the parties agree as follows:

1. **SALE**. Seller agrees to sell and HRSD agrees to purchase the Property, together with all rights and appurtenances thereto, including all right, title and interest of Seller in and to any land lying in the bed of any highway, street, road, or avenue, open or proposed, in front of or abutting, or adjoining such tract or piece of land and any riparian rights, if any, and any rights, easements, and appurtenances pertaining thereto, and any building and other property situated thereon, including all personal property,

attached or appurtenant to, located in or on, or used in connection with the real property, if any. The real property and the personal property are called "the Property".

2. PURCHASE PRICE. The purchase price (the Purchase Price) for the Property is **SEVEN THOUSAND AND 00/100 DOLLARS (\$7,000)**, and shall be paid to the Seller at settlement, by certified check or wired funds at closing.
3. CONVEYANCE.
 - a. At the Closing, Seller shall convey title to the Property in fee simple, by general warranty deed, free and clear of any and all liens, mortgages, deeds of trust, security interests, leases, covenants, conditions, restrictions, easements, rights-of-way, licenses, encroachments, judgments or encumbrances of any kind, except for the following permitted exceptions: (a) the lien of real estate taxes not yet due and payable; (b) zoning and building restrictions and other laws, ordinances, and regulations of governmental bodies having jurisdiction over the Property; and (c) matters of record affecting title to the property, as reviewed and approved (or deemed approved) by HRSD in accordance with this Agreement. Except as expressly stated in this Agreement, the Property shall be conveyed in "AS IS" condition.
 - b. Title to the Property shall be good and marketable and, if HRSD chooses to obtain title insurance, insurable by a nationally recognized ALTA title insurance company of HRSD's choice at or below normal rates. In the event that a title examination discloses defects of title or other matters unsatisfactory to HRSD at HRSD's sole determination, HRSD shall notify Seller in writing (an "Objection Notice"), within 90 days of the Effective Date of such title defects or other matters to which HRSD objects. Seller covenants that it shall cure all monetary encumbrances and all title objections which may be cured by execution of a document requiring the signature of no party other than Seller (including any affidavits which may reasonably be required by the title insurer). Seller may notify HRSD in writing (an "Objection Response"), within ten (10) business days after receiving an Objection Notice if it believes that the Objection Notice makes reference to any title defect or other matter that Seller cannot or elects not to cure. Upon receipt of an Objection Response from Seller, HRSD shall have the option either to (i) terminate this Agreement by notice to Seller given within ten (10) business days of the Objection Response or (ii) accept the defects, exceptions or other matters referenced in such Objection

Response and proceed to Closing hereunder with no reduction of the Purchase Price. Seller shall have the period until the Closing date within which to correct all defects, exceptions or other matters that it is required or elects to cure. Seller shall provide such documents (including evidence of authority), affidavits, and other instruments that may be reasonably required for the issuance of a title insurance policy to HRSD.

- c. Possession of the Property will be given to HRSD at Closing, except that HRSD will have access to the Property for the purposes specified herein.
 - d. Seller agrees to pay proration of real estate taxes and storm water fees and agrees to deliver possession of the Property to HRSD at settlement. HRSD will pay all other fees charged in connection with preparation and recordation of the deed, including grantor's tax.
 - e. Seller and HRSD agree that the attorney selected by HRSD shall act as the Settlement Agent at HRSD's expense. The Settlement Agent shall prepare the settlement statement, update and record the deed, collect and disburse settlement funds in accordance with this Agreement and the settlement statement, and file any required state and federal tax forms or other certifications.
4. RIGHT OF ENTRY. HRSD and HRSD's authorized representatives may at any reasonable time and after giving reasonable notice to Seller, enter upon the Property for the purpose of making inspections, appraisals, surveys, including but not limited to the cutting of survey lines and putting up markers and driving stubs and stakes, site analysis, engineering studies, core sampling for engineering reports, and locating existing rights of way, easements, and utilities. HRSD will exercise this right of entry in such a way so as to not cause unreasonable damage to the Property. HRSD agrees to indemnify and save harmless the Seller from all claims of liability for any personal injury or property damage or otherwise to any person or property caused by any action or omission of HRSD or its agents on the Property before or after Closing.
5. CONDITIONS AND CONTINGENCIES.
- a. HRSD's obligations are expressly conditioned upon the waiver or satisfaction of each of the following conditions in the sole determination of HRSD. If any one of the following conditions cannot be met within 120 days after the Effective Date (the Effective Date being defined as the date the contract is endorsed

by both HRSD and Seller), HRSD may unilaterally terminate this Agreement:

- i. Receipt of a satisfactory title commitment with all unacceptable title exceptions, encumbrances, and conditions as deemed by HRSD removed or cured at Seller's cost; however, if Seller chooses not to remove or cure any such title exception, HRSD's sole remedy shall be to terminate this Agreement;
 - ii. Receipt of a Phase I Environmental Assessment and Report (Phase I Report) conducted and prepared by an environmental engineering and inspection company selected by HRSD at HRSD's expense and such other testing and reports as may be reasonably required by HRSD or recommended in the Phase I Report;
 - iii. Seller's compliance of all of its obligations under this Agreement.
- b. This Agreement is expressly conditioned upon the completion of all title and environmental "due diligence" by HRSD and notification to the Seller in writing of any conditions that are unsatisfactory to HRSD within the 120 day period. In the event HRSD fails to notify the Seller in writing within such 120 day period, any objection to such conditions shall be deemed waived by HRSD and the parties shall proceed to closing; provided, however, in no event shall any mortgage, deed of trust, security agreement or monetary lien against the Property be deemed waived objections and the Seller agrees that the same shall be removed and released as liens on the Property on or before Closing.
- c. This Agreement is contingent on the review and approval of the purchase by the Hampton Roads Sanitation District Commission and upon such Commission granting authorization to the General Manager to proceed under the terms of this Agreement.

6. ENVIRONMENTAL AND RELATED MATTERS.

- a. As a condition precedent to HRSD's obligation to purchase, HRSD, at HRSD's expense, may have a Phase I Environmental Assessment of the Property performed by a qualified environmental consultant (the Consultant) selected by HRSD and reasonably acceptable to Seller, conducted in accordance with standard commercial practice at the time of the assessment. A copy of the

Phase I Environmental Assessment will be made available to Seller, together with copies of any supplemental reports or assessments.

- b. If the Consultant recommends soil, water, or structural remediation or further assessment activity after or as a result of performing a Phase I Environmental Assessment or if HRSD otherwise determines, in its reasonable judgment, that further assessment activity (including, but not limited to, a Phase II Environmental Assessment) is desirable, HRSD may at its option:
- (i) Terminate this Agreement; or
 - (ii) Extend the time for closing for an additional period of sixty (60) days in order to perform any such additional assessment at HRSD's expense; or
 - (iii) Waive the environmental defect and proceed to Closing.

In the event HRSD chooses to perform any additional assessment, such as a Phase II, and determines that the results of such assessment are not satisfactory, HRSD may at its option:

- (i) Terminate this Agreement; or
- (ii) Waive the environmental defect and proceed to Closing.

7. REPRESENTATIONS AND WARRANTIES BY SELLER. Seller represents and warrants as of the date of this Agreement and as of the date of Closing that: Seller has the right, title, and authority to enter into this Agreement and to perform its obligations hereunder.

Seller further represents and warrants and shall deliver to HRSD at or prior to the Settlement, an Owner's Affidavit prepared by HRSD and all other documents required by the title company to issue an owner's policy evidencing the following facts:

- (i) Other than this Agreement, there are no other contracts for sale or options involving the Property now in effect;
- (ii) To the best of Seller's knowledge, no other party has any right, title or interest in the Property;
- (iii) There are no unrecorded leases, options, licenses or easements existing in connection with the property to which the Seller has knowledge;

- (iv) There are no adverse government notifications or proceedings and there is no pending or threatened litigation or any other potentially adverse claims affecting the property to which the Seller has knowledge.
 - (v) Foreign Status. Seller is not a foreign corporation, person or entity and is a "United States Corporations, Person or Entity" as such terms is defined in Section 1445 and in Section 7701 (a)(30) of the Internal Revenue Code of 1986, as amended (the "Code") and shall deliver to HRSD at or prior to the Settlement an Affidavit prepared by HRSD evidencing such fact and such other documents as may be required under the Code.
 - (vi) From and after the date of this Agreement, Seller shall not transfer any interest in, or grant any easements or enter into any contractual agreement or understanding, written or oral, with respect to the Property or any portion thereof or make any changes at all that require recordation and therefore modifications to title, without the prior written consent of HRSD.
 - (vii) The Seller warrants that to the best of his knowledge there are no wetlands or hazardous wastes, which would prevent HRSD's intended use of the land. To the best of the Seller's knowledge: (i) none of the Property has been excavated (except for standard grading related to site development); (ii) no hazardous materials, toxic chemicals, or similar substances, as defined by 42 U.S.C. §1251, et seq. or 42 U.S.C. §6901, et seq. or 42 U.S.C. §9601, et seq., or 33 U.S.C. §1317(1), or 15 U.S.C. §2606(f), or 49 U.S.C. §1801, et seq., or regulations adopted pursuant thereto, or any similar provision of any applicable state, Federal, or local law (collectively "Hazardous Materials"), are or were stored or used on or under or otherwise were or are in existence or were in any way dealt with on or under the Property; and (iii) no owner or occupant of the Property has received any notice from any governmental agency with regard to such Hazardous Materials.
8. NOTICES. All notices to the parties hereto will be delivered by hand, via certified mail return receipt requested, or via facsimile and all be deemed effective upon delivery if by hand and upon confirmation of receipt if by other means, to the following address until the address is changed by notice in writing to the other party:

HRSD: Jay Bernas, P.E., M.B.A.
General Manager
P.O. Box 5911
Virginia Beach, Virginia 23471-0911

Copy to: Janice Pickrell Anderson, Esq.
Kellam, Pickrell, Cox & Anderson, PC
3 Caribbean Avenue
Virginia Beach, VA 23451

Seller: Eastern Shore Coalition Against Domestic Violence, Inc.
~~155 Market Street~~ P.O. Box 3
Onancock, Virginia 23417

9. CLOSING. Unless this Agreement is terminated pursuant to its terms or by mutual agreement of the parties, Closing will be made at the offices of the Settlement Agent on or about 120 days from the Effective Date of this Agreement
10. SURVIVAL. The provisions contained in this Agreement will be true as of the date of this Agreement and as of the date of Closing.
12. PRORATIONS. All rents, interest, taxes, insurance premiums, utility bills, and fuel oil, if any, will be prorated as of the date of Closing.
13. RISK OF LOSS. All risk of loss or damage to the Property by fire, windstorm, casualty, or other cause is assumed by Seller until Closing. In the event of substantial loss or damage to the Property before Closing, HRSD will have the option of either:
 - a. Terminating this Agreement, or
 - b. Affirming this Agreement and proceeding to Closing.
14. FUTURE SALE BY HRSD. In the event that HRSD shall determine to sell all or a portion of the property for private development within two (2) years of the Settlement Date, it agrees to notify Seller and give Seller first opportunity to purchase the property on such terms as the parties shall mutually agree. Such notice shall be written and addressed in accordance with the provisions of Section 8 herein or such other address provided to HRSD by the Seller and shall provide Seller with at least thirty (30) calendar days to present HRSD with an offer to purchase the property,

which is acceptable to HRSD. This provision will not be included within the deed.

15. BROKERS. Seller and HRSD both represent and warrant to the other that it has not hired, engaged, or consulted with any broker or agent in regard to this transaction. Each party agrees to indemnify and hold harmless the other from any and all costs, expenses, or damages resulting from any claim for brokerage fees or other similar forms of compensation made by any real estate broker or other person or entity with whom a party has dealt, and who is not expressly named herein.
16. CONDEMNATION. Seller covenants and warrants that Seller has not heretofore received any notice of any condemnation proceeding or other proceeding in the nature of eminent domain in connection with the Property. If prior to Settlement any such proceeding is commenced or any change is made, or proposed to be made, to the current means of ingress and egress to the Property or to the roads or driveways adjoining the Property, or to change such ingress or egress or to change the grade thereof, Seller agrees immediately to notify HRSD thereof. HRSD then shall have the right, at HRSD's option, to terminate this Agreement by giving written notice to Seller within thirty (30) days after receipt of such notice.
17. DEFAULT AND REMEDIES.
 - a. If the sale and purchase contemplated by this Agreement is not consummated because of Seller's or HRSD's default, the non-defaulting party may elect to:
 - i. Terminate this Agreement;
 - ii. Seek and obtain specific performance of this Agreement; or
 - iii. Pursue all other rights or remedies available at law or in equity, including an action for damages.
 - b. If either Seller or HRSD defaults under this Agreement, the defaulting party will be liable for any expenses incurred by the non-defaulting party in connection with the enforcement of its rights under this Agreement.
 - c. These remedies are cumulative and non-exclusive and may be pursued at the option of the non-defaulting party without a requirement of election of remedies.

18. ENTIRE AGREEMENT. This Agreement contains the entire agreement of the parties and will supersede the terms and conditions of all prior written and oral agreements, if any, concerning the matters it covers. The parties acknowledge there are no oral agreements, understandings, representations, or warranties that supplement or explain the terms and conditions contained in this Agreement. This Agreement may not be modified except by an agreement in writing signed by the parties.
19. WAIVER. Failure to insist upon strict compliance with any of the terms, covenants, or conditions hereof will not be deemed a waiver of the term, covenant, or condition, nor will any waiver or relinquishment of any right or power at any one time or more times be deemed a waiver or relinquishment of the right or power at any other time or times.
20. SEVERABILITY. This Agreement will be construed in its entirety and will not be divisible, except that the invalidity or unenforceability of any provision hereof will in no way affect the validity or enforceability of any other provision.
21. CAPTIONS. Captions are used in this Agreement for convenience only and will not be used to interpret this Agreement or any part of it.
22. GOVERNING LAW. This Agreement is to be construed in accordance with the laws of the Commonwealth of Virginia.
23. CHOICE OF FORUM/JURISDICTION. The parties hereby consent to the jurisdiction and venue of the courts of the Commonwealth of Virginia, specifically to the courts of the Town of Onancock, Virginia, and to the jurisdiction and venue of the United States District Court for the Eastern District of Virginia in connection with any action, suit, or proceeding arising out of or relating to this Agreement and further waive and agree not to assert in any action, suit, or proceeding brought in the Town of Onancock, Virginia, or the Eastern District of Virginia that the parties are not personally subject to the jurisdiction of these courts, that the action, suit, or proceeding is brought in an inconvenient forum or that venue is improper.
24. WAIVER OF TRIAL BY JURY. THE PARTIES WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING, OR COUNTERCLAIM BROUGHT BY EITHER PARTY AGAINST THE OTHER ON ANY MATTER WHATSOEVER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ANY RELATED AGREEMENTS OR INSTRUMENTS AND THE ENFORCEMENT THEREOF, INCLUDING ANY CLAIM OF INJURY OR DAMAGE TO ANY PARTY OR THE PROPERTY OF ANY PARTY.

25. SUCCESSOR/ASSIGNMENT. This Agreement will be binding upon and the obligations and benefits hereof will accrue to the parties hereto, their heirs, personal representatives, successors, and assigns. This Agreement is assignable by HRSD only upon written consent of the Seller, which consent will not be unreasonably withheld. If this Agreement is assigned by HRSD with Seller's consent, HRSD will nevertheless remain fully liable for its performance.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each will be considered an original, and together they will constitute one Agreement.
27. FACSIMILE SIGNATURES. Facsimile signatures will be considered original signatures for the purpose of execution and enforcement of the rights delineated in this Agreement.
28. ETHICS IN PUBLIC CONTRACTING. By executing this Agreement, the undersigned Seller or its representative, and the representative of HRSD, certify that the prices agreed to in this Agreement were arrived at without collusion or fraud and that they have not offered or received any payment, kickbacks or other inducement from any other party to this Agreement or its agent or employee in connection with this Agreement, and that they have not conferred on any public employee having responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services (or anything of more than nominal value, present or promised) unless disclosed in this Agreement.

[THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Hampton Roads Sanitation District Commission has caused this Agreement to be signed on its behalf by its General Manager in accordance with authorization granted at its regular meeting held on _____, 2022. This Agreement is expressly subject to approval by the HRSD Commission

WITNESS the following signatures and seals:

BUYER:

HAMPTON ROADS SANITATION DISTRICT (HRSD)

By: _____

Date: _____

Name: Jay Bernas, P.E., M.B.A.

Title: General Manager

Contact Address: 1434 Air Rail Avenue, Virginia Beach, Virginia 23455

COMMONWEALTH OF VIRGINIA

City of Virginia Beach, to-wit:

The foregoing instrument was acknowledged before me this ___ day of _____, 2022, by Jay Bernas, P.E., M.B.A., General Manager, Hampton Roads Sanitation District.

Notary Public

Notary Public Registration No. _____

My commission expires: _____

WITNESS the following signatures and seals:

SELLER:

Eastern Shore Coalition Against Domestic Violence, Incorporated

By: Patricia A. Dodge

Date: 6/14/22

aka PATRICIA A. DODGE

Name: Peaches Dodge, who is the same person as Patricia A. Dodge

Title: President

Contact Address: 12 Meadville Drive, Onancock, Virginia 23417
P.O. Box 3

COMMONWEALTH OF VIRGINIA

City/County of Accomack to-wit:

The foregoing instrument was acknowledged before me this 14th day of June,
2022, by Peaches Dodge, President, Eastern Shore Coalition Against Domestic
Violence, Incorporated aka Patricia A. Dodge

[Signature]
Notary Public

Notary Public Registration No. _____
My commission expires: _____

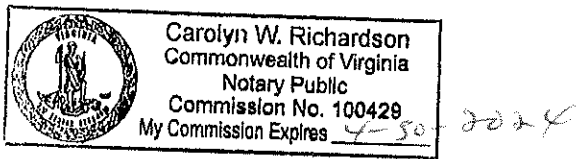


Exhibit "A"

Formal Legal Description

ALL THAT certain parcel of land situate in the Town of Onancock, Lee Magisterial District, Accomack County, Virginia, identified as "LOT A", containing 0.230 AC, as more particularly described on plat made by Bowman Consulting, dated May 27, 2022 and entitled "Plat Showing A Subdivision on the property of Eastern Shore Coalition Against Domestic Violence Incorporated, Instrument #210004298, Lee Magisterial District, Accomack County, Virginia" and recorded in the clerks office for the Circuit Court of Accomack County, Virginia in Plat Book _____ Page _____ / Instrument No. _____; on _____ day of _____, 2022.

IT BEING a part of the property conveyed to Eastern Shore Coalition Against Domestic Violence, Incorporated by deed dated August 12, 2021 from Maggy's Eastern Shore Properties, LLC, recorded on August 19, 2021 in the aforesaid clerk's office as Instrument #210004298.

Exhibit "B"

Subdivision Plat

SOURCE OF TITLE:
PARCEL: 08A3-A-8

THE PROPERTY SHOWN HEREIN WITH THE LIMITS OF THIS SUBDIVISION WAS CONVEYED AS FOLLOWS:

TO EASTERN SHORE COALITION AGAINST DOMESTIC VIOLENCE, INCORPORATED A NON-PROFIT CORPORATION, BY THE TAX MAP CONVEYED IN A FIRST EASE AND ON 2006, AND RECORDS ALL TO DEED IN INSTRUMENT NO. 2006-11 IN THE COUNTY COURT OF ACCORDA COUNTY, VIRGINIA.

BY: *Carly R. Kelly*
DEPUTY SHERIFF - LAW SERVICES

OWNER'S DECLARATION:

THE PLATTING AND BOUNDARIES OF THE MAP PARCELS, 08A3-A-8, SEE METRICIAN'S REPORT CONTAINING A PLAN NUMBER IS WITH THE BEST INTEREST AND IN ACCORDANCE WITH THE TERMS OF THE INSTRUMENTS, RECORDS AND PLATS, OF ANY, THAT ALL RIGHTS AND OBLIGATIONS ON THE PART AND WHOLLY BELONGING TO THE PROPERTY TO BE CONVEYED AND SHOWN ON THE MAP ARE SALES TO THE EASTERN SHORE COALITION AGAINST DOMESTIC VIOLENCE, INCORPORATED AND RECORDS IN INSTRUMENT NO. 2006-11 IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF ACCORDA COUNTY, VIRGINIA.

DATE: _____

NOTES:

1. SEE CONVEYANCE.
2. EASEMENT INCORPORATED FROM PARCEL 08A3-A-8.
3. CONVEYANCE TO EASTERN SHORE COALITION AGAINST DOMESTIC VIOLENCE, INCORPORATED, INSTRUMENT NO. 2006-11.
4. DEVELOPER: EASTERN SHORE COALITION AGAINST DOMESTIC VIOLENCE, INCORPORATED, 100 MARKET STREET, DANBURG, VA 22827.
5. BOUNDARY INFORMATION AS SHOWN HEREON IS BASED ON A CEMENT FIELD SURVEY PERFORMED BY BOWMAN CONSULTING GROUP, INC. COMPLETED ON DECEMBER 12, 2023.
6. THE SHOWN PROPERTY BOUNDARIES ARE IN ACCORDANCE WITH THE TERMS OF THE INSTRUMENTS, RECORDS AND PLATS, OF ANY, THAT ALL RIGHTS AND OBLIGATIONS ON THE PART AND WHOLLY BELONGING TO THE PROPERTY TO BE CONVEYED AND SHOWN ON THE MAP ARE SALES TO THE EASTERN SHORE COALITION AGAINST DOMESTIC VIOLENCE, INCORPORATED AND RECORDS IN INSTRUMENT NO. 2006-11 IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF ACCORDA COUNTY, VIRGINIA.
7. THE SHOWN PROPERTY BOUNDARIES ARE SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD AND BOUNDARY SURVEYS, AND ANY OTHER RIGHTS, RESTRICTIONS AND EASEMENTS OF RECORD THAT MAY AFFECT THE AREA SHOWN.
8. THERE ARE ALIEN INTERESTS SHOWN AND THEREIN FROM PLAT BOOK 23, PAGE 11 FOR THE PURPOSE OF CALCULATING LOT AREA.

VICINITY MAP
SCALE: 1" = 100'

AREA TABULATION
ORIGINAL TAX MAP 08A3-A-8: 4.8124 AC
NEW LOT 1: 0.135 AC
NEW LOT 2: 4.6774 AC
TOTAL: 4.8124 AC

COUNTY APPROVAL:

APPROVED BY THE BOARD OF SUPERVISORS OF ACCORDA COUNTY, VIRGINIA, ON THIS _____ DAY OF _____, 2024.

BY: _____

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL OF THE REQUIREMENTS OF THE BOARD OF SUPERVISORS OF ACCORDA COUNTY, VIRGINIA, HAVE BEEN COMPLIED WITH AND THAT THE PLATTING OF THIS SUBDIVISION IS IN ACCORDANCE WITH THE TERMS OF THE INSTRUMENTS, RECORDS AND PLATS, OF ANY, THAT ALL RIGHTS AND OBLIGATIONS ON THE PART AND WHOLLY BELONGING TO THE PROPERTY TO BE CONVEYED AND SHOWN ON THE MAP ARE SALES TO THE EASTERN SHORE COALITION AGAINST DOMESTIC VIOLENCE, INCORPORATED AND RECORDS IN INSTRUMENT NO. 2006-11 IN THE OFFICE OF THE CLERK OF THE CIRCUIT COURT OF ACCORDA COUNTY, VIRGINIA.

BY: *Chris S. Wheeler*, INC. NO. 2240
BOWMAN CONSULTING GROUP, INC.

SCALE: 1" = 40'

DATE: MAY 27, 2024

Bowman CONSULTING

Chris S. Wheeler, Inc. No. 2240
100 Market Street
Danburg, VA 22827
Tel: 540-825-1111
Fax: 540-825-1112

LOT A
0.135 AC

LOT B
4.6774 AC

LOT C
0.0000 AC

EASTERN SHORE COALITION AGAINST DOMESTIC VIOLENCE INCORPORATED
100 MARKET STREET
DANBURG, VA 22827
4.8124 AC (TOTAL)

LEGEND:

SYMBOL	LEGEND
SP 8	IRON PIPE FOUND
SP 9	IRON ROD FOUND
SP 10	IRON ROD SET
SP 11	EXISTING CURB
SP 12	APPROXIMATE EDGE OF WATER
SP 13	PROPERTY LINE
SP 14	ADJACENT PROPERTY LINE
SP 15	PERMITS LINE

SCALE: 1" = 40'

DATE: APR 8, 2024

Bowman CONSULTING

Chris S. Wheeler, Inc. No. 2240
100 Market Street
Danburg, VA 22827
Tel: 540-825-1111
Fax: 540-825-1112

EXEMPT from State and Local recording taxes pursuant to Section 58.1-811(A)(3) AND 58.1-811(C)(4), Code of Virginia, 1950, as amended

TOWN OF EXMORE, VIRGINIA
a municipal corporation of the
Commonwealth of Virginia

to **DEED OF BARGAIN AND SALE**

HAMPTON ROADS SANITATION DISTRICT,
a political subdivision of the
Commonwealth of Virginia

THIS DEED, made this 8th day of April, 2022, by and between, TOWN OF EXMORE, VIRGINIA, a municipal corporation of the Commonwealth of Virginia, **GRANTOR**, and HAMPTON ROADS SANITATION DISTRICT, a political subdivision of the Commonwealth of Virginia, **GRANTEE**, whose mailing address is: Post Office Box 5911, Virginia Beach, VA 23471-0911.

WITNESSETH:

That for and in consideration of the sum of ten (\$10.00) dollars, and other good and valuable consideration, the receipt of which is hereby acknowledged, the said Grantor does grant, bargain, sell, assign and convey, with **SPECIAL WARRANTY** and with **ENGLISH COVENANTS OF TITLE** unto the said **HAMPTON ROADS SANITATION DISTRICT**, a political

Prepared by and Return to:
Janice Pickrell Anderson VA State Bar #36930
KELLAM, PICKRELL, COX & ANDERSON, P.C.
403 Boush Street, Suite 300
Norfolk, VA 23510
Telephone: 757-627-8365
Facsimile: 757-625-2189

**KELLAM, PICKRELL,
COX & ANDERSON**
PROFESSIONAL CORPORATION
ATTORNEYS AT LAW

Consideration: None; Assessment: \$ 5,500.00 and \$ 5,500.00
Tax ID: 010A2-03-00-0000009 and 010A2-03-00-0000010
Title Insurance: Fidelity National Title Ins Co.

subdivision of the Commonwealth of Virginia, Grantee, the following described property, to-wit:

ALL THOSE two (2) certain lots or parcels of land located in the Town of Exmore, Northampton County, Virginia number and designated as Lots nine (9) and ten (10) on that certain map or plat entitled "M. J. Duer's Lot Division, Exmore, Virginia," dated September 9, 1950 and prepared by Geo H. Badger, Jr.-C.S. which map or plat is recorded in the aforesaid Clerk's Office in Plat Book 5, Page 37 and thereto reference is hereby made for a more accurate description thereof.

IT BEING a portion of the same property conveyed to the Grantor by Deed of Gift dated May 13, 2013 from Carolyn Duer Pennell recorded in the Clerk's Office of the Circuit Court of Northampton County, Virginia as Instrument No. 130000954, and pursuant to Corrected Quitclaim Deed dated February 7, 2022 and recorded in the Clerk's Office of the Circuit Court of Northampton County, Virginia as Instrument No. 220000709.

The above property is conveyed subject to the conditions, restrictions, reservations covenants and easements of record in the chain of title, if any, constituting constructive notice.

WITNESS the following signature and seal:

TOWN OF EXMORE, VIRGINIA

By  (SEAL)

Robert G. Duer, Town Manager

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF Northampton, to-wit:

I, the undersigned, a Notary Public in and for the City/County and State aforesaid, do hereby certify that ROBERT G. DUER, TOWN MANAGER of TOWN OF EXMORE, VIRGINIA,

whose name is signed to the foregoing instrument, has acknowledged the same before me

In my City/County and State aforesaid this 8th day of April, 2022.

Ethel B. Parks

Notary Public

Registration No. 327725

My Commission expires: June 30, 2023

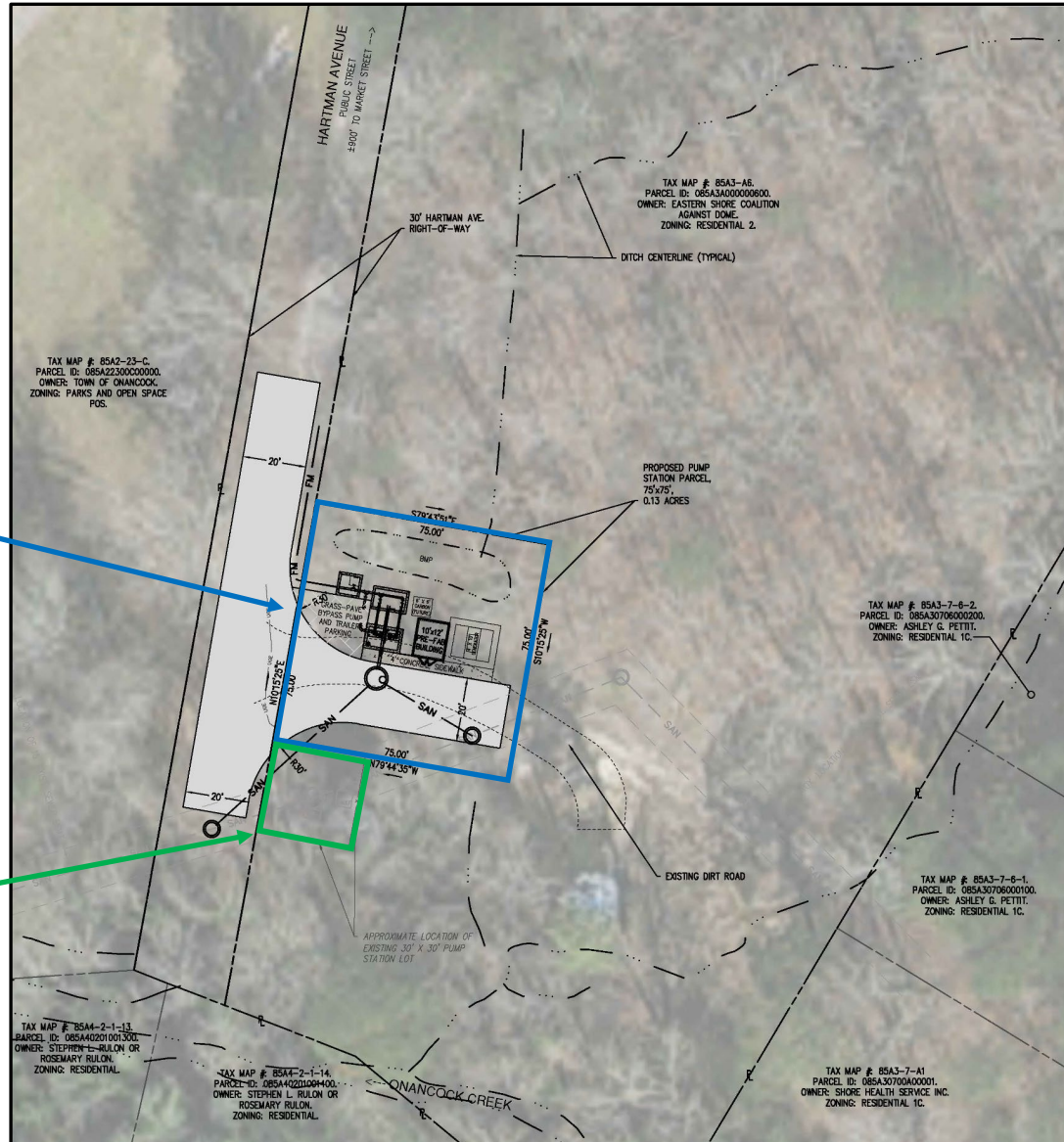


Commonwealth of Virginia
Ethel B. Parks - Notary Public
Registration # 327725

DOC/SAP/REAL ESTATE/HRSD PURCHASES/Purch Parcels EXMORE, VA/DEED

KELLAM, PICKRELL,
COX & ANDERSON
PROFESSIONAL CORPORATION
ATTORNEYS AT LAW

12 and 14 Hartman Avenue, Onancock, Virginia Location Map



Proposed pump station location and layout

Existing pump station location

Carolyn Avenue, Exmore, Virginia Location Map



Proposed pump station location

HRSD FM Easement within Railroad ROW

AGENDA ITEM 7. – June 28, 2022

Subject: Jefferson Avenue Interceptor Force Main Replacement Phase III
Easement Acquisition - 12130 Jefferson Avenue, Newport News, Virginia 23602

Recommended Action: Approve the purchase of a 14,418 square foot permanent easement for \$170,600 in accordance with the terms and conditions of the Purchase Agreement with Target Corporation (f/k/a Dayton Hudson Corporation), (Seller) and authorize the General Manager to execute same and related acquisition documents in accordance with those terms and conditions substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary and as approved by counsel.

CIP Project: JR011730

Regulatory Requirement: None

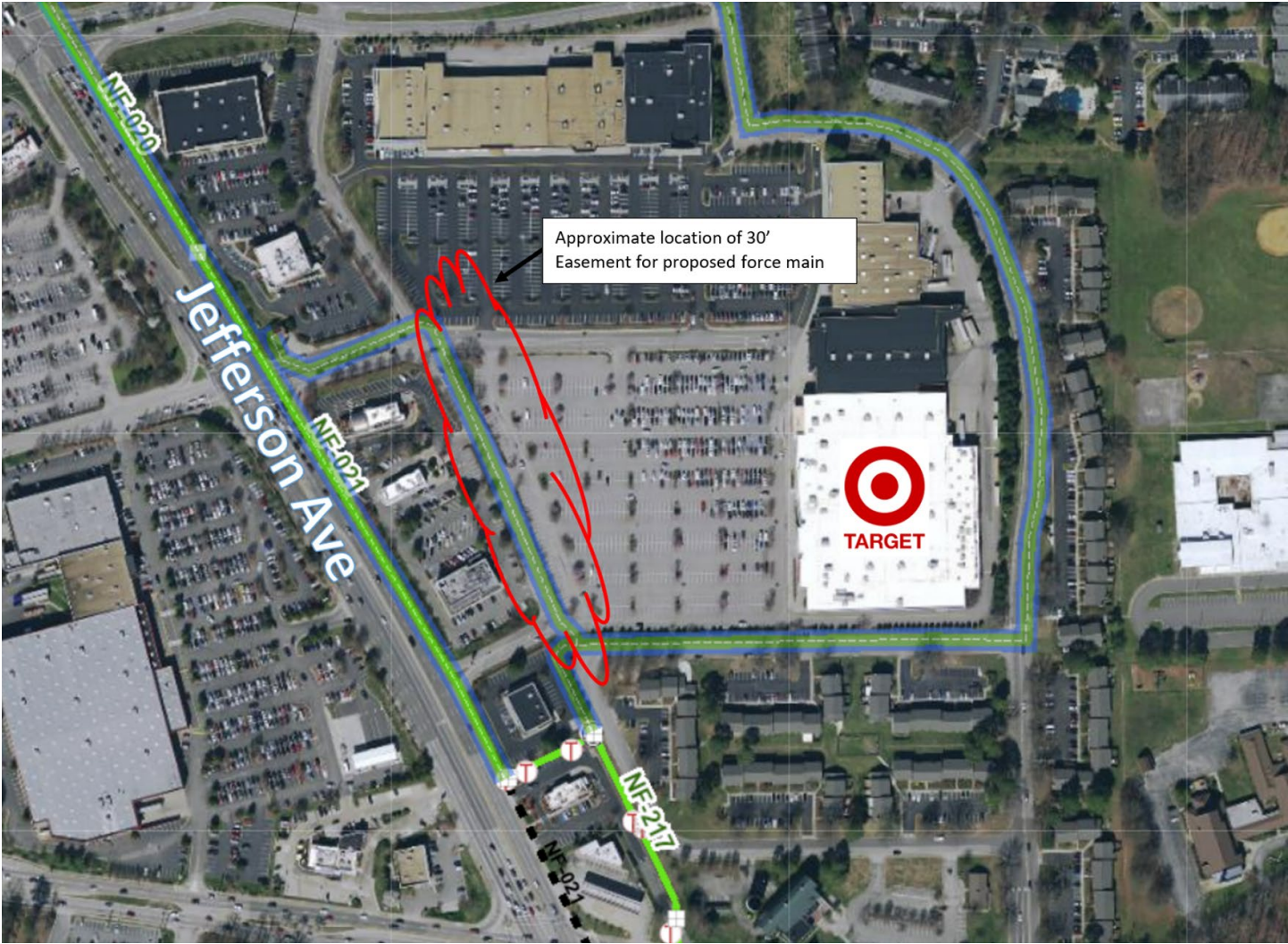
Budget	\$11,039,588
Previous Expenditures and Encumbrances	(\$1,714,732)
Available Balance	\$9,324,856

Project Description: This project will replace approximately 9,000 linear feet of 12-inch, 14-inch, and 16-inch HRSD force main from the intersection of Route 171 (Oyster Point Road) and Jefferson Avenue to the proposed Patrick Henry jumper. A preliminary hydraulic and capacity analysis revealed that pressures in the HRSD force main are hindering the City of Newport News' pump stations from entering the HRSD system during high flow conditions. Future development is planned for the service area, which will exacerbate the current problem. Construction of this project will also provide additional capacity and system flexibility when combined with other proposed improvements.

As part of the project, HRSD will require 15 temporary and permanent easements. The subject easement acquisition cost is above the \$25,000 threshold as defined in HRSD's Commission Governance Guidelines and will require Commission approval.

The [Purchase Agreement](#) is attached and upon approval, the conveyance Deed will be forthcoming. The final Deed will be reviewed by HRSD staff and legal counsel before execution. The attached [plat](#) and [map](#) depict the project and easement location.

Analysis of Cost: The cost for the easement is based upon an appraisal by Dove Valuations, Inc. as well as a negotiated settlement with the property owner, which includes estimated impact to Landowner and costs for lender releases on the property.



Approximate location of 30'
Easement for proposed force main



AGREEMENT

THIS AGREEMENT, made this 3rd day of May, 2022, by and between **TARGET CORPORATION** formerly known as **DAYTON HUDSON CORPORATION**, a Minnesota corporation, whose mailing address is 1000 Nicollet Mall, Minneapolis, Minnesota 55440 (“Landowner”), and **HAMPTON ROADS SANITATION DISTRICT** (“HRSD”), a political subdivision of the Commonwealth of Virginia, located at 1434 Air Rail Avenue, Virginia Beach, Virginia 23455 (the “Grantee”), and Collectively, Landowner and HRSD shall be referred to as the “Parties.”

WITNESSETH: That for and in consideration of one dollar and other valuable consideration, receipt of which is hereby acknowledged, Landowner agrees to convey to HRSD a Permanent Utility Easement over, across and through the following described property of the Landowner, by Deed of Easement (attached hereto as Exhibit A), properly executed, acknowledged, and delivered.

The land and improvements subject to the Permanent Utility Easement (hereinafter referred to as the "Easement") is described as follows:

All that certain Permanent Utility Easement located in the City of Newport News, Virginia, shown and designated as a “20’ SANITARY SEWER EASEMENT HEREBY DEDICATED 14,418 S.F. OR 0.33099 AC.”, as shown on the attached plat prepared by Paul W. Michael, Jr., Surveyor, Michael Surveying & Mapping, P.C., 41 Old Oyster Point Road, Suite B, Newport News, Virginia 23602 entitled, “EASEMENT PLAT FROM: DAYTON HUDSON CORPORATION TO: HAMPTON ROADS SANITATION DISTRICT”, and dated December 1, 2020; and being part of the same property containing 12.89 acres as shown on Plat of Parcel 1, as shown on that certain plat entitled “Subdivision Plat of Parcel E as shown on Plat of the Property of Yoder Development Company in (DB 779, PG 130) and a Portion of Part of the Property of H.E. and C.P. Yoder Parcels “A”, “B”, and “C”, Newport News, Virginia, plat recorded in Deed Book 1408, Page 367, which said plat is dated July 14, 1995, and made by Engineering Services, Inc., Civil Engineering – Land Surveying.

The total consideration for the conveyance provided for herein is as follows:

CONSIDERATION: ONE HUNDRED SEVENTY THOUSAND SIX HUNDRED DOLLARS AND 00/100 CENTS (\$170,600.00) in full for the easement described herein before and for all damages, if any.

The consideration hereinabove mentioned represents the value of all estates or interests in such land, and the damages to remaining lands of the Landowner which may result by reason of the use to which HRSD will put the land to be conveyed.

It is understood and agreed that the consideration paid to the Landowner in connection herewith constitutes payment in full for the Easement hereby conveyed. Damages, if any, to the residue or other property of the Landowner resulting from the project and use made of the Easement conveyed for the installation of the facilities shall be covered by the HRSD.

In the event the Landowner is unable to convey clear title to the above easement to HRSD as herein provided, and HRSD should elect to institute condemnation proceedings for the purpose of acquiring such easement, it is agreed by the Landowner that this instrument may be introduced in such proceedings as evidence of the value of land and damages, if any, to the remaining property of the Landowner.

The Landowner by execution of this instrument acknowledges that the plans for the aforesaid project as they affect the subject property have been fully explained to the undersigned.

HRSD or its contractor will restore Landowner's land and Parcel affected as a result of construction of the project as closely as is reasonably possible to its pre-construction condition (or better) upon completion of the Project including replacing with acceptable landscaping. Any disturbance of the premises during the life of this Agreement by the **GRANTEE** or its contractor will be restored by the **GRANTEE** as nearly as practicable. This includes paving, fences, backfilling of trenches, grass, reseeding, replacing or replanting landscaping, addressing ground sink issues, and removal of trash or debris. Landscaping will be replaced with immature trees, shrubs, and ground cover.

HRSD or its contractor hereby agrees that it will perform all such measures in a manner causing as little inconvenience and disruption to the Landowner, and Landowner's invitees, licensees and occupants as is reasonably possible.

RIGHT TO ENTER: The HRSD, or its agents, may exercise the right to enter upon so much of the parcel or Land needed for such purposes as may be necessary for the construction of this project with at least 48-hour notice to the Landowner, unless in cases of emergency repair of HRSD facilities.

ETHICS IN PUBLIC CONTRACTING: By executing this Agreement, the undersigned Landowner or its representative, and the representative of HRSD, certify that the prices agreed to in this Agreement were arrived at without collusion or fraud and that they have not offered or received any payment, kickbacks or other inducement from any other party to this Agreement or its agent or employee in connection with this Agreement, and that they have not conferred on any public employee having responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless disclosed in this Agreement.

Landowner acknowledges that HRSD has relied upon these covenants, representations and warranties in purchasing the above easements.


Settlement shall be within ninety (90) days, or as soon thereafter, allowing a reasonable time to correct any title defects reported by the title examiner and preparation and signing of the necessary documents to enable the HRSD to take proper title.

THE COVENANTS, AGREEMENTS, REPRESENTATIONS, WARRANTIES OF THE LANDOWNER CONTAINED IN THESE PARAGRAPHS SHALL SURVIVE THE CLOSING AND DELIVERY OF THE DEED OF EASEMENT ACROSS THE SUBJECT LAND.

WITNESS the following signatures and seals:

LANDOWNER:

Target Corporation, a Minnesota corporation

By:  (SEAL)
Name: Michael Seaman (Signature)

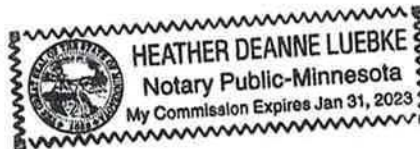
Title: Sr. Director Real Estate

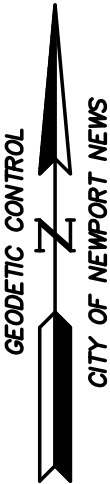
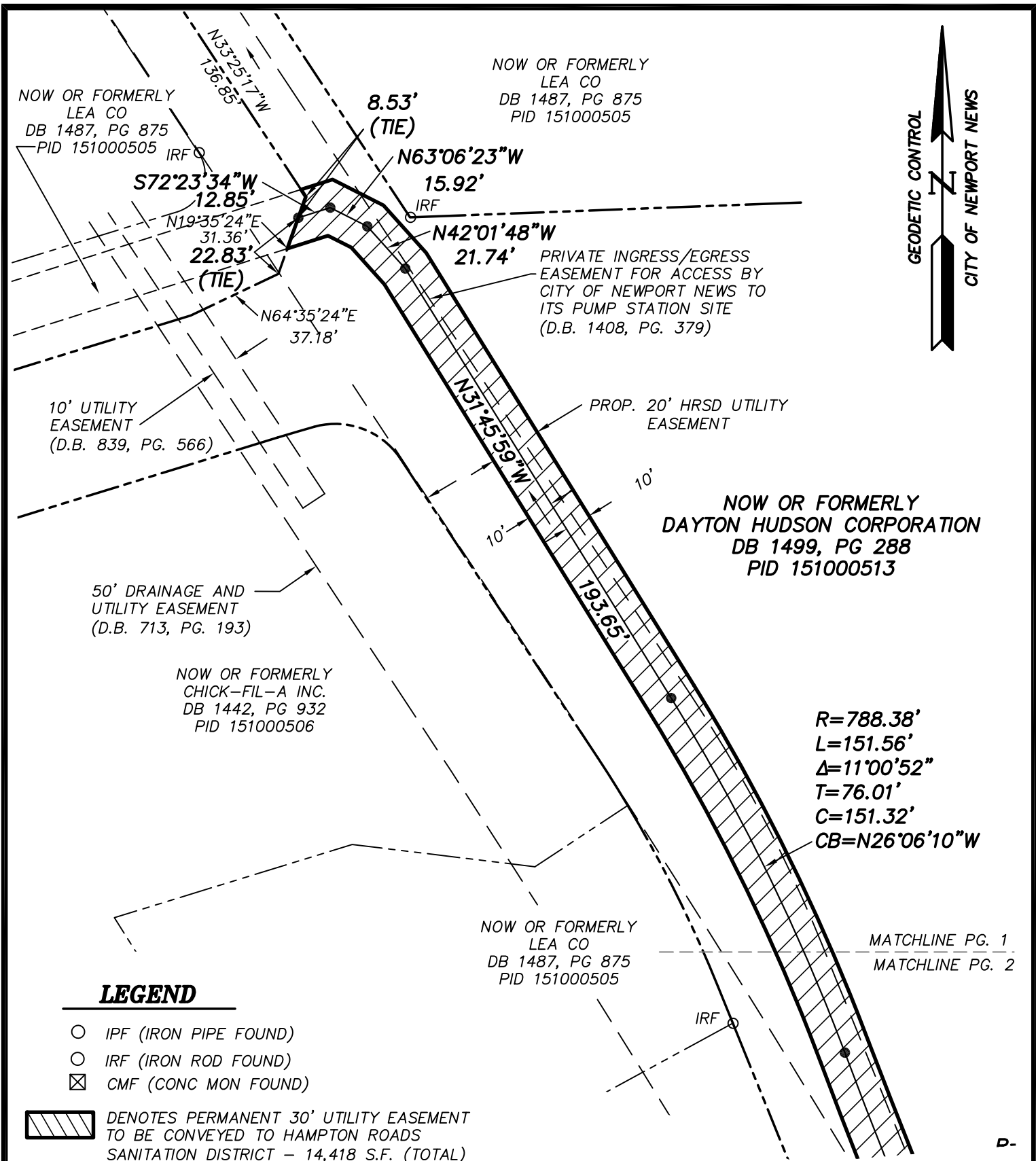
STATE/Commonwealth of Minnesota
City/County of Hennepin, to-wit:

The foregoing instrument was acknowledged before me this 3rd day of May, 2022, by Michael Seaman, on behalf of Target Corporation, a Minnesota corporation.


Notary Public

Notary Public Registration No. 31057562
My commission expires: January 31, 2023





LEGEND

- IPF (IRON PIPE FOUND)
- IRF (IRON ROD FOUND)
- ⊠ CMF (CONC MON FOUND)

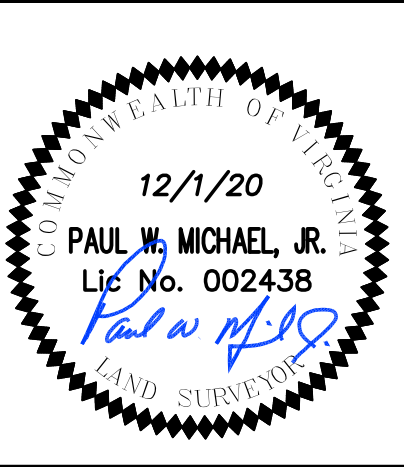
DENOTES PERMANENT 30' UTILITY EASEMENT TO BE CONVEYED TO HAMPTON ROADS SANITATION DISTRICT - 14,418 S.F. (TOTAL)

NOTES:

1. HORIZONTAL COORDINATE INFORMATION IS BASED ON THE CITY OF NEWPORT NEWS GEODETTIC CONTROL NETWORK, STATE PLANE COORDINATE SYSTEM SOUTH ZONE (NAD 83) (1992), UNITS ARE U.S. SURVEY FEET.

2. PROPERTY LINES SHOWN ARE BASED ON COMPILED RECORD INFORMATION, TAX MAP INFORMATION AND MADE TO FIT FIELD FOUND MONUMENTATION. THIS PLAT IS FOR EASEMENT PURPOSES ONLY AND DOES NOT CONSTITUTE A PHYSICAL OR BOUNDARY SURVEY.

3. A TITLE REPORT WAS NOT PROVIDED FOR THIS PROJECT, THEREFORE THERE MAYBE OTHER EASEMENTS THAT AFFECT THE PROPERTY THAT ARE NOT SHOWN.



References:
D.B. 1499,
PG. 288

Notes:
PAGE 1 OF 2

EASEMENT PLAT
FROM: DAYTON HUDSON CORPORATION
TO: HAMPTON ROADS SANITATION DISTRICT
PROJECT: JEFFERSON AVE IFM
REPLACEMENT PHASE III

Date: 12/1/20 Scale: 1"=50' Job No.: 19-012

MICHAEL SURVEYING & MAPPING, P.C.
41 OLD OYSTER POINT RD. - SUITE B
NEWPORT NEWS, VIRGINIA 23602
TEL 757.873.1762 FAX 757.873.1772

NOW OR FORMERLY
LEA CO
DB 1487, PG 875
PID 151000505

MATCHLINE PG. 1
MATCHLINE PG. 2



NOW OR FORMERLY
QCA NEWPORT NEWS LLC
INST #170007008
PID 151000510

$R=2820.49'$
 $L=198.96'$
 $\Delta=4'02'30''$
 $T=99.52'$
 $C=198.92'$
 $CB=N22'36'59''W$

NOW OR FORMERLY
DAYTON HUDSON CORPORATION
DB 1499, PG 288
PID 151000513

NOW OR FORMERLY
QCA NEWPORT NEWS LLC
INST #170007008
PID 151000510

50' DRAINAGE AND
UTILITY EASEMENT
(D.B. 713, PG. 193)

PRIVATE INGRESS/EGRESS
EASEMENT FOR ACCESS BY
CITY OF NEWPORT NEWS TO
ITS PUMP STATION SITE
(D.B. 1408, PG. 379)

$R=25.00'$
 $L=27.78'$
 $\Delta=63'39'36''$
 $T=15.52'$
 $C=26.37'$
 $CB=S59'16'59''E$

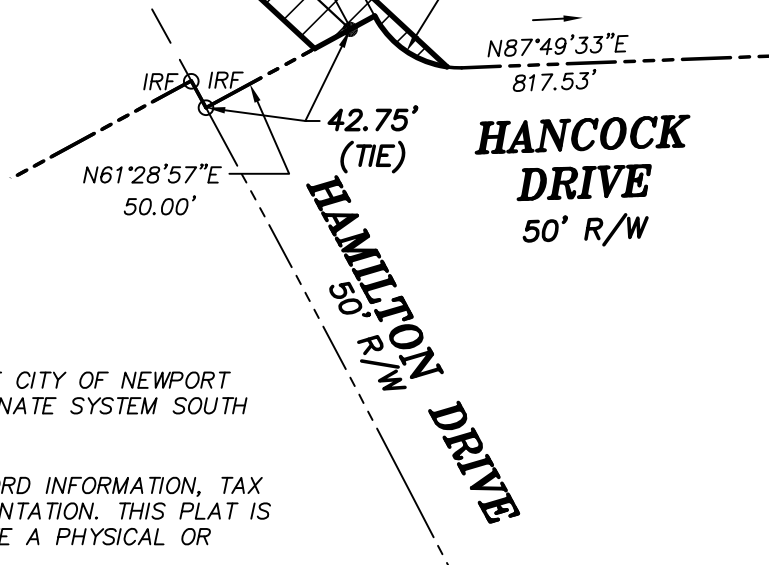
LEGEND

- IPF (IRON PIPE FOUND)
- IRF (IRON ROD FOUND)
- ⊠ CMF (CONC MON FOUND)

DENOTES PERMANENT 30' UTILITY EASEMENT
TO BE CONVEYED TO HAMPTON ROADS
SANITATION DISTRICT - 14,418 S.F. (TOTAL)

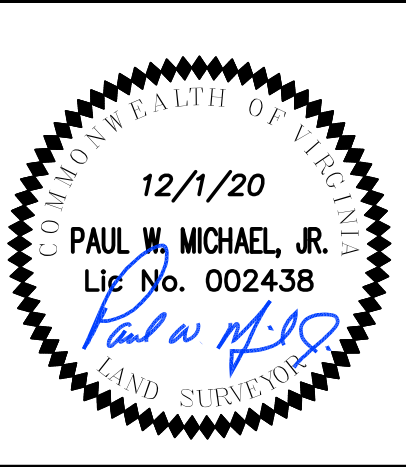
NOTES:

1. HORIZONTAL COORDINATE INFORMATION IS BASED ON THE CITY OF NEWPORT NEWS GEODETTIC CONTROL NETWORK, STATE PLANE COORDINATE SYSTEM SOUTH ZONE (NAD 83) (1992), UNITS ARE U.S. SURVEY FEET.
2. PROPERTY LINES SHOWN ARE BASED ON COMPILED RECORD INFORMATION, TAX MAP INFORMATION AND MADE TO FIT FIELD FOUND MONUMENTATION. THIS PLAT IS FOR EASEMENT PURPOSES ONLY AND DOES NOT CONSTITUTE A PHYSICAL OR BOUNDARY SURVEY.
3. A TITLE REPORT WAS NOT PROVIDED FOR THIS PROJECT, THEREFORE THERE MAYBE OTHER EASEMENTS THAT AFFECT THE PROPERTY THAT ARE NOT SHOWN.



HANCOCK DRIVE
50' R/W

HAMILTON DRIVE
50' R/W



References:
D.B. 1499,
PG. 288

Notes:
PAGE 2 OF 2

EASEMENT PLAT
FROM: DAYTON HUDSON CORPORATION
TO: HAMPTON ROADS SANITATION DISTRICT
PROJECT: JEFFERSON AVE IFM REPLACEMENT PHASE III

Date: 12/1/20 Scale: 1"=50' Job No.: 19-012

MICHAEL SURVEYING & MAPPING, P.C.
41 OLD OYSTER POINT RD. - SUITE B
NEWPORT NEWS, VIRGINIA 23602
TEL 757.873.1762 FAX 757.873.1772

AGENDA ITEM 8. – June 28, 2022

Subject: Middlesex Collection System – Cooks Corner
Additional Appropriation and Contract Award (>\$200,000)

Recommended Actions:

- a. Appropriate additional funding in the amount of \$2,953,747.
- b. Award a contract to Tidewater Utility Inc. in the amount of \$3,734,750.

CIP Project: MP013500**Regulatory Requirement: None**

Budget	\$1,660,622
Previous Expenditures and Encumbrances	(\$363,407)
Available Balance	\$1,297,215
Proposed Contract to Tidewater Utility Inc.	(\$3,734,750)
Proposed Task Order to Bowman Consulting Group, Ltd.	(\$195,994)
Proposed Task Order to System East Inc.	(\$135,218)
Proposed Contingency	(\$185,000)
Project Shortage/Requested Additional Funding	(\$2,953,747)
Revised Total Project Authorized Funding	\$4,614,369

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. The project was advertised on March 22, 2022, and two bids were received on April 21, 2022. The bids received are listed below:

Bidder	Bid Amount
Tidewater Utility Construction Inc.	\$3,734,750
Walter C. Via Enterprises Inc.	\$4,437,745

Engineer Estimate: \$2,943,675

The design engineer, Bowman Consulting Group, Ltd., evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder Tidewater Utility Construction Inc. in the amount of \$3,734,750.

Project Description: This project consists of a wastewater collection system to convey wastewater from the Cook's Corner service area to the planned Middlesex Interceptor system. The collection system will consist of approximately 3,200 linear feet of gravity sewer, a submersible pump station, and 1,100 linear feet of force main.

The attached [map](#) depicts the project location.

Project Justification: Middlesex County has secured funding for the revitalization of Cook's Corner including a Vibrant Communities Initiative Grant and an Industrial Revitalization Fund Grant which was awarded in August 2018 and entails completing the revitalization in 18 months. Providing

sanitary sewer service to the area is a requirement of these grants. The [Memorandum of Agreement](#) between the Hampton Roads Sanitation District and Middlesex County for Cost Sharing of Sewer System Projects outlines that HRSD will manage design and construction of collection system projects on behalf of Middlesex County. The “Project Design” section of the agreement states “All costs incurred by HRSD related to the collection system of any such project shall be reimbursed by the project funds once financing is secured by the County for construction of the collection system.” The “Construction” section of the agreement states that “all costs associated with construction, inspection and administration related to the collection system portion of the project shall be included in the project cost and reimbursed to HRSD by the County.” This project was authorized and approved for construction at the [June 15, 2022 Board of Supervisor’s](#) meeting.

Analysis of Cost: The original CIP project estimate did not anticipate or foresee the current market rate, inflation, and current workload of local and national construction firms. In addition, the Engineer’s estimate is lower than the bids received mainly due to the subcontractor’s and vendor’s reluctance to provide final pricing on materials until orders are submitted. Bowman’s construction cost estimate is approximately 26% lower than the low bid. The majority of the cost differential was attributed to the cost of 8-inch gravity sewer pipe. Due to unstable market conditions, contractors are also including escalation factors in the bid to account for any future cost impacts which is understood as another factor impacting cost differentials between the Engineers estimate and the low bid. The lowest responsive and responsible bid amount of \$3,734,750 exceeds the current balance available for the CIP project. A five percent construction contingency is also being requested for unforeseen conditions, in the amount of \$185,000. Bowman Consultant Group, Ltd. will be used to perform construction phase service, in the amount of \$195,994. System East Inc. will provide construction services to install controls for the pump station, in the amount of \$135,218. Therefore, the project requires \$2,953,747 in additional funding.

<u>Schedule:</u>	Construction	July 2022
	Project Completion	July 2023

**MEMORANDUM OF AGREEMENT
BETWEEN
THE HAMPTON ROADS SANITATION DISTRICT
AND
MIDDLESEX COUNTY
FOR
COST SHARING OF SEWER SYSTEM PROJECTS**

This Memorandum of Agreement for Cost Sharing of Sewer Collection System Projects defines the responsibilities of the Hampton Roads Sanitation District (HRSD) and Middlesex County (the COUNTY) related to study, design and construction of sanitary sewer collection systems within Middlesex County to be connected to HRSD Interceptor and treatment facilities.

BACKGROUND

1. HRSD is a political subdivision of the Commonwealth responsible for the effective treatment and disposal of wastewater in the communities that are within the HRSD service area to protect public health and the waters of the Commonwealth. HRSD is responsible for treatment capacity and piping to "intercept" local collection systems and convey those flows to the HRSD treatment facilities. HRSD owns and operates one treatment facility in Middlesex County that serves the Courthouse and County jail facilities.
2. Middlesex County is within the territory that has been legislatively and court ordered to be within the Hampton Roads Sanitation District. Middlesex County is responsible for determining where sewer service will be provided within the COUNTY and land use designations that determine the potential sewage flow from each area so designated. There are currently no sanitary sewer collection systems within the COUNTY connected to the HRSD system with the exception of the Independent Town of Urbanna.
3. The COUNTY is interested in providing sewer service to other areas of the COUNTY. The COUNTY would like to take advantage of the expertise of HRSD to help determine feasibility, design and construct collection systems within the COUNTY.
4. HRSD has previously funded studies that have investigated the feasibility of adding sewer facilities to various parts of the COUNTY. These studies have been accomplished at HRSD's cost and have demonstrated that construction of collection system facilities within the COUNTY was cost prohibitive at that time. As a result the COUNTY has not moved forward on any specific project to date.

FEASIBILITY STUDIES

5. At the request of the COUNTY with appropriate approvals and in consultation with HRSD, HRSD will commission and conduct sewer feasibility studies up to and including development of a Preliminary Engineering Report (PER). Such studies shall be funded by HRSD (subject to funds availability) upon authorization by the COUNTY and completed accordance mutually agreed upon terms, cost and time schedules. Should a project not move forward within 24 months of completion of a study requested and authorized by the COUNTY, the COUNTY shall reimburse HRSD for the agreed cost of the study authorized by the County.

Project Design

6. If upon completion of a feasibility study and PER, the COUNTY desires to move a project through to detailed design and preparation of contract documents, HRSD shall fund (subject to funds availability) and manage that work on behalf of the COUNTY. All costs incurred by HRSD related to the collection system of any such project shall be reimbursed by the project funds once financing is secured by the COUNTY for construction of the collection system. Costs associated with interceptors and treatment facilities shall be HRSD's responsibility.

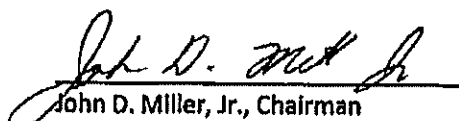
Construction


7. HRSD will manage the bidding process and construction on behalf of the COUNTY for any sanitary sewer project, including collection system projects. All costs associated with construction, inspection and administration related to the collection system portion of the project shall be included in the project cost and reimbursed to HRSD by the County. HRSD shall be responsible for all costs associated with transmission force mains, interceptors and treatment to be provided per HRSD policy.

Reimbursement

8. All payments due under this agreement shall be made within 60 days of demand. HRSD shall provide access to all records and support all payment requests with appropriate documentation (contracts, internal time accounting and hourly rates, etc.) HRSD labor will be reimbursed at the fully burdened labor rate established by HRSD during the applicable fiscal year. Should HRSD terminate the study prior to completion, HRSD forfeits all claims for reimbursement.

Signatures


John D. Miller, Jr., Chairman
Middlesex County Board of Supervisors
Date: 7/11/17


Ted Henfin
Hampton Roads Sanitation District
Date: 7/26/2017

**FIRST AMENDMENT TO MEMORANDUM OF AGREEMENT BETWEEN THE
HAMPTON ROADS SANITATION DISTRICT AND MIDDLESEX COUNTY FOR
COST SHARING OF SEWER SYSTEM PROJECTS**

This First Amendment to Memorandum of Agreement Between the Hampton Roads Sanitation District and Middlesex County For Cost Sharing of Sewer System Projects (hereinafter "MOU"), which was fully executed on July 21, 2017, is effective as of the latter signature date hereof by and between The Board of Supervisors of Middlesex County, Virginia (County) and Hampton Roads Sanitation District (HRSD), sometimes collectively referred herein as "the parties".

WHEREAS, the parties desire to amend the MOU as set forth in this First Amendment.

NOW THEREFORE, in consideration of the foregoing recitals and mutual covenants set forth herein and other good and valuable consideration, the parties hereby agree as follows:

1. The following sentence shall be added to the end of paragraph 5, entitled Feasibility Studies:

However, if the estimated project costs as determined by the Preliminary Engineering Report (PER) (based on the original scope as defined in the task order) are twenty-five (25%) percent higher or more than the initial concept project estimates provided to the County by Bowman Consulting, and if the County decides not to proceed with such project(s), then the parties shall split equally the costs of said studies.

2. All of the other terms and conditions of the MOU not in conflict with the provisions of this First Amendment shall remain in full force and effect.

Signatures:

Middlesex County Board of Supervisors

Date: 3/8/18

By: [Signature]
Name: Mark E. Holt III
Title: Chairman of Middlesex County Board of Supervisors

HRSD

Date: 3/15/2018

By: [Signature]
Name: Ted Henifin
Title:

Approved as to form: [Signature]
County Attorney

Matthew L. Walker
County Administrator



Betty S. Muncy
Asst. County Administrator

Ann Marie Ricardi
Asst. County Administrator

County of Middlesex
Office of the County Administrator

June 17, 2022

Mr. John J. Dano
Chief of Planning and Analysis
Hampton Roads Sanitation District
1434 Air Rail Avenue
Virginia Beach, VA 23455

Mr. Jeremiah Burford
HRSD Project Manager
Hampton Roads Sanitation District
1434 Air Rail Avenue
Virginia Beach, VA 23455

Email: jdano@hrsd.com
burford@hrsd.com

RE: Cooks Corner Deployment

Gentlemen:

During the June 15, 2022, Board of Supervisors work session meeting for the Middlesex County Sewer Project, the Board voted unanimously to authorize HRSD to move forward with the gravity system at Cooks Corner as originally planned, not exceeding a cost of \$4,614,369.00 as outlined in the table below:

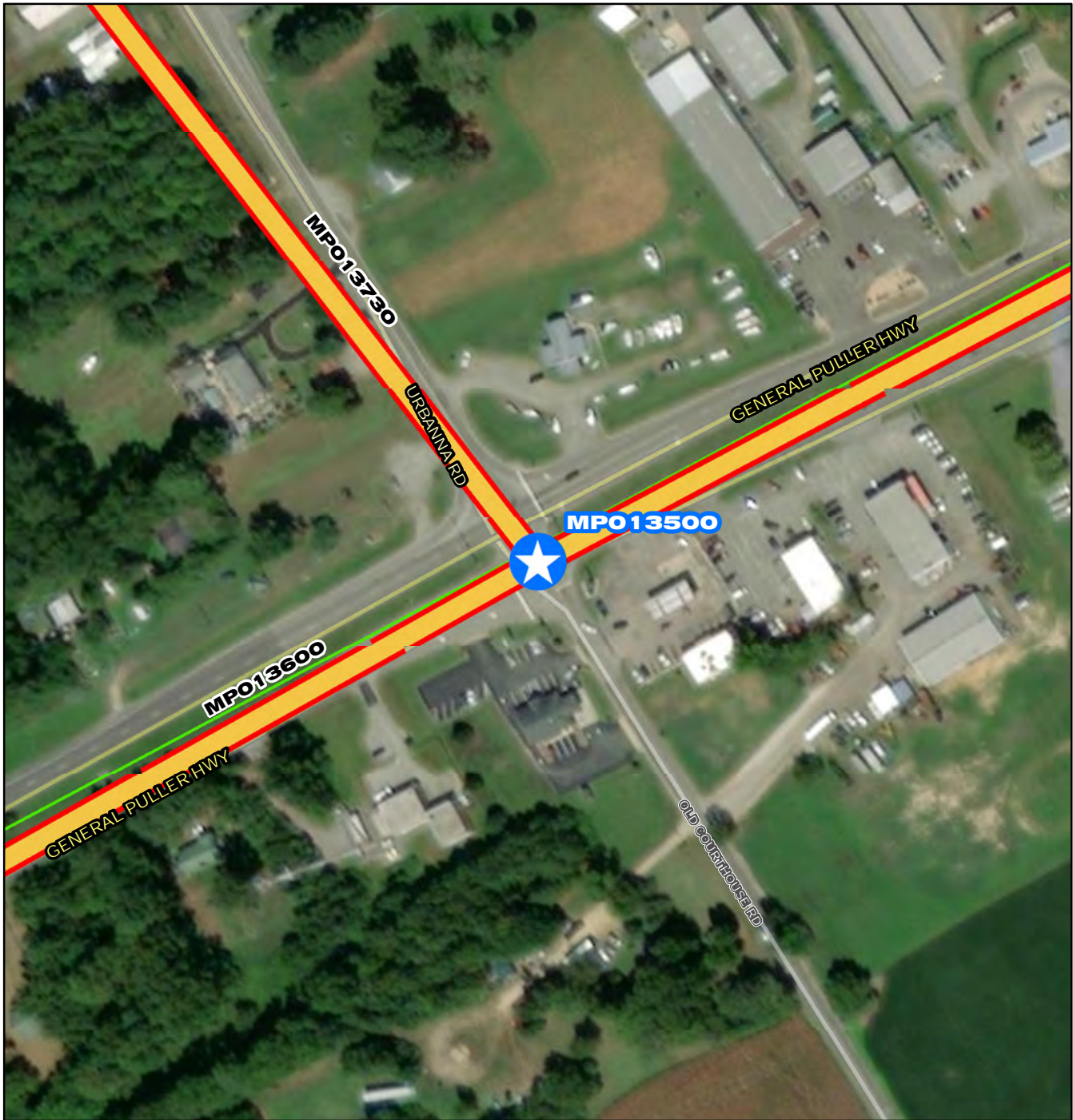
PER	\$0
Design/Pre-Construction	\$363,407
Construction (Tidewater Utility)	\$3,734,750
Construction (SCADA)	\$135,218
CA/CI	\$195,994
Contingency (5% of construction cost)	\$185,000
Total Project Cost	\$4,614,369

The Board has asked Mr. Ken Turner with Timmons, to move forward with obtaining a preliminary cost estimate for an LPS system for both Saluda and Hartfield. This will be revisited during the Board's July 12, 2022 meeting.

Respectfully,

Matthew L. Walker
County Administrator

MLW/tlg

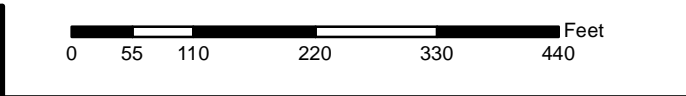


MPO 13500

- Project Interceptor Line
- Project Interceptor Point
- Project Pump Station Point
- Project Area

Legend

- CIP Interceptor Point
- CIP Pump Station Point
- CIP Interceptor Line
- CIP Abandonment
- CIP Project Area
- HRSD Interceptor Force Main
- HRSD Interceptor Gravity Main
- HRSD Treatment Plant
- HRSD Pressure Reducing Station
- HRSD Pump Station



MPO 13500

Middlesex Collection System-Cooks Corner

CIP Location

Middlesex County

AGENDA ITEM 9. – June 28, 2022

Subject: Nansemond SWIFT Facility
Initial Appropriation, Alternative Project Delivery and Task Order (>\$200,000)

Recommended Actions:

- a. Appropriate total project funding in the amount of \$365,489,400.
- b. Approve the Design-Build project delivery method for the Nansemond SWIFT Facility project.
- c. Approve a task order with AECOM in the amount of \$987,226.

CIP Project: GN016380

Contract Status:	Amount
Original Contract with AECOM	\$0
Total Value of Previous Task Orders	\$0
Requested Task Order	\$987,226
Total Value of All Task Orders	\$987,226
Revised Contract Value	\$987,226
Engineering Services as % of Construction	0.3%

Regulatory Requirement: Integrated Plan – SWIFT

Project Description: Nansemond SWIFT Facility will design and construct advanced water treatment infrastructure necessary to convert highly treated wastewater into SWIFT Water at the Nansemond Treatment Plant (NTP). It will also distribute SWIFT Water to a series of wells located within, and adjacent to, NTP that will recharge the Potomac Aquifer. The project scope includes mixing and sedimentation basins, biologically active filters, solids handling facilities, granular activated carbon contactors, ozone, ultra-violet light, and chlorine contact tanks, electrical, instrumentation and control systems, site grading, yard piping, SWIFT Water distribution and well backflush piping, and well enclosures. The scope does not include drilling recharge and monitoring wells as these are included in the Nansemond Recharge Wells (GN016381) project.

The attached [map](#) depicts the project location.

Project Justification: Nansemond SWIFT Facility is needed to reduce nutrients entering the Chesapeake Bay to meet current waste load regulations, augment the groundwater supply, reduce the rate of groundwater subsidence, and protect groundwater from saltwater intrusion.

Brief: Per HRSD's Procurement Policy, the competitive sealed bid process is the preferred method of construction procurement, which reflects the Design-Bid-Build project delivery method. This method has its advantages for prescriptive, well-defined work. Given the schedule constraints related to the coordination of dependent capital projects, financial risk, funding requirements, and project complexity, an alternative delivery approach is recommended for the delivery of this project. This project will be able to take advantage of design-build benefits by using performance based documents to set the requirements for construction on a green-field site.

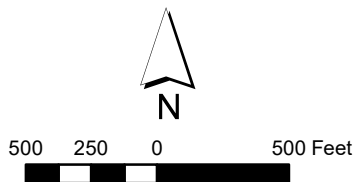
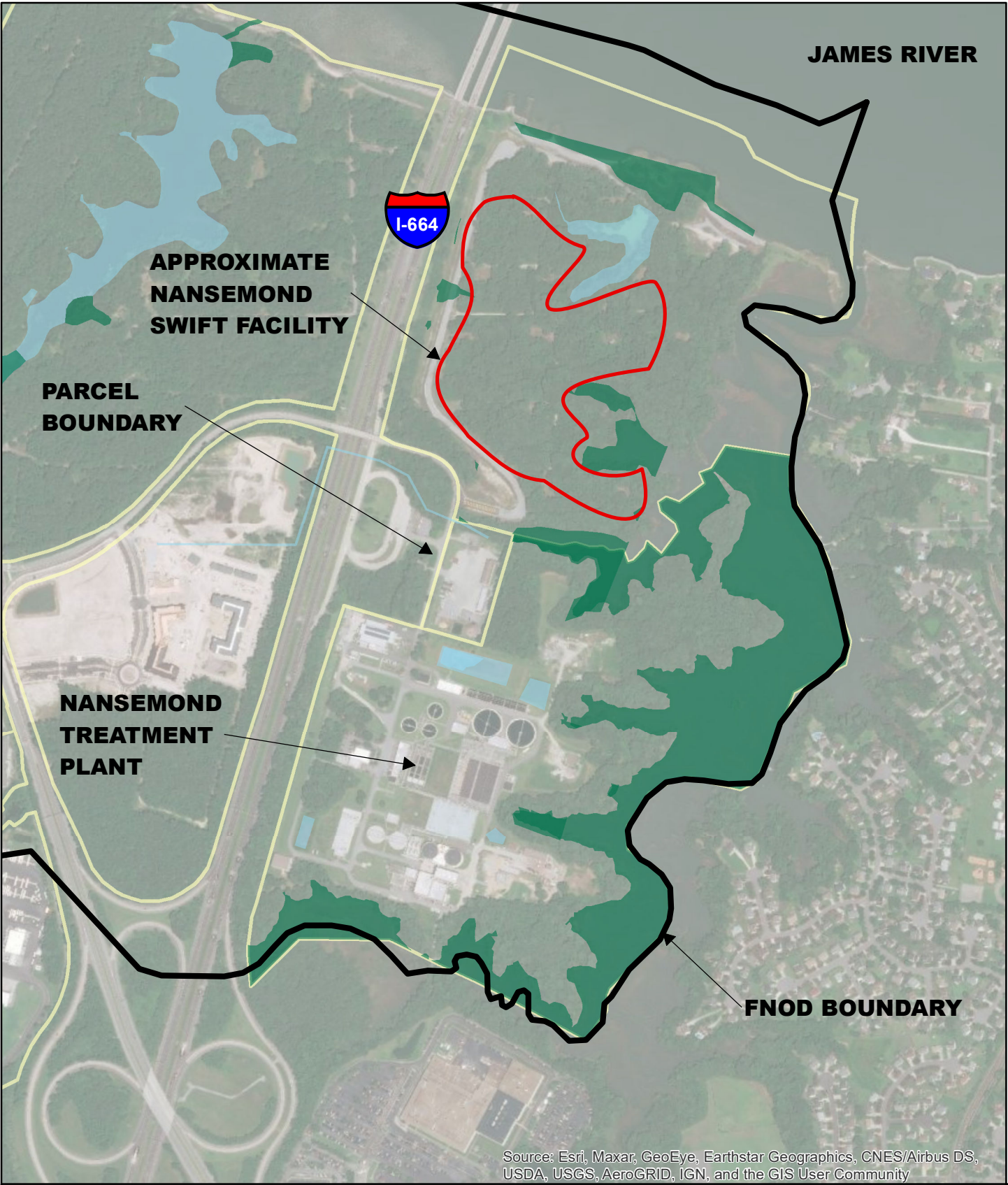
Design-Build Fixed Price delivery method will minimize project risk and reduce the delivery schedule by:

- Encouraging greater collaboration and allow for later design modifications without adversely impacting the overall schedule or cost as compared to the competitive sealed bid process;
- Allowing the designer and contractor to optimize construction sequencing;
- Offering a Price Cost/Risk Sharing Approach to participate equally during challenging pricing environments;
- Providing HRSD with earlier pricing and cost certainty; and
- Providing HRSD with the opportunity to select a high-quality construction and engineering team versus being limited to the “lowest qualified bidder” in a competitive sealed bid environment for a very complex project.

Task Order Description: The task order will provide basis of design development services required for the procurement, detailed design, and construction of the Nansemond SWIFT Facility project. Work under this task order will be provided by the SWIFT Full Scale Implementation Program (FSIP) Management team. Concepts developed under the pre-planning phase will be advanced to convey the project intent and requirements during the procurement phase. The deliverables from this task order will be a Basis of Design report with performance-based project requirements and minimal preliminary drawings. The expected duration of this task order is eight months.

Analysis of Cost: The cost for this task order is based on detailed negotiated scope of work for basis of design development services. The proposed fee is 0.3 percent of the estimated construction cost for the project, which is significantly less than preliminary engineering report efforts of large HRSD treatment plant projects. This task order will be issued as an amendment to the Professional Services Agreement with AECOM for SWIFT Full Scale Implementation. Hazen and Sawyer is a major subconsultant under the Agreement and will perform a majority of the basis of design development work. The total hours budgeted are appropriate for the scope of this task order and the labor rates for each category in the proposed fee are consistent with the rates structure in the Agreement, as approved for FY2022.

<u>Schedule:</u>	Preliminary design begins	July 2022
	Preliminary design approval and begin Procurement process	January 2023
	Selection of Design-Build firm / establish Contract Cost Limit (CCL)	December 2023
	Stipulated Final Fixed Price	November 2024
	Construction Completion	May 2028



**NANSEMOND SWIFT FACILITY
(GN016380)
SUFFOLK, VA**

June 2022



AGENDA ITEM 10. – June 28, 2022

Subject: Small Communities Collection System Rehabilitation Phase III
Initial Appropriation, Construction Contract Award (>\$200,000)

Recommended Actions:

- a. Appropriate total project funding in the amount of \$1,213,118.
- b. Award a contract to Walter C. Via Enterprises in the amount of \$1,023,578.

CIP Project: MP013020**Regulatory Requirement: None**

Budget	\$10,000
Previous Expenditures and Encumbrances	(\$9,657)
Available Balance	\$343
Proposed Construction Contract	(\$1,023,578)
Proposed Task Order Budget to Engineer	(\$75,883)
Proposed Contingency	(\$104,000)
Project Shortage/Requested Additional Funding	(\$1,203,118)
Revised Total Project Authorized Funding	<u>\$1,213,118</u>

Type of Procurement: Competitive Bid

In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. The project was advertised on April 27, 2022, and two bids were received on May 25, 2022. The bids received are listed below:

Bidder	Bid Amount
Walter C. Via Enterprises	\$1,023,578
Shaw Corporation	\$1,651,389

Engineer Estimate: \$2,047,006

The design engineer, WRA, evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder Walter C. Via Enterprises in the amount of \$1,023,578.00.

Project Description: This project will construct the replacement and/or rehabilitation of the remaining declared prompt repairs, as identified in the PER under the Small Communities Collection System Rehabilitation Phase I project (MP013000). The design development effort for this project was completed under MP013000. This CIP project will construct the following repair locations: Camilla Drive, King William Avenue, Azalea Crescent, two areas between Ogden Street and Thompson Avenue, Thompson Avenue, two areas off of Cypress Avenue, all located in West Point, and Virginia Street located in Urbana. Additionally, two newly identified repairs are included in this project: an aerial crossing repair near Euclid Drive and a point repair on 5th Street, both located in West Point.

The attached [maps](#) depict the project locations.

Project Justification: Through Condition Assessment work of the Small Communities System, a multitude of pipe defects ranging from severe Infiltration & Inflow (I&I) to structural failure of existing infrastructure were identified. Workshops with HRSD staff as part of prior project MP013000, determined that 16 of the defects met the established criteria of 'Prompt Repair' as defined in the Condition Assessment Plan utilized for assessment of the North and South Shore Interceptor Systems under the consent decree. This project will allow for replacement, repair and/or rehabilitation of the remainder of the identified defects and their associated assets to correct these severe infrastructure deficiencies

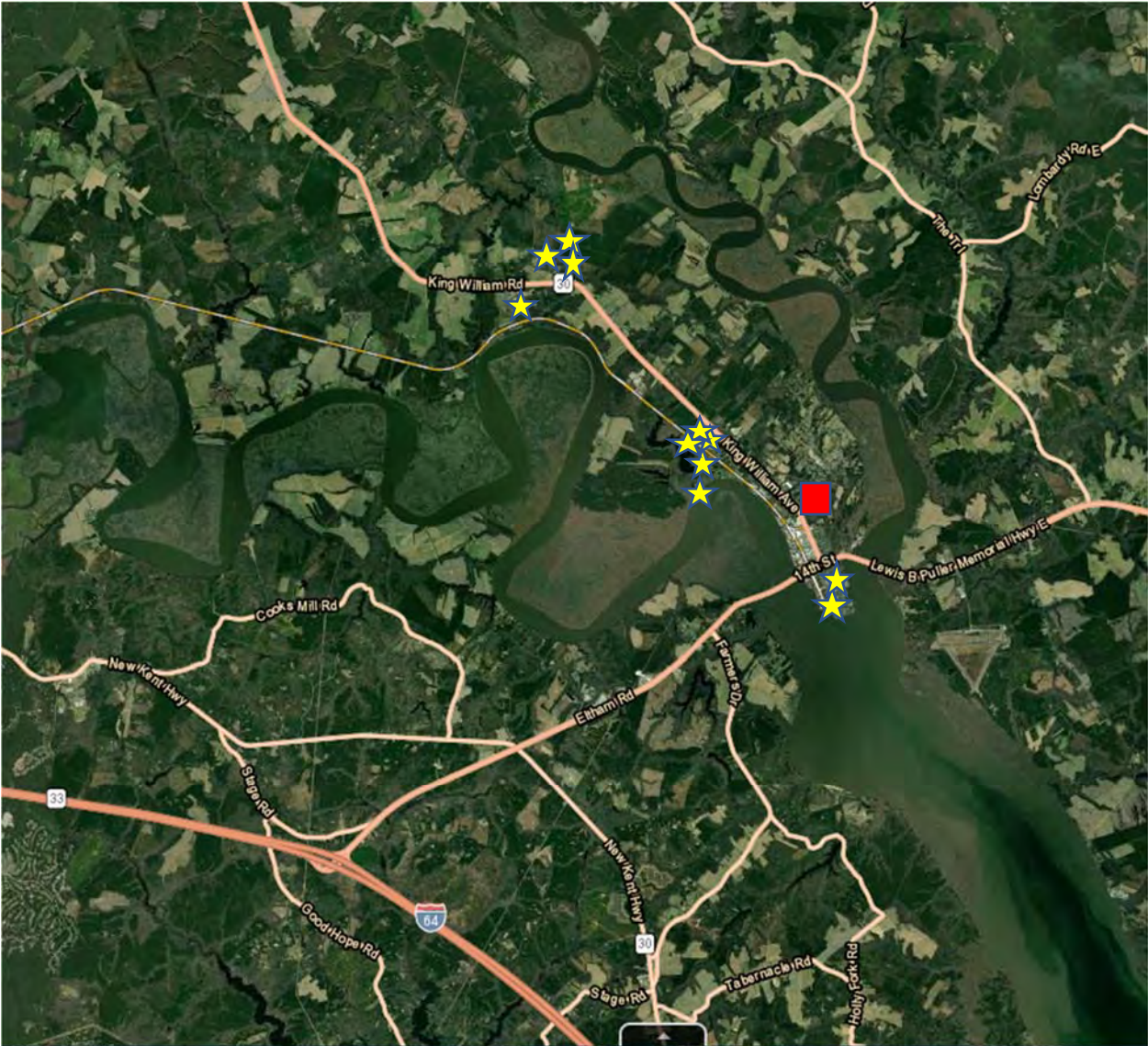
Contract Description: This contract is for construction of the project described above.

Task Order Description: The Contract Administration (CA) and the Construction Inspections (CI) Services for this project will be provided by McDonough Bolyard Peck, Inc, under their current Annual Services Contract. The task order fee of \$75,883 was negotiated to provide CA and CI phase services for the project described above. This cost for construction phase services is roughly 7.4% of total construction cost.

Analysis of Cost: The cost for this construction contract is based on a competitive bid. The Engineer's estimate is approximately 100% higher than the low bid. The majority of the cost differential was attributed to the cost of manhole rehabilitation, Cured-in-Place Pipe (CIPP) lining, and point repairs. WR&A used a cost escalation factor and a higher-than-normal contingency to account for unstable market conditions impacting manufacturing and transportation costs for materials and equipment. The low bidder is a local contractor and did not include these added costs in the bid. WR&A's cost estimate for CIPP was based on the national average cost plus an escalation factor. Upon further evaluation the low bid included a reduced cost for CIPP (approximately 45% less than Engineer's estimate). The effort for this CA/CI budget is based on negotiated costs and the current Annual Services Contract with MBP. This budget is in agreement with other similar efforts. The revised total project cost is currently \$1,213,118. This amount is based on construction costs of \$1,023,578, engineering services costs during construction of \$75,883 and a 10 percent contingency of \$104,000.

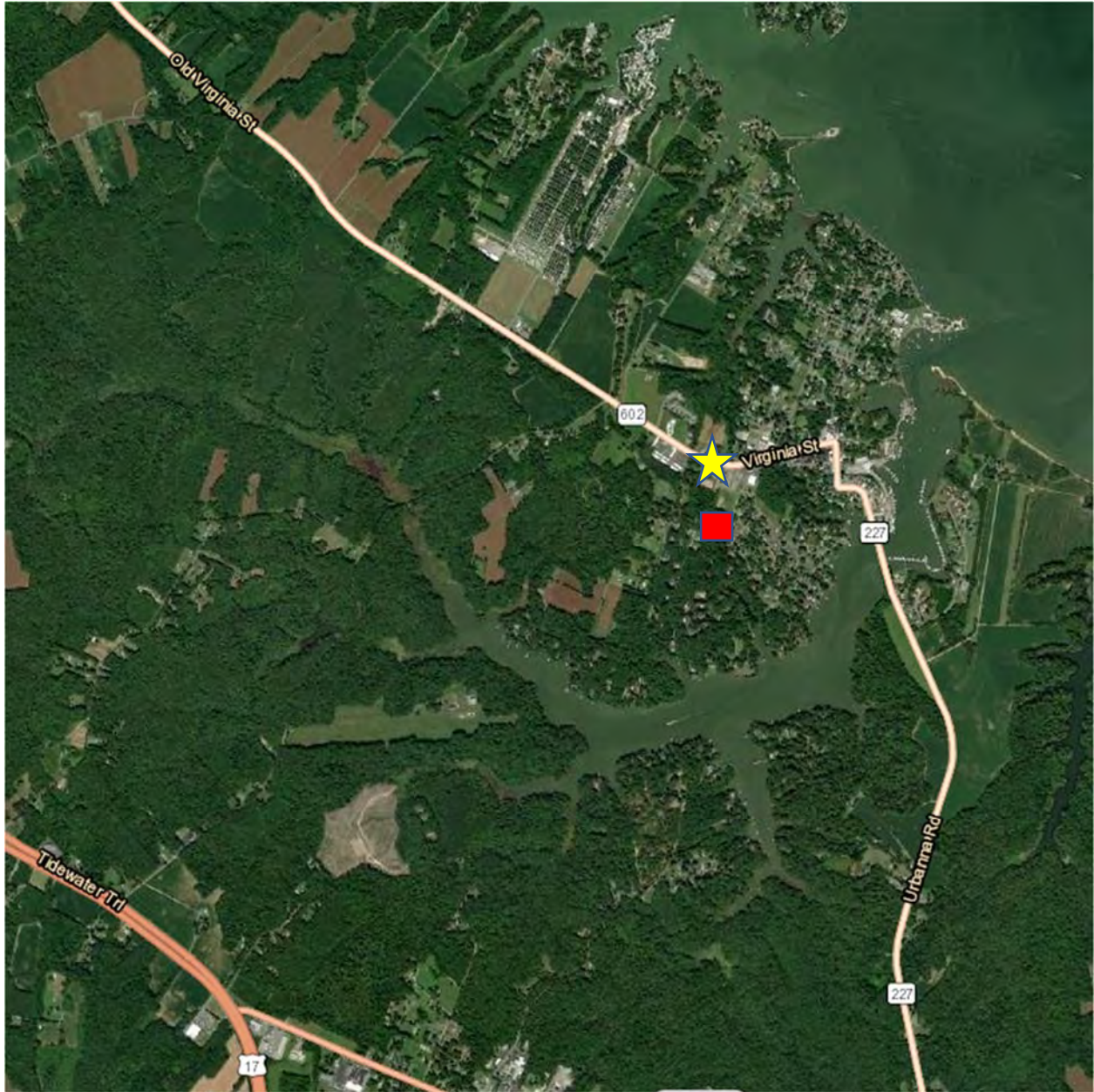
<u>Schedule:</u>	Construction	August 2022
	Project Completion	January 2023

MP013020 Small Communities Collection System Rehabilitation Phase III



11 work areas in West Point, Virginia, each represented by a yellow star

West Point Treatment Plant is represented by red box



1 work area in Urbanna, Virginia, represented by a yellow star

Urbanna Treatment Plant, represented by a red square

AGENDA ITEM 11. – June 28, 2022

Subject: COVID-19 Wastewater Surveillance Study Update

Recommended Action: No action is required.

Brief: Staff will present the latest data and status of the COVID-19 surveillance work.

AGENDA ITEM 12. – June 28, 2022

Subject: Election of Officers

Recommended Action: Elect a Chair and Vice-Chair of the Commission for the coming fiscal year.

Brief: The Commission is required by the Enabling Act to elect a Chair and Vice-Chair each year. Chair Elofson appointed Commissioners Levenston and Glenn to the Operations and Nominations Committee in May. The Committee will make its nominating report at the June meeting.

AGENDA ITEM 13. – June 28, 2022

Subject: Unfinished Business

AGENDA ITEM 14. – June 28, 2022

Subject: New Business

AGENDA ITEM 15. – June 28, 2022

Subject: Commissioner Comments

AGENDA ITEM 16. – June 28, 2022

Subject: Public Comments Not Related to Agenda

AGENDA ITEM 17. – June 28, 2022

Subject: Informational Items

Recommended Action: No action is required.

Brief: The following items listed below are presented for information.

- a. Management Reports
 - (1) [General Manager](#)
 - (2) [Communications](#)
 - (3) [Engineering](#)
 - (4) [Finance](#)
 - (5) [Information Technology](#)
 - (6) [Operations](#)
 - (7) [Talent Management](#)
 - (8) [Water Quality](#)
 - (9) [Report of Internal Audit Activities](#)
- b. [Strategic Planning Metrics Summary](#)



June 16, 2022

Re: General Manager's Report

Dear Commissioners:

EPA sent a Pre-Demand Letter for stipulated penalties for unauthorized discharges (SSOs) during the period of January 16, 2021, and December 31, 2021. Staff sent a response to the letter disputing 21 of the discharges. Eleven of these unauthorized discharges were capacity-related due a historically wet winter, four were infrastructure damage or failure, one was damage by others, and five were non-potable water releases. Relative to HRSD's total treated flow, the total SSO volume of 2.2 MG from this time period was only 0.004% of the total volume treated in 2021. This should be the last Pre-Demand letter as future stipulated penalties will be self-assessed with quarterly, semi-annual and annual reports as outlined in our approved Integrated Plan.

Finances remain strong, driven by higher-than-expected water consumption. Staff are managing expenses to the best of their abilities to offset the historic inflation which is impacting fuel, chemical and utility costs.

The highlights of May's activities are detailed in the attached monthly reports.

- A. **Treatment Compliance and System Operations:** The Army Base Treatment Plant experienced a plant upset starting on May 29. Staff quickly mobilized to maintain treatment while the Pretreatment and Pollution Prevention (P3) staff performed an investigation of industrial sources. Unfortunately, a cause could not be determined yet. With staff's diligent efforts, there were no permit violations, and the process is back to normal.

There is a significant ongoing effort to resolve odor issues at the Atlantic Treatment Plant. Staff have been responding to numerous odor complaints since our new community reporting system was put in place in April. When an odor complaint is received, staff are immediately dispatched to investigate the complaint and determine the source of the odor. In addition, we had a consultant onsite to evaluate the various odors and a report is expected in the coming weeks. Staff also implemented several other initiatives such as dosing Ferric, piloting carbon sleeves for the digester covers, and keeping the storage pad clean to help reduce odors. The long-term plan to resolve the issue is a series of capital projects that will be presented to the Commission in the coming months.

PO Box 5911, Virginia Beach, VA 23471-0911 • 757.460.7003

Commissioners: Frederick N. Elofson, CPA, Chair • Stephen C. Rodriguez, Vice-Chair • Vishnu K. Lakdawala, PhD
Michael E. Glenn • Willie Levenston, Jr. • Elizabeth A. Taraski, PhD • Nancy J. Stern • Ann W. Templeman
www.hrsd.com

B. **Internal Communications:** I participated in the following meetings/activities with HRSD personnel:

1. Atlantic Treatment Plant Master Planning session
2. Monthly Atlantic Plant odor meeting
3. North Shore Interceptor Operations visit, SCADA tour
4. James River Treatment Plant visit, MIFAS tour
5. Boat Harbor Treatment Plant visit
6. Employees' Association kick-off meeting

C. **External Communications:** I participated in the following meetings/activities:

1. Elizabeth River Project Groundbreaking
2. Meeting with Owner of S23 (Boat Harbor land agreement)
3. Virginia Investment Pool Board meeting
4. Meeting with James City County Director of Utilities and County Administrator
5. Meeting with City of Chesapeake Director of Utilities
6. Presentation to Hampton Roads' Director of Utilities on HRSD's finances
7. Meeting with DEQ (Tidewater) on Director Rolband's priorities

D. **Integrated Plan (IP):** In the IP, HRSD must spend \$10 million on the Microbial Source Tracking (MST) program before 2030 and another \$10 million from 2030-2040. Staff is developing an internal policy and procedure to ensure this compliance requirement is met.

Thanks for your continued dedicated service to HRSD, the Hampton Roads region, the Commonwealth, and the environment. **I look forward to seeing you in person in Virginia Beach at 10 am on Tuesday, June 28, 2022.**

Respectfully submitted,

Jay Bernas, P.E.
General Manager

TO: General Manager
FROM: Director of Communications
SUBJECT: Monthly Report for May 2022
DATE: June 9, 2022

A. Publicity and Promotion

HRSD and/or SWIFT were mentioned or featured in 13 news stories or media/social media mentions on topics that included:

1. HRSD expansion into Eastern Shore
2. Wastewater surveillance for COVID 19
3. HRSD sponsorship of new Research Dock at the ODU Institute for Coastal Adaptation and Resilience

Analysis of May media coverage:

Mentions, reach and sentiment

Mentions

Compared to last period

35
Total Mentions
↓ 78%

Total Potential News Reach

Compared to last period

19.9M
Total Reach
↑ 97%

Sentiment

Compared to last period

9
Total Sentiment
↓ 88%

Top Article by Reach



The Hill • Patricia Sinicropi, ...
US | Apr 25, 2022, 12:00 PM

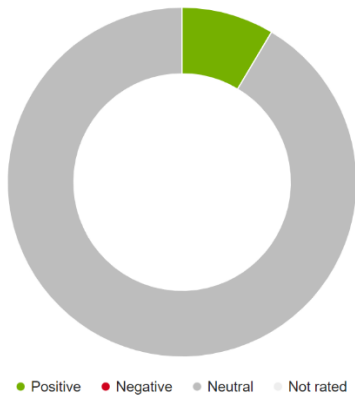
Droughts are ravaging the US — it's time to get serious about water recycling

output at risk. To address these challenges, **Hampton Roads Sanitation District** is recycling water to drinking standards and pumping it

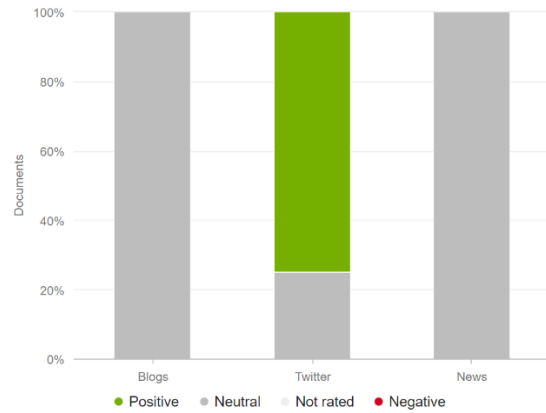
18.6M Reach Social Echo Neutral O

How favorable is the content?

Sentiment Share of Voice

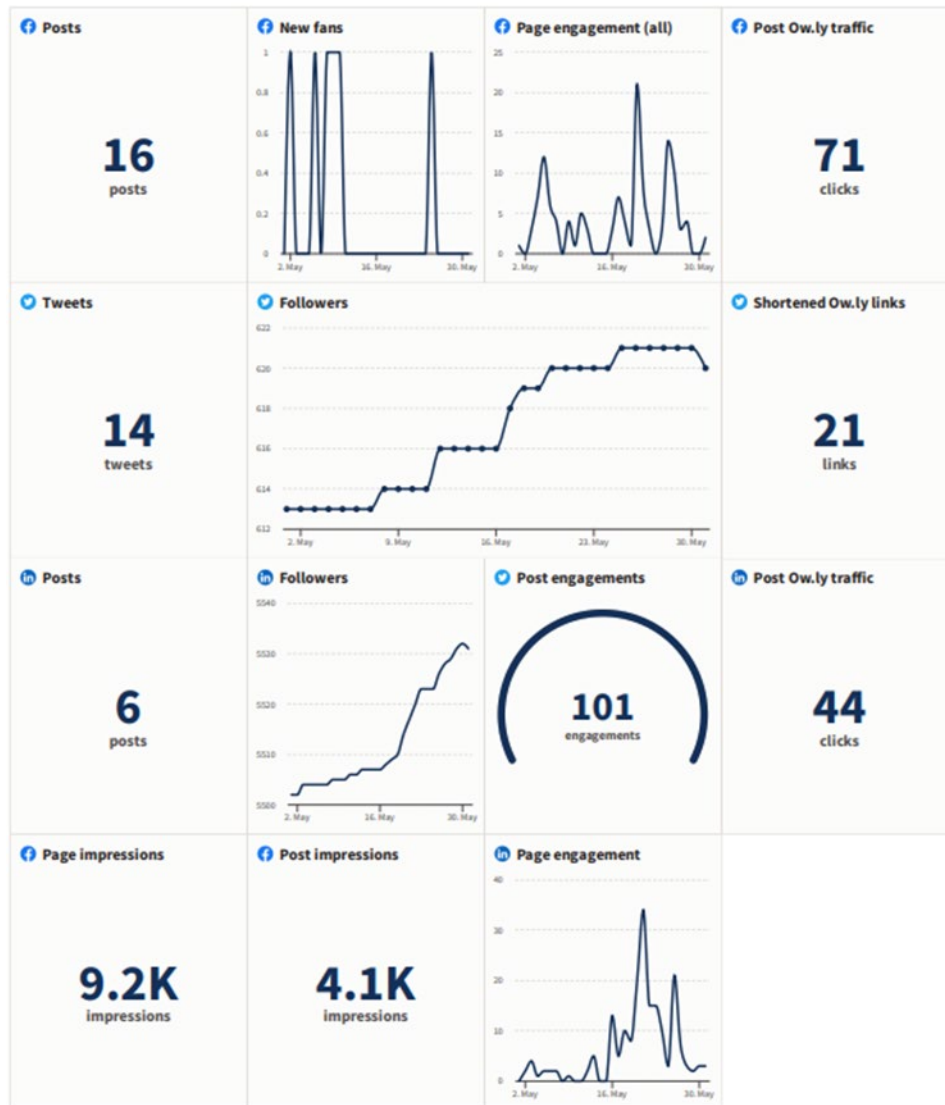


Sentiment by Source Type



B. Social Media and Online Engagement

1. Metrics



YouTube

Channel analytics

ADVANCED MODE

Overview Content Audience Research

May 1 - 31, 2022

May

[Experimental](#) [Send us feedback](#)





2. Top posts on Facebook, Twitter, and YouTube

a. Top Facebook post

HRSD
May 11 at 12:01 PM · 🌐

Litter on the ground becomes trash in our waterways! HRSD employees have done three cleanups and collected 210 bags of trash while donating a collective 120 hours of their time in partnership with [Keep Suffolk Beautiful](#)!



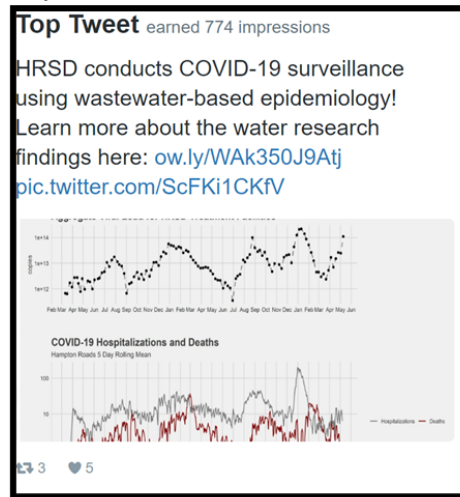
Keep Suffolk Beautiful
May 6 at 1:06 PM · 🌐

In the past six weeks, HRSD has done three cleanups and collected 210 bags of trash while donating a collective 120 hours of their time! It's absolutely amazing and we all owe them a lot of thanks. [HRSD](#)

[@askhrgreen](#) [@keepvirginiabeautiful](#) [#hrsd](#) [#cleanup](#) [#greatamericancleanup](#) [#suffolkva](#) [#keepsuffolkbeautiful](#)

👍❤️👏 8

b. Top Tweet



c. Top YouTube Videos

- Top YouTube Videos**
1. [The Wastewater Treatment Process](#) (302 views)
 2. [What is Asset Management? HRSD Celebrates Infrastructure Week at HRSD](#) (155 views)
 3. [HRSD Atlantic Treatment Plant Cambi Tour](#) (39 views)
 4. [SWIFT Research Center Ribbon Cutting Ceremony, May 2018](#) (23 views)
 5. [What is Asset Management? HRSD Celebrates Infrastructure Week | United for Infrastructure](#) (16 views)

3. Website and Social Media Impressions and Visits

- a. Facebook: 9,160 page impressions, 4,145 post impressions reaching 3,921 users, and Facebook Engagement of 129 (111 reactions, 14 shares, and 4 comments)
- b. Twitter: 4,222 tweet impressions; 1,448 profile visits and 7 mentions
- c. HRSD.com/SWIFTVA.com: 871 page visits
- d. LinkedIn Impressions: 2,951 page impressions and 3,516 post impressions
- e. YouTube: 671 views
- f. Next Door unique impressions: 1,026 post impressions from five targeted neighborhood posting shared with 13,261 residents
- g. Blog Posts: (1) [How Sunscreens Impact Marine Life](#)
- h. Construction Project Page Visits – 1,229 total visits (not including direct visits from home page, broken down as follows:
 - (1) 872 visits to individual pages
 - (2) 357 to the status page

C. News Releases, Advisories, Advertisements, Project Notices, Community Meetings and Project Web Postings

1. News Releases: 0
2. Traffic Advisories: 0
3. Construction Notices and or notices to neighbors: 4
4. Advertisements: 0
5. Project Notices: 9 (via door hanging, reaching 373 residents)
6. Project/Community Meetings: 0
7. New Project Web Pages: 1 ([West Avenue Sanitary Sewer Replacement](#))
8. New Project Videos: 0

D. Special Projects and Highlights

1. Communications director and staff continue to work with consultants, James River Plant staff and the City of Newport News in planning the official groundbreaking ceremony for the James River SWIFT full-scale facility and adjacent Riverview Farm Park amenities. This event will take place on Thursday, July 21.
2. Director worked with engineering to produce a video on the Woodstock Park project for use as part of the award submission to the Design Build Institute of America (DBIA). An educational version of this video is also in production and will be available in late June. It will be featured to promote the one-year anniversary of the park's opening, shared on HRSD's YouTube page and it will also be promoted externally on other social channels and internally on SharePoint.

E. Internal Communications

1. Director participated in the following internal meetings and events:
 - a. Meetings with DEI UNIFIED Council co-chairs
 - b. Meeting with external auditors performing FOIA audit
 - c. Workshop on the Atlantic Treatment Plant (ATP) Progress Farm Land Conversion
 - d. Numerous meetings with ATP staff related to develop communications plans around the recent odor issues experienced there
 - e. Weekly GM check-in meetings
 - f. SWIFT Community Commitment Plan monthly meeting
 - g. Meetings with finance and customer care staff to discuss biannual survey
 - h. Discharge Monitoring Report (DMR), SWIFT Quality Steering Team (QST) and QST meetings
 - i. Weekly GM check-in meetings
2. Director also conducted biweekly communications department status meetings and weekly team and one-on-one check-in meetings.

3. Staff attended project progress and outreach development meetings with various project managers.

F. Metrics

1. Educational and Outreach Activities: 35 virtual
 - a. Self-guided SWIFT Virtual Tours – 35 views (analytics specify number of times “Take a Tour” button was selected)
2. Number of Community Partners: 0
3. Additional Activities Coordinated by Communications Department: 3
 - 05/22/2022 – Kilgore Gifted Center Career Day | 75 students
 - 05/23/2022 - Blair Middle School Watershed | 100 students
 - 05/24/2022 - SWIFT Water™ for LEAD Peninsula | 48 participants
4. Monthly Metrics Summary

Item #	Strategic Planning Measure	Unit	May 2022
M-1.4a	Total Training Hours per Full Time Employee (3) - Current Month	Hours / #FTE	5
M-1.4b	Total Training Hours per Full Time Employee (3) - Cumulative Fiscal Year-to-Date	Hours / #FTE	79.25
M-5.2	Educational and Outreach Events	Number	41
M-5.3	Number of Community Partners	Number	0

Respectfully,

Leila Rice, APR
Director of Communications

TO: General Manager
FROM: Director of Engineering
SUBJECT: Engineering Monthly Report for May 2022
DATE: June 10, 2022

A. General

1. Capital Improvement Program (CIP) spending for the 10th month of Fiscal Year (FY) 2022 was below the planned spending target. Actual CIP spending for the FY is likely to continue to trail planned spending with a new FY 2022 target of \$170M.

CIP Spending (\$ million):

	Current Period	FYTD
Actual	19.00	123.93
Plan	25.80	238.60

2. Cost volatility remains a challenge in the construction industry. Engineering News Record (ENR) publishes cost indexes for the construction industry. The Construction Cost Index has increased 8.2% on an annual basis and the Materials Cost Index increased 2.5% on a monthly basis. These indexes have shown historically and consistently high values for all of 2022. Specialized equipment and system costs have also been very volatile making it challenging for the contractors bidding work for HRSD to determine pricing. Delays caused by supply chain issues have also been creating schedule issues for some projects. Finally, contractors are challenged to find skilled trades to increase their workforce. With limited staffing, contractors are very cautious to bid on new projects, further impacting pricing to HRSD. These challenges are expected to continue through 2022 which will result in higher construction prices for HRSD CIP projects.

B. Asset Management Division

1. A kick-off meeting was held with the new Vibration Monitoring vendor, Nikola Labs. This meeting was held in coordination with the Operations Department to review the planned vendor scope of work and the initial pilot project at the VIP Treatment Plant. This initial effort will include the installation of continuous vibration sensors on critical large rotating equipment such as influent pumps. The ability to monitor even slight vibrations for rotating equipment can result in finding slight alignment issues before they become major issues. This is an important aspect of preventative maintenance which has a goal of finding concerns and solving these issues before they result in system failures.
2. One requirement of the HRSD Consent Decree to reduce regional sanitary sewer overflows is to annually inspect, on average, 2,400 feet of existing force main located within 500 feet of drinking water reservoirs. These inspections can be performed in different ways to assure the integrity of the existing pipe. The Western Trunk Interceptor Force Main is located in Virginia Beach near Lake Smith. HRSD has engaged a contractor to inspect a section of the force main. This effort will include both a visual inspection and the removal of two samples of the existing pipe for further analysis. The pipe must be bypassed and isolated to acquire these samples. This effort will require

the contractor to excavate and install two tapping saddles on the pipe to extract the necessary samples. This is a time-consuming and complex effort that requires necessary permits from the City of Virginia Beach to conduct the work in public right-of-way.

C. North Shore, South Shore and SWIFT Design & Construction Divisions

1. Construction of the Surry Hydraulic Improvements and Interceptor Force Main is nearing completion. The force main pipe has been installed and satisfactorily tested. Most of the new pump station work is complete and electricity has recently been provided to each site by Dominion Virginia Power. The original project scope is expected to be completed later this Summer. Two additional pump stations were added to the project scope and this work will be completed later this year. This project has been very challenging and involved many engineers, contractors, and external stakeholders. The goal for this project is to close both the Town of Surry and Surry County Treatment Plants before the end of 2022.
2. A significant milestone was recently reached with the completion of the Elbow Road Pressure Reducing Station. The contractor is addressing the punch list to close out the project and a few contractual matters are still under negotiation. This new pump station is another important aspect of increasing hydraulic capacity of the regional sewer system on the southside of Hampton Roads. This project will allow for reduced pressure and increased capacity to the Atlantic Treatment Plant, particularly during wet weather events.
3. The services provided by the team of AECOM and Hazen are an important component of the SWIFT Full-Scale Implementation Program (FSIP). These two consultants were hired to provide program management, staff augmentation and preliminary engineering design services for SWIFT. At present, they are providing four full-time staff members and managing 12 projects. This effort will grow in coming years to include as many as 30 projects. The FSIP Team acts as an extension of the Engineering Department staff and is integrated into much of our internal work including e-mail, monthly administrative meetings, and other staff activities.

D. Planning & Analysis Division

1. HRSD has used an electronic records management system to store and update design/construction-related documents for over 20 years. The system in current use is the Meridian Document System sold by Accruent. This has been a valuable long-term software solution, but the program is not meeting current needs. A request for proposals has been issued to replace the existing document management system. The selection of a new system will be finalized this Summer with the new software in place by the Fall 2022.
2. An important tool for the Planning & Analysis Division is the Regional Hydraulic Model. This highly customized software program is used for many purposes including the planning for future development, calculation of pressures and flows in the system, and modeling of system diversions. An upgrade is planned for this software program sold by DHI. This upgrade must be closely coordinated with users and the Information Technology (IT) Department to limit downtime and to be sure of data integrity after this conversion. The software upgrade will occur in the coming month.

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 4
 - a. 05/06/2022 – Staff participated in a Career Day at Mt. Vernon Elementary School in York County.
 - b. 05/17/2022 – Staff presented to the Old Dominion University Civil & Environmental Engineering Visiting Council (CEEVC) What Does the Future Hold Seminar.
 - c. 05/18/2022 – Staff participated in a webinar by the Chesapeake Water Environment Association entitled, Asset Management for Electromechanical Equipment.
 - d. 05/31/2022 – Staff served a panelist in a webinar sponsored by the American Society of Civil Engineers (ASCE) entitled, Improving the ASCE Infrastructure Card; Aligning Financial Reporting.

2. Number of Community Partners: 4

- a. York County Public Schools
- b. Old Dominion University - CEEVC
- c. Chesapeake Water Environment Association
- d. ASCE

3. Number of Research Partners: 0

4. Monthly Metrics Summary:

Item #	Strategic Planning Measure	Unit	May 2022
M-1.4a	Total Training Hours per Full Time Employee (45) - Current Month	Hours / #FTE	2.42
M-1.4b	Total Training Hours per Full Time Employee (45) - Cumulative Fiscal Year-to-Date	Hours / #FTE	22.78
M-5.2	Educational and Outreach Events	Number	4
M-5.3	Number of Community Partners	Number	4
M-5.4	Number of Research Partners	Number	0

Bruce W. Husselbee, PhD, P.E., DBIA
 Bruce W. Husselbee, PhD, P.E., DBIA

TO: General Manager
FROM: Director of Finance
SUBJECT: Monthly Report for May 2022
DATE: June 15, 2022

A. General

1. Wastewater Service Charges remain strong as water consumption remains higher than budget. Thankfully, we took a conservative approach to this budget projection as water consumption declined 1.9% compared to last year's actual amount. We expect water consumption to end higher than budget at the end of the fiscal year. Facility Charges are lower than last year as new home construction slows with rising mortgage rates, supply chain and labor issues. The latest projection forecasts a 72 percent chance for a recession next year, which will impact our Facility Charge revenue in FY23. Inflation impacts can be seen in our Operating Expenses as Transportation (fuels), Utilities and Chemical purchases are much higher compared to year ago amounts. Overall, revenues continue to exceed expenses, which is how we expect to end the fiscal year.
2. Interest Income continues to be negative which reflects a mark to market valuation of our 1-3 year fixed income investments. Bond prices vary inversely to interest rates, so as rates rise, the value of the bonds decline. Over time, the income received from the higher interest rates offsets the unrealized losses as the long-term value of these funds is based on income, not valuation. Historically, this takes about two to three years which is in line with our strategy to only invest money in the 1-3 year fund that is not needed for two to three years. Although slightly more volatile, the 1-3 year fund consistently outperforms the Liquidity fund over long time frames.
3. The past two years of increasing arrearages appear to be stabilizing with the reintroduction of staff field activities. HRSD continues to offer penalty-free pay plans as a way for customers to manage their past-due balances. Staff anticipate the level of arrearages to slowly decrease over time.
4. In response to delinquent accounts, staff shut off water service to 1,040 accounts during May. Over 2,000 pay plans were created through the online self-service portal and through call center interactions. Establishment of these plans helps to avoid service interruptions or the initiation of the severance process.
5. Late payment charges will begin to appear on customer June bills if the May bill is not paid by the due date. If a customer has a pay plan and is keeping up with it, late payment charges can be avoided.
6. Customer calls have remained steady as warning tags and turn-off activities steadily increased throughout the month of May. Staff continue to work through resource challenges created by unexpected leave and extended vacancies due a tight labor market, particularly in the Call Center. As such, service levels dropped to 68 percent of calls answered within 3 minutes.

B. Interim Financial Report

1. Operating Budget for the Period Ended May 30, 2022

	Amended Budget	Current YTD	Current YTD as % of Budget (92% Budget to Date)	Prior YTD as % of Prior Year Budget
Operating Revenues				
Wastewater	\$ 336,455,000	\$ 313,702,186	93%	93%
Surcharge	1,600,000	1,441,487	90%	97%
Indirect Discharge	3,200,000	3,065,835	96%	85%
Fees	3,020,000	225,213	7%	-13%
Municipal Assistance	700,000	965,420	138%	91%
Miscellaneous	1,285,000	2,188,230	170%	137%
Total Operating Revenue	346,260,000	321,588,371	93%	92%
Non Operating Revenues				
Facility Charge	7,320,000	6,305,410	86%	116%
Interest Income	1,210,000	(1,460,418)	-121%	36%
Build America Bond Subsidy	2,095,000	1,064,842	51%	95%
Other	610,000	1,168,369	192%	190%
Total Non Operating Revenue	11,235,000	7,078,203	63%	104%
Total Revenues	357,495,000	328,666,574	92%	93%
Transfers from Reserves	17,346,624	15,901,072	92%	85%
Total Revenues and Transfers	\$ 374,841,624	\$ 344,567,646	92%	93%
Operating Expenses				
Personal Services	\$ 62,776,055	\$ 57,162,790	91%	90%
Fringe Benefits	25,173,707	21,979,314	87%	90%
Materials & Supplies	9,509,735	8,161,685	86%	83%
Transportation	1,555,282	1,154,507	74%	60%
Utilities	12,350,061	11,833,518	96%	88%
Chemical Purchases	9,249,441	8,255,977	89%	67%
Contractual Services	55,345,089	35,683,701	64%	61%
Major Repairs	16,056,857	7,954,906	50%	49%
Capital Assets	655,963	453,001	69%	32%
Miscellaneous Expense	3,137,304	2,366,770	75%	77%
Total Operating Expenses	195,809,494	155,006,169	79%	77%
Debt Service and Transfers				
Debt Service	64,308,209	59,310,026	92%	94%
Transfer to CIP	114,463,921	109,925,260	96%	90%
Transfer to Risk management	260,000	238,337	92%	92%
Total Debt Service and Transfers	179,032,130	169,473,623	95%	91%
Total Expenses and Transfers	\$ 374,841,624	\$ 324,479,792	87%	84%

4. Capital Improvements Budget and Activity Summary for Active Projects for the Period Ended May 30, 2022

HRSD - PROJECT ANALYSIS

May 31, 2022

Classification/ Treatment Service Area	Appropriated Funds	Expenditures		Total		
		prior to 7/1/2021	Year to Date FY2022	Project Expenditures	Encumbrances	Available Funds
Administration	\$ 70,138,240	\$ 20,771,298	\$ 3,063,028	\$ 23,834,326	\$ 1,833,136	\$ 44,470,778
Army Base	163,448,800	123,537,916	1,090,898	124,628,814	1,031,082	37,788,904
Atlantic	151,309,198	74,355,561	5,150,738	79,506,299	3,585,142	68,217,757
Boat Harbor	382,176,114	42,734,184	7,979,861	50,714,045	165,962,015	165,500,054
Ches-Eliz	183,285,621	105,101,136	12,867,804	117,968,940	6,538,701	58,777,980
Eastern Shore	28,167,651	68,570	3,340,349	3,408,919	20,365,110	4,393,622
James River	335,749,024	21,336,192	18,606,454	39,942,646	222,935,927	72,870,451
Middle Peninsula	95,522,822	13,361,582	5,944,521	19,306,103	5,980,287	70,236,432
Nansemond	461,987,327	27,969,786	11,673,490	39,643,276	265,276,684	157,067,367
Surry	57,612,528	26,413,528	11,929,893	38,343,421	3,073,296	16,195,811
VIP	165,959,940	9,757,328	7,056,005	16,813,333	22,022,506	127,124,101
Williamsburg	28,243,555	17,550,821	3,121,751	20,672,572	4,793,666	2,777,317
York River	71,119,281	9,783,051	3,002,023	12,785,074	10,591,804	47,742,403
General	826,290,881	152,763,171	53,889,738	206,652,909	278,684,597	340,953,375
	<u>\$ 3,021,010,982</u>	<u>\$ 645,504,124</u>	<u>\$ 148,716,553</u>	<u>\$ 794,220,677</u>	<u>\$ 1,012,673,953</u>	<u>\$ 1,214,116,352</u>

5. Debt Management Overview

HRSD - Debt Outstanding (\$000's)

May 31, 2022

	Principal			Interest	
	Apr 2022	Principal Payments	Principal Draws	May 2022	Payments
Fixed Rate					
Senior	183,899	-	-	183,899	(3,124)
Subordinate	604,622	-	1,344	605,966	-
Variable Rate					
Subordinate	50,000	-	-	50,000	(19)
Line of Credit	33,721			33,721	(30)
Total	<u>\$ 872,242</u>	<u>\$ -</u>	<u>\$ 1,344</u>	<u>\$ 873,586</u>	<u>\$ (3,173)</u>

HRSD- Series 2016VR Bond Analysis

June 3, 2022

	Spread to		
	SIFMA Index	HRSD	SIFMA
Maximum	4.71%	4.95%	0.24%
Average	0.34%	0.48%	0.14%
Minimum	0.01%	0.01%	0.00%
As of 6/03/22	0.68%	0.65%	-0.03%

* Since October 20, 2011 HRSD has averaged 48 basis points on Variable Rate Debt

6. Financial Performance Metrics for the Period Ended May 30, 2022

HRSD - UNRESTRICTED CASH

May 31, 2022

Can be used for any purpose since it is not earmarked for a specific use and is extremely liquid

		Days Cash on	
		Hand	Adjusted Days Cash on Hand
Total Unrestricted Cash	\$ 213,317,919		398
Risk Management Reserve	\$ (4,257,880)	(8)	390
Capital (PAYGO only)	\$ (22,970,826)	(43)	347
Adjusted Days Cash on Hand	\$ 186,089,213		347

Risk Management Reserve as a % of Projected Claims Cost is 25% YTD compared to 25% Policy Minimum
Adjusted Days Cash on Hand Policy Minimum is 270-365 days.

HRSD - SOURCES OF FUNDS

May 31, 2022

Primary Source	Beginning	YTD			Ending	Allocation of Funds	Credit Quality	Current Mo Avg Yield
	Market Value July 1, 2021	Contributions	Withdrawals	Income Earned	Market Value May 31, 2022			
BAML Corp Disbursement Account	30,017,420	434,326,220	437,422,050	38,190	26,959,780	15.8%	N/A	0.55%
VIP Stable NAV Liquidity Pool	108,890,465	50,000,000	15,000,000	243,984	144,134,449	84.2%	AAAm	0.72%
Total Primary Source	\$ 138,907,885	\$ 484,326,220	\$ 452,422,050	\$ 282,174	\$ 171,094,229	100.0%		

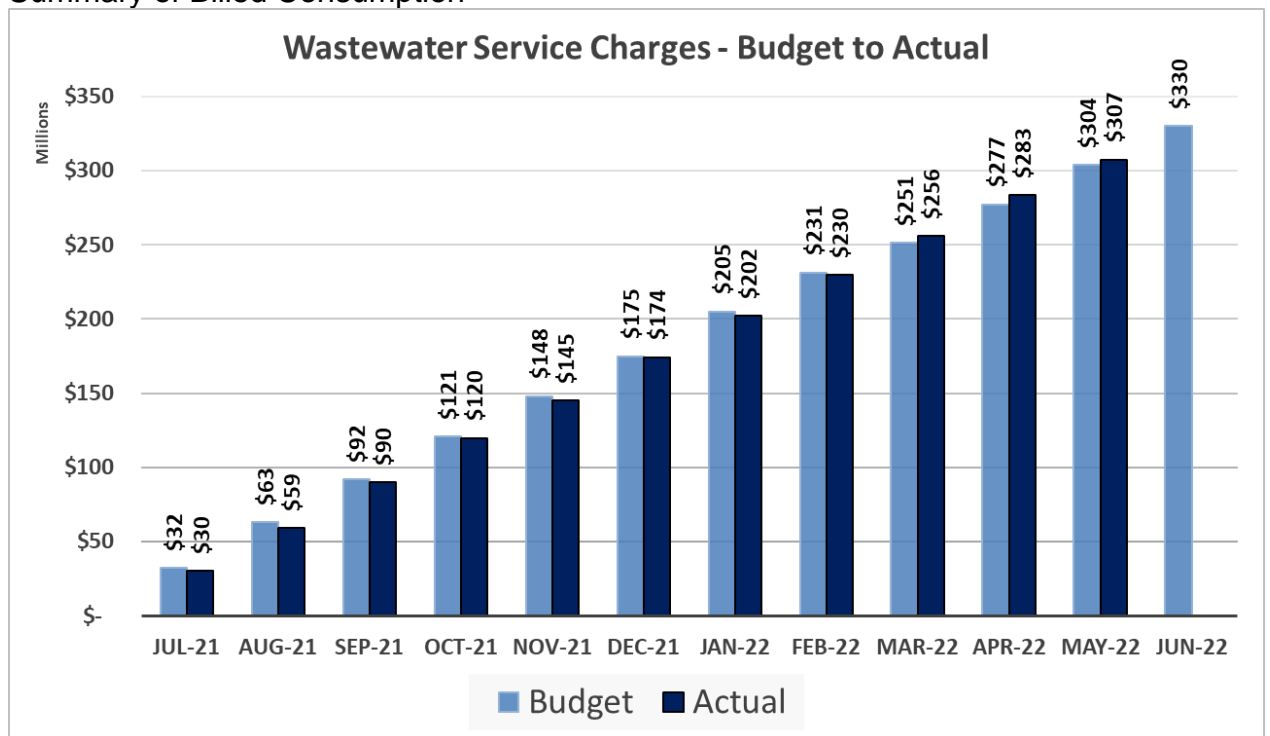
VIP Stable NAV Liquidity Pool performed at the same level as Va Local Government Investment Pool's (the market benchmark) in the month of May 2022.

Secondary Source	Beginning	YTD			Ending	Ending Cost	LTD Mkt Adj	Yield to Maturity at Market
	Market Value July 1, 2021	Contributions	Withdrawals	Income Earned & Realized G/L	Market Value May 31, 2022			
VIP 1-3 Year High Quality Bond Fund	65,054,203	-	11,828	310,690	63,264,860	63,698,405	(433,546)	2.42%
Total Secondary Source	\$ 65,054,203	\$ -	\$ 11,828	\$ 310,690	\$ 63,264,860	\$ 63,698,405	\$ (433,546)	

VIP 1-3 Year High Quality Bond Fund performed slightly below ICE BofA ML 1-3 yr AAA-AA Corp/Gov Index (the market benchmark) by 0.03% in May 2022.

	Total	Fund Alloc
Total Primary Source	\$ 171,094,229	73.0%
Total Secondary Source	\$ 63,264,860	27.0%
TOTAL SOURCES	\$ 234,359,089	100.0%

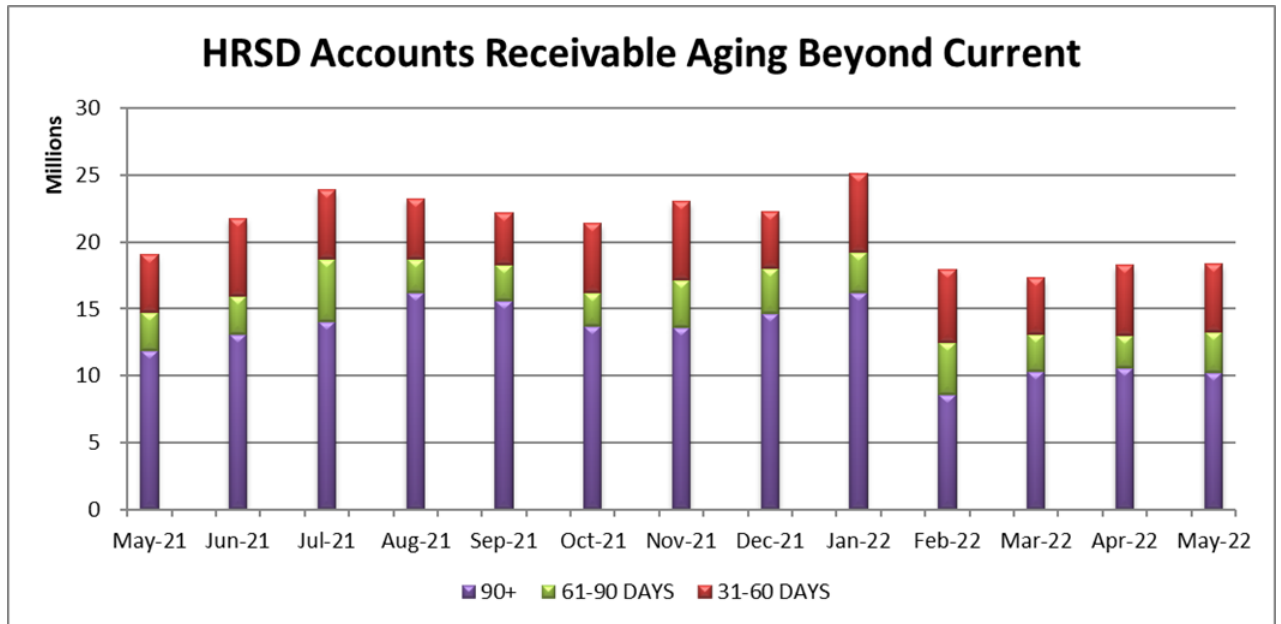
7. Summary of Billed Consumption

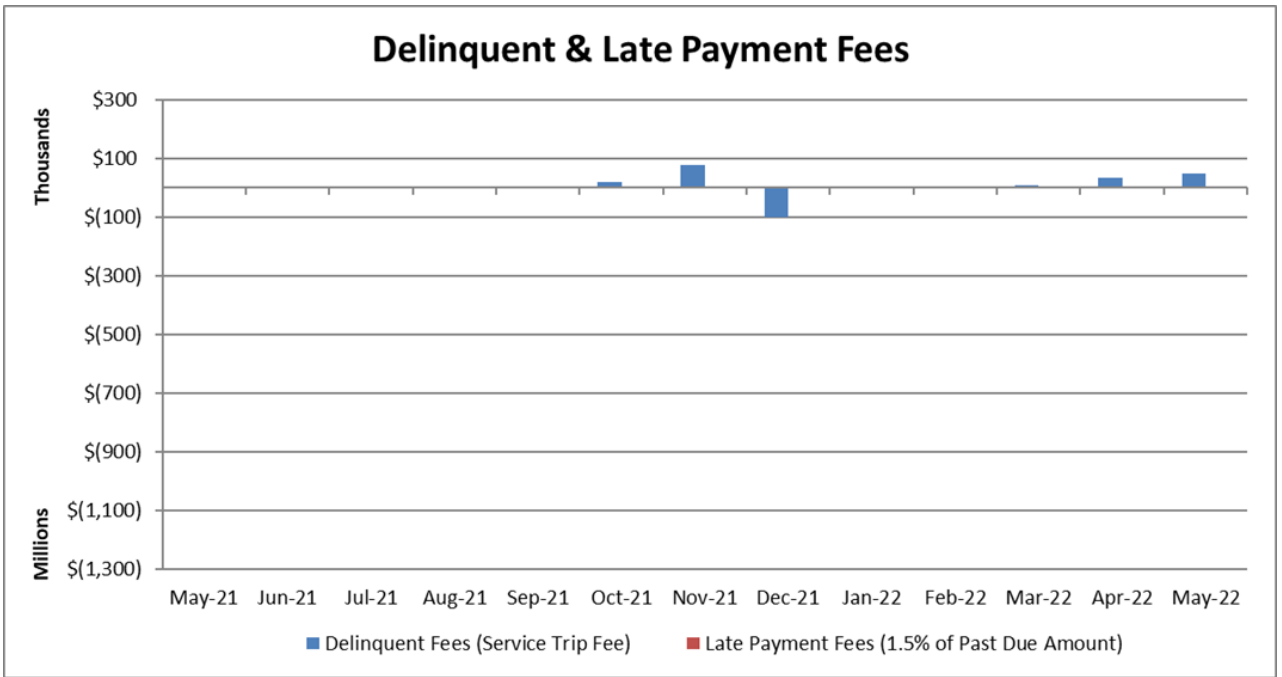


Summary of Billed Consumption (,000s ccf)							
Month	FY2022 Cumulative Budget Estimate	FY2022 Cumulative Actual	% Difference		% Difference		% Difference
			From Budget	Cumulative FY2021 Actual	From FY2021	Cumulative 3 Year Average	From 3 Year Average
July	5,015	4,976	-0.8%	4,751	4.7%	5,006	-0.6%
Aug	9,883	9,517	-3.7%	9,459	0.6%	9,866	-3.5%
Sept	14,413	14,346	-0.5%	14,335	0.1%	14,303	0.3%
Oct	18,892	19,048	0.8%	18,863	1.0%	18,931	0.6%
Nov	23,125	22,952	-0.7%	21,192	8.3%	22,474	2.1%
Dec	27,336	27,541	0.8%	27,614	-0.3%	27,458	0.3%
Jan	32,088	31,865	-0.7%	32,478	-1.9%	32,116	-0.8%
Feb	36,182	36,187	0.0%	36,068	0.3%	36,110	0.2%
March	39,309	40,229	2.3%	41,018	-1.9%	40,340	-0.3%
Apr	43,360	44,569	2.8%	45,116	-1.2%	44,540	0.1%
May	47,508	48,315	1.7%	49,256	-1.9%	48,716	-0.8%
June	51,620	-	N/A	54,195	N/A	53,202	N/A

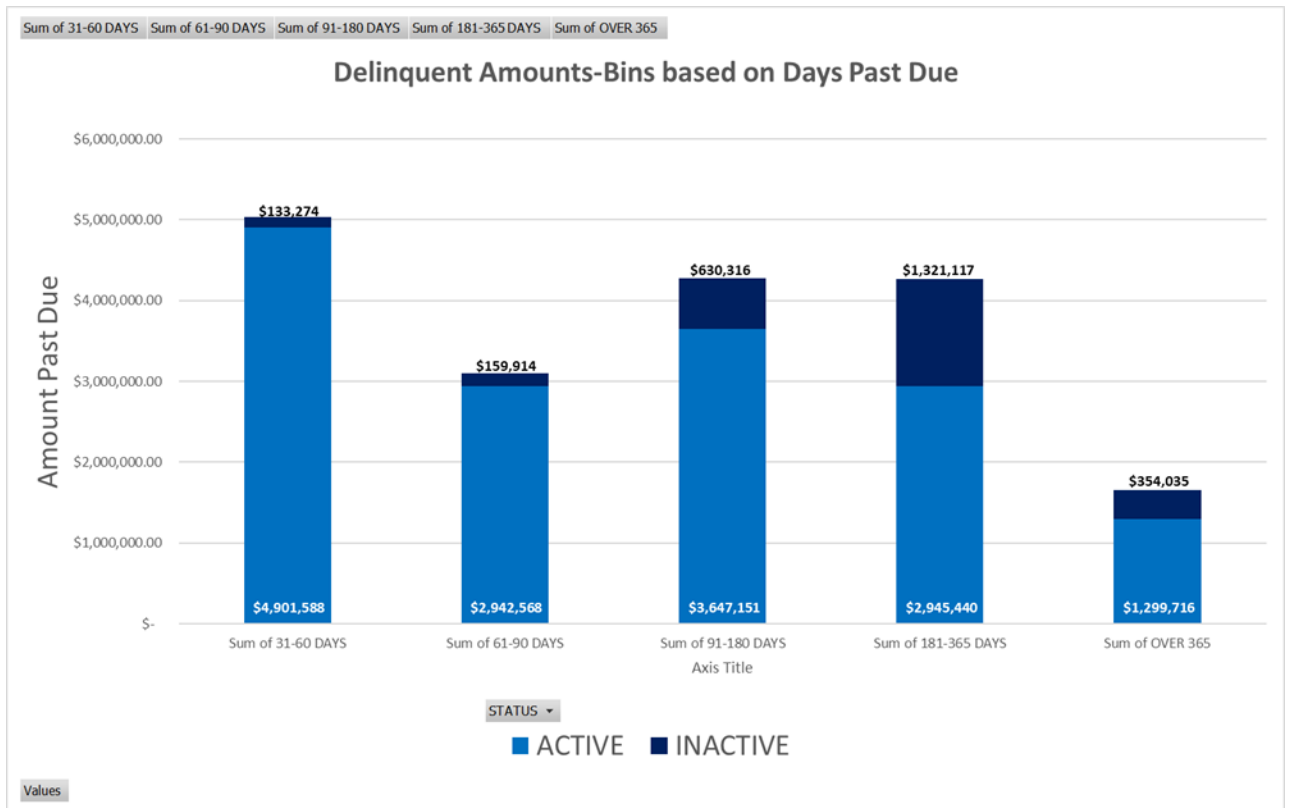
C. Customer Care Center

1. Accounts Receivable Overview

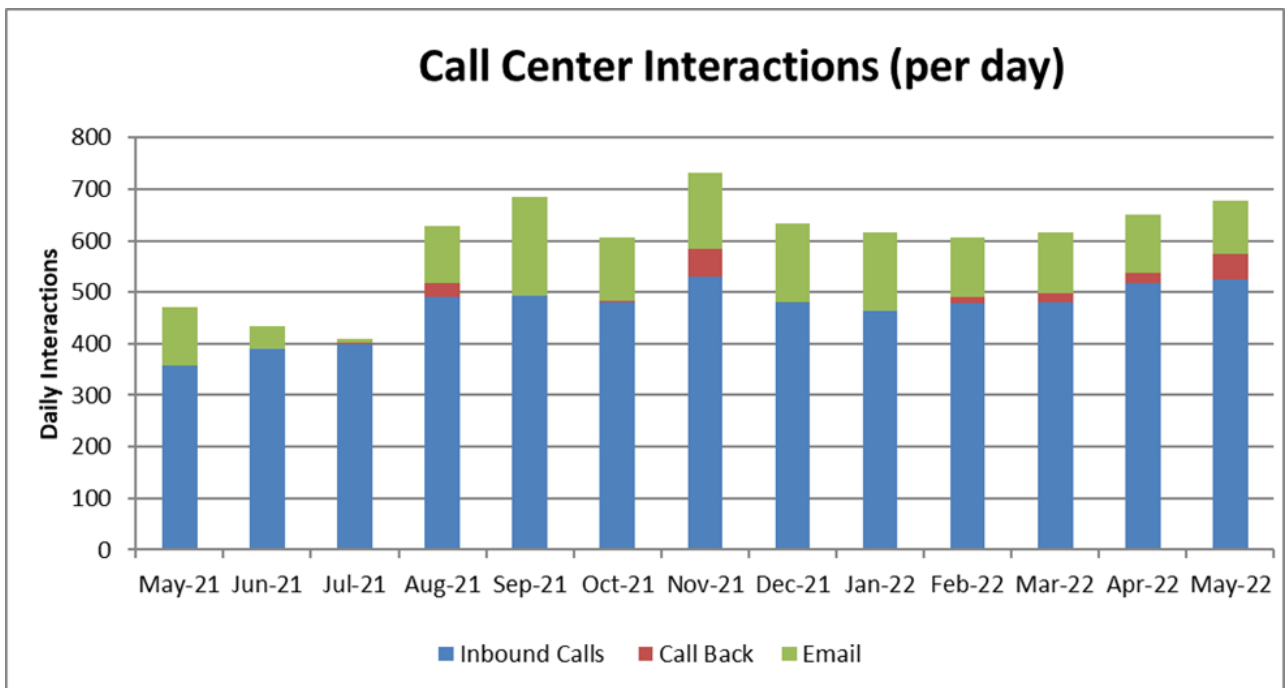
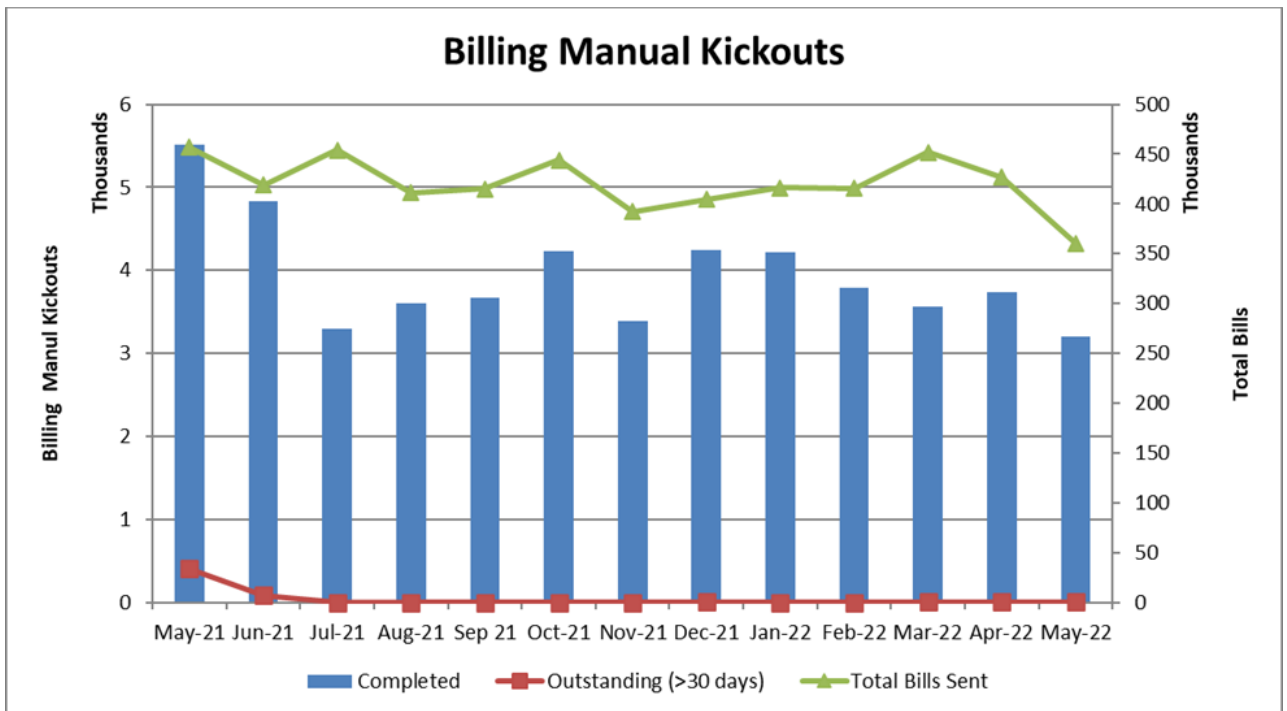


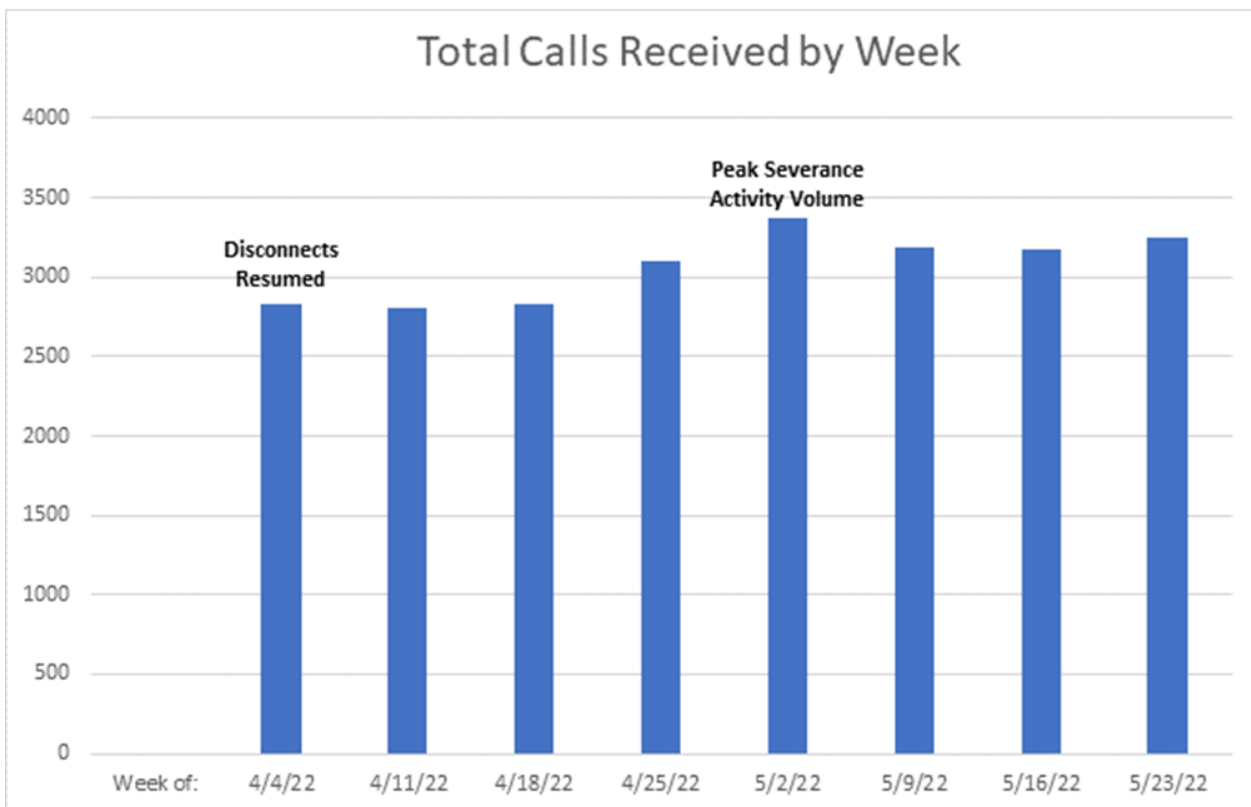


Apr 20-Feb 22 Field Activity was suspended late March 2020 in response to COVID-19.



2. Customer Care Center Statistics





Customer Interaction Statistics	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Calls Answered within 3 minutes	96%	65%	91%	93%	50%	67%	84%	88%	86%	83%	68%
Average Wait Time (seconds)	30	433	57	38	379	193	89	75	81	101	203
Calls Abandoned	4%	23%	6%	4%	22%	15%	9%	6%	7%	7%	12%

D. Procurement Statistics

ProCard Fraud	External Fraud Transactions *	Comments
July	0	
August	0	
September	1	Caught by card holder
October	0	
November	1	
December	8	Caught by card holder
January	5	3 caught by the bank, 2 caught by card holder
February	1	Caught by card holder
March	2	Caught by the bank
April	0	
May	0	
Total	18	

***External Fraud:** Fraud from outside HRSD (i.e.: a lost or stolen card, phishing, or identity theft)

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 0
2. Community Partners: 0
3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	May 2022
M-1.4a	Training During Work Hours Per Full Time Employee (102) – Current Month	Hours / #FTE	1.51
M-1.4b	Total Training During Work Hours Per Full Time Employee (102) – Cumulative Fiscal Year-to-Date	Hours / #FTE	22.11
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0
	Wastewater Revenue	Percentage of budgeted	101%
	General Reserves	Percentage of Operating Budget less Depreciation	111%
	Liquidity	Days Cash on Hand	398 Days
	Accounts Receivable (HRSD)	Dollars	\$32,641,336
	Aging Accounts Receivable	Percentage of receivables greater than 90 days	31%

Respectfully,
Jay A. Bernas
Jay A. Bernas, P.E.
Director of Finance

TO: General Manager
FROM: Director of Information Technology
SUBJECT: Information Technology Department Report for May 2022
DATE: June 8, 2022

A. General

1. Numerous IT projects are beginning to realize the impacts of the global supply chain crisis, with some projects experiencing estimated delivery delays in excess of 10 months. Staff are continuously monitoring the delays and attempting to realign project schedules and resource allocations accordingly.
2. The IT Help Desk processed 385 work orders in May, with other members of staff completing an additional 37 work orders for a grand total of 422 orders completed, ensuring availability of computing resources to those working locally and remotely.
3. Staff have completed their review of proposed storage solution replacements required for aging hardware and software nearing end of support. Procurement will negotiate the best possible price with the successful offeror and complete the necessary steps to award a contract next month.
4. The implementation of Microsoft OneDrive is complete with all user data successfully migrated. Staff are monitoring performance and stability while cleaning up data which is no longer needed or is stored offline, in compliance with data retention practices, policies and requirements.
5. Staff are working with members of the asset management division to remediate several database issues related to auditing and reporting functionality following the recent upgrade of the Computerized Maintenance Management System (CMMS).
6. Microsoft Internet Explorer v11 will reach its end of life and support next month. Staff are taking appropriate actions to ensure that any remaining installations are rendered inaccessible and that users access Microsoft Edge or another supported web browser.

B. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 0
2. Number of Community Partners: 0

C. Metrics Summary

Item #	Strategic Planning Measure	Unit	May 2022
M-1.4a	Training During Work Hours Per Full-Time Employee (51) – Current Month	Total Training Hours / # FTE	1.04
M-1.4b	Total Training During Work Hours Per Full-Time Employee (51) – Cumulative Fiscal Year-to-Date	Total Training Hours / # FTE	10.41
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0

Respectfully,

Don Corrado

TO: General Manager
FROM: Director of Operations
SUBJECT: Operations Report for May 2022
DATE: June 15, 2022

A. Interceptor Systems

1. North Shore (NS) and South Shore (SS) Interceptor Systems

- a. It was a quiet month for both NS and SS Interceptor Systems this month giving staff the opportunity to focus on normal maintenance activities.
- b. Staff continues to lead the implementation of the Supervisory Control and Data Acquisition (SCADA) project. Implementation for each SCADA site is a collaborative and extensive effort among staff from both NS and SS Interceptor Systems as well as other staff from the Operations and Engineering Departments. At each site, there are more than 25 distinct steps and series of tests that must be completed before a site is considered complete. There are a total of 202 SCADA sites across the district. To date, we have completed 48.
- c. On May 17, staff from SS operated a system valve to assist a property owner with a private force main repair.

B. Major Treatment Plant Operations

1. Army Base Treatment Plant (ABTP)

Staff discovered a process upset that began on approximately May 29. The upset resulted in poor activated sludge settling and loss of nitrification. Staff responded immediately by making process changes to preserve active biomass and worked quickly to assemble a secondary clarifier polymer addition system from equipment on hand. Polymer addition started on June 1 and process performance has been recovering gradually since June 4. Plant treatment performance recovered sufficiently to comply with all effluent permit requirements. The cause of the upset has not been identified. No issue internal to the treatment plant has been identified as a likely contributor to the upset. Staff from the Water Quality Department conducted interviews and inspection of industrial dischargers in the service area and did not find an apparent cause. Staff conducted sampling of industrial discharges and we are awaiting laboratory results.

2. Atlantic Treatment Plant (ATP)

- a. Staff received many calls and emails in response to newly created public outreach efforts that were established in April to help staff better understand and manage odor challenges. Staff from both the Operations and Water Quality Departments worked closely together responding to all calls and emails. Staff continues to perform daily odor checks and address any odors problems before they might become an off-site odor issue.

- b. On May 21, contractors finished hauling all the biosolids off the drying pads for this land application season. With that, the emails and phone calls from nearby residents dropped off significantly.
- c. Staff worked with the contractors to shutdown pre-dewatering processes and empty the pre-dewatering hopper so repairs could be made to two of the four bottom screws feeding Thermal Hydrolysis Process (THP). These screws push the pre-dewatering cake towards the pulper feed pumps. Damage to the screws was found to be more than what was initially anticipated, and the contractor was unable to make immediate repairs. Necessary parts have been ordered.
- d. Staff replaced a failed gasket on the THP cooling hex pump #2. They also replaced various leaking ball valves and potentially producing off-site odors.
- e. Staff replaced seals on the pressure relief valve for digester #6, which was leaking digester gas, potentially causing offsite odors.
- f. Staff modified the hypo feed system to better eliminate organic odors from the system.

2. Boat Harbor Treatment Plant (BHTP)

- a. Staff completed the annual inspection on aeration tank #2.
- b. Staff tested the remote shutdown hurricane procedures for the emergency generators. All the testing went as planned.

3. James River Treatment Plant (JRTP)

- a. There was one reportable wastewater event because of a loss of chlorination for about 25 minutes resulting in a 0.04 mg/L low chlorine residual. This was caused by the inability of the sodium hypochlorite pump to feed chemical when the storage tank was at a low level.
- b. Staff installed a new sodium hydroxide recirculation pump for circulating store chemical, replaced eyewash stations in the sodium hypochlorite building, and installed a new pipeline for feeding sodium hypochlorite to gravity thickener recycle water.
- c. Testing of the Moving Integrated Fixed Film Activated Solids (MIFAS) project for improved nutrient removal continued. Staff fabricated and installed an air release unit to aid in mixing the media. They also constructed a line from the primary clarifier effluent to reactor #5 on Integrated Fixed Film Activated Solids (IFAS) tank #5 to allow for carbon addition in the reactor.
- d. Staff modified the gravity belt thickener polymer system to allow for bulk delivery and storage of polymer. The new system will reduce the amount of time operators spend switching polymer totes and will increase floor space in the thickener building by eliminating the use of totes.

- e. Work on the outside raceway of primary clarifier #3 was completed. The aluminum raceway was bent in several places due to the forces of influent flow and scum buildup. The new raceway was extended an additional four feet in hopes of keeping scum out of the inner side of the raceway where scum removal is difficult.

4. Nansemond Treatment Plant (NTP)

- a. On May 2, the plant lost sodium hypochlorite feed to the contact tanks and flow was automatically diverted to the effluent holding pond. The valve that diverts flow from the outfall and to the effluent holding pond is automatic and is based on a few parameters including a 30-minute residual analyzer. Subsequently, the analyzer indicated that the sodium hypochlorite feed was reestablished, and the tank water was properly disinfected, and flow automatically reverted to the outfall. After 26 minutes, based on readings from other sensors, staff discovered that the 30-minute residual analyzer controlling the valves was incorrect and that flow was improperly flowing to the outfall. During this time, even though the water wasn't sufficiently disinfected, sodium hypochlorite was consistently fed to the contact tanks. This problem has been fixed with programming modifications.
- b. On May 3, sodium hypochlorite tanks automatically rotated from tank #1 to tank #4. However, the critical hand valve on tank #4 was closed causing a decrease in sodium hypochlorite. This resulted in an event like the reportable event on May 2, where pond valves reverted prematurely, and we discharged non-disinfected effluent for approximately 15 minutes. On the same day, contractors completed programming to ensure this doesn't happen again.
- c. On May 4, a contractor shut down the Non-Potable Water (NPW) to the Regional Residual Facility (RRF) for a tie in. When contractors returned the flow back to the RRF, the self-priming wet well pumps did not prime properly and the NPW continued to run, flooding the pad overnight. The pad in front of the RRF was flooded, as well as part of the grease facility construction site, and the grass behind the RRF. When discovered, staff primed the wet well pumps and pumped the water on the pad back to the aeration tanks and recovered as much of the water on the ground as possible. Of the 64,380 gallons discharged, approximately 60,000 gallons was recovered with 4,380 gallons released to the creek.
- d. On May 20, contractors performing work in the motor control center room of the Sustainable Water Initiative For Tomorrow (SWIFT) Research Center (RC) accidentally bumped the power switch inside the interposing relay cabinet. This caused the drain pump station to trip. When flow was restarted to the SWIFT RC the drain pumps were in manual mode and not turned on, causing the drain pump station to overflow. Approximately 200 gallons of Floc-Sed effluent discharged to the ground.
- e. Sustainable Water Initiative For Tomorrow (SWIFT) Research Center (RC)
 - (1) The total volume of SWIFT recharge into the Potomac aquifer for the month of May was 14.24 million gallons (MG) (64.3% Recharge Time based on 500 gpm).

- (2) On May 5, staff began solids recycle testing on Floc-sed train #1 basin. This testing is to study the effect on chemical usage/potential savings of coagulant (aluminum chlorohydrate) and improved water quality characteristics (TOC, Turbidity, UVT %) by recirculating solids from the sedimentation basin back to rapid mix.

5. Virginia Initiative Plant (VIP)

- a. Staff from the Water Quality Department reported a sewage odor, along with high ammonia and microbial indicator results from samples taken from a City of Norfolk storm drainpipe south of the plant site. Staff collaborated to determine if the source of the pollutant in the storm drain was from the plant. Storm drain hatches were opened and inspected, and the primary drain line was inspected for damage. Flow from the primary scum concentrator supernatant was found seeping into an abandoned storm drain line through a concrete plug that deteriorated over time. The Department of Environmental Quality (DEQ) was notified on May 31, when the leak was discovered, and flow was secured. A new concrete plug, along with a stainless-steel backing plate, coal tar sealant and mounting anchors, were installed to prevent future leakage.
- b. The final report from the annual air permit stack test indicated full permit compliance for the incinerator operations.
- c. Staff coordinated work by contractors to complete refractory work inside the standby incinerator. Further inspection of sand seals, center shaft bearings, burner ports and rabble teeth will be required before returning the incinerator to service.
- d. Staff and contractors installed a permanent building for noise abatement at a blower pad. The block work is complete, and the roof is under construction.

6. Williamsburg Treatment Plant (WBTP)

- a. Staff drained and cleaned aeration tank #4 to repair air leaks with diffusers and air supply piping.
- b. Staff cleaned solids out of #1 primary clarifier in preparation for replacement of the corroded effluent pipe. Removal of grit solids from the tank required the use of a contractor with equipment for removing grit. A second contractor prepared the new effluent pipe for installation by coating the pipe.

7. York River Treatment Plant (YRTP)

- a. There was a release of fire suppression chemical Aqueous Film Forming Foam (AFFF) into a methanol tank due to a failed pull valve actuator. A contractor arranged for proper disposal of approximately 7,900 gallons of methanol contaminated with AFFF. Some AFFF was also discharged through a pressure relief device into the methanol tank retaining wall mixing with rainwater. Contractors were used to properly dispose of AFFF contaminants from the retaining wall source.

- b. Staff drained and cleaned primary clarifier #1 to perform routine maintenance. While the tank was out of service, repairs were made to primary clarifier pump #1.
- c. Staff acid washed the centrate lines from the centrate storage tank to the centrate equalization tank to remove struvite. Their efforts were very successful, preventing the replacement of pipe due to excessive buildup of struvite.

8. Incinerator Operations Events Summary

- a. Total Hydrocarbon (THC) monthly averages (not to exceed 100 parts per million) were met by all four treatment plants with incinerators with a THC continuous emissions monitoring (CEM) valid data captured of greater than 98 percent.
- b. There were no deviations from the minimum operating parameters and one minor bypass events (<60 minute).

C. Small Communities (SC)

1. Middle Peninsula

a. West Point Treatment Plant (WPTP) and Collections

Staff cleaned the Pamunkey pump station wet well because of a grease buildup causing a blockage in the collections system. A mainline gravity and lateral blockage caused a backup to occur in a residential home this past month. A contractor sanitized and cleaned the property and removed the blockage.

b. King William Treatment Plant and Collections (KWTP)

Contractors installed concrete pads for the new ultraviolet system. A new headworks screen installed by staff is now operational and working well.

2. Eastern Shore (ES)

a. Onancock Treatment Plant (ONTP)

- (1) A temporary mobile solids dewatering and disposal contract was established to remove excess solids resulting from an undersized solids handling dewatering system.
- (2) The dewatering solids building is deteriorated and needs to be replaced. A Quonset hut structure repurposed from the closed Chesapeake Elizabeth Treatment Plant will soon be relocated to the plant.

b. Onancock Collection System

- (1) Staff installed an emergency bypass valve connection at the South Street Pump Station (PS). This will provide backup pumping into the downstream

system of the pumping station in the event of a failure of the pumps.

- (2) Staff installed numerous residential sewer lateral clean-outs to allow access to sewer mains.

D. Electrical & Instrumentation (E&I)

1. Staff are working with a contractor, to determine what caused Unit Sub Station 1B's feeder circuit breaker to trip (i.e., current phase imbalance) while reconnecting to its unloaded transformer at NTP. This also caused the utility voltage to dip, which resulted in the emergency generators coming online
2. Staff experienced interference issues that affected communications at 15 Pump Station's (PS's) on the Motorola/iFix Supervisory Control and Data Acquisition (SCADA) system in the Williamsburg service area. Staff reprogrammed all sites to a new frequency and replaced communication cards, radios, and processors. In addition, they also tested/verified all cables, connectors, and antennas at WBTP repeater site to overcome the interference.

E. Special Projects and Energy Management (EEM)

1. Recent installations of oxidation catalysts on several diesel generators in four treatment plants allow us to run the generators in those facilities to support the regional operation of the electrical grid. This activity is called the Demand Response (DR) Program. The Regional Transmission Operator (RTO) pays us to put our generators on standby and run them if necessary to help maintain the stability of an overloaded utility grid. When the RTO calls us to run our engines, we start them and remove our loads from the grid until the anomaly has been resolved. Supporting the DR Program over the last three years generated nearly \$126,000.
2. Operational problems with the solar array for the SWIFT RC are keeping it from properly operating. The solar provider is working through several issues to provide and/or repair parts to re-establish normal operation.

F. Water Technology and Research

Improving 1,4-dioxane removal is an important aspect of SWIFT, both for the RC and the design of full-scale SWIFT facilities. The application of propane for enhancing co-metabolic removal of 1,4-dioxane through biofiltration at the pilot scale has been successful, and this work is continuing with a number of research questions remaining. Since this is such a promising technology from a capital and operating cost standpoint, we decided to move forward with full-scale pilot testing at the RC. A system has been designed to safely feed propane to two of the four parallel biofilters at the SWIFT RC. The propane feed system was started up in May, and intensive sampling and analysis has been initiated to evaluate 1,4-dioxane removal and other potential impacts, both positive and negative, of propane addition. This is a completely novel technology development, and to the best of our knowledge, has never been attempted previously in a pilot- or full-scale biofiltration process.

G. MOM reporting numbers

MOM Reporting #	Measure Name	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
2.7	# of PS Annual PMs Performed (NS)	2	3	3	4	2	4	4	4	4	5	2	
2.7	# of PS Annual PMs Performed (SS)	6	6	4	5	2	4	2	10	4	2	4	
2.7	# of Backup Generator PMs Performed (Target is 4.6)	10	13	8	10	8	13	12	12	10	7	14	
2.8	# of FM Air Release Valve PMs Performed (NS)	72	89	184	210	166	251	149	41	185	227	174	
2.8	# of FM Air Release Valve PMs Performed (SS)	124	165	193	269	167	205	211	166	381	265	241	
2.9	# of Linear Feet of Gravity Clean (NS) (Target is 2,417 for HRSD)	5,209	0	9,963	8,696	3,829	3,161	4,047	4,403	1,801	530	1,817	
2.9	# of Linear Feet of Gravity Clean (SS) (Target is 2,417 for HRSD)	0	3,531	7,717	10,276	5,272	0	0	745	2,693	0	0	
2.9	# of Linear Feet of Gravity CCTV Inspection (HRSD Target 3,300 LF)	0	0	11,796	0	11,796	24,175	33,133	10,570	10,570	10,570	33,133	

H. Strategic Measurement Data

1. Education and Outreach Events: 5

- a. 05/05/2022 – VWEA Education Seminar, Invited Presentation, PdNA at HRSD – Stephanie Klaus and Mike Parsons
- b. 05/09/2022 – SWIFT Tour to Blaga Delic with AECOM – Germano Salazar-Benites
- c. 05/10/2022 – SWIFT Tour for Suez Team – Germano Salazar-Benites and Justin Barker
- d. 05/10/2022 – National Academies Workshop, Future of Managed Aquifer Recharge in the U.S., Invited Presentation, SWIFT Overview – Charles Bott
- e. 05/12/2022 - Invited Panel Review, National Water Research Institute, Anne Arundel County Advanced Treatment and Managed Aquifer Recharge – Charles Bott

2. Community Partners: 3

- a. Chesapeake Bay Foundation-Oyster Cage Maintenance at BHTP for Oyster Garden Project
- b. DOE Jefferson Lab
- c. Old Dominion University (ODU)

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	May 2022
M-1.4a	Training During Work Hours per Full Time Employee (FTE) (538) – Current Month	Hours / FTE	3.36
M-1.4b	Total Training During Work Hours per FTE (538) – Cumulative Year-to-Date	Hours / FTE	45.29
M-2.3a	Planned Maintenance Total Maintenance Hours	Total Recorded Maintenance Labor Hours	26,460.76
M-2.3b	Planned Maintenance – Preventive and Condition Based	percent of Total Maintenance Hours	62.68%
M-2.3c	Planned Maintenance - Corrective Maintenance	percent of Total Maintenance Hours	15.95%
M-2.3d	Planned Maintenance - Projects	percent of Total Maintenance Hours	21.37%
M- 4.1a	Energy Use: Treatment *Reported for May 2022	kWh/MG	4,063
M-4.1b	Energy Use: Pump Stations *Reported for May 2022	kWh/MG	284
M-4.1c	Energy Use: Office Building *Reported for May 2022	kWh/MG	97
M-5.2	Educational and Outreach Events	Number	5
M-5.3	Number of Community Partners	Number	3

Respectfully submitted,
Steve de Mik
 Director of Operations

TO: General Manager
 FROM: Director of Talent Management (TM)
 SUBJECT: Monthly Report for May 2022
 DATE: June 15, 2022

A. Talent Management Executive Summary

1. Recruitment Summary

New Recruitment Campaigns	18
Job Offers Accepted – Internal Selections	6
Job Offers Accepted – External Selections	14
Internal Applications	47
External Applications	178
Average Days to Fill Position	36.34

2. Employee Separation Summary

	May 2022	Total (April 2022- May 2022)
Career/Better Opportunity	1	2
Content of work	0	1
Family circumstances	1	1
Dismissal	2	3
Going to school	0	1
Lack of Opportunity for Advancement	1	1
Moving from the area	0	1
Salary	2	3
Retirement	0	1

3. The following activities were performed in response to the COVID-19 pandemic:

Continued addressing and monitoring suspected COVID-19 cases and potential exposures based on Virginia Department of Health (VDH) guidelines.

Description	May 2022	Total (March 2020 – May 2022)
Quarantines due to illness or direct exposure (household or external)	5	429
Work Related Quarantines	27	86
Personal Travel Quarantines	0	59
Confirmed Employee COVID-19 Cases	20	221
Work Related Confirmed COVID-19 Cases	6	12
Contractor COVID-19 Cases on HRSD Sites	0	12
Work Related exposures no quarantine*	40	40
Vaccine Acknowledgements	9	858
Booster Acknowledgements	14	370
HRSD Vaccination Rate	97%	
*HRSD Boosted Rate	42%	

*Added May 2022

4. Human Resources continued work with the consultant on system changes to benefit interfaces and benefit plan changes.
5. Compensation and Benefits
 - a. The Compensation and Classification (C&C) team evaluated one position based on Department request.
 - b. Conducted open enrollment in the month of May. Held 12 meetings and had total attendance of 424 employees.
 - c. HR Staff participated in the evaluation and ranking discussions of Request for Proposal (RFP) for the Wellness and EAP Programs.

6. Wellness Program

Year Ten Participation Activities	Unit	May 2022	Year to Date (March 2022–February 2023)
Biometric Screenings	Number	4	55
Preventive Health Exams	Number	4	50
Preventive Health Assessments	Number	22	47
Online Health Improvement Programs	Number	11	21
Web-MD Online Health Tracking	Number	149	274
New Challenges “ <i>Team to Team</i> ”	Number	0	30
Fit-Bit Promotion	Number	18	29

- a. The Wellness Specialist managed the WebMD Step Challenge and the 7-Day Push Up Challenge.
 - b. The summer visit schedules were sent out to the work centers. The summer visits will start the end of June.
 - c. Four clinical corner articles were created to send out weekly.
 - d. Fit Bit products were promoted and sent to HRSD employees and spouses in the wellness program.
7. Worked with Organizational Development consultant Hicks Carter Hicks (HCH) on the following:
- a. Worked with consultant Hicks-Carter-Hicks (H-C-H) and the HRSD sponsor on several Diversity, Equity, and Inclusion (DE&I) initiatives. The team ratified the UNIFIED Council Charter and promoted Juneteenth events for the organization to participate.
 - b. Worked with consultant H-C-H on the Leadership Ethical Accountability Program (LEAP) supervisor training program. The topic was Productive Conflict and Managing Conflict.
 - c. Continued working on the LAMA Cohort 2022- 2023 program. The topic was Design Thinking. We also finalized the capstone project, One HRSD. The challenging question is, as HRSD expands in personnel and service area size, how do we remain connected as one HRSD.
 - d. Facilitated the Half-Day Your Role In workshop.

- e. Continued work with the Customer Care Division to curate online learning paths and integration of available Corporate Training courses.
 - f. Continued work with the Water Quality Department to increase quality assurance training courses.
 - g. Continued work with Boat Harbor Treatment plant leadership to conduct a StrengthsFinder workshop for their team.
8. Coordinated a cross-sectional team to advance the functionality of Canvas.
9. Apprenticeship Program
- a. Continued work on the *Youth Summer Intensive (YSI) Program*. ODT Staff are currently working with high school administrators, apprenticeship instructors and work center staff to develop and prepare for the summer internship.
 - b. Work continued on the following:
 - (1) Apprenticeship Mentoring Program
 - (2) Request for Proposals for a Student Information System and Attendance and Assessment applications.
 - (3) Developing Standard Operating Procedures for ODT responsibilities
 - (4) Trade curricula revisions and course development to update and enhance course offerings
10. Mishaps and Work-Related Injuries Status to Date (OSHA Recordable)

	<u>2021</u>	<u>2022</u>
Mishaps	33	18
Lost Time Mishaps	12	2
<i>Numbers subject to change pending HR review of each case.</i>		

11. Safety Division Monthly Activities

Safety Training Classes	15
Work Center Safety Inspections	8
Reported Accident Investigations	4
Construction Site Safety Evaluations	4
Contractor Safety Briefings	1
Hot Work Permits Issued	0
Confined Space Permits Issued/Reviewed	162
Industrial Hygiene Monitoring Events	1

B. Monthly Strategic Planning Metrics Summary

- 1. Education and Outreach Events: (2)
 - a. 05/26/2022 –Youth Summer Intensive Information Session
 - b. 05/26/2022 – Hicks-Carter-Hicks
- 2. Community Partners: (5)
 - a. Water Environment Federation (WEF) Utility Management Committee Leadership Workgroup

- b. VWEA Leadership Academy
- c. Organizational Development Regional Committee
- d. Stephen Covey
- e. Center for Leadership Studies

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	May 2022
M-1.1a	Employee Turnover Rate (Total)	Percentage	1.17%
M-1.1b	Employee Turnover - Service Retirements	Percentage	0.0%
M-1.4a	Total Training Hours Per Full Time Employee (17)	Total Training Hours/ FTE	3.78
M-1.4b	Total Training During Work Hours Per Full Time Employee (17) – Cumulative Fiscal Year-to-Date	Hours / FTE	30.67
M-5.2	Educational and Outreach Events	Number	2
M-5.3	Community Partners	Number	5

Respectfully submitted,

Dorissa Pitts-Paige
 Director of Talent Management

TO: General Manager
FROM: Director of Water Quality (DWQ)
SUBJECT: Monthly Report for May 2022
DATE: June 15, 2022

A. General

1. The Pretreatment and Pollution (P3) Division issued one civil penalty this month. In May 2022, P3 issued an Enforcement Order to Naval Station Norfolk for a March 2022 technical violation resulting from an unauthorized discharge of at least 1,550 gallons of Aqueous Film Forming Foam (AFFF) to the sanitary sewer that negatively impacted the HRSD Army Base Treatment Plant (ABTP). The AFFF spill was properly reported by the permittee on March 9, 2022. ABTP began to experience impacts to the treatment process on March 9th and did not return to normal operations until March 14, 2022. A Show Cause meeting was held in April 2022 and the permittee attributed the violations to multiple electrical failures, one of which was associated with a rain event and one associated with Navy personnel negligence. The permittee has addressed the electrical issues, installed an alarm system to ensure the AFFF diversion system is activated, is reviewing the design of the other hangars to ensure the AFFF pull box design is not flawed, and is developing an AFFF Spill Response SOP. The Enforcement Order included a \$5,000 civil penalty assessment, but due to the Supreme Court decision, *Ohio v. Department of Energy, US, 112 SCT 1627, 118 Led2d 255 (1992)*, an invoice was not generated, and the Civil Penalty could not be collected. HRSD is in the process of issuing an invoice for cost recovery associated with HRSD staff time attributed to the investigation, clean up and recovery.
2. The Department of Environmental Quality (DEQ) issued modified permits to each of HRSD's James River dischargers to comply with the Enhanced Nutrient Removal Certainty Program (ENRCP). This legislation identified a priority nutrient removal project for each of these facilities and mandated that each individual facility permit be modified to reflect new nutrient targets. The legislation also included language to allow facilities with an aggregated wasteload allocation (such as HRSD) to comply with these nutrient targets by exercising the option to achieve an equivalent discharged load based on the annual average concentration and actual flow treated.
3. Water Quality continued work with Operations, General Manager and Communications staff to address ongoing odor issues at the Atlantic Treatment Plant (ATP).
 - (1) Technical Services Division (TSD) increased odor surveillance, worked with ATP staff to identify and mitigate odor sources, and implemented a response and monitoring system to immediately respond to odor complaints and identify potential sources.

- (2) Worked with Communications and Operations to draft and send a letter to ATP neighbors summarizing HRSD's ongoing response and plans to address and resolve odors.
 - (3) Participated in weekly status and mitigation meetings.
4. Work continued toward implementing on-line Total Residual Chlorine analysis at Nansemond TP. Data handling procedures were finalized for testing to occur over a one-month period.
5. DWQ met with North Shore Interceptor Engineer, HRSD Permit Manager and Sussex Service Authority (SSA) staff to discuss elevated Surry County TP effluent CBOD results and corrective actions. The TP returned to normal operations following implementation of several corrective actions taken by SSA.
6. The CEL began planning a restructure based on expansion of analytical capabilities and staffing changes. This restructure will improve workload balance between sections and will facilitate knowledge transfer.
7. Ashley Roberts, Lab Manager, was awarded the Water Environment Federation (WEF) Laboratory Analyst Award by the Virginia Water Environment Association/Virginia American Water Works Association Laboratory Practices Committee. This award is the highest honor WEF awards to a laboratory professional contributing to the advancement of environmental analysis.
8. Advocacy and external activities:
 - a. Attended the New Jersey Water Environment Association Spring Conference to provide operator education through support of Operations Challenge.
 - b. Attended the Virginia Association of Municipal Wastewater Agencies (VAMWA) annual planning meeting to plan the strategic initiatives for the coming year. Emphasis over the next year will be placed on leadership development for emerging leaders in the organization.
 - c. Continued coordination efforts to distribute HRSD Environmental Improvement Fund Awards provided to middle and high school students as part of the Annual Tidewater Science and Engineering Fair.
 - d. DWQ met with an Old Dominion University Development staff member to discuss PFAS information and resources.
 - e. DWQ attended an EPA Water Workforce webinar.
9. DWQ participated in the following HRSD Activities:
 - a. Open Enrollment meeting
 - b. SWIFT strategy meeting

- c. HRSD Culture Survey Feedback discussion with Senior Management and Organization Development and Training (OD&T).
- d. Nutrient Compliance meeting to review 2027 Virginia Nutrient Credit Exchange Agency submittal and future compliance plans to meet both General Permit and Individual Permit requirements related to the Enhanced Nutrient Removal Certainty Program (ENRCP).

B. Quality Improvement and Strategic Activities

1. The Sustainability Environment Advocacy (SEA) Group performed the following:
 - a. Continued to work with Boat Harbor (BH) and TSD staff on the Trash Collector operating in the harbor adjacent to the TP. BH staff weighs and properly disposes the collected trash. TSD staff audits and compiles data to build a data set to quantify items collected. In May, the Trash Collector removed 122.8 pounds of trash.
 - b. Published *How Sunscreens Impact Marine Life* on the [Making Waves Blog](#), written by team member, Lenzie Ward, P3 Specialist. The blog describes the effects of chemical sunscreens on marine ecosystems and offers advice on how to protect your skin and minimize environmental impact.
2. The WQ Communication Team resumed activities. The team was restructured with several new members joining. The team will gather input from all WQ staff to identify ideas and opportunities to enhance communication and collaboration throughout WQ.
3. WQ SharePoint Governance Team met to evaluate WQ, Division and Employee sites to identify needs and improvements.

C. Municipal Assistance Program (MAP)

HRSD provided sampling and analytical services to Northumberland and Westmoreland counties, the City of Franklin, and the Town of Lawrenceville to support monitoring required for their respective VPDES permits.

D. Microbial Source Tracking (MST)

Hampton Roads Projects - HRSD provided sampling and analytical services to City of Norfolk (Mason Creek), City of Virginia Beach (Thalia Creek), City of Chesapeake (Southern Branch), City of Hampton (New Market Creek), City of Suffolk (downtown), City of Newport News (Lucas Creek/Southeast Newport News), and James City County.

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 4

- a. 05/03/2022 - provided a CEL tour to a Christopher Newport University student interested in an environmental laboratory career.
 - b. 05/05/2022 - Provided a CEL tour to United States (US) Navy representatives as part of a WQ Department Tour.
 - c. 5/19/2022 -provided a CEL tour to an Old Dominion University student interested in an environmental laboratory career.
 - d. 05/26/2022 - Provided a CEL and Water Quality Services Building tour to Chesapeake Bay Foundation (CBF) staff and a local high school student. HRSD provided nutrient analysis for the student's science project in partnership with CBF.
2. Community Partners: 4
- a. City of Chesapeake, Chesapeake Local Health District, and the Virginia Department of Health - Local COVID-19 wastewater surveillance
 - b. City of Norfolk – partnership to identify compromised infrastructure at Lambert's Point
 - c. US Navy
 - d. Chesapeake Bay Foundation
3. Odor Complaints:
- See attached [Effluent and Air Emissions Summary](#).
4. Monthly Metrics

Item #	Strategic Planning Measure	Unit	May 2022
M-1.4a	Training During Work Hours Per Full Time Employee (119) (Current Month)	Total Hours / # FTE	7.24
M-1.4b	Total Training During Work Hours Per Full Time Employee (119) (Cumulative Fiscal Year-to-Date)	Total Hours / # FTE	55.79
M-2.5	North Shore/South Shore Capacity Related Overflows	# within Level of Service	0
M-3.1	Permit Compliance	# of Exceedances: # of Permitted Parameters	8:55,806
M-3.2	Odor Complaints	#	20*

Item #	Strategic Planning Measure	Unit	May 2022
M-3.4	Pollutant Removal (Cumulative Fiscal Year-to-Date)	Total Pounds Removed	162,842,046
M-3.5	Pollutant Discharge (Cumulative Fiscal Year-to-Date)	% Pounds Discharged/ Pounds Permitted	15%
M-5.2	Educational and Outreach Events	#	4
M-5.3	Community Partners	#	4
	Average Daily Flow	Total MGD for all Treatment Plants	136.04
	Pretreatment Related System Issues	#	1

*Increased ATP community outreach – see Effluent and Air Emissions Summary

Respectfully submitted,

Paula A Hogg

Director of Water Quality

EFFLUENT SUMMARY FOR MAY 2022

PLANT	FLOW mgd	% of Design	BOD mg/l	TSS mg/l	FC #/UBI	ENTERO #/UBI	TP mg/l	TP CY Avg	TN mg/l	TN CY Avg	CONTACT TANK EX
ARMY BASE	8.56	48%	1	5.1	2	2	1.5	0.56	4.1	3.8	2
ATLANTIC	42.88	79%	15	11	2	2	NA	NA	NA	NA	5
BOAT HARBOR	11.66	47%	10	5.4	4	3	0.60	0.51	24	22	12
CENT. MIDDLESEX	0.011	42%	<2	2.1	<1	1	NA	NA	NA	NA	NA
JAMES RIVER	12.12	61%	6	4.8	1	1	0.51	0.86	8.5	9.8	4
KING WILLIAM	0.069	69%	<2	<1.0	NA	<1	0.063	0.19	2.8	2.9	NA
NANSEMOND	15.54	52%	2	3.1	4	2	0.59	0.58	3.5	4.0	2
NASSAWADOX	0.017	17%	<2	4.5	<1	<1	0.99	0.62	14	15	NA
ONANCOCK	0.171	23%	<2	<1.0	1	1	0.20	0.21	1.9	1.0	0
SURRY, COUNTY	0.040	62%	10	2.0	NA	NA	NA	NA	NA	NA	0
SURRY, TOWN	0.039	65%	2	11	NA	14	NA	NA	NA	NA	NA
URBANNA	0.068	68%	2	6.8	11	13	0.26	0.73	6.5	13	NA
VIP	23.53	59%	5	2.5	4	2	0.53	0.30	3.7	3.1	14
WEST POINT	0.345	58%	19	9.4	1	4	2.4	2.7	18	18	2
WILLIAMSBURG	8.64	38%	4	3.0	11	2	1.7	0.80	2.6	3.2	7
YORK RIVER	12.35	82%	1	0.68	<1	<1	0.30	0.33	4.7	4.7	1
	<u>136.04</u>										

Tributary Summary

	% of Capacity	<u>Annual Total Nitrogen</u>			<u>Annual Total Phosphorus</u>		
		Discharged		Operational	Discharged		Operational
		YTD	Projection CY22		YTD	Projection CY22	
Tributaries		%	Lbs	%	%	Lbs	%
James River		22%	2,388,142	67%	19%	223,777	71%
York River		31%	245,761	85%	36%	16,725	87%
Rappahannock		22%	NA	NA	4%	NA	NA

Rainfall (inch)

	<u>North Shore (PHF)</u>	<u>South Shore (ORF)</u>	<u>Small Communities (FYJ)</u>
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Permit Exceedances: Total Possible Exceedances, FY22 to Date: 8:55,806

Pounds of Pollutants Removed in FY22 to Date: 162,842,046

Pollutant Lbs Discharged/Permitted Discharge FY22 to Date: 15%

Month	4.31"	4.50"	3.17"
Normal for Month	3.96"	4.09"	4.21"
Year to Date Total	20.70"	18.60"	16.86"
Normal for YTD	18.45"	16.83"	18.11"

*Small Communities includes Eastern Shore

AIR EMISSIONS SUMMARY FOR MAY 2022

MHI PLANT	No. of Permit Deviations below 129 SSI Rule Minimum Operating Parameters								Part 503e Limits		
	Temp	Venturi(s) PD	Precooler Flow	Spray Flow	Venturi Flow	Tray/PBs Flow	Scrubber	Any	THC	THC	BZ Temp
	12 hr ave (F)	12 hr ave (in. WC)	12 hr ave (GPM)	12 hr ave (GPM)	12 hr ave (GPM)	12 hr ave (GPM)	pH 3 hr ave	Bypass Stack Use	Mo. Ave (PPM)	DC (%)	Daily Ave Days >Max
ARMY BASE	0	0	0	0	0	0	0	1	52	100	0
BOAT HARBOR	0	0	0	n/a	0	0	0	0	13	100	0
VIP	0	0	0	n/a	0	0	0	0	52	98	0
WILLIAMSBURG	0	0	0	n/a	0	0	0	0	22	99	0

ALL OPERATIONS

DEQ Reportable Air Incidents:	0
DEQ Request for Corrective Action:	0
DEQ Warning Letter:	0
DEQ Notice of Violation:	0
Other Air Permit Deviations:	0
Odor Complaints Received:	20*
HRSD Odor Scrubber H2S Exceptions:	0

Items of Interest – May 2022

MULTIPLE HEARTH INCINERATION (MHI)

Total Hydrocarbon (THC) monthly averages (not to exceed 100 ppm) were met by all four MHI plants (Army Base, Boat Harbor, Virginia Initiative, and Williamsburg) with a THC continuous emissions monitoring (CEM) valid data captured of greater than 98%.

The MHIs had no deviations from the required 129 SSI rule minimum operating parameters and one minor bypass event (<60 minute).

VIP passed their MHI 129 emission limits stack test that was performed on April 5. The final test report was submitted to and approved by DEQ.

AIR PERMITS and ODOR CONTROL

With the HRSD Atlantic Plant Outreach (APO) brochure published for Ocean Lakes Nextdoor.com on May 4 and the APO letter of May 11 being received by some 2000 residents that live with a mile of the plant, HRSD received numerous calls and emails regarding odors from the plant. Half the complaints and reports of odors were from the neighbors past experiences and the other half were contemporary/in May or even received in real time. HRSD has responded to both the past email or phone contacts while plant staff and TSD immediately investigated all real time complaints.

No other odor complaints were received or odor control scrubber exceptions measured during May.

TREATMENT

DEQ was notified of the following reportable events:

James River

On May 31, a loss of chlorination for about twenty-five minutes resulting in a 0.04 mg/L low chlorine residual occurred. This was caused by the inability of the sodium hypochlorite pump to feed chemical when the storage tank was at a low level. A full hypo tank was put in service and hypo was restored.

Nansemond

On May 02nd, the plant lost Sodium Hypochlorite feed to the contact tanks and flow was automatically diverted to the effluent holding pond. The valve that diverts flow from the outfall to the effluent holding pond is automatic based on a few parameters including a 30-minute residual analyzer. This analyzer showed conditions returned to normal and effluent flow automatically reverted back to the outfall for approximately 26 minutes. During this period Sodium Hypochlorite was already being fed to the contact tanks, though other chlorine meters produced lower readings indicating that the contact tank residuals may not have provided adequate disinfection during that discharge period.

Plant staff identified the problem with the 30-minute residual analyzers while checking trends to investigate the cause of the issue.

On May 3rd, Sodium Hypochlorite tanks automatically rotated from tank #1 to tank #4, however, the critical hand valve on tank #4 was closed causing a decrease in Sodium Hypochlorite. Flow was diverted to the effluent holding pond. Similar to the reportable event on May 2nd, pond valves reverted prematurely due to the conditions indicated by the 30 minute residual analyzer, and effluent, which may have not been adequately disinfected, was discharged for approximately 15 minutes. On the same day contractors completed programming to prevent further occurrences.

On May 4, a contractor shut down the Non-Potable Water (NPW) to the Regional Residual Facility (RRF) for a tie in. When NPW was turned back on the RRF self-priming wet well pumps did not prime properly and the NPW continued to run flooding the pad overnight. The pad in front of the RRF was flooded, as well as part of the grease facility construction site, and the grass behind the RRF. Plant staff primed the wet well pumps and pumped the water on the pad back to the plant and contractors recovered as much of the water on the ground as well. Of the 64,380 gallons discharged approximately 60,000 was recovered with 4,380 gallons released to the creek.

On May 20, contractors performing work in the MCC room of the SWIFT Research Center (SRC) accidentally bumped the power switch inside the interposing relay cabinet. This caused the drain pump station to trip. When flow was restarted to the SRC the drain pumps were in manual mode and not turned on, causing the drain pump station to overflow. Approximately 200 gallons of Floc-Sed Effluent were discharged to the ground. Staff are working with Emerson to ensure pumps default to AUTO after a loss of power.

Virginia-Initiative

On April 22 a Norfolk Southern employee reported a possible sewage spill south of the HRSD VIP Plant. Plant staff investigated and did not find a source of release. HRSD TSD staff performed HF183 testing and determined sewage was likely entering a Norfolk storm drain south of the plant draining to the Elizabeth River. After extensive investigation by HRSD and the City of Norfolk, the issue was found to be supernatant flow from the VIP primary clarifier scum concentrator. It was discovered that an old storm drain manhole had been converted to direct flow to the plant drain, and the plug preventing flow from entering the storm drain had failed.

Promptly after this discovery on May 31, the old plug was removed and replaced with a new brick and concrete plug. A stainless steel plate coated with epoxy adhesive was also installed to prevent the possibility of accidental leakage. Approximately 10,000 gallons of primary scum supernatant entered a storm drain to the Elizabeth River between April 22 and May 31.

SYSTEM

There were no reportable events this month.

2022 Metals, Ammonia, and TKN

		Limit	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Central Middlesex	Ammonia	0.56	0.03	NA	NA	0.23	NA							
	TKN	3.0	<0.50	NA	NA	<0.50	NA							
King William	Zinc	*	75	NA	NA	18	NA							
	TKN	3.0	1.3	2.6^	0.44	0.40	0.26							
Nassawadox Riverside	Cadmium	2.0	<0.50	<0.50	<0.50	<0.50	<0.50							
	Copper	23	<5.0	<5.0	<5.0	<5.0	<5.0							
	Nickel	38	17	23	14	15	<10							
	Zinc	150	<50	<50	<50	<50	<50							
	Ammonia	1.7	2.2^	0.09	0.07	0.09	0.07							
Onancock	Copper	12	2.0	NA	NA	1.3	NA							
	Ammonia	0.90, 2.0	0.29	0.16	0.02	0.04	0.10							
Surry County	Copper	5.9	3.0	2.0	1.0	4.0	4.0							
	Zinc	56	24	33	11	31	28							
	Ammonia	0.77	NA	NA	NA	NA	NA						NA	NA
	TKN	3.0	0.55	NA	0.57	NA	2.7							
Town of Surry	Copper	12	2.0	6.0	3.0	5.0	4.0							
	Zinc	39	14	12	12	14	11							
	Ammonia	4.5	0.11	0.10	0.11	0.11	<0.10							
	TKN	6.7	2.0	1.9	1.8	1.3	0.57							
Urbanna	Ammonia	3.83, 9.08	7.76	0.05	1.26	0.08	0.41							

*No limit. Treatment objective 53 ug/L

Units: TKN, Ammonia: mg/L. Metals: ug/L

^ NR Monthly average 2.2, weekly Jan 23 3.4

^ KW Monthly average 2.6, weekly Feb 6 9.95

2022 MONTHLY FLOW AVERAGES

	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YR AVG	FY AVG
Army Base	8.38	8.29	9.12	8.56	8.56								8.58	8.18
Atlantic	42.47	42.46	42.81	40.26	42.88								42.18	35.19
Boat Harbor	15.64	13.78	13.31	12.04	11.66								13.28	11.81
C.Middlesex	0.005	0.006	0.006	0.010	0.011								0.007	0.007
Ches-Eliz	0.00	0.00	0.00	0.00	0.00								0.00	5.79
James River	14.47	13.70	14.65	13.10	12.12								13.61	12.96
King William	0.064	0.050	0.066	0.070	0.069								0.064	0.067
Lawnes Point	0.000	0.000	0.000	0.000	0.000								0.000	0.000
Nansemond	16.32	15.78	16.16	15.46	15.54								15.85	15.57
Nassawadox	0.020	0.013	0.022	0.023	0.017								0.019	0.014
Onancock	0.177	0.160	0.208	0.174	0.171								0.18	0.188
Surry, County	0.047	0.043	0.057	0.046	0.040								0.047	0.043
Surry, Town	0.043	0.044	0.057	0.047	0.039								0.046	0.038
Urbanna	0.041	0.034	0.038	0.059	0.068								0.048	0.050
VIP	25.64	26.17	27.83	23.85	23.53								25.40	23.83
West Point	0.433	0.385	0.429	0.415	0.345								0.402	0.375
Williamsburg	8.25	7.59	8.41	8.51	8.64								8.28	8.24
York River	14.08	12.97	13.66	12.81	12.35								13.18	11.64
North Shore	52.45	48.03	50.03	46.45	44.76								48.35	44.65
South Shore	92.81	92.70	95.92	88.13	90.52								92.01	88.56
Small Communities	0.83	0.73	0.88	0.84	0.76								0.81	0.78
TOTAL	146.09	141.47	146.84	135.42	136.04								141.17	134.00

Bold values indicate monthly plant flow average >95% of permitted design flow



The following Internal Audit Status document has been prepared by SC&H for the HRSD Commission. Below is a summary of projects in process, upcoming audits, and the status of current management action plan monitoring.

I. Projects in Process

Unifier/ERP Integration

- **Tasks Completed (May 2022)**
 - Validated findings
 - Issued draft report for management review
- **Upcoming Tasks (June 2022)**
 - Review management action plans and timelines
 - Finalize and submit report

Family Medical Leave Act (FMLA)

- **Task Completed (May 2022)**
 - Performed process walkthroughs and documented procedures/process information
 - Requested and reviewed process documentation
- **Upcoming Tasks (June 2022)**
 - Finalize planning procedures and documentation
 - Develop audit program for fieldwork/test procedures

Freedom of Information Act (FOIA)

- **Task Completed (May 2022)**
 - Performed process walkthroughs and documented procedures/process information
- **Upcoming Tasks (June 2022)**
 - Finalize planning procedures and documentation
 - Develop audit program for fieldwork/test procedures



II. Management Action Plan Monitoring

SC&H is performing on-going management action plan (MAP) monitoring for internal audits previously conducted for HRSD. SC&H begins MAP follow-up approximately one year following the completion of each audit and will assess bi-annually.

For each recommendation noted in an audit report, SC&H gains an understanding of the steps performed to address the action plan and obtains evidence to confirm implementation, when available.

The following describes the current project monitoring status. This listing does not include audits which were determined by HRSD Management and the Commission to include confidential or sensitive information.

Audit	Report Date	Next Follow-up	Recommendations		
			Closed	Open	Total
Biosolids Recycling	10/8/16	June 2022	7	1	8
Treatment Plant Operations	10/15/18	July 2022	8	1	9
Safety Division	9/12/19	September 2022	1	1	2
SWIFT Program	2/24/2021	April 2022	9	3	12
Fleet Services	2/24/2021	June 2022	0	17	17
Succession Planning	6/4/2021	July 2022	0	4	4
Emergency Repairs	1/18/2022	February 2023	0	3	3
D&C: CIP Project Management	5/11/16	Closed	13	0	13
HR Benefits	11/22/16	Closed	15	0	15
Inventory	4/20/17	Closed	5	0	5
Procurement/ProCard	8/23/17	Closed	11	0	11
Engineering Procurement	4/20/18	Closed	8	0	8
Corporate Governance: Ethics Function	3/21/18	Closed	5	0	5
Permitting	2/4/20	Closed	2	0	2
Payroll	3/27/20	Closed	3	0	3
Customer Care Division	7/26/19	Closed	4	0	4
Pollution Source Control	6/2/20	Closed	8	0	8
Totals			99	30	129

Annual Metrics															
Item	Strategic Planning Measure	Unit	Target	FY-10	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20	FY-21
M-1.1a	Employee Turnover Rate (Total)	Percentage	< 8%	5.63%	4.09%	6.64%	7.62%	8.22%	9.97%	6.75%	6.66%	9.99%	6.63%	6.78%	6.31%
M-1.1b	Employee Turnover Rate within Probationary Period		0%		2.22%	8.16%	14.58%	9.68%	0.66%	0.13%	0.90%	1.01%	2.10%	3.08%	5.44%
M-1.2	Internal Employee Promotion Eligible	Percentage	100%		59%	80%	70%	71%	64%	69%	68%	85%	85%	63%	78%
M-1.3	Average Time to Fill a Position	Calendar Days	< 30		70	60	52	43.76	51	56	67	67	66	60	95
M-1.4	Training Hours per Employee - cumulative fiscal year-to-date	Hours	> 40		30.0	43.8	37.5	35.9	42.8	49.0	48.4	41.1	40.9	39.3	28.2
M-1.5a	Safety OSHA 300 Incidence Rate Total Cases	# per 100 Employees	< 3.5	6.57	6.15	5.8	11.2	5.07	3.87	7	5.5	5.7	4.1	4.8	4.1
M-1.5b	Safety OSHA 300 Incidence Rate Cases with Days Away	# per 100 Employees	< 1.1	0.74	1.13	1.33	0.96	1.4	0.82	1.9	1	1.1	0.8	1.34	1.3
M-1.5c	Safety OSHA 300 Incidence Rate Cases with Restriction, etc.	# per 100 Employees	< 0.8	3.72	4.27	2.55	4.5	2	1.76	3.6	2.8	2.8	1.8	1.6	4.1
M-2.1	CIP Delivery - Budget	Percentage			113%	96%	124%	149%	160%	151%	156%	160%	170%	170%	123%
M-2.2	CIP Delivery - Schedule	Percentage			169%	169%	161%	150%	190%	172%	173%	167%	159%	159%	155%
M-2.3a	Total Maintenance Hours	Total Available Mtc Labor Hours Monthly Avg			16,495	22,347	27,615	30,863	35,431	34,168	28,786	28,372	31,887	29,596	28,722
M-2.3b	Planned Maintenance	Percentage of Total Mtc Hours Monthly Avg			20%	27%	70%	73%	48%	41%	43%	44%	59%	59%	62%
M-2.3c	Corrective Maintenance	Percentage of Total Mtc Hours Monthly Avg			63%	51%	12%	10%	18%	25%	25%	24%	18%	19%	16%
M-2.3d	Projects	Percentage of Total Mtc Hours Monthly Avg			18%	22%	20%	18%	32%	34%	32%	32%	27%	25%	22%
M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	2%		8.18%	6%	6%	4%	7%	7%	5%	5%	4	5%	7%
M-3	Carbon Footprint	Tons per MG Annual Total			1.61	1.57	1.47	1.46	1.44	1.45	1.58	1.66	1.58	1.7	1.75
M-3.6	Alternate Energy (Incl. Green Energy as of FY19)	Total KWH			0	0	0	5,911,289	6,123,399	6,555,096	6,052,142	5,862,256	47,375,940	56,473,800	58,044,110
M-4.1a	Energy Use: Treatment	kWh/MG Monthly Avg			2,473	2,571	2,229	2,189	2,176	2,205	2,294	2,395	2,277	2,408	2,459
M-4.1b	Energy Use: Pump Stations	kWh/MG Monthly Avg			197	173	152	159	168	163	173	170	181	174	170
M-4.1c	Energy Use: Office Buildings	kWh/MG Monthly Avg			84	77	102	96	104	97	104	104	95	102	82
M-4.2	R&D Budget	Percentage of Total Revenue	> 0.5%		1.0%	1.4%	1.0%	1.3%	1.0%	0.8%	1.3%	1.4%	1.8%	1.3%	1.4%
M-4.3	Total Labor Cost/MGD	Personal Services + Fringe Benefits/365/5-Year Average Daily Flow		\$1,028	\$1,095	\$1,174	\$1,232	\$1,249	\$1,279	\$1,246	\$1,285	\$1,423	\$1,348	\$1,487	\$1,545
M-4.4	Affordability	8 CCF Monthly Charge/ Median Household Income	< 0.5%		0.48%	0.48%	0.41%	0.43%	0.53%	0.55%	0.59%	0.60%	0.64%	0.71%	0.67%
M-4.5	Total Operating Cost/MGD	Total Operating Expense/ 365/5-Year Average Daily Flow		\$2,741	\$2,970	\$3,262	\$3,316	\$3,305	\$3,526	\$3,434	\$3,592	\$3,959	\$3,823	\$4,048	\$4,311
M-5.1	Name Recognition	Percentage (Survey Result)	100%	67%	71%	N/A	62%	N/A	60%	N/A	N/A	53%	N/A	53%	N/A
M-5.4	Value of Research	Percentage - Total Value/HRSD Investment			129%	235%	177%	149%	181%	178%	143%	114%	117%	143%	138%
M-5.5	Number of Research Partners	Annual Total Number			42	36	31	33	28	35	15	20	26	32	27
	Rolling 5 Year Average Daily Flow	MGD		157.8	155.3	152	154.36	155.2	151.51	153.09	154.24	152.8	152.23	149.84	149.72
	Rainfall	Annual Total Inches		66.9	44.21	56.21	46.65	46.52	51.95	54.14	66.66	49.24	53.1	48.49	54.04
	Billed Flow	Annual Percentage of Total Treated		71.9%	82.6%	78%	71%	73%	74%	72%	73%	76%	72%	78%	72%
	Senior Debt Coverage	Net Revenue/Senior Annual Debt Service	> 1.5	2.51%	2.30%	2.07%	1.88%	1.72%	1.90%	2.56%	3.10%	3.59%	4.84%	5.80%	6.03%
	Total Debt Coverage	Net Revenue/Total Annual Debt	>1.4	1.67%	1.67%	1.46%	1.45%	1.32%	1.46%	1.77%	1.93%	2.03%	2.62%	2.81%	2.66%

*to be reported

Monthly Updated Metrics																	
Item	Strategic Planning Measure	Unit	Target	FY-10	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	FY-19	FY-20	FY-21	FY-22	FY-22
	Average Daily Flow	MGD at the Plants	< 249		136	146.5	158.7	156.3	153.5	155.8	153.5	145.8	152.7	141.5	155.3	135.4	136.0
	Industrial Waste Related System Issues	Number	0		3	6	6	6	2	4	7	4	7	1	2	0	1
	Wastewater Revenue	Percentage of budgeted	100%		97%	96%	98%	107%	102%	104%	103%	103%	104%	104%	106%	104%	101%
	General Reserves	Percentage of Operating and Improvement Budget	75% - 100%		72%	82%	84%	92%	94%	95%	104%	112%	117%	108%	108%	108%	111%
	Accounts Receivable (HRSD)	Dollars (Monthly Avg)			\$17,013,784	\$17,359,488	\$18,795,475	\$20,524,316	\$20,758,439	\$22,444,273	\$22,572,788	\$22,243,447	\$23,900,803	\$27,335,100	\$34,060,154	\$36,254,846	\$32,641,336
	Aging Accounts Receivable	Percentage of receivables greater than 90 days			21%	20%	18%	19%	21%	20%	18%	18%	17%	18%	29%	29%	31%
M-2.5	Capacity Related Overflows	Number within Level of Service	0		25	1	30	5	11	16	6	10	5	2	25	0	0
M-3.1	Permit Compliance	# of Exceedances to # of Permitted Parameters			12:55,045	1:51995	2:52491	1:52491	2:52491	2:52491	9:53236	9:58338	2:60879	9:60879	23:60879	8:50733	8:55806
M-3.2	Odor Complaints	Number	0		6	2	7	11	5	9	7	6	9	15	31	3	20
M-3.4	Pollutant Removal (total)	Total Pounds Removed			178,163,629	171,247,526	176,102,248	185,677,185	180,168,546	193,247,790	189,765,922	190,536,910	187,612,572	182,759,003	183,123,855	149,315,621	162,842,046
M-3.5	Pollutant Discharge (% of permitted)	Pounds Discharged/Pounds Removed	< 40%		25%	22%	25%	22%	22%	20%	22%	17%	17%	18%	15%	15%	15%
M-5.2	Educational and Outreach Events	Number			302	184	238	322	334	443	502	432	367	256	145	61	10
M-5.3	Number of Community Partners	Number			280	289	286	297	321	354	345	381	293	230	128	14	48