COMMISSION MEETING MINUTES
April 25, 2023

No.	Topic
	Call to Order
	Roll Call of HRSD Commission
1.	Awards and Recognition
2.	Consent Agenda
3.	Suffolk Pump Station Replacement Determination of Public Need for Fee Simple and Easement Acquisition Resolution
4.	Annual Budget and Related Components
5.	Revenue Policy Updates
6.	Hampton Roads Water Quality Credit Agreement for Chesapeake Bay Restoration Christopher Newport University Agreement
7.	Nutrient Credit Management Policy Updates
8.	County of Accomack Sewer Service Agreement
9.	Town of Accomac Reimbursement Agreement
10.	Town of Wachapreague Sewer Transfer and Service Agreement
11.	Town of Wachapreague Reimbursement Agreement
12.	Eastern Shore Infrastructure Improvements – Transmission Force Main Phase I Property Acquisition – Commonwealth of Virginia, The College of William and Mary in Virginia
13.	Bowers Hill Interceptor Force Main Section I Emergency Replacement Additional Appropriation

No.	Topic
14.	Great Bridge Interceptor Force Main Emergency Replacement (SF-180) New CIP and Initial Appropriation
15.	Norchester Pump Station Screening Improvements Initial Appropriation
16.	North Shore Automated Diversion Facilities Additional Appropriation, Contract Award (>$200,000), Task Order (>$200,000)
17.	Capital Improvement Program (CIP) Quarterly Update
18.	Unfinished Business
19.	New Business
20.	Commissioner Comments
21.	Public Comments
22.	Informational Items
23.	Closed Meeting
24.	Reconvened Meeting

COMMISSION MEETING MINUTES
April 25, 2023

The Commission Chair called the meeting to order, and the Commission Secretary read the roll call of HRSD Commissioners.

Name	Title	Present for Item Nos.
Rodriguez, Stephen C.	Commission Chair	1-24
Elofson, Frederick N.	Commission Vice-Chair	1-24
Glenn, Michael E.	Commissioner	1-24
Lakdawala, Vishnu K.	Commissioner	1-24
Levenston, Jr., Willie	Commissioner	1-24
Stern, Nancy J.	Commissioner	1-24
Taraski, Elizabeth	Commissioner	1-22
Templeman, Ann	Commissioner	1-24

In accordance with Virginia Code § 2.2-3708.3 (B) and the HRSD Remote Participation Commission Adopted Policy Commissioner Stern requested approval to participate in today's meeting from Belle Haven, Virginia due to The Commissioner's principal residence is more than 60 miles from the meeting location identified in the required notice for such meeting.

Moved: Frederick Elofson
Seconded: Vishnu Lakdawala
Roll call vote: **Ayes: 8** **Nays: 0**

1. Awards And Recognition

Action: No action required.

a. Service Awards

The Commission Chair presented a service award to Patrick Grace who marked his 25th year of service with HRSD on April 13, 2023.

Pat was hired in 1998 as a Plant Operator at the York River Treatment Plant, transferred to North Shore Operations to an Interceptor Assistant position in 2001, and lastly was promoted to his current position as a Heavy Equipment Operator at again North Shore Operations in 2006.

Pat has a Class 'A' Commercial Driver's License with Haz-Mat and Tanker endorsements with 17 years of experience as a Heavy Equipment Operator. He has extensive experience operating excavators, backhoes, loaders and his main role currently is to operate a sewer flusher and vacuum combination truck.

Pat is a key member of our team and has participated in countless projects and system repairs ranging from concrete and asphalt work to pipe repairs. He is a hard worker who can be depended on to strengthen HRSD's promise to maintain clean waterways for Virginia.

Some special notes about Pat. He joined the U.S. Navy right after high school in 1986, worked on the flight decks of USS Theodore Roosevelt, USS Dwight D. Eisenhower, and NAS Key West. Deployed three times in the Navy during Desert Shield and Desert Storm. Left the Navy after 11 years and was hired at HRSD. He then joined the Air Force Reserve in 2005 and was deployed to Afghanistan twice and Iraq twice and served as a Heavy Equipment Operator and Demolition Team Leader. Pat retired from the Air Force in April 2022. We thank him for his extraordinary service to our Country, to HRSD and to our environment.

b. New Employee Introduction

Ms. Virginia Opp was recently hired as a Project Manager in the Design and Construction – Special Projects Division of the Engineering Department. She is a registered Professional Engineer in the state of Virginia with 10 years of design and construction experience as a consultant as well as experience working for construction firms. Her responsibilities as Project Manager will include design and construction management oversight for both capital and non-capital projects as well as emergency projects. She holds a bachelor's degree in Civil Engineering with a minor in Environmental Engineering from Old Dominion University. Virginia is an associate board member with the Virginia Lakes and Watersheds Association.

c. Awards

a. EPA Clean Water State Revolving Fund

HRSD was pleased to receive from EPA the 2022 George F. Ames PISCES award in the Innovative Finance category. This award is meant to acknowledge a creative financing mechanism within the Clean Water State Revolving Fund to address particular needs of the community or challenges of the project. HRSD won this award for the creation of the programmatic revolving loan which bundled 48 individual projects to secure $100,000,000 in funding at a rate of 1.15%. The programmatic model has resulted in many streamlined processes within HRSD and the SRF and has become a model for other users of the SRF in Virginia. Erin Girardi accepted this award on behalf of HRSD at the Council of Infrastructure Authorities annual meeting in Washington DC.

b. Governor's Environmental Excellence Award

HRSD was pleased to receive the 2023 Governor's Environmental Excellence Gold Award for its collaboration with DC Water on development of Next Generation Mainstream Nitrogen Removal Technology through Partial Denitrification-Anammox (PdNA). This award recognizes successful and innovative efforts that improve Virginia's environment. The annual awards program is run as a partnership between the Department of Environmental Quality and the Department of Conservation and Recreation. Dr. Charles Bott, Dr. Stephanie Klaus and Mr. Mike Parsons received this award on behalf of HRSD at the Environment Virginia Conference held in Lexington.

2023 GOVERNOR'S ENVIRONMENTAL EXCELLENCE AWARD

Hampton Roads Sanitation District in Collaboration with DC Water

WHEREAS, Article XI of the Constitution of Virginia states that "it shall be the Commonwealth's policy to protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people of the Commonwealth"; and

WHEREAS, the Commonwealth seeks to recognize those who have demonstrated leadership, innovation, and commitment to implement pollution prevention practices to reduce environmental impacts and improve our natural environment; and

WHEREAS, pollution prevention is a cost-effective and environmentally sound approach to environmental management that strives to eliminate or reduce pollution at its source by minimizing the use of energy, water, and other natural resources through increased efficiency and conservation;

NOW, THEREFORE, I, Glenn Youngkin, Governor, do recognize Hampton Roads Sanitation District in collaboration with DC Water as Gold Medal recipients of the 2023 Governor's Environmental Excellence Award for their demonstrated commitment to the stewardship of Virginia's natural resources by developing and deploying the next generation of mainstream nitrogen removal technology through partial denitrification-anammox (PdNA).

Governor | Secretary of Natural and Historic Resources

Public Comment: None

2. Consent Agenda

Action: Approve the items listed in the Consent Agenda.

Moved: Vishnu Lakdawala
Seconded: Willie Levenston
Roll call vote: **Ayes: 8** **Nays: 0**

Brief:

a. Approval of minutes from previous meeting.

b. Appropriation or Additional Appropriation (≤5% original appropriation and <$200,000)

1.	Sanitary Sewer Project 1950 – Part 1 30-Inch Gravity Sewer	$147,330

c. Contract Awards

1.	Crusher Run and Stone Supply and Delivery Services	$450,000
2.	Fuel Supply and Delivery Services	$6,076,265
3.	Lawn Maintenance Services for North Shore and South Shore Operations Complexes	$525,705
4.	Lawn Maintenance Services for Treatment Plants	$1,776,840

d. Contract Change Orders

1.	Cisco SmartNet Technical Support Services	$4,199
2.	Nansemond Treatment Plant Primary Clarifier Influent Channel Repair and Coating	$13,111

e. Task Orders

1.	Atlantic Treatment Plant Access Road Extension	$845,589
2.	Atlantic Treatment Plant Biosolids Storage Pad Roof Structure Coating	$449,294
3.	Middlesex Interceptor System Program Phase III (Deltaville)	$411,582
4.	Nansemond SWIFT Facility	$436,900

5. Nansemond Treatment Plant Motor Control Center Replacements $990,326

6. West Point Treatment Plant Final Effluent Pump Station Improvements $386,230

7. West Point Treatment Plant Secondary Clarifier Improvements $257,487

f. Sole Source

1. Taylor Distribution Thermal Transfer Polypropylene Labels and Ribbons

g. HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award

1. Microsoft® Surface Pro Protection Plan and Accessories $1,227,683

2. Oracle Weblogic Server and Utilities Customer Care and Billing Task Optimization Tools $319,624

Public Comment: None

3. **Suffolk Pump Station Replacement**
Determination of Public Need for Fee Simple and Easement Acquisition Resolution

Action: Adopt the Resolution approving the public use determination and directing acquisition by condemnation, or other means, of fee simple acquisition, permanent and temporary easements for the Suffolk Pump Station Replacement project.

Moved: Willie Levenston
Seconded: Vishnu Lakdawala
Roll call vote: **Ayes: 8** **Nays: 0**

CIP Project: NP010620

Regulatory Requirement: Rehab Action Plan Phase 2 (2025 Completion)

Project Description: This project will design and construct two replacement pump stations in lieu of constructing one replacement for the existing Suffolk Pump Station located at 1136 Sanders Drive, in Suffolk. The benefit of the two-pump station scenario includes abandonment/removal of over 7,000 linear feet of gravity sewer and 34 manholes along Shingle Creek and associated wetlands with ongoing concerns for potential overflows, pipe failure and difficulty accessing for maintenance.

Project Justification: The new stations will meet current capacity needs and provide for future expansion to meet anticipated growth and improve system efficiencies. The existing pump station site does not provide the needed space for expansion, is difficult to access and creates a nuisance to traffic in the surrounding residential neighborhood.

As part of the project, HRSD anticipates a total of 26 temporary and permanent easements and three fee simple acquisitions.

A public hearing was held on March 28, 2023, to review the scope of the project, to define the public need of the project and identify the specific impact to the properties where condemnation may be considered and to receive public input. Attempts to purchase the final property and easements from the affected property owners have been unsuccessful. While a purchase is still possible, condemnation will likely be necessary to keep the project on schedule. The attached Resolution meets the requirements of the Code of Virginia should condemnation be necessary. The resolution has been reviewed by HRSD real estate legal counsel.

Staff provided a briefing to review concerns raised by one of the property owners prior to the adoption of the Resolution.

Discussion Summary: Construction of the pump station is anticipated to be complete in two years and has been designed to have minimal impact to the property owner and access. The overall size of the pump station has been reduced from the standard design, the security fencing will be enhanced during construction, an automatic security gate will be added to replace the current manual gate on site, and additional gravity sewer stub-out will be added to the property to accommodate future development. In addition, at the property owner's request for additional parking and property owner usage, the contractor will leave gravel at the easement, install a rolltop curb and gutter to ease access to Virginia Ham Drive and future truck turning radius, and tunneling across the road and entrance to allow the entrance to remain open during construction.

Public Comment: Mr. Arzillo asked that the maps from the presentation be shown onscreen again. *"I would just like to bring up our point was when you first started this pump station deal, our site wasn't even a recommended site. They chose a bunch of other sites. The best site that your expert came up with was across Portsmouth Boulevard. And right here, Potential site 7, was the best site. It seems like your only hang up is because you are dealing with the City of Portsmouth. Your gripe should be with the City of Portsmouth, not me. The railroad trestle right here we believe has been discontinued by CSX and City of Suffolk supposedly might want to try to use this as a trail. But that overpass is legal height and width. Tractor trailers go up under there every day and out every day. And our site isn't even in your line. You have manholes here. And that one spot is an option. I don't see why you can't put it there. I've read your original report and our site is even too high because of a 20-foot max lift or something for your manholes or your sewer pump station. We are too high. You need to be back here where it is lower. Because there was a chart that showed the outline of where you could put it and you can't even put it there. So, I'm just asking if you guys have an option, then put it there. We are going to have problems with the setback. There is a 20-foot rear SCOD setback. According to the UDO, you cannot have your drive in the rear 20-foot SCOD setback. For a subdivision site plan to be approved, that's the way it needs to be done. I don't know where he is getting his information from. But clearly, that is the procedure. I didn't make the procedure. City of Suffolk made the procedure. So, this is where we are at. If they have this underground tunneling technology, they should definitely be able to get under those tracks and put their pump station right there. I can understand maybe not here, but over here is the best spot. Like I said, my site isn't even in the top ten that was picked. You even picked a site here; you picked another site over here on Suburban Drive and you have drawings all done and I believe you guys have an option. I was hoping you would pick up on that option instead of interfering with our operation. Because clearly this is not the best site for your pump station."*

Chair Rodriguez thanked Mr. Arzillo for his time.

4. Annual Budget and Related Components

Action: Receive the Finance Committee's report for the proposed Fiscal Year 2024 Annual Budget and Capital Improvement Program (CIP).

Brief: The Finance Committee and other Commissioners attended the Capital Improvement Program (CIP) review meeting on March 2, 2023, and the Fiscal Year-2024 Annual Budget review meeting on April 25, 2023. A work session was held with the Commissioners on March 28 to review the draft Fiscal Year-2024 Annual Budget.

The entire budget package will be presented to the Commission for approval during the May Commission meeting. In accordance with Commission Governance Guidelines, the Commission must adopt an operating budget on or before the first day of June for the fiscal year beginning July 1 to allow for four consecutive weeks for rate advertisements as required by the Enabling Act.

The annual budgeting process includes updating a long-range financial forecast as well as developing an Annual Budget, CIP, and Rate Schedule. Because these components are inter-related, they are presented together to evaluate the overall budget and financial condition of HRSD.

The long-range financial forecast is a planning tool used to project the need, timing and amount of rate adjustments and capital requirements to fund the CIP and maintain financial resiliency. The revenue and expense projections are developed using inflationary assumptions, past experience, the Annual Budget and the CIP.

The 10-year CIP, a long-range planning tool used to summarize needed projects, includes a description, cost estimate and schedule for each project. The Commission approves the 10-year plan along with the planned expenditures for the first fiscal year in the plan. Each project is reviewed prior to commencement to reevaluate the need, timing, location, capacity, cost and schedule for the project. Individual projects in the approved CIP are presented to the Commission for appropriation of project funding when the first dollar is proposed to be spent. As individual projects proceed, the Commission remains informed through regular reports and briefings. The proposed CIP totals approximately $3.5 billion over the next 10 years.

Discussion Summary: Commissioner Elofson provided a report on the annual budget process including a summary of committee meetings held this year.

Public Comment: None

5. **Revenue Policy**
Commission Adopted Policy

Action: No action required.

Brief: The purpose of the Revenue Policy is to ensure there is sufficient revenue to support direct and indirect operating, capital and reserves and current and future debt service costs. The Policy covers such areas as the basis of charges, how charges are determined, how rates are approved, revenue forecasts, collections and an overview of the rate model. It was orignally adopted in May 2017 and last revised in May 2021.

The following changes were presented at the Finance Committee meeting on April 25, 2023.

- Added new Nutrient Credit Rates to recover the marginal operational cost to treat pollutants and the cost associated with the capacity of assets consumed to treat the pollutants. The rates include an Operational Nutrient Credit Rate designed to recover the marginal operating cost to treat a pound of Total Nitrogen, Total Phosporus, and/or Total Suspended Solids (collectively Nutrients). The rates also include an Asset Nutrient Credit Rate which is a one-time charged based on the proportional share of capital assets consumed to treat Nutrients. This rate is similar in concept to HRSD's existing Facility Charges.

- Added provisions that clarify that HRSD will pursue collections for delinquent customer accounts in accordance with the Enabling Act or other relevant governing law as appropriate. The policy also delgates the authority to pursue collections delinquent accounts to the General Manager. A resolution further documenting that authority will be presented to the Commission for consideration at the May 2023 meeting.

The revised Policy is provided for Commission review and comment and will be presented for Commission action at the May meeting.

Public Comment: None

6. **Hampton Roads Water Quality Credit Agreement for Chesapeake Bay Restoration Christopher Newport University Agreement**

Action: Approve the terms and conditions of the agreement with the Christopher Newport University (CNU) for provision of nutrient and sediment credits generated by SWIFT to meet CNU's MS4 Chesapeake Bay TMDL reduction requirements 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.

Moved: Vishnu Lakdawala
Seconded: Frederick Elofson
Roll call vote: **Ayes:** 8 **Nays:** 0

Brief: At the October 2020 meeting, the Commission approved the Nutrient Credit Management Policy which provides the underlying philosophy for entering into nutrient credit trade and offset agreements. This policy allows for the assessment of charges associated with the costs of generating nutrient credits on a case-by-case basis. Thus far, credit agreements have been entered into with local governments and regional entities to support their requirements to meet their Chesapeake Bay Total Maximum Daily Load (TMDL) pollutant reduction mandates in their stormwater permits. HRSD has also entered into nutrient offset agreements to accommodate the short-term needs associated with the construction of regional projects that provide benefit to HRSD rate payers (e.g., the Hampton Roads Bridge Tunnel and the Chesapeake Bay Bridge Tunnel projects).

CNU is public university of the Commonwealth, located in Newport News. It owns and operates a municipal separate stormwater sewer system ("MS4") authorized to discharge Total Nitrogen (TN), Total Phosphorus (TP) and Total Suspended Sediment (TSS) to the Chesapeake Bay watershed. The CNU MS4 is subject to the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems ("MS4 Permit") issued by DEQ and, as such, is required to reduce Total Nitrogen (TN), Total Phosphorus (TP) and Total Suspended Solids (TSS) discharges as part of a CNU-developed and DEQ-approved TMDL Action Plans for each of its three, five-year permit cycles. CNU is currently finishing its second permit cycle with the third permit cycle ending in 2028.

As with the other MS4 permittees into which HRSD has entered into credit agreements, CNU has limited opportunities to economically implement projects to achieve the required pollutant reductions in an area that is highly developed. CNU approached HRSD about acquiring the credits to meet its pollutant reduction needs. As CNU is a state entity without a direct connection with HRSD rate payers, staff worked with HRSD's rate modeler to identify a cost associated with the treatment of these pollutants.

The agreement was based upon the template previously established with other locality trading agreements with the addition of a cost recovery component for the provision of nutrient credits. The basic terms are as follows:

- HRSD will provide term credits (on an annual basis) to meet up to 95% of the nutrient and sediment load reductions as calculated in accordance with the terms of the CNU's municipal separate storm sewer system (MS4) permit as of the effective date of the agreement.
- CNU will purchase the credits utilizing the costs calculated for the period of Fiscal Year (FY) 2023 – FY2027. The annually requested TN, TP and TSS credits for the first 5-year period are approximately 35 lbs, 9 lbs, and 3,900 lbs, respectively, with a total cost recovery of $1,042.
- Credits can only be used to meet TMDL requirements.
- Regulatory changes or other related issues that impact the credits available from HRSD or required by the CNU shall be addressed through an amendment of this agreement if possible. If HRSD is unable to meet the CNU's credit demand, CNU is solely responsible for meeting its own permit obligations.

The agreement has been reviewed by HRSD legal counsel.

Public Comment: None

7. **Nutrient Credit Management Policy**
Commission Adopted Policy

Action: No action required.

Brief: Virginia regulations allow point source dischargers located within the same river basin to purchase or sell (trade) nutrient credits to facilitate compliance with annual wasteload allocations (WLAs). HRSD, as a member of the Virginia Nutrient Credit Exchange Association ("Exchange"), participates in a market-based trading program to help achieve nutrient reduction goals for the Chesapeake Bay.

Trades can be in the form of annual, term or perpetual transfers. A permanent transfer of credits can be achieved through the transfer of allocation. Similarly, nutrient offset requirements can be accommodated through the transfer or acquisition of necessary allocation. All allocation transfers are contingent upon approval of the Virginia Department of Environmental Quality (DEQ) in accordance with the "General Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia" ("General Permit").

This policy provides guidelines for HRSD's engagement in trading agreements that occur outside of the Exchange and in accordance with the rules and regulations that govern nutrient and sediment credit trading and offsets. It was orignally adopted in October 2020 and replaced two previously existing policies: HRSD's Nutrient Credit Offset Policy and HRSD Nutrient Credit Trading Policy.

The revised Policy aligns Commission review and approval of nutrient credit agreements with Commission Governance Guidelines. The following changes to "Section 5.0 Responsibility and Authority" were presented at the Finance Committee meeting on April 25, 2023:

> The HRSD Director of Water Quality or his/her designee shall prepare a written evaluation of each trading request *for HRSD General Manager review.*
>
> ~~The HRSD General Manager will review the evaluation and present a recommendation to the HRSD Commission.~~
>
> *Agreements and recommendations will be presented to the HRSD Commission as needed in accordance with Commission Governance Guidelines.*

The revised Policy is provided for Commission review and comment and will be presented for Commission action at the May meeting.

Public Comment: None

8. **County of Accomack**
Sewer Transfer and Service Agreement

Action: Approve a Sewer Transfer and Service Agreement (Agreement) with the County of Accomack (County) 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.

Moved: Michael Glenn
Seconded: Willie Levenston
Roll call vote: **Ayes:** 8 **Nays:** 0

Brief: Accomack and Northampton Counties were added to the HRSD service territory in October 2020. A regional initiative to provide centralized wastewater treatment to southern Accomack County is underway.

Some key highlights of the Agreement are:

- The County will convey its collection system and related property interests and easements to HRSD at no cost;
- HRSD agrees to provide collection, transmission and sewer treatment services to areas designated as Sewer Service Areas identified in Exhibit C of the agreement;
- Future expansions of the Sewer Service Areas are through the County's Comprehensive Plan. HRSD, at its option, may elect to be alignment with the Sewer Service Area if requested by the County; and
- If HRSD determines that any property conveyed by the County to HRSD under this agreement is no longer useful for HRSD to perform its obligations under the Agreement, HRSD will offer to convey the property to the County at no cost.

This Agreement has been reviewed by counsel and is in accordance with the Facility Transfer Commission Adopted Policy.

Public Comment: None

9. **Town of Accomac**
Reimbursement Agreement

Action: Approve a Reimbursement Agreement (Agreement) with the Town of Accomac (Town) 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.

Moved: Nancy Stern
Seconded: Vishnu Lakdawala
Roll call vote: **Ayes:** 8 **Nays:** 0

Brief: Accomack County (County), including the Town of Accomac (Town), and Northampton County were added to the HRSD service territory in October 2020. A regional initiative to provide centralized wastewater treatment to southern Accomack County is underway.

The County, in partnership with the Town, requested HRSD construct a pump station and force main to connect the County courthouse facilities located in the Town to the HRSD regional sewer system. The estimated cost of the entire project is $7.7 million. The Town has been awarded $4.5 million through the American Rescue Plan Act (ARPA) to help pay for the project. The ARPA funds will first be used to fund the pump station, collection system, and water meter replacements with an estimated cost of $2.2 million. Remaining ARPA funds, approximately $2.3 million, will be used to help fund the cost of the force main to connect to the HRSD system.

The attached draft Agreement provides that HRSD will pay for and be reimbursed by the Town for project costs. This Agreement has been reviewed by counsel.

Public Comment: None

10. **Town of Wachapreague**
Sewer Transfer and Service Agreement

Action: Approve a Sewer Transfer and Service Agreement (Agreement) with the Town of Wachapreague (Town) 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.

Moved: Willie Levenston
Seconded: Michael Glenn
Roll call vote: **Ayes:** 8 **Nays:** 0

Brief: Accomack and Northampton Counties were added to the HRSD service territory in October 2020. A regional initiative to provide centralized wastewater treatment to southern Accomack County is underway. The Town of Wachapreague is in Accomack County.

Some key highlights of the draft Agreement are:

- The Town will convey its collection system and related property interests and easements to HRSD at no cost;
- HRSD agrees to provide collection, transmission and sewer treatment services to areas designated as Sewer Service Areas identified in Exhibit C of the agreement;
- Future expansions of the Sewer Service Areas are through the Town's Comprehensive Plan. HRSD, at its option, may elect to be alignment with the Sewer Service Area if requested by the Town; and
- If HRSD determines that any property conveyed by the Town to HRSD under this agreement is no longer useful for HRSD to perform its obligations under the Agreement, HRSD will offer to convey the property to the Town at no cost.

This Agreement has been reviewed by counsel and is in accordance with Facility Transfer Commission Adopted Policy.

Public Comment: None

11. **Town of Wachapreague**
Reimbursement Agreement

Action: Approve a Reimbursement Agreement (Agreement) with the Town of Wachapreague (Town) 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.

Moved: Nancy Stern
Seconded: Vishnu Lakdawala
Roll call vote: **Ayes:** 8 **Nays:** 0

Brief: Accomack County (County), including the Town of Wachapreague (Town), and Northampton County were added to the HRSD service territory in October 2020. A regional initiative to provide centralized wastewater treatment to southern Accomack County is underway.

The Town requested that HRSD construct a pump station, force main, and collection system to connect to the HRSD regional sewer system. The estimated cost of the entire project is $3.92 million. The Town has been awarded $3.92 million through various state and federal funding sources to pay for the project. The awarded funds will be used to construct the pump station and force main first at an estimated cost of $3.07 million. Remaining funds will be applied to the cost of the collection system. If there is a funding deficit the Town will be required to contribute more to the project before construction of the collection system commences.

The attached draft Agreement provides that HRSD will pay for and be reimbursed by the Town for all project costs.

This Agreement has been reviewed by counsel.

Public Comment: None

12. **Eastern Shore Infrastructure Improvements – Transmission Force Main Phase I Property Acquisition – Commonwealth of Virginia, The College of William and Mary in Virginia**

Action: Approve the acceptance of property located at the corner of Brooklyn and Riverview Avenues and known as Lot 5A, in Block D in the Town of Wachapreague, County of Accomack, Virginia, Tax ID#: 113A-3-D-5, as offered by the Commonwealth of Virginia, the College of William and Mary in Virginia, (Grantor) for the site of a future pump station within the Town of Wachapreague.

Moved: Willie Levenston
Seconded: Michael Glenn
Roll call vote: **Ayes:** 8 **Nays:** 0

CIP Project: ES010100

Regulatory Requirement: None

Project Description: This project will provide for the abandonment of the wastewater treatment plant at 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 various pump stations will be built or transferred to HRSD to facilitate conveyance of this and additional flows. A pipeline will be constructed to connect and convey the flows from various towns starting at Nassawadox and north onto Onley.

This acquisition will allow for the construction and installation of the new pump station in the Town of Wachapreague that will be required, as part of this expanded project effort, to aide with capacity and conveyance of flow to the Onancock Treatment Plant and system.

Additional agreements and easement acquisitions will be required in other towns and counties on the Eastern Shore, for which the design of and negotiations are currently underway.

The draft Deed of Gift and Subdivision Plat are attached, for the future Wachapreague Pump Station and were reviewed by HRSD staff and general legal counsel. Upon approval and closing, the subdivision plat and conveyance deed will be recorded. A location map is provided for clarification purposes.

Public Comment: None

13. **Bowers Hill Interceptor Force Main Section I Emergency Replacement Additional Appropriation**

Action: Appropriate additional funding in the amount of $473,151.

Moved: Vishnu Lakdawala
Seconded: Ann Templeman
Roll call vote: **Ayes:** 8 **Nays:** 0

CIP Project: NP015210

Regulatory Requirement: None

Budget	$3,500,000
Previous Expenditures and Encumbrances	($3,182,839)
Available Balance	$317,161
Proposed Change Order No. 1 to Bridgeman Civil, Inc. (BCI)	($500,000)
Proposed Contingency	($290,312)
Project Shortage/Requested Additional Funding	($473,151)
Revised Total Project Authorized Funding	$3,973,151

Project Description: This emergency replacement of the Bowers Hill Interceptor Force Main Section I is under construction after declaration of emergency on July 15, 2022. On April 23, a force main failed near 3025 Gum Court in Chesapeake. BCI immediately mobilized on-site and repaired the failure. BCI subsequently worked Hazen and Sawyer, P.C. (Hazen) to provide condition assessment on the pipeline near the failure and found severe corrosion near where the pipeline goes under Interstate-664. A previous emergency declaration was pronounced on May 3, 2022, that authorized BCI to repair the failure and complete the condition assessment.

Staff has utilized the Prompt Repair On-Call Services contractor, BCI, to slip-line the 36-inch ductile iron (DI) force main and restore the area impacted by the construction. BCI will also install a line-stop and bypass to keep the force main in use during the rehabilitation and/or replacement. Staff has also utilized the On-Call General Engineering consultant, Hazen, to provide construction administration and inspection while BCI completes this replacement project.

The attached map depicts the project location.

Project Justification: This additional appropriation is required due to additional BCI and Hazen expenses related to time delays experienced in the field due to weather, unknown utility conflicts that caused portions of the work to be done in locations with poor access and tight working conditions, as well as unanticipated coordination with several project

stakeholder. In addition, the utility conflicts resulted in additional pipe and fittings to be installed, and additional site restoration in several heavily landscaped areas.

Analysis of Cost: The additional appropriation amount has been discussed with both Hazen and BCI and is adequate to cover expenses to date as well as those anticipated required to complete the remaining work activities**.**

Schedule:	Construction	July 2022
	Project Completion	June 2023

Public Comment: None

14. **Great Bridge Interceptor Force Main Emergency Replacement (SF-180)**
New CIP and Initial Appropriation

Actions:

a. **Approve a new CIP project.**

b. **Appropriate total project funding in the amount of $6,000,000.**

Moved: Willie Levenston
Seconded: Elizabeth Taraski
Roll call vote: **Ayes:** 8 **Nays:** 0

CIP Project: AT016400

Regulatory Requirement: None

Project Description: An emergency declaration was authorized on March 13, 2023, due to a force main failure in the City of Chesapeake that occurred on March 10, 2023. The failure was likely caused by a "spud" from a dredge vessel. The attached map depicts the project location.

On March 10, 2023, at approximately 5:00 p.m., the City of Chesapeake notified HRSD about a force main failure under the Intracoastal Waterway, between the Great Bridge Lock (operated by the U.S. Army Corps of Engineers – Norfolk District) and the Great Bridge Drawbridge (operated by the City of Chesapeake). The failure was on a 20-inch cast iron force main . By 8:00 p.m., HRSD Interceptor Operations was able to isolate the failure via valve closures. Pressure data indicated that the pipeline failure occurred at approximately 1:15 p.m. Based on flow data from the Elbow Road Pressure Reducing Station and Atlantic Treatment Plant it was estimated that 2.5 million gallons of sewage were spilled during this event.

An evaluation of the damaged pipeline revealed that a 7-foot section of the force main was crushed and irreparable without substantial waterway closure and without guarantee that additional sections of the crossing were damaged during the spud strike. Thus, staff believe that replacement of the pipeline is the best path forward. This project will also include the removal of the existing HRSD force main and an adjacent City of Chesapeake water main.

Staff will utilize Rummel, Klepper & Khal, LLP (RK&K) and Bridgeman Civil, Inc. to evaluate replacement alternatives for this pipeline, and to then design and install the selected alternative.

Work was initially accomplished with funds from the Operations Department Fiscal Year (FY) 2023 Operating Budget. Subsequent work will create significant stress on the FY-2023

Operations Department Budget. This proposed Commission action creates and fully funds a new CIP project that will allow all future costs as well as all costs already incurred against the Operations Department Budget for this emergency to be charged to this CIP project restoring the FY-2023 Operations Department Budget balance for use as planned for the remainder of FY-2023.

Analysis of Cost: The cost for this project is based on a cost estimate prepared by RK&K and reviewed with the Contractor (Bridgeman Civil, Inc.).

Schedule:		
	Emergency Declaration	March 2023
	Construction	Unknown at this time
	Project Completion	Unknown at this time

Discussion Summary: Commissioners expressed concern regarding who would be paying for the repair emphasizing the ratepayers should not bear the burden for getting this force main back in service. Staff explained an insurance claim will be submitted and likely subrogated by the insurance company.

Public Comment: None

15. **Norchester Pump Station Screening Improvements**
Initial Appropriation

Action: Appropriate total project funding in the amount of $616,896.

Moved: Michael Glenn
Seconded: Ann Templeman
Roll call vote: **Ayes:** 8 **Nays:** 0

CIP Project: VP018900

Regulatory Requirement: None

Project Description: This project will upgrade the screening equipment at the Norchester Pump Station. The attached map depicts the project location.

Project Justification: The existing Norchester Pump Station has an inline grinder that failed after only three years of service. Failure of the grinder appeared to be due to a heavy sand load in the influent stream that wore down the teeth and the bearings of the grinder cassette. However, the body of the grinder also showed very heavy metal corrosion due to high levels of hydrogen sulfide in the wet well. As a result, an evaluation of all screening technologies was performed to ensure a longer life expectancy and more reliable operation of the upgraded equipment. This project will design and construct the screening upgrades at this station.

Analysis of Cost: The total project cost estimate of $616,896 includes approximately $82,620 in design phase services, approximately $385,560 in construction phase costs, and $110,160 of project contingency and is based on a cost estimate prepared by HRSD. Preliminary engineering services have been completed by Rummel, Klepper and Kahl, LLP through the Operations budget.

Schedule:		
	Design	April 2024
	Bid	August 2024
	Construction	December 2024
	Project Completion	September 2025

Public Comment: None

16. **North Shore Automated Diversion Facilities**
Additional Appropriation, Contract Award (>$200,000), Task Order (>$200,000)

Actions:

a. **Appropriate additional funding in the amount of $616,229.**

b. **Award a contract to SHAW Construction, Corp. in the amount of $1,296,000.**

c. **Approve a task order with Rummel, Klepper & Kahl (RK&K) in the amount of $280,402.**

Moved: Ann Templeman
Seconded: Michael Glenn
Roll call vote: **Ayes:** 8 **Nays:** 0

CIP Project: GN015800

Regulatory Requirement: None

Budget	$1,813,062
Previous Expenditures and Encumbrances	($645,249)
Available Balance	$1,167,813
Proposed Contract to SHAW Construction, Corp.	($1,296,000)
Proposed Task Order to RK&K	($280,402)
Proposed Contingency	($207,640)
Project Shortage/Requested Additional Funding	($616,229)
Revised Total Project Authorized Funding	$2,429,291

Contract Status with Task Orders:	Amount
Original Contract with RK&K	$88,700
Total Value of Previous Task Orders	$213,063
Requested Task Order	$280,402
Total Value of All Task Orders	$493,465
Revised Contract Value	$582,165
Engineering Services as % of Construction	44.9%

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 3, 2023, and 3 bids were received on March 29, 2023. The bids received are listed below:

Bidder	Bid Amount
SHAW Construction, Corp	$ 1,296,000
MEB General Contractors, Inc.	$ 1,355,700
Bridgeman Civil, Inc.	$ 2,100,000

Engineer Estimate: $1,514,847

The design engineer, RK&K, evaluated the bids based upon the requirements in the invitation for bid and recommends award to the lowest responsive and responsible bidder SHAW Construction, Corp. in the amount of $1,296,000.

Project Description: This project will involve installing control valves at three pump station (PS) sites North Avenue PS, Woodland Road PS, and Big Bethel Pressure Reducing Station (PRS) to provide greater operational flexibility and system diversion capabilities during localized wet weather events. Immediate needs to reduce the three-month average flow at York River Treatment Plant (YRTP) will be addressed. The long-term goal of equalizing and coordinating flows at the James River Treatment Plant (JRTP) and the YRTP will also be achieved.

The attached map depicts the project location.

Project Justification: The YRTP has experienced increased average daily flow during winter months due to elevated groundwater levels. In the winter of 2014, YRTP experienced five consecutive months that exceeded the 95% design criteria threshold. As required by permit, once three consecutive months above 95% are experienced, a short-term and long-range plan shall be developed. This automated diversion project will serve as the long-range solution and will be able to manage the flow through diversions and operational strategies at several locations between the YRTP, JRTP, and Boat Harbor Treatment Plant (BHTP). Meter data, future flow projections, and hydraulic modeling indicate that once implemented these strategies will successfully reduce the flow below the 95% threshold at YRTP and provide the overall North Shore interceptor system with additional diversion capabilities. This project was also identified in the Smart Sewer Study as possible average daily (i.e., non-wet weather) equalization for the YRTP and JRTP. These automated valves together with off-line storage facilities could be used to equalize treatment plant flows over the entire day. This flow equalization would serve to both improve sewage treatment processes and optimization SWIFT facilities. It is anticipated that these facilities will provide significant operational and capital improvement cost savings.

Contract Description and Analysis of Cost: This contract is for automation of existing valves and installation of new valves and associated appurtenances at the Big Bethel PRS site to facilitate additional diversion capabilities between the YRTP and JRTP. The $1,296,000 low bid amount is 14% lower than the Engineer's Estimate of $1,514,847 and less than 5% lower than the second low bid amount of $1,355,700. The consistency in

these two bid amounts, as well as the engineer's estimate, suggests the low bid received is reflective of current market conditions for projects of this type, size, and location.

Task Order Description and Analysis of Cost: This task order will provide services during construction including contract administration, field engineering, and inspection. These services will apply to both the construction at Big Bethel PRS as well as the improvements at the Center Avenue metering site. The cost of the task order is based on a negotiated scope and an estimation of hours and existing rates in RK&K's annual services contract for Interceptor System Projects. Total Engineering Services is 44.9% of the Construction cost, which is indicative of the specialty engineering services required for this type of work and the relatively low construction cost compared to the typical HRSD CIP construction project.

Schedule:	Construction	June 2023
	Project Completion	October 2024

Public Comment: None

17. **Capital Improvement Program (CIP) Quarterly Update**

Action: Deferred to a future meeting.

18. **Unfinished Business** – None

19. **New Business** – None

20. **Commissioner Comments** – None

21. **Public Comments Not Related to Agenda** – None

22. **Informational Items**

Action: No action required.

Brief: The items listed below were presented for information.

a. Management Reports

b. Strategic Planning Metrics Summary

Public Comment: None

23. **Closed Meeting**

Action: Approve a motion to go into closed meeting to consider the following items as provided for in Code of Virginia §2.2-3711A:

Item 1.	**:**	**Legal matters concerning actual litigation**
Purpose	**:**	**Briefing and consultation**
Specific Exemptions	**:**	**§2.2-3711.A7**
Item 2.	**:**	**Legal matters concerning probable litigation**
Purpose	**:**	**Briefing and consultation**
Specific Exemptions	**:**	**§2.2-3711.A7**

Moved: Frederick Elofosn
Seconded: Vishnu Lakdawala
Roll call vote: **Ayes:** 8 **Nays:** 0

Exemption Description: (A7) Consultation with legal counsel and briefings by staff members or consultants pertaining to actual or probable litigation, where such consultation or briefing in open meeting would adversely affect the negotiating or litigating posture of the public body. For the purposes of this subdivision, "probable litigation" means litigation that has been specifically threatened or on which the public body or its legal counsel has a reasonable basis to believe will be commenced by or against a known party. Nothing in this subdivision shall be construed to permit the closure of a meeting merely because an attorney representing the public body is in attendance or is consulted on a matter.

24. **Reconvened Meeting**

Certification of Proceedings: Pursuant to Section 2.2-3712.D of the Code of Virginia, a roll call vote was conducted to certify that to the best of each Commission member's knowledge: (i) only public business matters lawfully exempted from open meeting requirements under this chapter, and (ii) only such public business matters as were identified in the motion by which the closed meeting was convened were heard, discussed or considered. Any Commissioner who believes there was a departure from these two requirements shall so state prior to the vote, indicating the substance of the departure.

Roll call vote: **Ayes:** 7 **Nays:** 0
Taraski left the meeting

Action: No action required.

Public Comment: None

Next Commission Meeting Date: May 23, 2023 at the HRSD South Shore Operations Complex, 1434 Air Rail Avenue, Virginia Beach, VA 23455.

Meeting Adjourned: 12:05 p.m.

SUBMITTED:

Jennifer L. Cascio
Commission Secretary

APPROVED:

Stephen C. Rodriguez
Commission Chair

2. Consent Agenda

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.b.1. – April 25, 2023

Subject: Sanitary Sewer Project 1950 – Part 1 30-Inch Gravity Sewer
Additional Appropriation (≤5% of Original Appropriation and <$200,000)

Recommended Action: Appropriate additional funding in the amount of $147,330.

CIP Project: VP014021

Regulatory Requirement: Rehab Action Plan Phase 2 (2025 Completion)

Budget	$4,232,935
Previous Expenditures and Encumbrances	($4,176,525)
Available Balance	$56,410
Proposed Change Order No. 3 to Bridgeman Civil	($203,740)
Project Shortage/Requested Additional Funding	($147,330)
Revised Total Project Authorized Funding	$4,380,265

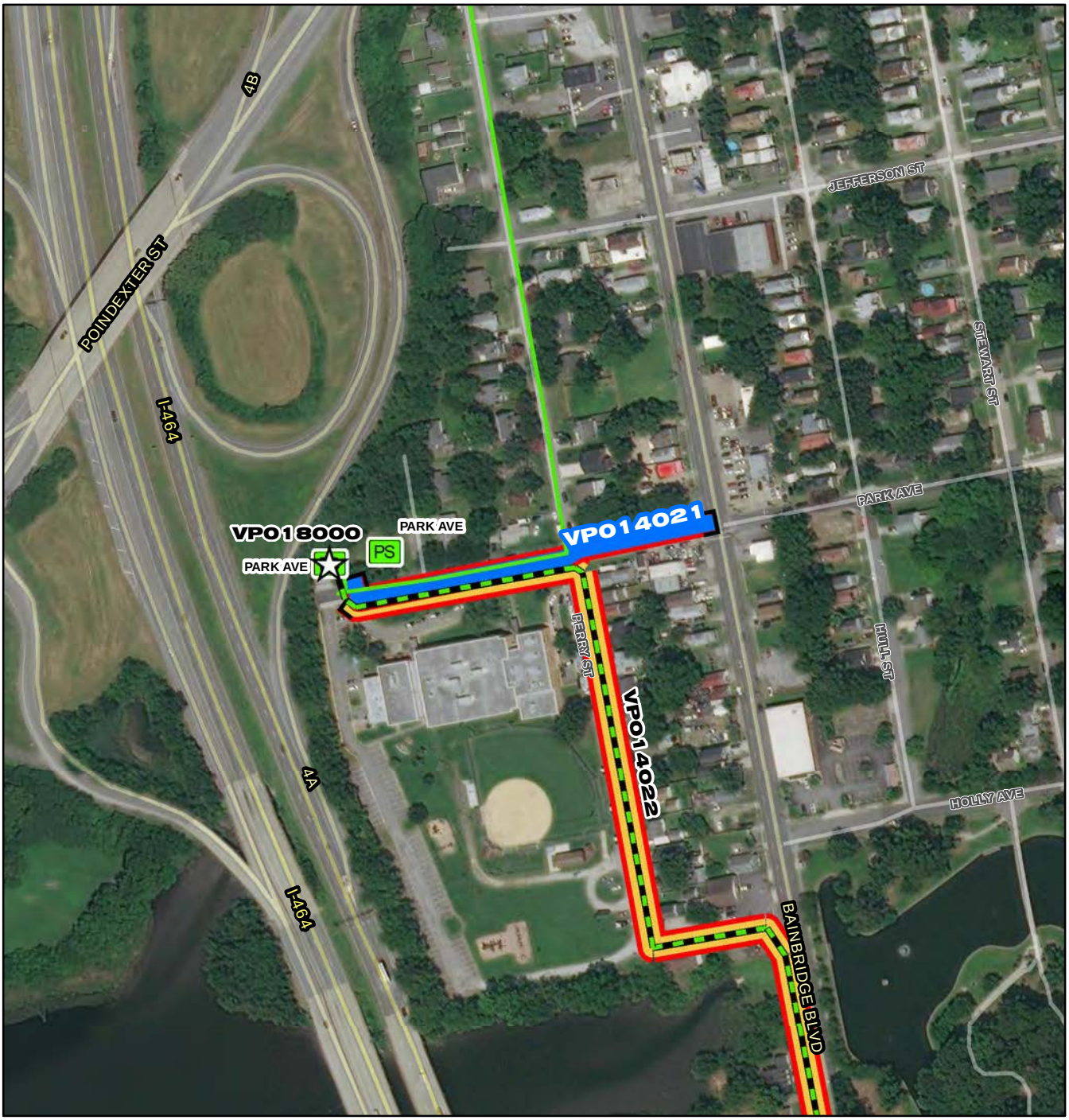
Project Description: This project will construct a 30-inch gravity sewer along Park Avenue from the new Park Avenue Pump Station to Bainbridge Boulevard. The attached map depicts the project location.

Project Justification: This new gravity sewer piping is required to handle the additional flows from the new Ferebee Pump Station and additional flow from the Park Avenue service area.

Funding Description: This project requires additional funding to close out the construction contract. The contractor experienced delays due to an obstruction encountered while completing the guided bore. Work was also stopped frequently to allow for school traffic entering and exiting the adjacent elementary school. Work is now complete, and a change order has been negotiated with Bridgeman Civil to compensate for the delays and downtime. The amount negotiated for the change order exceeds the current balance available for the CIP project.

Analysis of Cost: The additional costs for this change order were negotiated with the contractor and the Engineer has recommended approval for the negotiated cost for this work.

Schedule:		
	Construction	June 2022
	Project Completion	January 2023



VP014021

- 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
- WTP HRSD Treatment Plant
- PRS HRSD Pressure Reducing Station
- PS HRSD Pump Station

0 87.5 175 350 525 700 Feet

N W E S

CIP Location

VP014021

Sanitary Sewer Project 1950-Part 1
30-Inch Gravity Sewer

HRSD

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 2.c.1. – April 25, 2023

Subject: Crusher Run and Stone Supply and Delivery Services Contract Award (>$200,000)

Recommended Action: Award a blanket purchase contract for Crusher Run and Stone Supply and Delivery Services to Legacy Vulcan Corp dba Vulcan Construction Materials LP in the estimated amount of $90,000 for year one with four annual renewal options and an estimated cumulative value in the amount of $450,000.

Regulatory Requirement: None

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 contract was advertised on February 6, 2023, and three bids were received on February 13, 2023, as listed below:

Bidder	Bid Amount
Legacy Vulcan Corp dba Vulcan Construction Materials LP	$90,000
Blair Brothers, Inc.	$111,375
Tri Nguyen dba United Development & Hauling	$139,000

HRSD Estimate: $65,450

Contract Description and Analysis of Cost: This is an agreement for the supply and delivery of 21A and 21B Crusher Run and #57 Stone for HRSD facilities. Cost is based on a fixer per ton unit price using an estimated annual quantity for the South Shore, North Shore and Middle Peninsula service locations. Average frequency of orders is estimated at 16 to 25 tons per month. Costs are determined to be fair and reasonable based on the competitive solicitation results and past purchase history of Crusher Run and Stone taking into consideration inflation impacts.

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

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 2.c.2. – April 25, 2023

Subject: Fuel Supply and Delivery Services Contract Award (>$200,000)

Recommended Action: Award a blanket purchase contract for Fuel Supply and Delivery Services to World Fuel Services, Inc. in the estimated amount of $1,215,253 for year one with four annual renewal options and an estimated cumulative value in the amount of $6,076,265.

Regulatory Requirement: None

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 contract was advertised on December 20, 2022, and two bids were received on February 8, 2023, as listed below:

Bidder	Bid Amount
World Fuel Services, Inc.	$1,215,253
Mansfield Oil Company of Gainesville, Inc.	$1,257,118

HRSD Estimate: $1,073,127

Contract Description and Analysis of Cost: This is an agreement for the supply and delivery of regular gasoline, premium gasoline, and ultra-low sulfur diesel for HRSD facilities. The cost is based on the total price per gallon of fuel which is determined by a daily base price for each type of fuel, a differential cost, and taxes. Costs are determined to be fair and reasonable based on the competitive solicitation results and past contract history for fuel delivery services taking into consideration inflation impacts.

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

CONSENT AGENDA ITEM 2.c.3. – April 25, 2023

Subject: Lawn Maintenance Services for North Shore and South Shore Operations Complexes Contract Award (>$200,000)

Recommended Action: Award a contract for Lawn Maintenance Services to McKendree Services, Inc. in the estimated amount of $105,141 for year one with four annual renewal options and an estimated cumulative value in the amount of $525,705.

Regulatory Requirement: None

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 contract was advertised on March 7, 2023, and one bid was received on March 24, 2023 as listed below:

Bidder	Bid Amount
McKendree Services, Inc.	$105,141

HRSD Estimate: $81,964

Contract Description and Analysis of Cost: This is an agreement for lawn maintenance services at the North Shore and South Shore Operations Complexes. Services include mowing, trimming, weeding, herbicide application, edging, mulching, and fence line cleanup. Costs are determined to be fair and reasonable based on past contract history for lawn maintenance services taking into consideration inflation impacts.

This work is in accordance with Commission Adopted Procurement Policy.

CONSENT AGENDA ITEM 2.c.4. – April 25, 2023

Subject: Lawn Maintenance Services for Treatment Plants
Contract Award (>$200,000)

Recommended Action: Award a contract for Lawn Maintenance Services to McKendree Services, Inc. in the estimated amount of $355,368 for year one with four annual renewal options and an estimated cumulative value in the amount of $1,776,840.

Regulatory Requirement: None

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 contract was advertised on March 10, 2023, and one bid was received on April 5, 2023, as listed below:

Bidder	Bid Amount
McKendree Services, Inc.	$355,368

HRSD Estimate: $353,620

Contract Description and Analysis of Cost: This contract is an agreement for lawn maintenance services for the following treatment plants: Army Base, Atlantic, Boat Harbor, Chesapeake Elizabeth, James River, Nansemond, Virginia Initiative, Williamsburg and York River. Services include mowing, trimming, weeding, herbicide application, edging, mulching, and fence line cleanup. Costs are determined to be fair and reasonable based on past contract history for lawn maintenance services.

There are separate agreements in place for the North and South Shore Pump Stations, Middle Peninsula Treatment Plants and Eastern Shore.

This work is in accordance with Commission Adopted Procurement Policy.

Resource: Don Corrado

CONSENT AGENDA ITEM 2.d.1. – April 25, 2023

Subject: Cisco SmartNet Technical Support Services
Contract Change Order (>25% or $50,000)

Recommended Action: Approve a change order with Electronic Systems, Inc. in the amount of $4,199.

Regulatory Requirement: None

Contract Status:	Amount	Cumulative % of Contract
Original Contract with Electronic Systems, Inc.	$194,459.84	
Total Value of Previous Change Orders	$46,160	23.74%
Requested Change Order No. 3	$4,199.48	
Total Value of All Change Orders	$50,359.48	25.90%
Revised Contract Value	$244,819.32	

Time (Additional Calendar Days)		0

Project Description: This project is for technical support services on Cisco equipment furnished with the SmartNet support feature. SmartNet provides total care support capabilities for all Cisco hardware used by the Information Technology Department.

Change Order Description: This change order includes adding the SmartNet extended service plan for continued support of Cisco hardware.

Analysis of Cost: The cost is in line with previous additions of Smartnet features to Cisco hardware under the Technical Support Agreement.

This work is in accordance with Commission Adopted Procurement Policy.

CONSENT AGENDA ITEM 2.d.2. – April 25, 2023

Subject: Nansemond Treatment Plant Primary Clarifier Influent Channel Repair and Coating Contract Change Order (>25% or $50,000)

Recommended Action: Approve a change order with Commonwealth Epoxy Coatings, Inc. in the amount of $13,111.

Regulatory Requirement: None

Contract Status:	Amount	Cumulative % of Contract
Original Contract with Commonwealth Epoxy Coatings, Inc.	$85,410	
Total Value of Previous Change Orders	$32,850	38%
Requested Change Order No. 2	$13,111	
Total Value of All Change Orders	$45,961	53%
Revised Contract Value	$131,371	

Time (Additional Calendar Days)		0

Project Description: This project includes surface preparations, repair of mortar applications, and epoxy coating of hatches and windows at the Nansemond Treatment Plant Primary Influent Channel.

Change Order Description: This change order includes unforeseen work associated with priority response to a heavy rain event. The plant requested Commonwealth Epoxy to stop coating work on the primary clarifier so that it could be placed back in service. This work included removing all scaffolding, equipment, demobilization and remobilization, installing scaffolding, and power washing all contaminated areas.

Analysis of Cost: The cost for this change order is based on the pre-negotiated rates under the Annual Coating Services Agreement.

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

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.e.1. – April 25, 2023

Subject: Atlantic Treatment Plant Access Road Extension
Task Order (>$200,000)

Recommended Action: Approve a task order with HDR Engineering, Inc. in the amount of $845,589.

CIP Project: AT012920

Regulatory Requirement: None

Budget	$4,543,700
Previous Expenditures and Encumbrances	($204,394)
Available Balance	$4,339,306

Contract Status:	**Amount**
Original Contract with HDR	$0
Total Value of Previous Task Orders	$204,394
Requested Task Order	$845,589
Total Value of All Task Orders	$1,049,983
Revised Contract Value	$1,049,983
Engineering Services as % of Construction	8.8%

Project Description: This project will provide a second vehicle access road into the Atlantic Treatment Plant. The new private two-lane road will connect Firefall Drive to Dam Neck Road.

Project Justification: The rerouting of flow from the Chesapeake Elizabeth Treatment Plant to the Atlantic Treatment Plant has increased bio-solids production; consequently, truck traffic has increased. In addition, the new Fats, Oils, and Grease (FOG) Receiving Facility has resulted in an increase of truck traffic. Rerouting operations and construction related truck traffic from the residential streets adjacent to the Atlantic Treatment Plant will improve public safety, HRSD's public image, and reduce odors in the neighborhood from passing trucks.

Task Order Description: This task order will provide services required to acquire land from the Dam Neck Naval Base. These services include coordination with the Navy, conceptual road alignment, drainage design, wetlands delineation, habitat assessment for threatened and endangered species, a Phase I cultural survey, and a topographic survey.

Analysis of Cost: The cost for this task is based on a scope/fee negotiated with the Engineer and is in agreement with other similar efforts for comparable projects.

Schedule:

PER	August 2018
Design	October 2024
Bid	December 2025
Construction	March 2025
Project Completion	September 2026

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 2.e.2. – April 25, 2023

Subject: Atlantic Treatment Plant Biosolids Storage Pad Roof Coating Task Order (>$200,000)

Recommended Action: Approve a task order with Commonwealth Epoxy Coatings, Inc. in the amount of $449,294.

Regulatory Requirement: None

Contract Status:	**Amount**
Original Contract with Commonwealth Epoxy Coatings, Inc.	$0
Total Value of Previous Task Orders	$12,736,470
Requested Task Order	$449,294
Total Value of All Task Orders	$13,185,764
Revised Contract Value	$13,185,764

Task Order Description: This task order will provide services to coat the biosolids storage pad roof at the Atlantic Treatment Plant. Services include surface preparation, coating, pre-blast cleaning, brush off blasting, and testing.

Analysis of Cost: The cost for this task order is based on the pre-negotiated rates under the Annual Coating Services Agreement.

This work is in accordance with the Asset Management and Procurement Commission Adopted Policies.

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.e.3. – April 25, 2023

Subject: Middlesex Interceptor System Program Phase III (Deltaville)
Task Order (>$200,000)

Recommended Action: Approve a task order with RK&K in the amount of $411,582.

CIP Project: MP013810

Budget	$2,520,000
Previous Expenditures and Encumbrances	($172,511)
Available Balance	$2,347,489

Contract Status:	**Amount**
Original Contract with RK&K	$129,045
Total Value of Previous Task Orders	$0
Requested Task Order	$411,582
Total Value of All Task Orders	$411,582
Revised Contract Value	$540,627
Engineering Services as % of Construction	12.2%

Project Description: The Middlesex Interceptor System Project Phase III Deltaville will extend sewer service from Hardyville to Hartfield as part of the Middlesex Interceptor System Program. The program's purpose is to provide sewer collection to six sewer districts within the County of Middlesex. This program will provide the County of Middlesex with a centralized wastewater collection system.

The evaluation of two alternative alignments were presented in a PER entitled Middlesex Interceptor System Program Phase III (Deltaville) Preliminary Engineering Report. The recommended alignment (Southern Alignment) features construction of approximately 24,000 linear feet of 6-inch force main to extend sewer service to a future gravity sewer at Wood Brothers Road.

The attached map depicts the project location.

Task Order Description and Analysis of Cost: This task order will provide design and preconstruction phase services for the design of approximately 24,000 linear feet of 6-inch force main to extend to a future gravity sewer at Wood Brothers Road. The cost for this task order is based on a negotiated number of consulting hours to provide design and preconstruction services including subconsultant fees (including administrative markup) for geotechnical investigation, survey, and quality level A and B subsurface utility engineering. The engineering services for these items are comparable to other force main projects of similar size and complexity.

Schedule:

Design	May 2023
Bid	February 2024
Construction	May 2024
Project Completion	March 2025

MP013810

- 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
- WTP HRSD Treatment Plant
- PRS HRSD Pressure Reducing Station
- PS HRSD Pump Station

0 1,875 3,750 7,500 11,250 15,000 Feet

N W E S

CIP Location

MP013810

Middlesex Interceptor System Program Phase III

HRSD

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.e.4. – April 25, 2023

Subject: Nansemond SWIFT Facility
Task Order (>$200,000)

Recommended Action: Approve a task order with AECOM in the amount of $436,900.

CIP Project: GN016380

Regulatory Requirement: Integrated Plan - SWIFT

Budget	$365,489,400
Previous Expenditures and Encumbrances	($1,134,997)
Available Balance	$364,354,403

Contract Status:	**Amount**
Original Contract with AECOM	$0
Total Value of Previous Task Orders	$987,226
Requested Task Order	$436,900
Total Value of All Task Orders	$1,424,126
Revised Contract Value	$1,424,126
Engineering Services as % of Construction	0.01%

Project Description: The project will design, construct, and commission new advanced water treatment facilities necessary to treat highly treated wastewater from the Nansemond Treatment Plant (NTP) to produce SWIFT Water, which meets drinking water quality standards and is compatible with the Potomac Aquifer. The scope includes mixing and sedimentation basins, biologically active filters, solids handling facilities, granular activated carbon contactors, ozone, ultra-violet light, and chlorine contact disinfection tanks, electrical, instrumentation and control systems, site grading, yard piping, SWIFT Water distribution and well backflush piping, and well enclosures.

Project Justification: The project is needed to reduce nutrients entering the Chesapeake Bay, augment the groundwater supply, reduce the rate of groundwater subsidence, and protect groundwater from saltwater intrusion, and support Virginia's economy. This project will support HRSD's nutrient management strategy for meeting the lower James River Basin total phosphorus and total nitrogen discharge limits.

Task Order Description and Analysis of Cost: This task order will provide Owner's Consultant Services (OCS) during the procurement phase of the design-build project. Work under this task order will be provided by the SWIFT Full Scale Implementation Program (FSIP) Management team. OCS are intended to provide support to HRSD by providing clarifications of the intent for the conceptual documents, technical review of proposed alternates, and supporting negotiations of the Comprehensive Agreement. The expected duration of this project phase is 15 months.

The cost for this task order is based on detailed negotiated scope of work for procurement phase services. The proposed fee is less than 0.01 percent of the estimated construction cost for the project, which is significantly less than similar services for other large scale HRSD design build projects. 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 Professional Services Agreement with AECOM for SWIFT Full Scale Implementation, as approved for FY2023.

Schedule:	Selection of Design-Build firm / establish Contract Cost Limit (CCL)	May 2024
	Stipulated Final Fixed Price	August 2025
	Construction Completion	March 2029

Resource: Eddie Abisaab

CONSENT AGENDA ITEM 2.e.5. – April 25, 2023

Subject: Nansemond Treatment Plant Motor Control Center Replacements Task Order (>$200,000)

Recommended Action: Approve a task order with Saunders Contracting Services, Inc. in the amount of $990,326.

CIP Project: NP013000

Regulatory Requirement: None

Budget	$1,986,000
Previous Expenditures and Encumbrances	$1,180,967
Available Balance	$805,033

Contract Status:	**Amount**
Original Contract with Saunders Contracting Services, Inc.	$1,000,000
Total Value of Previous Task Orders	$2,440,355
Requested Task Order	$990,326
Total Value of All Task Orders	$3,430,681
Revised Contract Value	$3,460,681

Project Description: This project will replace six motor control centers (MCC). The MCCs were installed in the early 1980's. The MCCs feed Primary Pump Station #1, Float Thickening Building, Primary Pump Station #2, Clarified Recycle (CRCY) Pump Station, and Nitrified Recycle (NRCY) Pump Station.

Project Justification: This project will replace 32-year-old MCCs nearing the end of their useful life. The main breakers on the MCCs are no longer available and replacement parts are not available. The replacement of the MCCs will improve reliability to ensure critical unit processes are not adversely impacted. In addition, this project will reduce hazards to employees associated with arc flash.

Task Order Description: This task order will provide materials and labor to replace six MCCs at the Nansemond Treatment Plant. Services also include performing an inspection and field investigation to confirm the full scope of work and providing a backup control panel while work is performed.

Analysis of Cost: The cost for this project is based on pre-negotiated rates under the Annual Electrical Services Agreement.

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

Schedule:

Construction	May 2023
Project Completion	May 2024

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.e.6. – April 25, 2023

Subject: West Point Treatment Plant Final Effluent Pump Station Improvements Task Order (>$200,000)

Recommended Action: Approve a task order with HDR Engineering Inc. in the amount of $386,230.

CIP Project: MP015600

Regulatory Requirement: None

Budget	$764,350
Previous Expenditures and Encumbrances	($49,812)
Available Balance	$714,538

Contract Status:	**Amount**
Original Contract with HDR Engineering Inc.	$49,812
Total Value of Previous Task Orders	$0
Requested Task Order	$386,230
Total Value of All Task Orders	$386,230
Revised Contract Value	$436,042
Engineering Services as % of Construction	7.4%

Project Description: This project consists of the rehabilitation of the existing West Point Treatment Plant Effluent Pump Station to include:

- Construction of a new wet well and valve vault.
- Replacement of pumps and pump rail systems in the new location.
- Replacement of pump variable frequency drives (VFDs), to be used for flow control.
- Replacement of internal components of the valve vault in the new location.
- Installation of a new effluent flow metering vault and associated components.
- Upgrades to alarms, pump controls, power panel, and associated utility rack.
- Addition of emergency pump connections at the wet well and force main.
- New influent piping and discharge force main to/from the new wet well.
- Improvements to the final effluent pump station access road for the staging of bypass pumps.
- A new 480V generator.
- Electrical equipment rack on a concrete pad with a covered shelter.
- A new aluminum sulfate dosage system.

Project Justification: The station suffered significant failure of both the mechanical and electrical systems in calendar year 2020. Emergency work was undertaken to make temporary repairs, however permanent repairs and improvements are still required to this critical piece of infrastructure to ensure continued reliability of the treatment plant process.

Task Order Description and Analysis of Cost: This task order will provide engineering design and bid phase services. The cost for this design and bid phase services contract is based on engineer negotiations with HDR and is in agreement with other similar efforts for comparable projects.

Schedule:

Design	May 2024
Bid	June 2024
Construction	September 2024
Project Completion	November 2025

Resource: Bruce Husselbee

CONSENT AGENDA ITEM 2.e.7. – April 25, 2023

Subject: West Point Treatment Plant Secondary Clarifier Improvements Task Order (>$200,000)

Recommended Action: Approve a task order with HDR Engineering Inc. in the amount of $257,487.

CIP Project: MP015700

Regulatory Requirement: None

Budget	$739,900
Previous Expenditures and Encumbrances	($52,373)
Available Balance	$687,527

Contract Status:	**Amount**
Original Contract with HDR Engineering Inc.	$52,373
Total Value of Previous Task Orders	$0
Requested Task Order	$257,487
Total Value of All Task Orders	$257,487
Revised Contract Value	$309,860
Engineering Services as % of Construction	7.1%

Project Description: This project consists of the rehabilitation of the existing West Point Treatment Plant (WPTP) Secondary Clarifier Improvements to include:

- Replacement of the waste sludge pumping system equipment and controls, including new waste sludge pumps, rails, level controls in the wet well, and control panel.
- Replacement of waste sludge valving at the secondary clarifiers.
- Replacement of all internal components of the secondary clarifiers, including the internal sludge collection mechanisms.
- Replacement of secondary clarifier effluent weirs.
- Replacement of secondary clarifier skimmer wasting wells.
- Rehabilitation of secondary clarifier tank concrete above the water line.

Project Justification: The secondary clarifier system of the WPTP has seen significant degradation since original installations in the 1950's and 1970's. Condition assessment of the system has shown several portions of the clarifiers require repair or replacement in order to continue to treat wastewater effectively and reliably in accordance with the regulated permit. Additionally, the hydraulic profile of the plant flow creates a restriction on Secondary Clarifier #2, resulting in premature diversion to the plant holding pond.

Task Order Description and Analysis of Cost: This task order will provide engineering design and bid phase services. The cost for this design and bid phase services contract is based on engineer negotiations with HDR and is in agreement with other similar efforts from firms.

Schedule:		
	Design	May 2024
	Bid	June 2024
	Construction	September 2024
	Project Completion	November 2025

Resource: Jamie Mitchell

CONSENT AGENDA ITEM 2.f.1. – April 25, 2023

Subject: Taylor Distribution Thermal Transfer Polypropylene Labels and Ribbons
Sole Source (>$10,000)

Recommended Action: Approve the use of Thermal Transfer Polypropylene Labels and Ribbons by Taylor Distribution Group, LLC at all HRSD facilities.

Regulatory Requirement: None

Sole Source Justification:

- ☐ Compatibility with existing equipment or systems is required
- ☒ Support of a special program in which the product or service has unique characteristics essential to the needs of the program
- ☐ Product or service is covered by a patent or copyright
- ☐ Product or service is part of standardization program to minimize training for maintenance and operation, and parts inventory

Details: Product includes the purchase of thermal transfer polypropylene labels and ribbons used throughout the Water Quality and Operations Departments. Sample containers used for regulatory testing must have a label with proper identifying information affixed at all times for proper analysis. These are the only known labels on the market with a unique proprietary formula in which the labels can withstand extreme temperatures and conditions, making it effective for use during the autoclave process and when used in the field.

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

Resource: Don Corrado

CONSENT AGENDA ITEM 2.g.1. – April 25, 2023

Subject: Microsoft® Surface Pro 9 Hardware, Protection Plan and Accessories
HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award (>$200,000)

Recommended Actions:

a. Approve the use of the Fairfax County Contract# 4400006325 for IT Hardware, Software & Related Services.

b. Award a contract to CDW LLC dba CDW Government LLC in the amount of $1,227,683.

HRSD Estimate: $1,227,683

Regulatory Requirement: None

Contract Description and Analysis of Cost: This contract is for the mass purchase (approximately 820) of Microsoft® Surface Pro 9 hardware, service protection plans and accessories as part of an organization wide hardware upgrade. By utilizing the cooperative contract through Fairfax County, HRSD is receiving 25 percent cost savings.

Resource: Don Corrado

CONSENT AGENDA ITEM 2.g.2. – April 25, 2023

Subject: Oracle WebLogic Server Software and Utilities Customer Care and Billing (CC&B) Task Optimization Tool Licensing, Maintenance and Support
HRSD Use of Existing Competitively Awarded Contract Vehicle and Contract Award (>$200,000)

Recommended Actions:

a. Approve the use of the Virginia Information Technology Agency (VITA) Contract# VA-170130-MYTH for Oracle Software and Related Services.

b. Award a blanket purchase contract for Oracle Weblogic Server Software and Utilities Customer Care and Billing (CC&B) Task Optimization Tool Licensing, Maintenance and Support to Mythics, Inc. in the estimated amount of $79,906 for year one with three one year annual renewal options and an estimated cumulative value in the amount of $319,624.

HRSD Estimate: $79,906

Regulatory Requirement: None

Contract Description and Analysis of Cost: This contract is for Oracle WebLogic server software and CC&B advanced tool set licensing, maintenance, and support. Both WebLogic and CC&B directly support billing functions for all HRSD billing operations such as HRSD wastewater treatment, HRUBS, hauled waste, pretreatment and municipal assistance. By utilizing the cooperative contract through VITA, HRSD is receiving 32 percent cost savings.

3. Suffolk Pump Station Replacement
Determination of Public Need for Fee Simple and Easement Acquisition
Resolution

HRSD

RESOLUTION

Providing for the acquisition by condemnation, if necessary, of parcels and/or easements with respect to Suffolk Pump Station Replacement; CIP NO. NP010620

WHEREAS, Hampton Roads Sanitation District (hereinafter "HRSD"), as part of its Capital Improvement Program, is proceeding with the project known as the Suffolk Pump Station Replacement; CIP NO. NP010620 (the "Project"); and

WHEREAS, as a part of the said Project, HRSD has determined that it is necessary to acquire certain property and easements, as shown on the plans for the Suffolk Pump Station Replacement (the "Plans"), the Plans being on file in the offices of HRSD at 1434 Air Rail Avenue, Virginia Beach, Virginia, (the "Property"), by condemnation (or other means); and

WHEREAS, HRSD provided public notice, duly published in newspapers of general circulation in the City of Suffolk, and held a public hearing on this matter at 1434 Air Rail Avenue, Virginia Beach, Virginia on March 28, 2023; and

WHEREAS, at the public hearing, HRSD allowed for public input with respect to the proposed condemnation, as well as considered information provided by HRSD staff, and considered whether the proposed use is a public use and whether the acquisition of the said Property by condemnation (or other means) should be authorized by HRSD; and

WHEREAS, after holding a public hearing on the matter, HRSD has determined that a public necessity exists for the acquisition of the Property for the Project and that the Project is in the public interest;

NOW, THEREFORE, BE IT RESOLVED *on the 25th day of April, 2023, by the HRSD Commission that:*

1. The Project is approved as a public use, necessary for the construction of said Project within HRSD's system; and said Project is further declared to be in the public interest;

2. The acquisition of the Property by purchase or condemnation is necessary for the said Project and is hereby approved;

3. The Property will be used by HRSD in furtherance of its public functions pursuant to the Virginia Code, and that the acquisition of the Property for that public use: (i) will serve only public interests which dominate any private gain; (ii) are sought for the primary purpose of serving public interests and not private financial gain, private benefit, or an increase in employment; and (iii) otherwise complies with §1-219.1 of the Virginia Code;

4. HRSD previously has made bona fide efforts to acquire the Property from the landowners, but, to date, those efforts have been ineffectual;

5. HRSD authorizes its staff and counsel, respectively, to take all actions for and on behalf of HRSD which are or may be appropriate or necessary for HRSD to acquire the Property through the exercise of its power of eminent domain, including but not limited to, the filing of any papers or pleadings with the applicable circuit court, and other actions related to the initiation of any legal proceedings necessary or appropriate to acquire the Property by eminent domain, provided, however, that nothing in this Resolution shall be construed as preventing the continued negotiation by HRSD, its staff, and/or counsel for the acquisition by purchase or other means of the Property before or after the initiation of any such eminent domain proceedings; and

6. This resolution shall take effect immediately upon its adoption.

The undersigned further certifies that the foregoing has been properly approved and adopted in accordance with all applicable requirements of the HRSD Commission.

Stephen C. Rodriguez, Chair

HRSD
Cleaning wastewater every day for a better Bay.

Suffolk Pump Station Replacement Briefing

April 25, 2023

Project Overview

Location: Portsmouth Blvd. and E. Washington St., Suffolk, VA

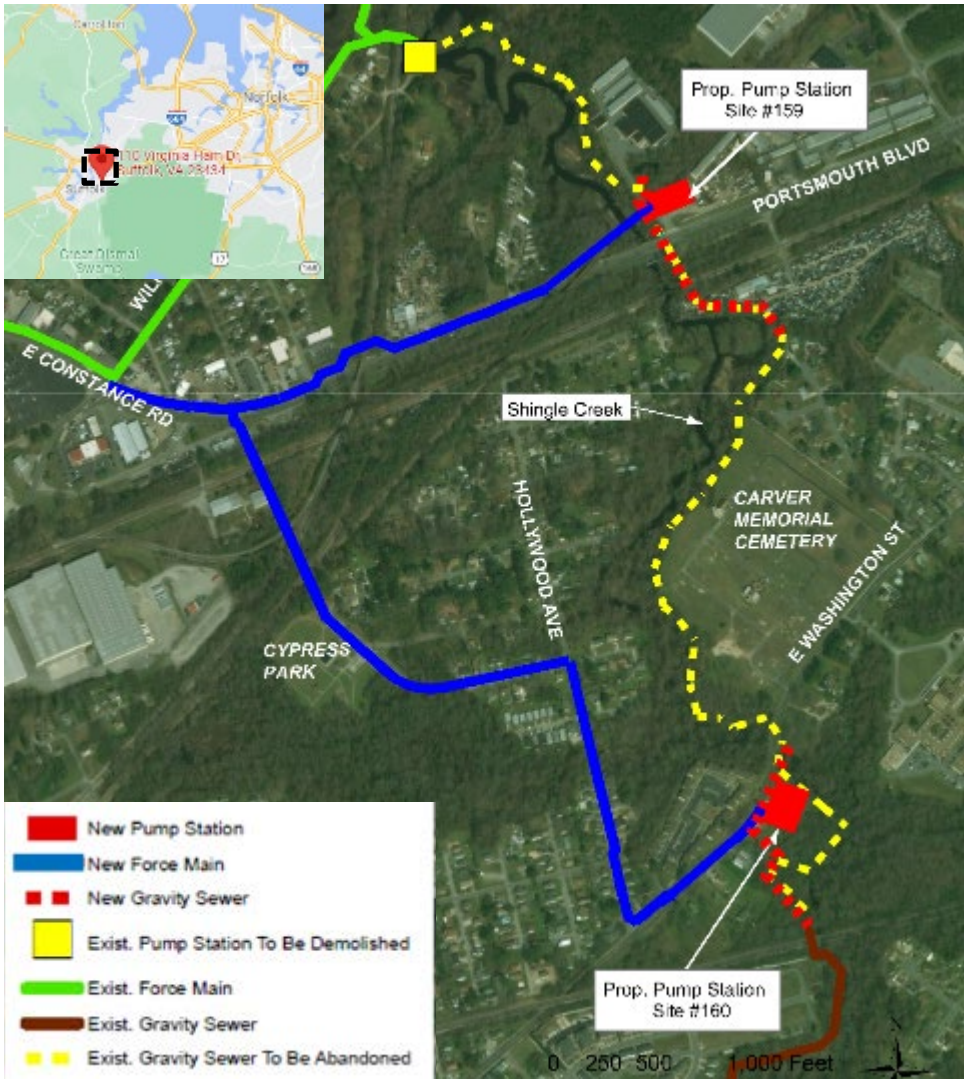
Scope: Replacement of existing Pump Station (PS) and rehabilitation or replacement of gravity sewer

Need: Reduce impacts to neighbors/environment (SSO's, creek crossings, oyster beds), remedy multiple breaks, reduce O&M challenges

Design Plan: Construct two PS's and corresponding force main, gravity sewer improvements and abandonment of existing sewer and PS

Construction Length: 3 years

Regulatory Deadline: May 2025



Pump Station Site Selection Process

Pump Station Location Screening Methodology

- As a starting point for this project, the consulting firm of AECOM completed a Preliminary Engineering Report (PER) and developed a two-phased approach to identify the potential pump station locations for replacement of the existing HRSD Suffolk Pump Station. **A total of 14 potential sites were studied during this effort**.

- Two Phase Site Selection Process
  - First Phase: Use of a set of geographic-information-system (GIS) criteria, which was used to screen all possible pump station locations. AECOM worked closely with HRSD Engineering and Operations staff to reduce any potential sites meeting several screening criteria down to the most feasible sites

  - Second Phase: Established scoring criteria which ranked each of the potential pump station sites that passed the minimum requirements in Phase 1. AECOM conducted a series of workshops with HRSD Engineering and Operations staff and City of Suffolk Department of Public Utilities representatives to review screening criteria.

Criteria for Pump Station Location Selection

Site Selection Criteria

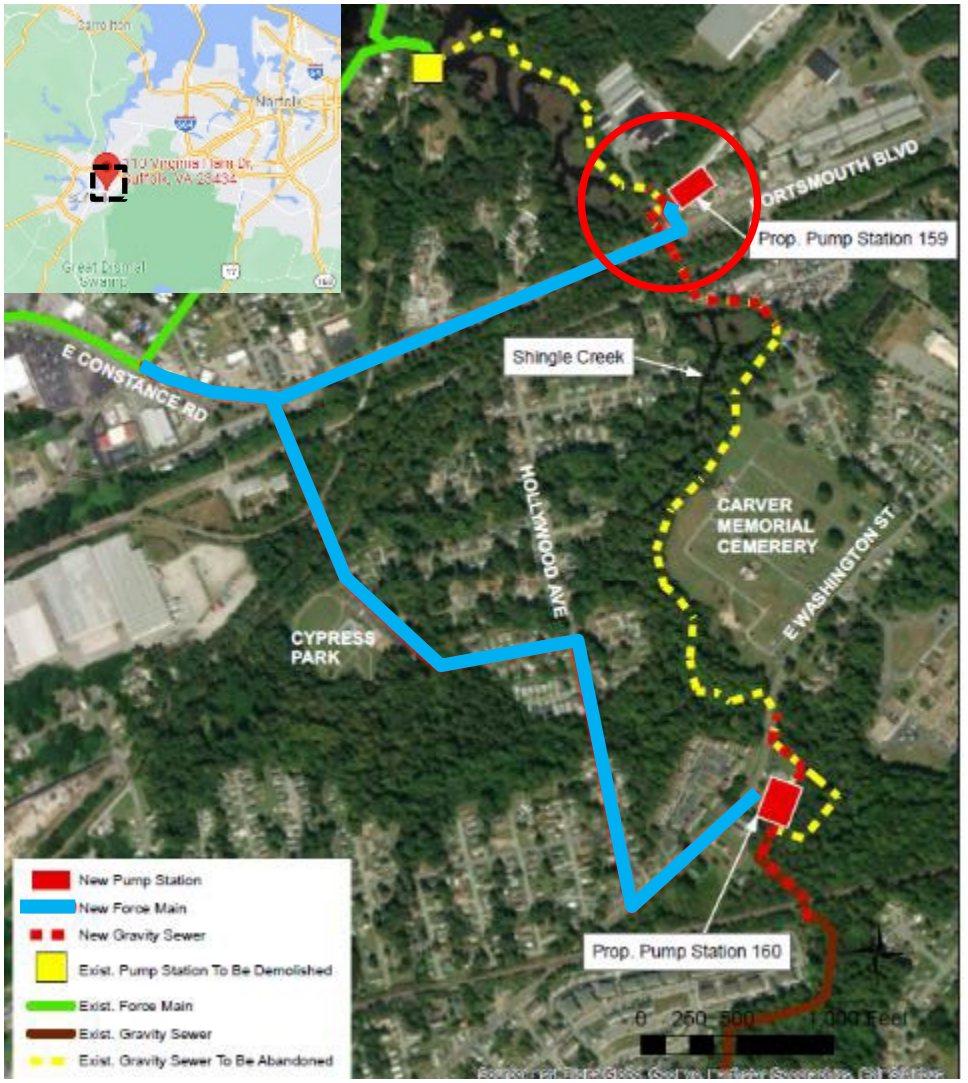
- Gravity sewer and force main O&M concerns
- Chesapeake Bay Preservation Area (CBPA)/Resource Protection Area (RPA) restrictions
- Topography (excluded sites above 20’ elevation)
- Flood plain considerations (100-year flood)
- Location relative to existing Shingle Creek Gravity sewer and City of Suffolk gravity sewer (to intercept flow)
- Force main routing
- Permanent access for operation and maintenance (O&M)
- Depth of pump station and gravity sewer
- Site access (during construction and permanent)
- Utility conflicts
- Availability of utilities (electric, water, etc..)
- Disruption to traffic
- Potential for soil and groundwater contamination
- Gravity sewer and force main Costs
- Visibility of site
- Proximity to nearest residence
- Ownership status and estimated acquisition costs

Site Selection

PS 159 Site Selection

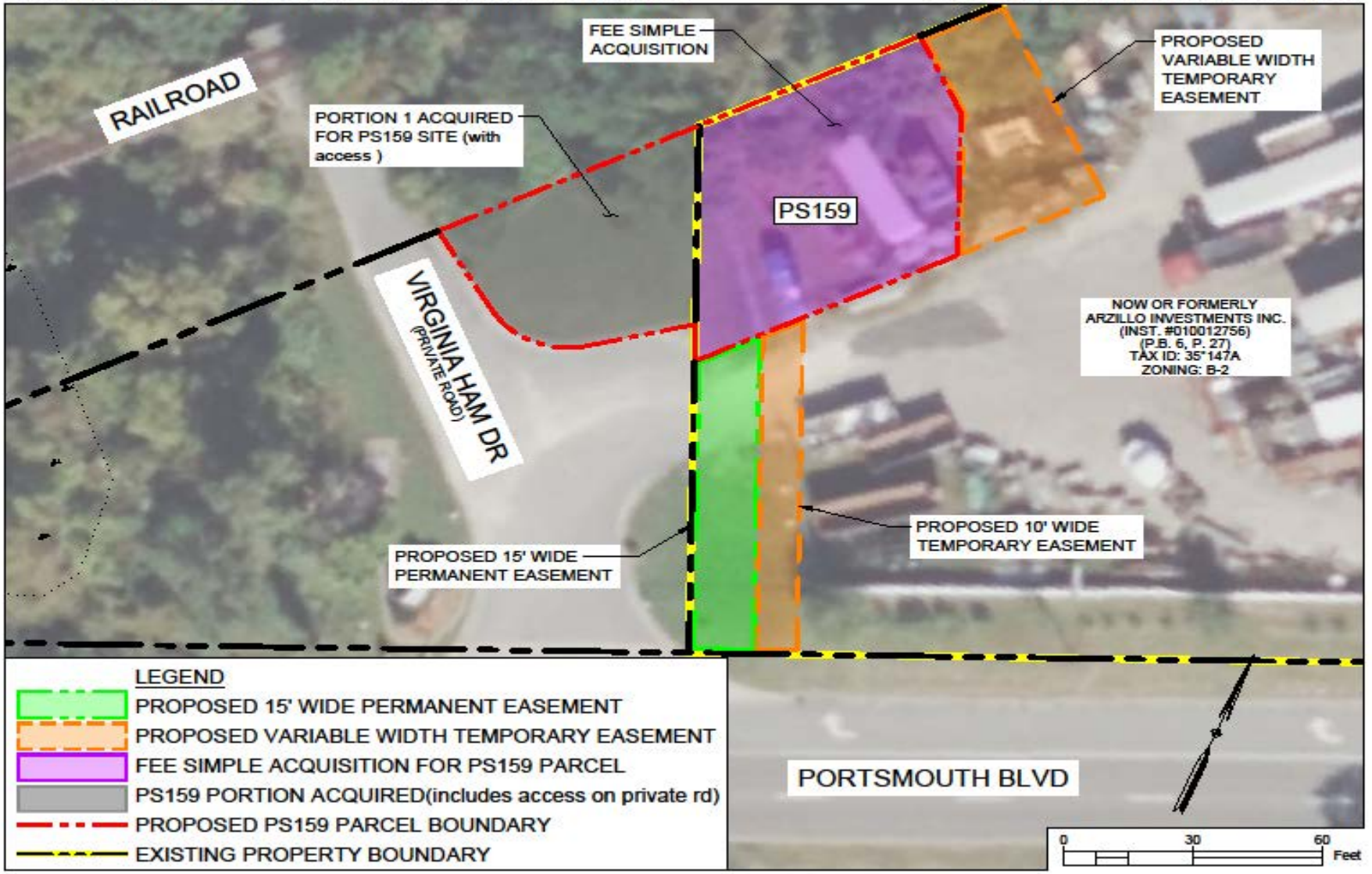
The 960 Portsmouth Blvd. site was selected for several reasons:

- Ease of intercepting existing gravity sewer (both City and HRSD)
- Outside of CBPA/RPA/Designated Wetlands
- Outside of 100-year flood elevation
- Utilities (Dominion Power and City Water) readily available
- Construction access
- No impact to traffic along Portsmouth Blvd
- Ease of access off Virginia Ham Drive
- Adequate footprint for small, submersible, pump station

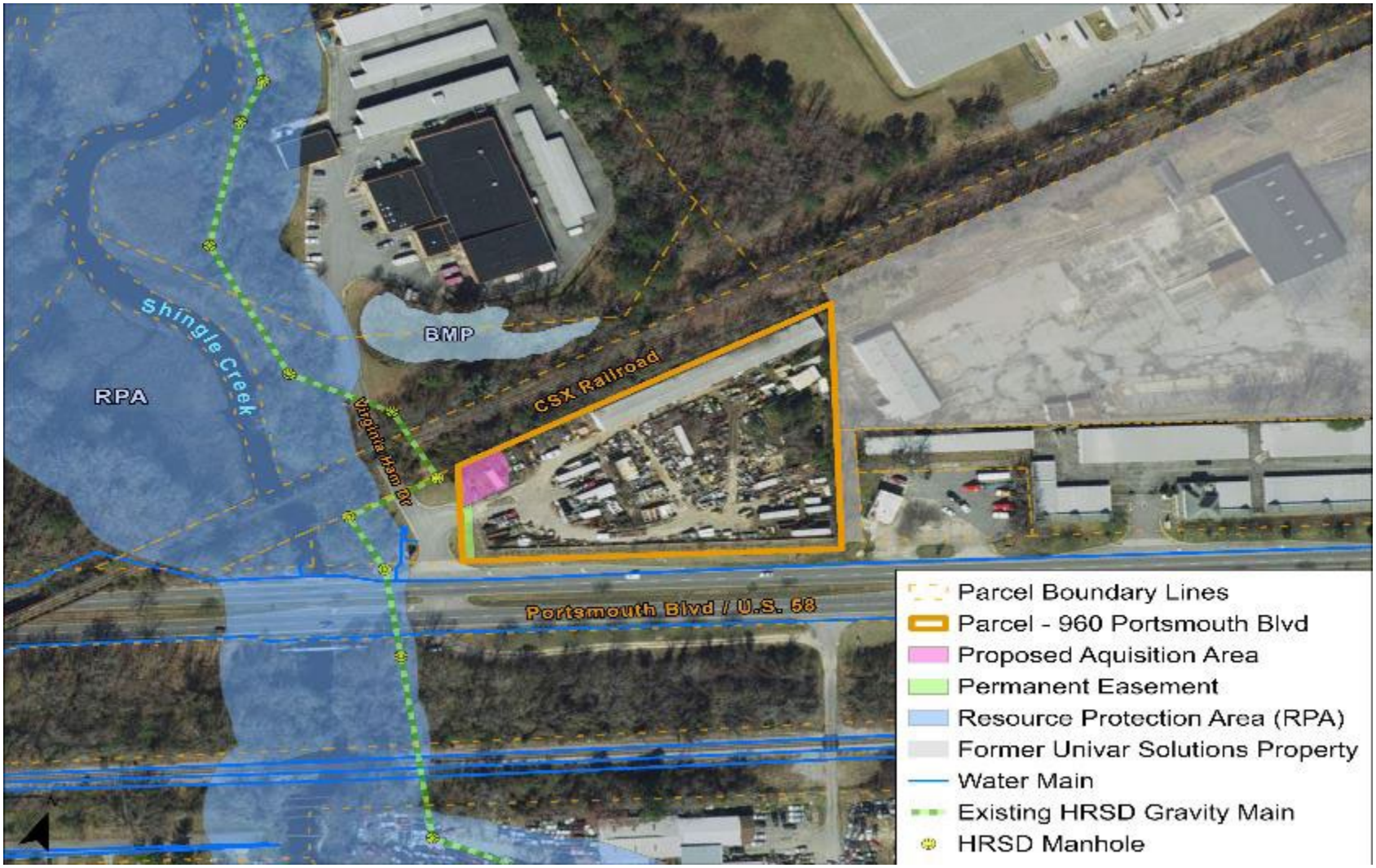


LOCATION MAP - PARCEL 023/PS159 RESUBDIVISION PARCEL

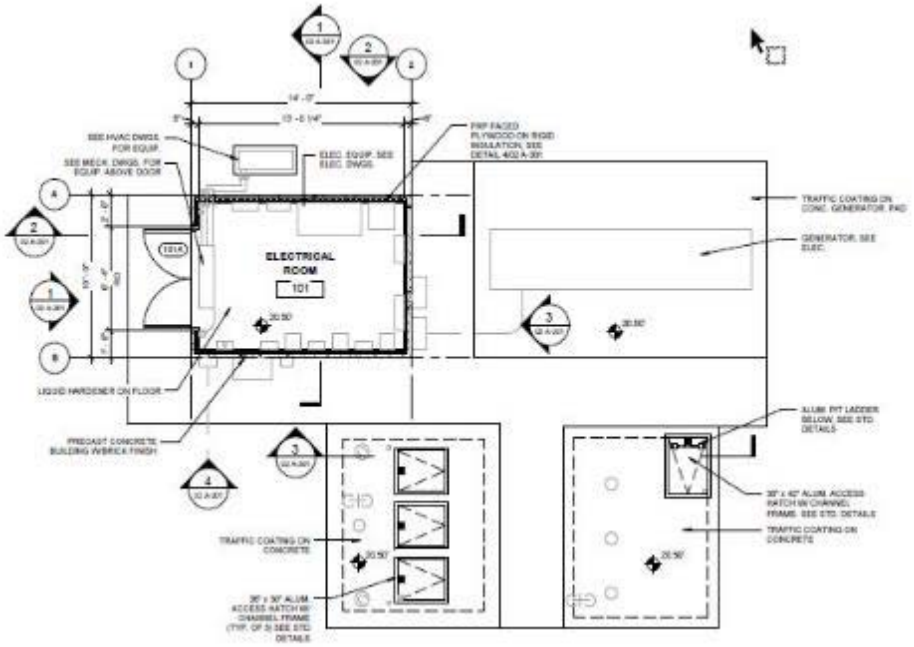
960 PORTSMOUTH BLVD, SUFFOLK, VA



Site Challenges



Schematic of Proposed Pump Station



Concessions for the acquisition of a portion of 960 Portsmouth Boulevard

- Reduce the overall size of the HRSD pump station from our standard
- Enhanced temporary security fencing during construction
- Addition of a gravity sewer stub-out to this property to accommodate future development, at no cost to the property owner
- Enhanced permanent security fence with automatic gate to replace the manual gate currently on site
- Contractor to leave gravel in easement area at property owner's request - to increase parking and property owner's usage
- Install roll top curb and gutter to ease truck access entering Virginia Ham Drive and to reduce number of curb repairs
- Tunnelling portion under the driveway entrance versus open cut

Comments from Public Hearing and Responses

"…place the pump station on the adjacent wooded parcel or the wooded parcel behind our property."

Response: HRSD could not place the pump station further back or on the adjacent wooded parcels due to various reasons such as: a BMP in the wooded area behind, the topography (drops offs and sloping land) does not allow for our infrastructure, existing monitoring wells and various infrastructure throughout the parcels, impediments to constructability requirements and future access for operations and maintenance of the site, the Chesapeake Bay Preservation Act (CBPA), wetlands and flood zone designated areas do not allow for it.

Comments from Public Hearing and Responses

"…HRSD already has the easements in place with existing manholes."

Response: HRSD does have some easements around the area but has not acquired fee simple acquisitions that would be required to build a pump station in a different location. The existing easements (20 and/or 30 feet) in the area are for existing sewer infrastructure (pipelines, manholes and other appurtenances). This infrastructure will be kept in service during construction to help minimize impacts to the public by seamlessly continuing sewer service throughout construction efforts and until the new system is activated.

Comments from Public Hearing and Responses

"…taking of the part of our parcel will adversely affect our daily operations since we only have one entrance on Virginia Ham Drive."

Response: HRSD will not be impacting the entrance.

- The entrance to the business will not be closed due to construction
- Construction traffic (vehicles) to be minimized
- Trenchless tunneling method will be utilized to avoid working in the entrance area. This tunneling effort will span from the opposite side of Portsmouth Blvd and crossing under the adjacent parcel & entrance to avoid impacts to the business
- Pump station and construction are located outside of the turning radius for entrance
- Contractor will stage equipment and perform work in a way to maintain access to Arzillo Investment Inc. and Shingle Creek Associates properties during normal business hours.

Comments from Public Hearing and Responses

"…asking HRSD to install a second entrance on Portsmouth Boulevard to accommodate our needs."

Response:

The City of Suffolk reviewed and has denied the property owner's request for a second entrance on multiple occasions. It is not in HRSD's power to add entrances to properties when the City has denied it or deemed it unsafe to motoring traffic. As HRSD's work will not be affecting the access to the property, there is no need for HRSD to engage further with this request.

Comments from Public Hearing and Responses

"HRSD is required under the Suffolk Unified Defined Ordinance to get a variance or waiver to the rear SCOD requirements on the subdivision site plan."

Response:

HRSD has already received acceptance and approval for the site plan and subdivision plat, pending it being signed and recorded.

Comments from Public Hearing and Responses

"Any future development may have issues with our property lines being redrawn and ask HRSD to correct these issues now."

Response:

There is no issue for HRSD to correct, the SCOD setbacks surrounding the property stay the same per the City. The City has responded to the property owner through several correspondences and various staff with regards to the plat, the meaning of their notes and what steps the property owner would take in the future, if a future development is desired. To date, no plans have been submitted to the City to review and therefore cannot be addressed.

In correspondence that HRSD has been included on, the Deputy City Planner has stated they will not provide a blanket acceptance or change (as have been requested) to their required standards for setbacks for properties. They will address the non-conforming nature of his property in the future and stated HRSD has not altered the use or function of the parcel.

Comments from Public Hearing and Responses

"HRSD engineers say that our driveway would not be impacted because they have new tunneling technology. If this new technology exists, then we believe the tunneling under the railroad tracks should not be an issue."

Response:

Correct, the tunneling method will ensure access through the entrance to the business, during stated operating hours, will remain open throughout the project. HRSD will be tunneling under the railroad trestles in a very defined path and width as allowed by the railroad. Acceptance for this project and project design from the railroad has been obtained.

Comments from Public Hearing and Responses

"Some have stated that the railroad tracks or the structure crossing Virginia Ham Drive is old and deteriorated and it is reasonable to assume that it would be costly for the CSX to make the bridge usable."

Response:

The railroad still deems this line as active and all permits, constraints and building restrictions are still in place. HRSD has worked through the project design review process with the railroad, paid all required fees and received all necessary license agreements and approvals to move forward with this work.

Comments Post Public Hearing & Responses

"I was just reading on the site plan for the subdivision site plan that the SCOD rear setback is going to be changed since my property line is going to be changed. And it clearly says that on the SCOD setback and HRSD needs to get a waiver or a variance, in my opinion, to get this subdivision site plan approved by the City of Suffolk. There is no reason why I should be burdened with that cost for the subdivision site plan variance or waiver. I don't know how the City of Suffolk can approve your subdivision site plan without that variance or waiver."

Response: HRSD is responsible for and had paid all application, and review fees with regards to the property acquisition and the upcoming work (Subdivision and Site Plan Reviews). These efforts are separate from any changes the property owner may want to make in the future. The Property Owner would have to submit their own site plan for any future review and approval, and pay the fees associated with that City review effort if and when, in the future they expand or redevelop the property. This is a City standard requirement each time a property is redeveloped – this would be a requirement even if HRSD work (or subdivision) never occurred. HRSD has not impacted the property owner for this requirement.

Comments from Public Hearing and Responses

"I've met with the City staff, the City Manager and he said you guys need to get a variance and bring it before the Board of Zoning Appeals to get the variance in place before the subdivision can be approved. That is right in the UDO. There is no reason why I should have to pay for that. If you want the variance, that is HRSD's responsibility not ours."

Response: Response to these comments have already been addressed in previous slides.

960 Portsmouth Boulevard

Railroad Tracks at 960 Portsmouth Boulevard

110 Virginia Ham Drive

Questions?

5. Revenue Policy Updates

1.0 Purpose and Need

The purpose of this revenue policy is to ensure that there is sufficient revenue to support direct and indirect operating, capital, reserves and current and future debt service costs.

2.0 Definitions

2.1 Domestic Quality Wastewater. Defined in accordance with HRSD's Domestic Wastewater Survey that specifies the primary pollutants and the corresponding concentration levels for domestic wastewater.

2.2 Domestic Quality Wastewater Survey. A sampling evaluation of wastewater to define Domestic Quality Wastewater concentrations of primary pollutants conducted in residential neighborhoods in various localities (cities/counties) served by HRSD.

2.3 Facility Charges. Charges to cover the cost of treatment and conveyance capacity consumed by new connections or redevelopment. Facility charges are applied to any sewer or sewer system discharging into HRSD facilities and any increase to existing service.

2.4 Fats, Oils, and Grease (FOG). Wastewater created from the cleaning of a grease control device (GCD) and transported and discharged to a wastewater treatment plant by conveyance other than pipelines.

2.5 Flat Rate. A constant rate applied to customer accounts in lieu of a metered based bill. The rate is based on the winter average water consumption of existing flat rate accounts as determined periodically.

2.6 Hauled Wastewater. Wastewater transported and discharged to a wastewater treatment plant by conveyance other than pipelines, excluding Fats, Oils and Grease (FOG) waste from a grease control device (GCD).

2.7 High Strength or Unusual Waste. Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Total Phosphorus (TP), and Total Kjeldahl Nitrogen (TKN) discharged waste concentrations that exceed those defined as Domestic Quality Wastewater or unusual wastes not covered by the Rate Schedule that may be considered separately and may be assigned a special rate.

2.8 HRSD Charges. Any and all charges or fees billed to customers for wastewater services provide by HRSD.

2.9 HRSD Collection System. All infrastructure conveying flow to the Interceptor System in localities where HRSD owns or operates a collection system.

2.10 HRSD Collection System Charges. Rates for HRSD Collection System operating and maintenance costs that are in addition to Wastewater Treatment Charges.

2.11 HRSD Enabling Act. The Commonwealth of Virginia 1960 Acts of the Assembly, c. 66, as amended.

2.12 HRSD Rate Schedule. Published listing of rates, fees and charges applicable for specified time frame.

2.13 Interceptor System. Larger diameter pipelines conveying flow from the collection system to the Wastewater Treatment Plant.

2.14 **NAICS Surcharge Categories.** The North American Industry Classification System (NAICS) standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

~~2.14~~2.15 Nutrient Credit Rates. *Rates established to recover the marginal operational cost to treat pollutants and the capacity of assets consumed to treat the pollutants. HRSD, as provided in its Nutrient Credit Management Policy may elect to sell these credits if it doesn't jeopardize compliance with its wasteload allocation.*

~~2.15~~2.16 **Rational Nexus Criteria.** These ensure that there is a reasonable connection between HRSD Charges and the actual cost of operating the wastewater system. These criteria ensure: (1) the charges are not arbitrary, (2) the charges are equitable, and (3) the charges are not discriminatory.

~~2.16~~2.17 **Regional Sanitary Sewer System.** All portions of the individual locality and HRSD wastewater collection and interceptor systems and appurtenances thereto.

~~2.17~~2.18 **Surcharge Rate.** Rates for High Strength or Unusual Wastes to recover costs in direct proportion to volume and pollutant concentrations. Surcharge rates are based on a marginal cost approach for the variable costs associated with the incremental costs to treat High Strength or Unusual Wastes.

~~2.18~~*2.19* **Wastewater Treatment Charges.** Charges to convey and treat Domestic Quality Wastewater that are based on billed water consumption, an effluent wastewater meter, or a Flat Rate.

~~2.19~~*2.20* **Wastewater Treatment Rate.** Rate per specified unit of measure to recover the costs of conveyance and treatment of Domestic Quality Wastewater.

~~2.20~~*2.21* **Town Wholesale Treatment Rate.** Rate paid by an incorporated town per specified unit of measure to recover the costs of conveyance and treatment of Domestic Quality Wastewater when the town does not use all HRSD facilities or need ~~all of~~*all* the services provided to a typical customer. This rate is only applicable to incorporated towns with a population less than 2,000.

3.0 Guiding Principles

3.1 General

3.1.1 To the extent feasible, HRSD is a cost recovery enterprise and supports a uniform rate structure for interception and treatment regardless of which wastewater treatment plant treats a customer's wastewater.

3.1.2 *HRSD uses the Rational Nexus Criteria as a guiding principle~~s~~ to derive its wastewater charges.*

~~3.1.2~~*3.1.3* Wastewater Treatment and Collection Charges shall not be waived. However, payment extensions may be established for the collection of HRSD Charges.

~~3.1.3~~*3.1.4* All new connections and redevelopment shall pay an equitable share for the treatment and conveyance capacity consumed by their wastewater discharge to the Regional Sanitary Sewer System.

~~3.1.4~~*3.1.5* All HRSD rates shall be reviewed and revised (if required) at least annually and approved by the Commission. Changes shall be publicly advertised in accordance with HRSD's Enabling Act and posted on HRSD's web site.

~~3.1.5~~*3.1.6* Surcharge rates are set to recover costs in direct proportion to volume and pollutant concentrations in excess of Domestic Quality Wastewater.

~~3.1.6~~*3.1.7* Facility Charges ensure that an unfair burden is not placed on existing users that would otherwise pay higher rates to expand the system to accommodate new flows and loads to HRSD's facilities. ~~HRSD uses the~~

~~Rational Nexus Criteria as one of the guiding principles to derive Facility Charges.~~

~~3.1.7~~***3.1.8*** HRSD will not depend on temporary revenues such as grants to fund operating costs. One-time temporary revenues or grants should typically be used to fund one-time expenses.

~~3.1.8~~***3.1.9*** Surcharge rates *that* are applied to non-permitted commercial facilities ~~using~~ *use* sampling data for groups of businesses that produce similar goods or services using the North American Industry Classification System (NAICS).

3.2 Basis of Charges

3.2.1 Wastewater Treatment Charges

(1) The Wastewater Treatment Rate is derived from the Rate Model, see Appendix A.

(2) Volumetric Accounts

a. Volume of water purchased by the customer (as recorded by a water meter); or,

b. Volume of effluent discharged to the sewer system (as recorded by an effluent meter)

(3) A rate based on facility use and billing period.

(4) A single family residential Flat Rate as defined herein.

(5) HRSD treatment plants are designed to treat domestic quality wastewater. Additional charges may be assessed for wastewater with qualities that differ from the current definition of Domestic Quality Wastewater.

(6) Minimum charges apply to all accounts, except as specified herein.

3.2.2 Facility Charges

(1) HRSD shall establish Facility Charges for new connections based upon the size of the water meter serving the new connection. If the locality does not offer a specific meter size, a combination meter is proposed, or another similar scenario exists, the Facility Charge may be based on a calculated meter size using the AWWA M22 Sizing Water Service Lines

and Meters manual. Additional special exceptions, including redevelopment provisions, may be outlined in the HRSD Rate Schedule.

(2) The Facility Charge for each meter size is based on the total net replacement value of all HRSD's assets, HRSD's total hydraulic capacity, and the average water consumption for each meter size.

(3) HRSD reserves the right to require Facility Charges based upon wastewater that differs from domestic quality wastewater and that consumes loading capacity in excess of capacity consumed by the equivalent volume of Domestic Quality Wastewater.

3.2.3 HRSD Collection System Rate. A rate to recover HRSD costs for maintenance and operation of HRSD owned collection systems. The rate shall be based upon the weighted average rate charged by localities within the HRSD service area for collection system operation and maintenance of locality owned collection systems. Localities that do not charge a Locality collection rate will be excluded from this calculation. The weighted average will be based on the latest population estimates provided by the Welden Cooper Center for Public Service or other Commonwealth designated demographics agency. HRSD may establish separate collection system maintenance charges for each locality within the HRSD Collection System where warranted by unique circumstances.

3.2.4 Hauled Wastewater Rate. This rate is based on five individual charges specific to Hauled Wastewater: BOD, TSS, TP, TKN and volume as derived from the HRSD Rate Model and may include applicable credits, see Appendix A, and are not subject to a minimum charge. Since waste haulers do not use the Interceptor System, those costs are excluded from the volume rate.

3.2.5 Fats, Oils, and Grease (FOG) Rate. This rate is based on five individual charges specific to FOG: BOD, TSS, TP, TKN and volume as derived from the HRSD Rate Model and may include applicable credits, see Appendix A, and are not subject to a minimum charge. Since waste haulers do not use the Interceptor System, those costs are excluded from the volume rate.

3.2.6 Town Wholesale Treatment Rate. This rate is based on HRSD's average unit costs to: (1) treat wastewater in all of its major wastewater plants, (2) transport wastewater from HRSD's member municipalities through its interceptor systems, and (3) the management, administration, and support costs applicable to these services. This charged volume is based on an effluent meter where a town discharges into the HRSD System, which will include infiltration and inflow.

3.2.7 *Nutrient Credit Rates*

(1) Operational Nutrient Credit Rate. These rates are based on the marginal operating cost to treat a pound of TN, TP and/or TSS. These costs are derived from budgeted operational expenses and vary in direct proportion to the quantity of pollutants treated (i.e., chemicals, electricity, disposal of directly related solids).

(2) Asset Nutrient Credit Rate. These rates are based on the proportional share of capital assets consumed to treat TN, TP and/or TSS.

~~3.2.6~~3.2.8 *TSS Operational and Assets Charges may not apply if TP is the driving parameter for Water Quality permitting.*

4.0 Procedures

4.1 Determining Costs Used in the HRSD Rate Model, See Appendix A.

4.1.1 The budgeted annual costs shall be used to calculate rates that will be in effect for the budget fiscal year.

4.1.2 Budgeted costs shall be loaded into a comprehensive rate model to allocate costs to applicable categories annually. This model shall allocate costs to volume and each pollutant identified in the most recent Domestic Wastewater Survey.

4.1.3 The Domestic Wastewater Survey shall be updated every five years or more frequently if permit requirements or treatment technology changes warrant revisiting.

4.2 Determining Total Wastewater Volume

The total volume of wastewater to be billed during a budget year shall be estimated based upon the water consumption trends within the HRSD service area and other information when available.

4.3 Calculating Rates

4.3.1 The model shall calculate the Wastewater Treatment Rate based on total budgeted cost divided by the estimated volume of wastewater to be billed in the fiscal year. The rate shall be expressed in dollars per hundred cubic feet or per 1,000 gallons.

4.3.2 The HRSD Rate Model shall calculate the Surcharge Rate for High Strength Waste based on the incremental cost to treat each additional pound of each pollutant in excess of the pounds of pollutants identified for Domestic Quality Wastewater in the most recent HRSD Domestic Quality Wastewater Survey. The rates shall be expressed in dollars per 100 pounds or per milligrams per liter per hundred cubic feet of wastewater.

4.3.3 Facility Charges shall be calculated by dividing the replacement cost for all HRSD facilities by HRSD's total hydraulic capacity to obtain the replacement cost per gallon. This replacement cost per gallon shall be multiplied by the estimated flow expected from new connections and redevelopment and expressed in dollars per meter size. The estimated flow is based on the average daily flows for each size water meter using actual historical data from HRSD's meter database and any additional information available.

4.3.4 Flat Rate shall be calculated by determining the average water consumption for the months of January, February, and March for all existing flat rate accounts for a 30-day period multiplied by the Wastewater Treatment Rate.

~~4.3.4~~***4.3.5*** *Nutrient Credit Asset Charges are one-time charges and shall be paid in advance of providing a credit. Nutrient Operational Charges shall be paid in advance for five years and will be based on the rate in effect at the time the credits are provided. The charge will be reassessed every five years based on the rate in effect at the time of reassessment. On a case-by-case basis, intervals other than five years may be considered to support alignment with the credit recipient's permit cycle or needs. As provided in HRSD's Nutrient Credit Management Policy, HRSD may enter into private trading or offset agreements outside of this Revenue Policy.*

~~4.3.5~~***4.3.6*** Daily Minimum shall be calculated by dividing the total labor costs (not dependent on volume of wastewater conveyed or treated) of the Operations Department by the total number of accounts' ten-year rolling average divided by 365.

~~4.3.6~~***4.3.7*** Surcharge Rates shall be calculated using moving averages using historical data to dampen the year-over-year volatility.

4.4 Implementation

4.4.1 All rates shall be approved by the Commission.

4.4.2 Rates shall be advertised for four consecutive weeks in a newspaper of general circulation within the District.

4.5 Financial Forecast

HRSD will analyze water consumption, regional economic and population data periodically to identify any trends that may impact its long-range financial forecast. HRSD will also analyze and conservatively project major expense drivers, such as construction costs, inflation, operating cost increases, and borrowing costs. The forecast should target financial metrics, across the twenty-year period, that are consistent with rating agency metrics for a strong, double-A rated credit. This approach will ensure the long-range forecast is resilient and maintains HRSD's strong financial framework.

4.6 Collections *of Customer Accounts*~~.~~

4.6.1 HRSD will monitor all collections *of customer accounts* to ensure they are equitably administered, timely and accurate. *Generally, t*~~T~~he cost of collections *of customer accounts* shall not exceed the marginal incremental revenue and it should not be a large percentage of the amount to be collected.

4.6.2 Charges shall be collected for all services rendered unless determined to be uncollectable.

4.6.3 Charges may be assessed for services received but not billed (for any reason) for a period of up to three prior years. The rate in effect in the year treatment services were provided shall be applied. If necessary, at HRSD's sole discretion, billing adjustments and/or payment plans may be established for payment of delayed billing or unbilled previous service.

4.6.4 Past due charges for services received and billed shall be pursued *in accordance with the governing statute of limitations and as allowed by law.* ~~for up to 10-years after write-off.~~

4.6.5 If a customer has past due charges on any account for services received, and establishes a new account within HRSD's service area, *the* customer will be subject to the past due charges being transferred to their active account, and collection will be pursued.

4.6.6 *HRSD shall establish criteria to pursue legal action for delinquent customer accounts, including both residential and commercial, in accordance with Section 25 of the Enabling Act and as otherwise provided by relevant governing law.*

5.0 Responsibility and Authority

5.1 The General Manager shall ensure the Commission reviews all rates annually as part of the annual budget process.

5.2 Rates may only be changed with an affirmative vote of a majority of the Commission at a legally noticed public meeting of the Commission.

5.3 The General Manager shall ensure any rate revisions are advertised and published in accordance with the HRSD Enabling Act.

5.4 The Director of Finance will present an updated Financial Forecast to the Commission and manage the update to the Rate Model on an annual basis.

~~5.4~~5.5 *The General Manager shall have the authority to initiate legal action for the collection of delinquent customer accounts as provided in Section 25 of the Enabling and noted in 4.6.6 above.*

Approved: _____ _____

~~Frederick N. Elofson~~*Stephen C. Rodriquez*
Commission Chair

Date

Attest: _____ _____

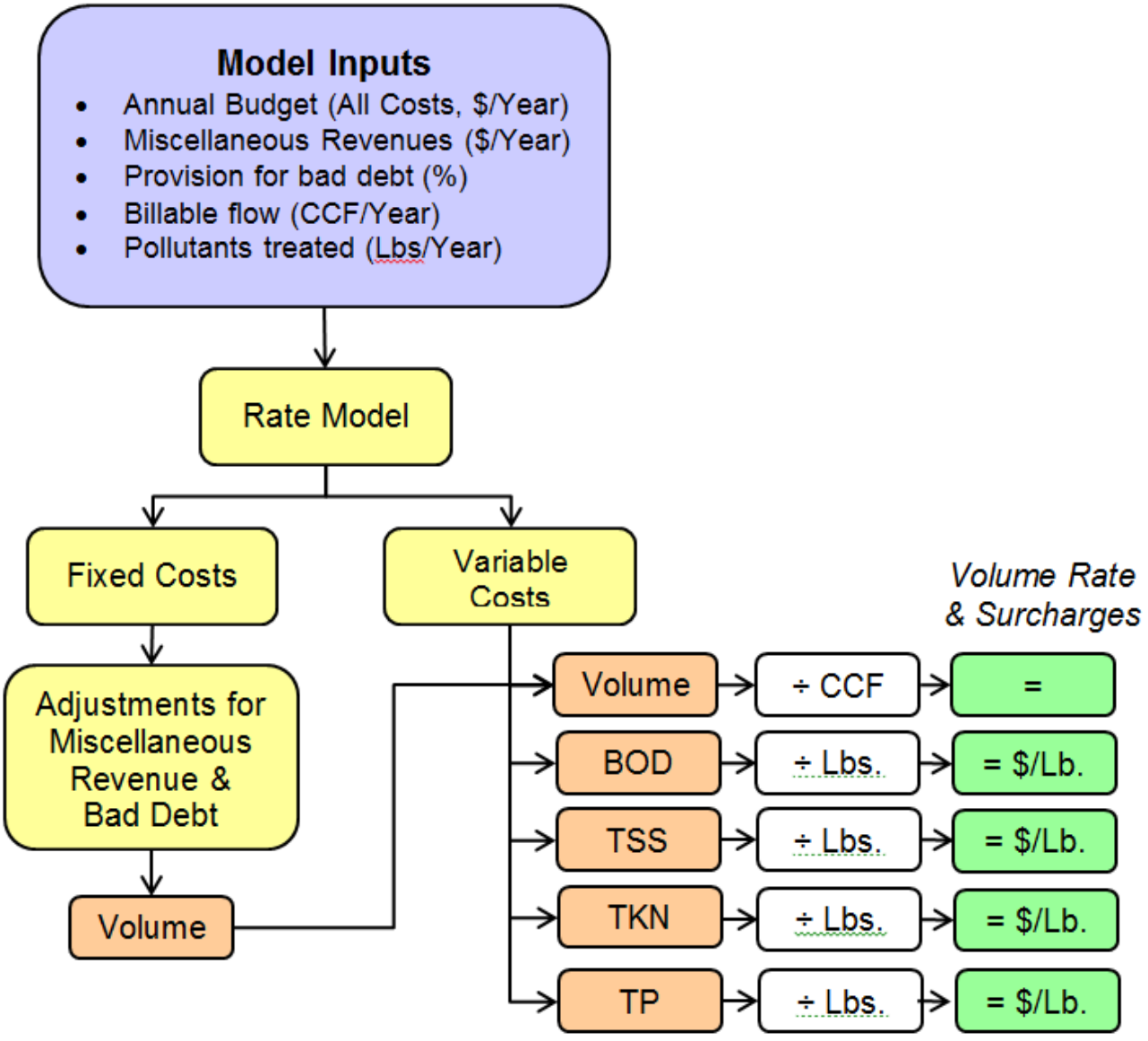
Jennifer L. Cascio
Commission Secretary

Date

1.0 HRSD's Rate Model Summary

HRSD's Rate Model uses a cost accounting process to allocate all operating costs to volume and each of four specific pollutants. The model designates each line item cost as fixed or variable. Fixed costs are those that are not influenced, in the short run, by volume or the quantity of pollutants in the wastewater being treated. These include for example, personnel costs, office, administrative, customer service, billing and collection expenses, and debt service. Conversely, variable costs are those that are affected by the volume and the amount of pollutants present; these include treatment plant expenditures for chemicals, electricity, fuel, and solids disposal. The rate model uses engineering criteria to allocate the variable costs to each of the four pollutants. Once the operating costs have been allocated, the model deducts miscellaneous revenues, includes a provision for bad debt, and derives rates for volume ($/CCF) and high strength surcharges ($/pound); the latter equates to HRSD's marginal or incremental cost attributable to treating each pollutant in excess of the amount present in typical domestic wastewater and is also presented as the equivalent $ per mg/l per 100 CF to facilitate calculation by customers. Net fixed costs and the variable costs to treat the four pollutants present in typical domestic sewage are recovered via the volume rate and surcharges.

2.0 Rate Model Schematic



6. Hampton Roads Water Quality Credit Agreement for Chesapeake Bay Restoration
   Christopher Newport University Agreement

HAMPTON ROADS WATER QUALITY CREDIT AGREEMENT FOR CHESAPEAKE BAY RESTORATION

THIS HAMPTON ROADS WATER QUALITY CREDIT AGREEMENT FOR CHESAPEAKE BAY RESTORATION (this "Agreement") is made this _____ day of May, 2023, by and between the Hampton Roads Sanitation District, a public body and political subdivision of the Commonwealth of Virginia ("HRSD"), and Christopher Newport University, a public university of the Commonwealth of Virginia, located in Newport News ("CNU") (each a "Party" and jointly the "Parties").

BACKGROUND

A. The HRSD Plants. HRSD owns and operates various wastewater treatment plants that are authorized to discharge the nutrients total nitrogen ("TN") and total phosphorus ("TP") as well as sediment as total suspended solids ("TSS") to the Chesapeake Bay watershed (the "HRSD Plants"). The HRSD Plants have TN, TP and TSS waste load allocations assigned by the State Water Control Board and the Virginia Department of Environmental Quality (jointly, "DEQ") pursuant to the Water Quality Management Planning Regulation, 9 VAC 25-720, and by the U.S. Environmental Protection Agency ("EPA") pursuant to the Chesapeake Bay Total Maximum Daily Load ("TMDL") and related Virginia Watershed Implementation Plan ("WIP"). The HRSD Plants are subject to the General Virginia Pollutant Discharge Elimination System ("VPDES") Watershed Permit Regulation for TN and TP Discharges and Nutrient Trading in the Chesapeake Bay Watershed in Virginia, 9 VAC 25-820, most recently reissued by DEQ effective January 1, 2022, as hereafter modified or reissued from time to time (the "Watershed General Permit"). Due to exceptional performance and current operating conditions, the HRSD Plants currently discharge less TN, TP and TSS than they are authorized to discharge under the Watershed General Permit while protecting Chesapeake Bay water quality and, therefore, HRSD has the ability to provide TN, TP and TSS credits on at least a temporary basis.

B. The CNU MS4. CNU owns and operates a municipal separate stormwater sewer system ("MS4") authorized to discharge TN, TP and TSS to the Chesapeake Bay watershed. Like the HRSD Plants, the MS4 is subject to the Chesapeake Bay TMDL as derived from the Virginia WIP. The CNU MS4 is also subject to the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems ("MS4 Permit") issued by DEQ. Pursuant to the TMDL, WIP and MS4 Permit, it is anticipated that CNU will reduce MS4-related TN, TP and TSS discharges pursuant to CNU-developed and DEQ-approved TMDL Action Plans for each of three, five-year permit cycles, which are referred to as the First Bay TMDL Permit Cycle (5% Progress), Second Bay TMDL Permit Cycle (40% Progress), and Third Bay TMDL Permit Cycle (100% Progress). During 2023, CNU is in the final year of its Second Bay TMDL Permit Cycle.

C. The SWIFT Project. HRSD's Sustainable Water Initiative For Tomorrow ("SWIFT") Project was conceived with multiple benefits in mind for the Hampton Roads region. Aside from TMDL benefits, this innovative water purification project is designed to enhance the sustainability of the long-term groundwater supply and help address other environmental pressures such as sea level rise and saltwater intrusion. The SWIFT Project is intended to achieve these benefits by taking already-treated wastewater that would otherwise be discharged into the Chesapeake Bay watershed, purifying it through additional rounds of advanced water treatment to

meet drinking water standards, and injecting the resulting drinking quality water into the Potomac aquifer deep underground. With respect to TMDL benefits, SWIFT will result in a significant reduction in the total volume of HRSD discharge to the Chesapeake Bay watershed, to achieve greater environmental benefits with corresponding significant reductions of TN, TP and TSS discharges to the Chesapeake Bay watershed.

D. Legal Authority. Pursuant to Virginia Code § 62.1-44.19:21, CNU may acquire and use TN and TP credits for purposes of compliance with the Chesapeake Bay TMDL loading reductions of its MS4 Permit, including credits generated by the HRSD Plants by discharging less TN or TP than permitted under the Watershed General Permit. Pursuant to Virginia Code § 62.1-44.19:21.1, CNU may also acquire and use TSS credits for purposes of compliance with the Chesapeake Bay TMDL loading reductions of its MS4 Permit, including credits generated by the HRSD Plants by discharging less TSS than allocated under the Chesapeake Bay TMDL. With respect to all three parameters, it is recognized that this authority does not limit or otherwise affect the authority of DEQ to establish and enforce more stringent water quality-based effluent limitations in permits where such limitations are necessary to protect local water quality and, further, that the use of water quality credits does not relieve an MS4 permit holder of any requirement to comply with applicable local water quality-based limitations.

E. Redevelopment-Based MS4 TMDL Action Plan. CNU expects to achieve its Chesapeake Bay TMDL reduction goals more cost-effectively by utilizing HRSD-generated TN, TP and TSS credits before and during operation of the SWIFT Project in lieu of stormwater retrofit projects on a condensed 10-year schedule (*i.e.*, Second and Third Bay TMDL Permit Cycles) coupled with ongoing stormwater quality improvements from redevelopment projects, which are subject to TP reduction criteria (and associated TN and TSS reductions) under the applicable water quality design requirements of DEQ's Virginia Stormwater Management Program Regulation, 9VAC25-870-63.A.2. By aligning with the normal redevelopment cycle rather than scheduling retrofits prior to redevelopment activity, CNU's Chesapeake Bay TMDL Action Plan will also conserve scarce state and local resources for other important water quality projects.

F. Credit Trading Premise of SWIFT. For all of the above reasons and others, the ability to generate TN, TP, and TSS credits through the SWIFT Project and apply those credits as progress under MS4 Permits and associated TMDL Action Plans of entities such as CNU is a fundamental premise for the SWIFT Project. HRSD is proceeding with the SWIFT Project, and CNU is supporting it, in large part based on reliance on these water quality trading-based benefits.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing premises (hereby incorporated as if fully set forth herein), the mutual covenants and conditions herein, and other good and valuable consideration, the receipt and sufficiency of which HRSD and CNU acknowledge, the Parties hereby agree as follows.

1. Annual Credit Transfers. HRSD shall annually generate and transfer to CNU the quantity of water quality credits needed to meet CNU's compliance requirements under its DEQ-Approved Chesapeake Bay TMDL Action Plan for its MS4, as provided below. This annual

transfer shall be made by HRSD's execution and delivery to CNU of the Water Quality Credit Transfer Form (Attachment B hereto) and shall serve to meet the annual reduction requirements for the term identified on the form.

Determination of Total Reductions Needed. CNU shall determine the total TN, TP and TSS reductions required for its full MS4 implementation of the Chesapeake Bay TMDL and WIP as issued in December 2010, in accordance with the procedures established in its MS4 Permit and DEQ Guidance Memorandum 15-2005, Chesapeake Bay TMDL Special Condition Guidance (May 18, 2015). CNU shall update, in writing, its required reduction for each term by March 30 of the first year of the desired new term.

a. Credit Demand Minimization Elements. CNU shall minimize its calculated reductions by (i) accurately mapping and delineating its existing MS4 service area, (ii) taking full credit for reductions achieved by stormwater projects and regulated redevelopment projects occurring prior to the effective date of CNU's MS4 Permit in effect as of the date of this Agreement, and (iii) other procedures or accounting measures reasonably available to CNU.

b. Credit Pricing. CNU shall pay the costs associated with the TN and TP credit generation. These costs will reflect both a one-time cost attributable to the infrastructure necessary to effectively remove TN and TP and the annual operational costs for same. The costs associated with providing credits will be tallied for a multiyear term as identified in Attachment B (generally 5 years), and will be payable by CNU no later than 30 days following the effective date of the first annual credit transfer of the applicable term. Rates associated with TN and TP credit generation shall be reflected in Attachment B. CNU shall notify HRSD of its need to acquire credits to satisfy its MS4 obligations no later than January 15 of the desired new term to allow time for HRSD to calculate the rates for the next multi-year term. Updates to these rates for future terms will be made no later than February 15 of that same year. TSS credits will be provided at no additional cost, acknowledging that the TSS required reductions in MS4 permits are driven by TP reduction needs.

c. Credit Transfer Ceilings. HRSD's annual credit transfer obligations to CNU shall not exceed the lesser of (i) CNU's initial estimate of credit needs, or (ii) 95 percent of CNU's total calculated reductions determined in accordance with Subparagraphs 1.a. and 1.b. and set forth in a DEQ-approved Chesapeake Bay TMDL Action Plan, or (iii) the quantity of credits actually needed to meet such total calculated reductions. CNU's initial estimate of credit needs as of the date of this Agreement is set forth in Section 1 of Attachment A hereto. Following DEQ's approval of CNU's Chesapeake Bay TMDL Action Plan and subsequent acceptance of the credit needs by HRSD as consistent with the requirements of this Subparagraph 1.c., HRSD shall issue an update to Attachment A setting forth in Section 2 thereof HRSD's actual annual credit transfer obligation determined in accordance with this Subparagraph 1.c.

d. Term & Termination of Initial Credit Transfers. HRSD's annual credit transfer obligations to CNU under this Paragraph 1 shall expire upon termination as specifically authorized by any other provision of this Agreement..

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2. Regulatory Plans & Approvals. In furtherance of the annual credit transfer contemplated by this Agreement, the Parties shall collaborate on appropriate submittals to and requests of DEQ, as follows; however, HRSD shall have no responsibility for the failure or refusal of DEQ or other governmental authority to approve such transfers.

a. CNU's TMDL Action Plan. For purposes of annual transfers, CNU shall each include in its Chesapeake Bay TMDL Action Plan a provision for the receipt and use of TN, TP and TSS credits from the HRSD Plants in the form set forth in Attachment C hereto (or such other form as may be mutually agreeable to CNU and HRSD).

b. Virginia Chesapeake Bay TMDL WIP. HRSD and CNU shall collaborate to seek inclusion in any future modification or phase of Virginia's WIP of recognition of the SWIFT Project and the annual transfers contemplated by this Agreement.

3. Authorized Use of Credits. CNU agrees that its sole and limited use of the TN, TP, and TSS credits transferred under this Agreement shall be for the purpose of MS4 Permit compliance and Chesapeake Bay TMDL implementation and that it shall not transfer any portion of HRSD-generated credits (or waste load allocations, if applicable) to any other person or entity. In the event that CNU no longer requires some or all of the credits for such use, they shall revert to HRSD and HRSD shall update and reissue Attachment A accordingly.

4. Mutual Cooperation. The Parties shall continue to cooperate with each other as reasonably necessary to confirm or bring about the transfers contemplated by this Agreement.

5. Permits & Approvals. If for any reason any federal, state, regional or local government or agency fails to issue any necessary permit, approval or other authorization for the SWIFT Project or the transfers contemplated by this Agreement, HRSD shall be excused from its performance hereunder.

6. Force Majeure. The obligations of HRSD, including its annual transfer obligations, shall be suspended while and as long as performance is prevented or impeded by strikes, disturbances, riots, fire, severe weather, epidemic, pandemic, acts of war, acts of terrorism, acts of God, government action (other than by HRSD), major technical, engineering or construction related delays, or any other cause similar or dissimilar to the forgoing that is beyond the reasonable control of and not due to the gross negligence of HRSD.

7. Change in Law. In the event of any material change in applicable laws or regulations, the Parties shall work together to attempt to amend this Agreement to conform to such change, while maintaining as closely as practical the provisions and intent of this Agreement. If in any such event HRSD is unable to perform its transfer obligations as provided herein, CNU shall be solely responsible for otherwise meeting its TMDL and MS4 Permit obligations.

8. Significant Financial & Budgetary Constraints. Notwithstanding any other provision of this Agreement or any prior determination of feasibility of the SWIFT Project, HRSD reserves the right to terminate or renegotiate this Agreement in the event HRSD experiences significant financial or budgetary challenges which, in HRSD's opinion, would significantly

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impair its ability to perform its obligations hereunder. In such event, the Parties shall work together to attempt to amend this Agreement to accommodate such challenges, with the goal of providing annual credits to CNU (and to Hampton Roads entities with similar water quality credit agreements) as practical.

9. Credit Supply Constraints. Notwithstanding any other provision of this Agreement, to the extent that HRSD determines in its sole discretion that its available quantity of water quality credits (or allocations) is insufficient to meet the total MS4 Chesapeake Bay TMDL Action Plan compliance requirements of CNU and of all other Hampton Roads entities that are party or become party to a similar water quality credit agreement, HRSD's obligations hereunder shall be limited to transferring to CNU its pro rata share of HRSD's available credits based on pollutant-specific total credit needs of all such Hampton Roads entities. HRSD agrees to provide CNU with notice of its ability only to transfer a pro rata share of HRSD's available credits as promptly as possible but no later than 90 days after becoming aware of the event limiting HRSD's ability to meet the total credit needs of all such Hampton Roads entities. Should this pro rata allocation of water quality credits become necessary, HRSD will continue providing CNU with its pro rata share, as needed, for the duration of the term identified in Attachment B and shall be under no obligation to provide these credits once the term has ended, thereby terminating this Agreement. For clarity, HRSD shall assume no obligation under this Agreement to install, upgrade, improve, or significantly alter the operation of any portion of its sewerage system or treatment works for purposes of providing water quality credits (or allocations).

10. No Third-Party Beneficiaries. This Agreement is solely for the benefit of the Parties hereto and their permitted successors and assigns and shall not confer any rights or benefits on any other person or entity.

11. No Assignment. This Agreement, and the rights and obligations established hereunder, shall be binding upon and inure to the benefit of any successors of the Parties. However, no Party may transfer or assign this Agreement, or its rights or obligations hereunder, without the prior written consent of the other Party, which consent shall not be unreasonably withheld.

12. Expenses; Commissions. Except as provided herein, each Party shall pay its own fees and expenses, including its own counsel fees, incurred in connection with this Agreement or any transaction contemplated hereby. The Parties represent and warrant to each other that they have not dealt with any business broker or agent who would be entitled to a brokerage commission or finders fee as a result of this Agreement or any related transactions.

13. Governing Law; Venue; Severability. This Agreement shall be construed in accordance with and governed for all purposes by the laws of the Commonwealth of Virginia. This Agreement is a Virginia contract deemed executed and accepted in the City of Virginia Beach; and all questions with respect to any of its provisions shall be instituted, maintained, and contested in a court of competent jurisdiction in the City of Virginia Beach, Virginia. If any word or provision of this Agreement as applied to any Party or to any circumstance is adjudged by a court to be invalid or unenforceable, the same shall in no way affect any other circumstance or the validity or enforceability of any other word or provision.

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14. No Waiver. Neither any failure to exercise or any delay in exercising any right, power or privilege under this Agreement by either Party shall operate as a waiver, nor shall any single or partial exercise of any right, power or privilege hereunder preclude the exercise of any other right, power or privilege. No waiver of any breach of any provision shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision, nor shall any waiver be implied from any course of dealing.

15. Entire Agreement; Amendments. This Agreement contains the entire agreement between the Parties as to the subject matter hereof and supersedes all previous written and oral negotiations, commitments, proposals and writings. No amendments may be made to this Agreement except by a writing signed by both Parties.

16. Counterparts; Signatures; Copies. This Agreement may be executed in counterparts, both of which shall be deemed an original, but all of which together shall constitute one and the same instrument. A facsimile or scanned signature may substitute for and have the same legal effect as an original signature. Any copy of this executed Agreement made by photocopy, facsimile or scanner shall be considered the original for all purposes.

17. Authorization. Each Party represents that its execution, delivery and performance under this Agreement have been duly authorized by all necessary action on its behalf, and do not and will not violate any provision of its charter or enabling legislation or result in a material breach of or constitute a material default under any agreement, indenture, or instrument of which it is a party or by which it or its properties may be bound or affected.

18. Hampton Roads Sanitation District (HRSD) 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 April 25, 2023.

IN WITNESS WHEREOF, the Parties hereto have caused the execution of this Agreement as of the date first written above.

[SIGNATURES BEGIN ON NEXT PAGE]

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SIGNATURE PAGE OF HAMPTON ROADS WATER QUALITY CREDIT AGREEMENT FOR CHESAPEAKE BAY RESTORATION BY AND BETWEEN HRSD AND THE FORT MONROE AUTHORITY

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

By: _____

Jay A, Bernas
General Manager

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SIGNATURE PAGE OF HAMPTON ROADS WATER QUALITY CREDIT AGREEMENT FOR CHESAPEAKE BAY RESTORATION BY AND BETWEEN HRSD AND THE FORT MONROE AUTHORITY

CHRISTOPHER NEWPORT UNIVERSITY, a public university of the Commonwealth of Virginia

By: _____
Name: _____
Title: _____

[END OF SIGNATURES]

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HAMPTON ROADS WATER QUALITY CREDIT AGREEMENT
FOR CHESAPEAKE BAY RESTORATION
ATTACHMENT A

Water Quality Credit Needs for Second & Third Bay TMDL Permit Cycles

Section 1: Initial Estimate of Credit Needs (lbs/yr)
[As Estimated by CNU as of the date of this Agreement]

	James River Basin		
Parameter	2nd Permit Cycle	3rd Permit Cycle	Total Both Cycles
TN	34.68		
TP	8.61		
TSS	3,895.55		

Section 2: CNU-Calculated and HRSD-Accepted Credit Needs (lbs/yr)
Under DEQ-Approved TMDL Action Plan and Subparagraph 1.c. of this Agreement
[As Accepted by HRSD After DEQ Approval of CNU's TMDL Action Plan]*

	James River Basin		
Parameter	2nd Permit Cycle	3rd Permit Cycle	Total Both Cycles
TN			
TP			
TSS			

* DEQ approved CNU's TMDL Action Plan prior to the date of this Agreement. Section 2 is complete.

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HAMPTON ROADS WATER QUALITY CREDIT AGREEMENT
FOR CHESAPEAKE BAY RESTORATION
ATTACHMENT B

Water Quality Credit Transfer Form

Instructions: To be completed and executed by HRSD and delivered to CNU on or before each May 20 immediately following the calendar year of credit generation by HRSD.

By execution and delivery of this Credit Transfer Form, HRSD transfers the following water quality credits in the amounts specified to CNU in accordance with, and for the specific and limited purposes of, the Hampton Roads Water Quality Credit Agreement for Chesapeake Bay Restoration.

Transferor: Hampton Roads Sanitation District

Transferee (MS4): Christopher Newport University

Years Credits Generated: _____

Dates Credits Transfer: _____

River Basin	TN (lbs/yr)	TP (lbs/yr)	TSS (lbs/yr)
James			

Nutrient Credit Costs

	Credits Needed (lbs/yr)	Asset Charge (One-Time) $/lb	Operational Costs $/lb/yr	Total Cost, 5 yrs
TN				
TP				

Signed (for HRSD): _____

Name (Print): _____

Title: _____

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HAMPTON ROADS WATER QUALITY CREDIT AGREEMENT
FOR CHESAPEAKE BAY RESTORATION
ATTACHMENT C

Draft Provision for the Use of HRSD-Generated Water Quality Credits for MS4 Chesapeake Bay TMDL Action Plan Development

The intent of this plan is the generation and use of TN, TP and TSS credits before and during operation of the SWIFT Project in collaboration with HRSD pursuant to the Hampton Roads Water Quality Credit Agreement for Chesapeake Bay Restoration to which CNU and HRSD are signatories. This compliance method is in lieu of more traditional stormwater retrofit projects, which may not be feasible to execute on a condensed 10-year schedule (i.e., Second and Third Bay TMDL Permit Cycles). Not only does this method have the advantage of more reliably meeting the MS4 Permit's short deadlines, but it is also beneficial to the public in that it will meet FMA's Chesapeake Bay TMDL reduction goals more cost-effectively than otherwise possible. This component of the plan is fully in accordance with Virginia Code §62.1-44.19:21 (TN and TP) and §62.1-44.19:21.1 (TSS). The quantity of reduction credits from the SWIFT Project that are allocated to this TMDL Action Plan for the James River Basin are _____ lbs/yr TN, _____ lbs/yr TP, and _____ lbs/yr TSS.

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HAMPTON ROADS WATER QUALITY CREDIT AGREEMENT
FOR CHESAPEAKE BAY RESTORATION
ATTACHMENT B

Water Quality Credit Transfer Form

Instructions: To be completed and executed by HRSD and delivered to CNU on or before each May 20 immediately following the calendar year of credit generation by HRSD.

By execution and delivery of this Credit Transfer Form, HRSD transfers the following water quality credits in the amounts specified to CNU in accordance with, and for the specific and limited purposes of, the Hampton Roads Water Quality Credit Agreement for Chesapeake Bay Restoration.

Transferor: Hampton Roads Sanitation District

Transferee (MS4): Christopher Newport University

Years Credits Generated: Calendar Years 2022 - 2026
Dates Credits Transfer: June 1 of the years 2023 - 2027

River Basin	TN (lbs/yr)	TP (lbs/yr)	TSS (lbs/yr)
James	34.68	8.61	3,895.55

Nutrient Credit Costs

	Credits Needed (lbs/yr)	Asset Charge (One-Time) $/lb	Operational Costs $/lb/yr	Total Cost, 5 yrs, $
TN	34.68	13.20	0.2896	507.99
TP	8.61	57.37	0.9305	534.01

Total Credit Costs: $1,042

Signed (for HRSD): _____

Name (Print): _____

Title: _____

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7. Nutrient Credit Management Policy Updates

1.0 Purpose and Need

Virginia regulations allow point source dischargers located within the same river basin to purchase or sell (trade) nutrient credits to facilitate compliance with annual wasteload allocations (WLAs). HRSD, as a member of the Virginia Nutrient Credit Exchange Association ("Exchange"), participates in a market-based trading program to help achieve nutrient reduction goals for the Chesapeake Bay.

Trades can be in the form of annual, term or perpetual transfers. A permanent transfer of credits can be achieved through the transfer of allocation. Similarly, nutrient offset requirements can be accommodated through the transfer or acquisition of necessary allocation. All allocation transfers are contingent upon approval of the Virginia Department of Environmental Quality (DEQ) in accordance with the "General Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia" ("General Permit").

This policy provides guidelines for HRSD's engagement in trading agreements that occur outside of the Exchange and in accordance with the rules and regulations that govern nutrient and sediment credit trading and offsets.

This policy combines and replaces two existing policies: HRSD's Nutrient Credit Offset Policy and HRSD Nutrient Credit Trading Policy.

2.0 Definitions

"Agreement" means a private transaction for the trade of nutrient and sediment credits occurring outside of the Exchange. Agreements can provide for annual, term or perpetual credit trades or offset allocations.

"Credit" means the difference between (i) the wasteload allocation for a permitted facility specified as an annual mass load of the pollutant (total nitrogen (TN), total phosphorus (TP) or total suspended sediment (TSS)) and (ii) the monitored annual mass load of the pollutant (TN, TP or TSS) discharged from that facility, where clause (ii) is less than clause (i), and where the difference is adjusted by the applicable delivery factor and expressed as pounds per year of delivered total nitrogen load.

DRAFT

"Offset" means the voluntary transfer of a discharger's waste load allocation or a portion of the allocation to a new or expanding facility located in the same Chesapeake Bay tributary.

"*Trading*" means the voluntary exchange of credits on an annual, term or perpetual basis between existing dischargers located in the same Chesapeake Bay tributary. Perpetual trades may be made permanent through the transfer of wasteload allocation or a portion of allocation.

"Virginia Nutrient Credit Exchange Association, Inc. (Exchange)" means the organization authorized by the Virginia General Assembly to manage a nutrient trading program.

"Wasteload allocation (WLA)" means a limit or cap on the amount of nitrogen and phosphorus that public and private point sources such as wastewater facilities may discharge into the Chesapeake Bay watershed.

3.0 Guiding Principles

HRSD, because it is a member of the Exchange and has accepted Water Quality Improvement Fund grants, is obligated to provide its excess credits to the Exchange. While it has no obligation to do so, HRSD will consider entering into private trading or offset agreements if providing the allocation will not jeopardize HRSD's WLA compliance. The following factors will be considered when evaluating trading and offset requests.

A. *Protection of HRSD 's interests and preservation of its ability to meet future needs*

HRSD's WLAs must remain sufficient to satisfy the projected growth. Any WLA reduction resulting from providing credits or an offset shall not create an unacceptably greater risk of non-compliance for HRSD.

B. *Regional benefits*

Trading and offset agreements should offer regional benefits (an impact across multiple jurisdictions) and/or support regional initiatives when possible.

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C. *Environmental stewardship*

The trading partner must have a strong record of environmental protection and compliance with all relevant regulations.

D. *Cost to HRSD ratepayers*

Trades and offsets should provide the region with maximum environmental benefit at the lowest net cost to our ratepayers.

E. *Location*

Jurisdictions within HRSD's service area will have priority when multiple trading/offset requests are received.

F. *Magnitude*

The number of credits or allocation provided will be the minimum necessary to meet regulatory requirements.

G. *Limitations on Use*

The credits and/or offset allocations are only available to the party designated in the Agreement. Credits or allocations are not transferrable to any other person or entity.

H. *Cost Reimbursement*

Agreements will include a requirement for reimbursement for legal and administrative costs incurred by HRSD in developing these agreements. On a case-by-case basis, HRSD may additionally require reimbursement for costs associated with the generation of credits or offsets.

DRAFT

4.0 Procedures

Point source dischargers seeking to enter into a trading or offset Agreement with HRSD must make a request in writing to the Chief of Technical Services.

Based on the merits of the request, HRSD staff will make a recommendation to the HRSD Commission.

The request for an annual extension of an Agreement also must be made in writing at least 90 days prior to expiration of the Agreement, evaluated by HRSD staff and approved by the HRSD Commission.

5.0 Responsibility and Authority

The HRSD Director of Water Quality or his/her designee shall prepare a written evaluation of each trading request *for HRSD General Manager review*.

~~The HRSD General Manager will review the evaluation and present a recommendation to the HRSD Commission.~~

Agreements and recommendations will be presented to the HRSD Commission as needed in accordance with Commission Governance Guidelines.

All regulations promulgated by the Virginia Department of Environmental Quality and procedures established by the Exchange shall be followed by HRSD in the implementation of this policy.

Approved: _____ _____

~~Frederick N. Elofson, CPA~~*Stephen C. Rodriguez*
Commission Chair

Date

Attest: _____ _____

Jennifer L. Cascio
Commission Secretary

Date

DRAFT

8. County of Accomack
Sewer Service Agreement

SEWER TRANSFER AND SERVICE AGREEMENT

This SEWER TRANSFER AND SERVICE AGREEMENT, is made on this 31st day of May, 2023 (the "**Effective Date**") by and between the COUNTY OF ACCOMACK, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as the "**County**") and HAMPTON ROADS SANITATION DISTRICT, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as "**HRSD**") (each individually a "**Party**" and collectively, the "**Parties**").

RECITALS

R:1. The County owns and operates those certain wastewater collection and conveyance systems situated in Accomack County, Virginia shown on **Exhibit A** that are connected to the Onancock Treatment Plant (collectively, the "**System**"). The System is located beneath, upon, and over easements, rights of way, strips of land, and other real property interests (the "**Property Interests**"), including but not limited to fee simple interests in the real property underlying the System's pump stations shown as "Area 1" on that certain preliminary plat titled "Division of the lands of Blue Barn Properties, LLC"; shown as "Area 2" on that certain preliminary plat titled "Division of the lands of Industrial Development Authority of Accomack County"; and shown as "Pump Station Lot" on that certain preliminary plat titled "Subdivision of Shopping Center Tract," all as attached hereto as **Exhibit B** (collectively, the "**Plats**").

R:2. The County has determined that it would be in the best interests of its citizens to transfer ownership and operational responsibility of the System to HRSD, and has therefore requested that HRSD work with the County to have the System and Property Interests transferred to and accepted by HRSD. HRSD has agreed to accept and operate the System and Property Interests upon the terms and conditions stated in this Agreement.

R:3. For clarity, as used herein a "wastewater collection system" is a network of pipes, manholes, and pumping stations to convey flow from individual properties to a regional interceptor or transmission pipe. Subject to and in accordance with the terms stated herein, the County may add additional wastewater collection systems in the future.

AGREEMENT

NOW THEREFORE, for and in consideration of the mutual covenants contained herein and the sum of Ten Dollars ($10.00) cash in hand, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Transfer of the Facilities. The County agrees to convey, and HRSD agrees to accept, upon the terms, provisions, and conditions hereinafter set forth, the System, as well as all Property Interests and any other County owned real property interests that the Parties have determined are needed for the operation of the System in the County. Said Property Interests shall include the improvements thereon and fixtures thereto attached that are owned by the County as of the date of this Agreement. To the extent the County does not currently have fee simple interests in the real property underlying the System's pump stations, HRSD agrees to

work diligently and in good faith with the County for the County to acquire and convey to HRSD such fee simple interests as part of the Property Interests. Furthermore, should any easement, right of way, strip of land, or other real property interest necessary to operate the System be discovered at any time to be lacking from the Property Interests herein conveyed, the County shall take the necessary action, and execute and deliver any other documents reasonably necessary or appropriate, to convey such interest to HRSD.

The County further agrees to transfer to HRSD all easements, highway permits, and all rights, including rights for installation, operation, maintenance, repair, relocation, renewal of, and access, to the sewers and force mains that lie either within or without public streets or public places of rights of way, together with all documents and information in the County's possession relating to the System and Property Interests. The System, Property Interests, and other associated interests, real and personal, are referred to herein as the "**Facilities**". The Parties agree to execute such further documentation or instruments as are necessary to confirm, effect, and memorialize the conveyance and transfer of the Facilities from the County to HRSD, including but not limited to a general or special warranty deed in recordable form and an assignment of all easements, permits, and other contractual rights relating to the Facilities. Within thirty (30) days of the Effective Date, the County will deliver to HRSD, at no cost to HRSD, without representations or warranties, true and complete copies of all documents and information relating to or affecting the Facilities that are within the County's possession or control.

2. **Continued County Use of Easements**. The Property Interests conveyed to HRSD hereunder shall be available without additional compensation for use by the County for water utility facilities with the prior written knowledge of HRSD. The County understands and agrees that its use of the Property Interests for water utility facilities cannot conflict with or otherwise prevent HRSD from efficiently and effectively operating and using the Property Interests for wastewater collection and treatment purposes. In that regard, the Parties understand and agree that appropriate separation must be maintained between water and sanitary sewer facilities within the same Property Interests. If a conflict exists, the County agrees that it cannot use the Property Interests for water facility purposes.

3. **Title to the Facilities**. The County represents and warrants that it owns fee simple absolute title to all of the real estate herein conveyed or will work diligently and in good faith to acquire fee simple title and subsequently convey to HRSD all of the real estate comprising the Property Interests. The County shall convey marketable title to the Property Interests and other property interests that are among the Facilities by general or special warranty deed, free and clear of any liens or encumbrances which, in the reasonable judgment of HRSD, have a materially adverse effect upon the right of HRSD to use such lands or property in the performance of the functions of HRSD or would preclude HRSD from obtaining owners title insurance on the Facilities at reasonable rates. Prior to accepting the Property Interests conveyed pursuant to this Agreement, HRSD shall have received a commitment for an owner's policy of title insurance, which commitment shall include a report of the state of title to such Property Interests showing title to be marketable, in all ways satisfactory to HRSD and free and clear of all liens and encumbrances except those that will be satisfied at closing and the usual utility easements not adversely affecting title to the Property Interests.

4. **HRSD Sewer Services.** When all of the Facilities are transferred to HRSD and incorporated into its system, HRSD agrees to provide interceptor and sewer treatment services to the areas that are currently existing HRSD Sewer Service Areas, which are identified on **Exhibit C** hereto (the "**HRSD Sewer Service Areas**"), pursuant to and in accordance with its standard practices and controlling law and the provisions stated herein. HRSD shall be responsible for and entitled to all rights, obligations, and responsibilities associated with the provision of sewer service, including but not limited to the installation, maintenance, operation, and repair of the System (except as otherwise provided herein) and the collection of payment from the recipients of such services in the County. HRSD agrees to provide adequate capacity to treat all sewage generated within the HRSD Sewer Service Areas in accordance with all applicable laws and regulations at HRSD's cost. In the event that any HRSD permit relating to treatment of sewage is suspended or revoked, or in the event other circumstances beyond the control of the parties prevents HRSD from treating sewage within the HRSD Sewer Service Areas, HRSD agrees to work with the County to identify and implement measures, temporary or long-term, that will allow adequate treatment of such sewage.

5. **Expansion of Sewer Service Areas**. The County's designated Central Accomack Water and Sewer Service Area as identified on **Exhibit D** may be amended or expanded by the County, through designation in the County's Comprehensive Plan (including any necessary §15.2-2232 review) and an approved resolution of the County's Board of Supervisors. HRSD may expand the HRSD Sewer Service Areas to be in alignment with the County's designated or expanded sewer service areas if requested by the County, and the provision of conveyance and treatment are viable and acceptable as determined by HRSD. HRSD's determination of adequate capacity for the HRSD Sewer Service Areas and any expansion thereof will be reasonably anticipated and based upon current and future land use as approved in the County Comprehensive Plan. The County agrees to notify HRSD of any proposed future changes to the Comprehensive Plan's land use designations that will impact HRSD's treatment capacity in order to allow HRSD the opportunity to evaluate and advise the County as to whether HRSD can reasonably accommodate any such impact.

6. **Sewer Collection Systems.** HRSD is not responsible for the construction or funding of any new sewer collection systems and/or extensions of existing collection systems. The County may enter into agreements with third parties for such purposes and may impose and collect connection and other fees for such costs in addition to any charges that may be imposed and collected by HRSD. Charges and/or connection fees due to County resulting from agreements between County and third parties existing on the date of this Agreement shall continue to be collected by the County and HRSD shall have no rights or responsibilities related to such charges. The County will be responsible for establishing all necessary new accounts for any such new or extended system, after which established accounts shall be transferred to HRSD and billed by HRSD in accordance with Section 9 (Billing) hereof and the applicable HRSD Billing Agreement. Any such new or extended sewer collection systems shall be built to HRSD standards and connected to the System only upon written approval and acceptance by HRSD. HRSD will not accept, own or operate low pressure force main collection systems. Upon meeting HRSD's final inspection requirements and before being placed in service, any such new or extended sewer collection systems shall be conveyed to HRSD in the same manner and upon

the same terms and conditions as prescribed for the conveyance of the System herein, and shall thereafter be considered part of the System.

7. **HRSD Operation of Facilities.** HRSD shall maintain and operate the Facilities, including the wastewater collection system, interceptor system, and all treatment facilities, in accordance with all applicable laws and regulations, with the goal of providing the following levels of service:

a. Treatment Facilities: Permit compliance for ninety-nine percent (99%) of all permit parameters in a calendar year.

b. Interceptor & Transmission System Facilities: Investigation into facility failures and/or overflows within two (2) hours of notification. Corrective action to remediate as soon as possible thereafter.

c. Collection System Facilities: Investigation into facility failures and/or overflows within four (4) hours of notification. Corrective action to remediate as soon as possible thereafter.

d. System Odors: Investigation into source and/or cause of odor complaints within two (2) days of notification. Corrective action to remediate as soon as possible thereafter.

8. **HRSD Expansion / County Cooperation.** The County shall cooperate with and support HRSD in the planning, scheduling, locating, and constructing of new or replacement facilities that HRSD determines are required for the provision of HRSD's services or the operation of the Facilities, including as follows:

a. The County shall promptly notify HRSD in writing of any proposed changes to the County's Comprehensive Plan, as well as any proposed developments in the County pursuant to the existing Comprehensive Plan, with potential to add sewer flow to HRSD Facilities or require expansion of the Facilities.

b. The determination of whether to expand the HRSD Facilities, undertake new construction, or accept new sewer flow shall be in HRSD's sole discretion (subject to any County review required under § 15.2-2232 of the Code of Virginia). Projects requiring HRSD Facilities expansion or construction of new facilities will only be incorporated into the System once HRSD agrees to undertake and thereafter completes the work necessary to accept the proposed new sewer flow. HRSD Facilities expansion may include but is not limited to:
   i. Facilities expansion and/or construction;
   ii. Extension of conveyance service; and/or
   iii. Additional treatment capacity, beyond current permitted capacity.

c. If HRSD Facilities expansion or new construction requires County zoning, site plan, or other administrative approvals, the County agrees to provide reasonable cooperation and assistance with regard to the same.

d. County-owned real property, including easements and fee simple interests, required for new or expanded HRSD conveyance facilities, including pipelines and pump stations, shall be provided to HRSD at no cost to HRSD. Any relocation of HRSD Facilities at the request of the County shall be at the County's cost, including facilities on County-owned land or within public rights-of way.

e. In the event required easements do not exist for wastewater collection system assets, the County will assist HRSD with negotiating acquisition of such easements. Should easements need to be purchased from private property owners, County will share the cost of easement purchase with HRSD on an equal basis – each party paying half the purchase price. HRSD will pay all other legal, surveying, and other costs required to acquire the easements.

9. Billing. All sewer customers in the HRSD Sewer Service Areas shall be HRSD customers and billed for services in accordance with the then-current HRSD Rate Schedule and applicable policies. The County agrees to provide HRSD with any information in its possession that is necessary to bill current customers. The process by which new connections and customers are added to the System shall be agreed to by HRSD and the County by separate billing agreement.

10. Third Party Services. HRSD, at its sole discretion, may self-perform or contract for provision of any or all services required to fulfill HRSD's obligations under this Agreement.

11. County Right of First Refusal. The parties acknowledge that the Property Interests are being conveyed hereunder at no cost or liability to HRSD. Accordingly, at such time as HRSD shall determine, in its sole discretion, and consistent with the HRSD Commission adopted policy for Disposition of Real Property, that any of the Property Interests are no longer useful or necessary for the purposes of HRSD, HRSD shall offer to convey to the County, at no cost and liability to the County, said Property Interests, before otherwise disposing of said Property Interests pursuant to the HRSD Commission adopted policy for Disposition of Real Property.

12. General Provisions.

a. Entire Agreement: This Agreement, and any exhibits or attachments made hereto, represent the full agreement and understanding of the Parties hereto, there being no additional agreements written, oral or otherwise.

b. Amendment. This Agreement may be amended only with written approval of both of the parties hereto.

c. Assignment. HRSD may assign or transfer this Agreement in whole or in part with written approval from the County.

d. Authority: County and HRSD both represent and warrant that they have permission and authority derived under their respective controlling law, corporate charters, and

enabling acts to execute and undertake this Agreement and that all necessary actions of the Accomack County Board of Supervisors to allow execution of this Agreement have been completed, and that all necessary Resolutions and actions of the Commission of HRSD to allow execution of this Agreement have been completed. This Agreement shall apply to, and be binding upon both parties, their elected officials, officers, successors, and assigns, in their official capacity, to the maximum extent permitted by law.

e. Notices. All notices, communication or request required pursuant to the terms of this Agreement shall be provided in writing by either (1) hand-delivery if the receipt of the same is evidenced by the signature of the addressee or authorized agent, (2) electronic mail with confirmation of receipt, (3) a nationally recognized overnight delivery service (next business day service), addressed to County and to HRSD at the respective addresses herein shown, unless this Agreement is modified in writing to reflect other addresses:

For: County of Accomack
c/o Michael T. Mason,
County Administrator
P.O. Box 388
Accomac, VA 23301
Email: mmason@co.accomack.va.us
Telephone: (757) 787-5700

With Copy to:
Jan L. Proctor
P.O. Box 709
Accomac, VA 23301
Email: countyattorney@co.accomack.va.us

For: Jay Bernas,
General Manager
1434 Air Rail Avenue
Virginia Beach, VA 23455
Email: generalmanager@hrsd.com
Telephone: (757) 318-4335

With Copy to:
Robyn Hansen
Sands Anderson PC
Attorney
4801 Courthouse Street, Suite 203
Williamsburg, VA 23188
Email: Rhansen@sandsanderson.com

f. Compliance with Law: Each Party warrants that it has complied with all aspects of applicable federal, state, and local law in entering this Agreement and further warrants that it shall comply with all applicable federal, state, and local laws in the performance of this Agreement.

g. No Violation: The execution of this Agreement by the Parties will not violate any covenant, condition, or contract to which the Parties hereto are subject at the time of execution.

h. Governing Law; Venue: This Agreement shall be governed as to all matters whether of validity, interpretations, obligations, performance or otherwise exclusively by the laws of the Commonwealth of Virginia, and all questions arising with respect thereto shall be determined in accordance with such laws. Regardless of where actually delivered and accepted, this contract shall be deemed to have been delivered and accepted by the parties in the Commonwealth of Virginia.

i. Enforcement: The failure of either Party to enforce the terms of this Agreement shall not be considered a waiver as to the enforceability of such terms. If any provision of this Agreement is found to be unenforceable, the remainder of this Agreement shall remain in full force and effect.

j. Survival: This Agreement shall survive settlement and conveyance of title and shall terminate only upon the written agreement of both parties.

k. Force Majeure: No Party shall be responsible for its failure to fulfill an obligation pursuant to this Agreement to the extent that such failure is due to acts of God; labor strikes; war or terrorism; the actions of another Party; lockouts; or other events not reasonably within the control of the Party claiming force majeure. A party experiencing a force majeure event that prevents fulfillment of a material obligation hereunder shall (a) give the other party prompt written notice describing the particulars of the event; (b) suspend performance only to the extent and for the duration that is reasonably required by the force majeure event; (c) use reasonable efforts to overcome or mitigate the effects of such occurrence; and (d) promptly resume performance of the affected obligation if and when such Party is able to do so.

l. Counterparts: This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original as against any Party whose signature appears thereon, and all of which shall together constitute one and the same instrument. A signature affixed or delivered electronically will be considered an original.

m. Binding Effect: This Agreement shall inure to the benefit of the parties and shall, to the maximum extent permitted by law, be binding on the Parties and their successors and assigns.

n. Survival: All representations and warranties contained herein shall survive closing and conveyance of the Property Interests.

o. Reservation: Except as expressly provided herein, nothing in this Agreement shall be construed to limit or otherwise affect the authority, rights, or responsibilities of the parties.

p. Regulatory Approvals. Notwithstanding anything in this Agreement to the Contrary, HRSD approval is contingent on receipt of a release, in a form satisfactory to HRSD, of any and all security interests in the Facilities related to grants and/or loans from USDA, VRA and DEQ. Failure to provide this release shall nullify this Agreement.

q. Commission Approval. This Agreement is contingent on the review and approval by Hampton Roads Sanitation District Commission and upon such Commission granting authorization to the General Manager to proceed under the terms of this Agreement.

r. County Approval. The Agreement is contingent on approval by majority vote of the Accomack County Board of Supervisors and the granting of authority to the County Administrator or designee to take such action as may be necessary to implement the terms of this Agreement, provided that any proposed conveyance of property shall be approved by the Accomack County Board of Supervisors in accordance with state law.

[Signatures on following pages]

IN WITNESS WHEREOF, the County has caused this Agreement to be signed on its behalf by its duly authorized officers in accordance with authorization granted at its regular meeting held on May 31, 2023.

COUNTY:

Approved as to form:

County Attorney

Date: 5/31/2023

County of Accomack, Virginia

By:

Title: County Administrator

Date: 5/31/2023

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 April 25, 2023.

HRSD:

By:

Jay Bernas, General Manager

Date: 4/25/2023

EXHIBIT A

The System

ACCOMACK COUNTY WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

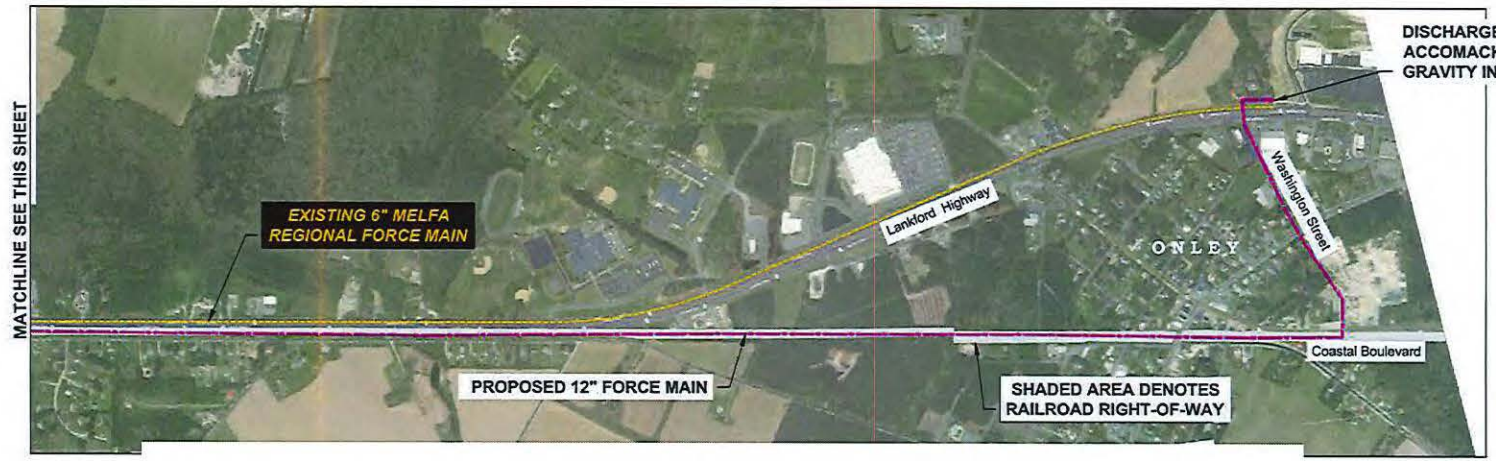
0 500 1,000 2,000 Feet

N

ACCOMACK COUNTY GRAVITY INTERCEPTOR

EXHIBIT A-1

ACCOMACK COUNTY WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

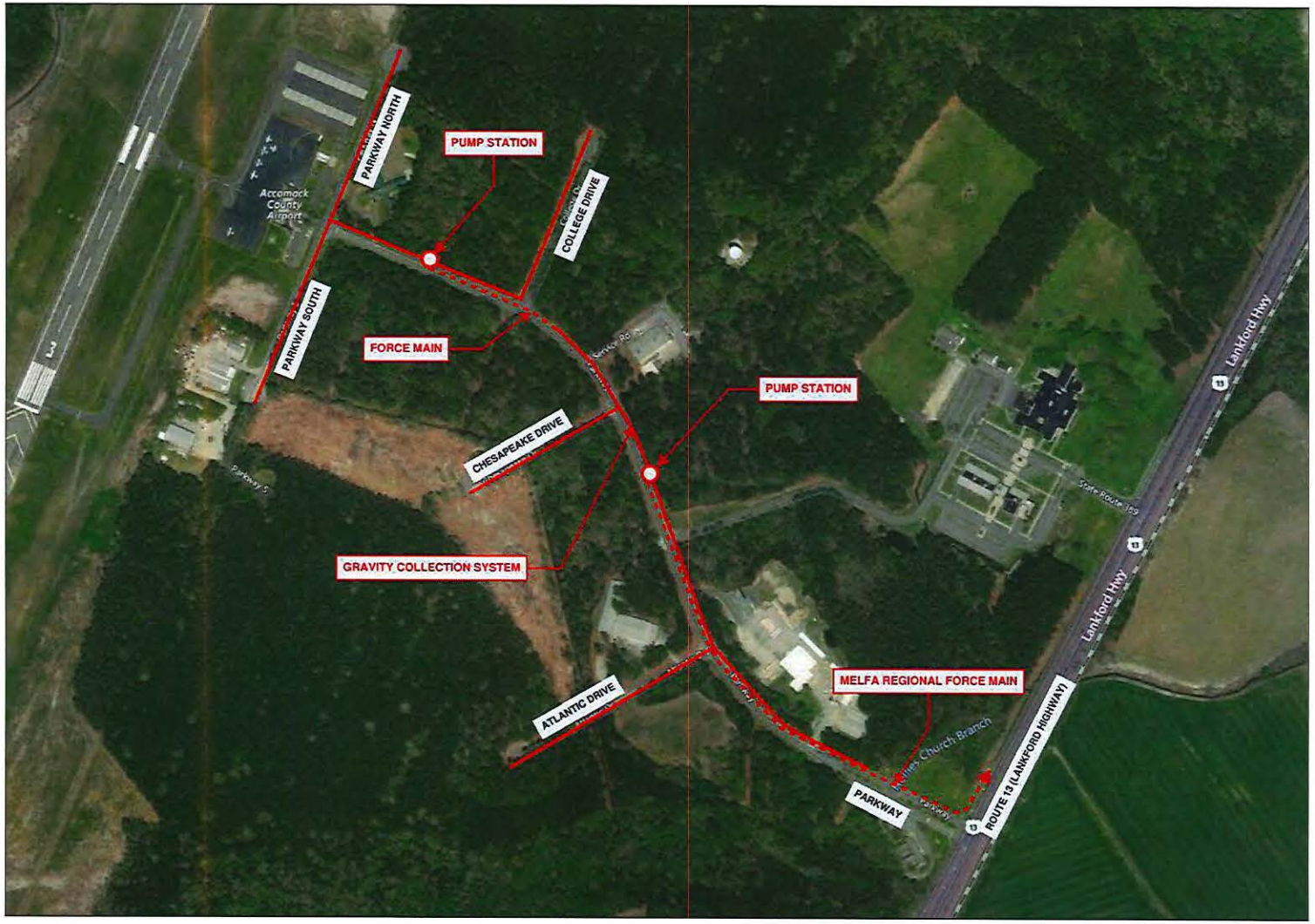


1000' 500' 0 1000'
1"=1000'
GRAPHIC SCALES

ACCOMACK COUNTY MELFA REGIONAL FORCE MAIN

EXHIBIT A-2

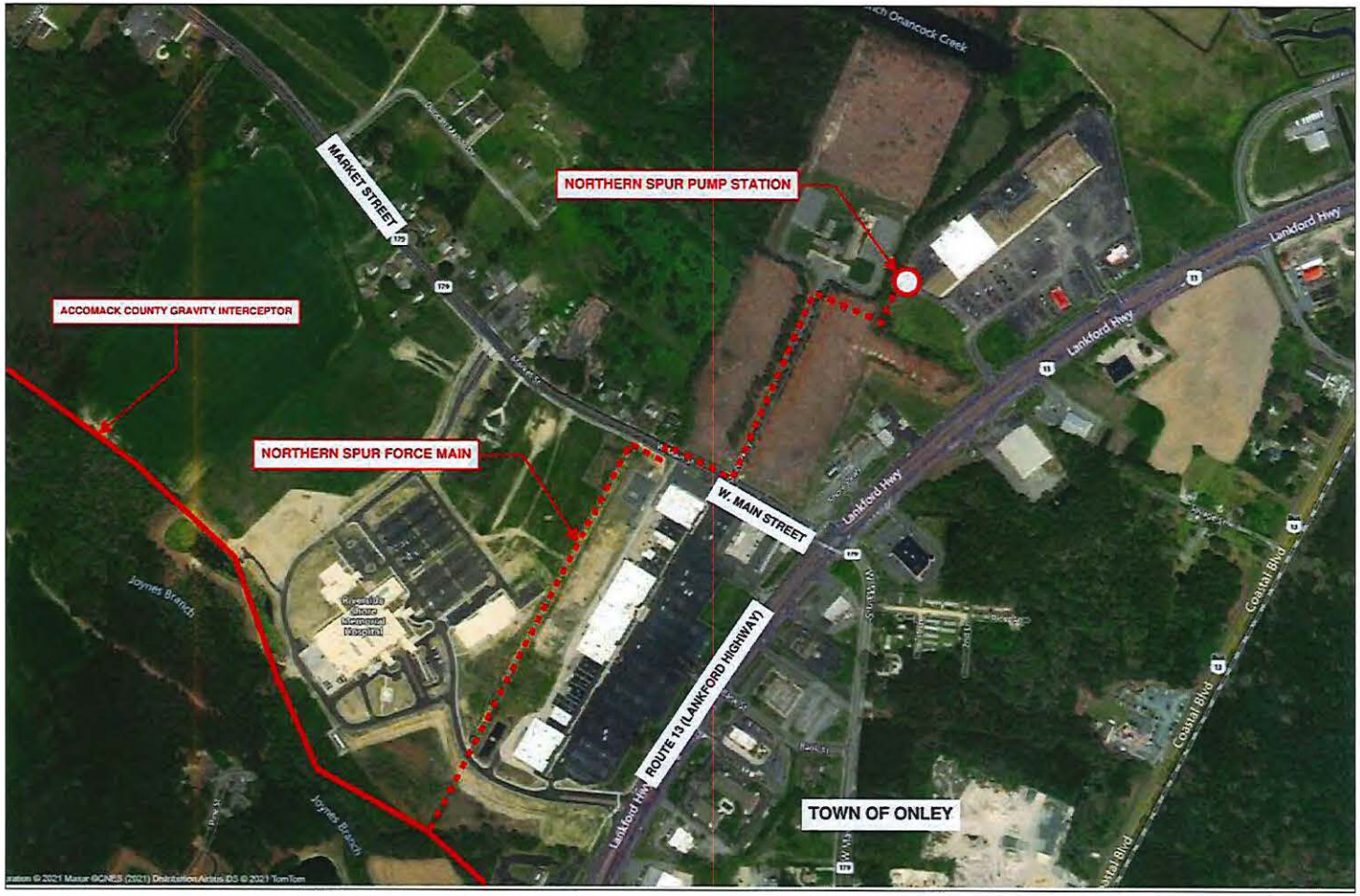
ACCOMACK COUNTY WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS



ACCOMACK COUNTY INDUSTRIAL/BUSINESS PARK

EXHIBIT A-3

ACCOMACK COUNTY WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

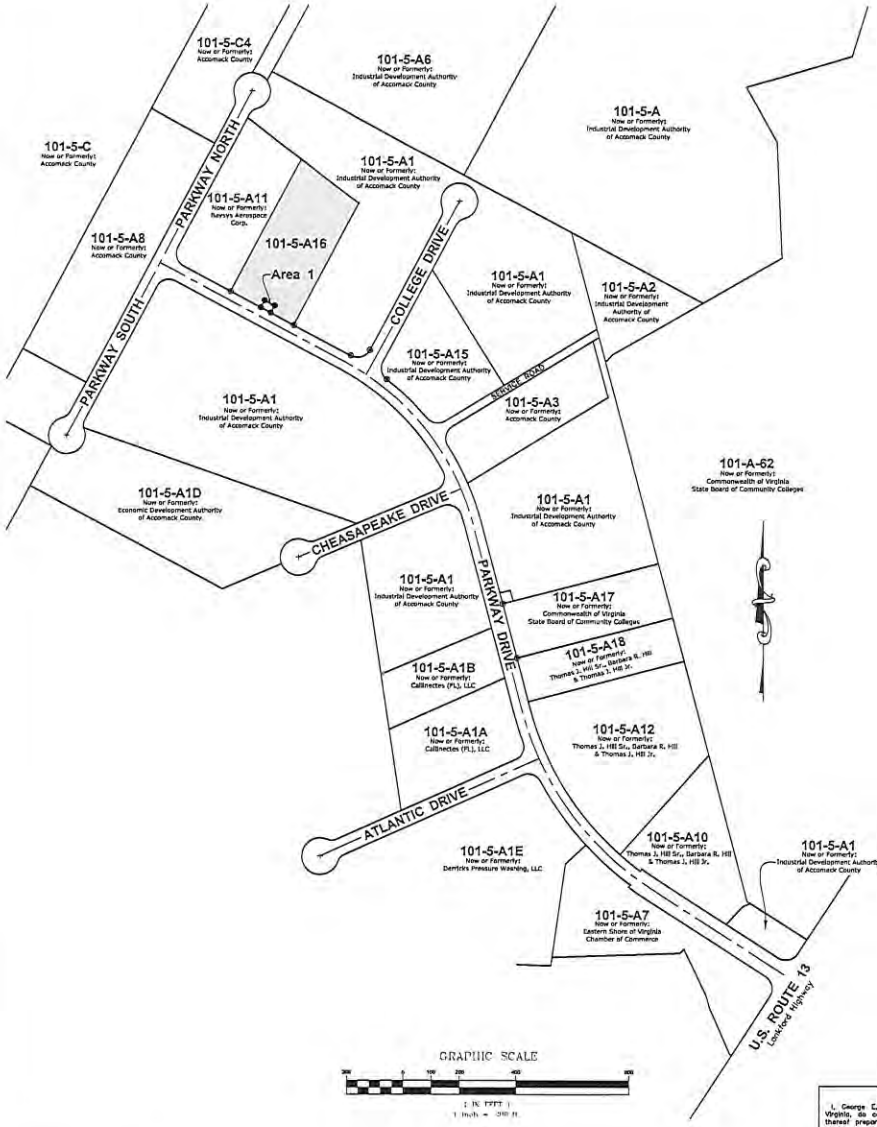


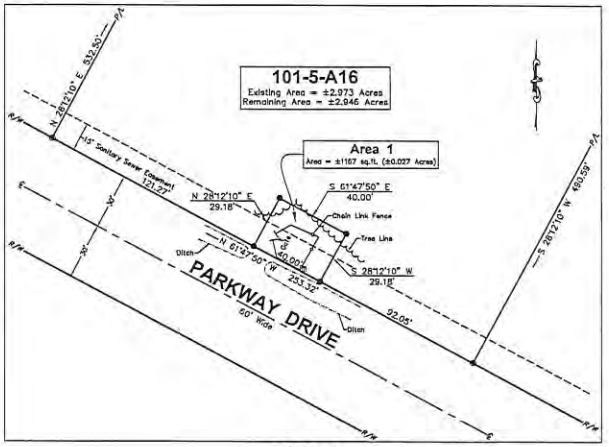
ACCOMACK COUNTY NORTHERN SPUR PUMP STATION AND FORCE MAIN

EXHIBIT A-4

EXHIBIT B

The Plats





AREA 1
Scale: 1" = 30'

VICINITY MAP
SCALE: 1" = 2000'±

SITE NOTES:

1. OWNER:
   Blue Barn Properties, LLC
   P.O. Box 868
   Kilmarnock, VA 22482
2. Tax Map No. 101-5-A16
3. Parcel ID 101000500A00016
4. Deed Ref.: 2018-00638
5. Plat Ref.: 94/152, 98/64, 98/85, 200502281 Pg. 3
6. Zoned: Industrial
7. Existing Area of 101-5-A16 = ±2.973 Acres
8. Area 1 = ±0.027 Acres
   Remaining Area of 101-5-A16 = ±2.946 Acres
9. By scaled map location and graphic plotting only, the subject property appears to lie entirely in Zone X (Areas determined to be outside the 0.2% annual chance floodplain) according to the Flood Insurance Rate Map for Accomack County, VA, Community Panel No. 5100100020G, Effective Date May 18, 2015.
10. Based on the Accomack County, VA Mapping Web Site, this site lies within the Chesapeake/Atlantic Preservation Area, Resource Management Area.
11. Based on the Accomack County, VA Mapping Web Site, there do not appear to be any wetlands located on this site.
12. No abstract title was provided prior to this survey.
13. All utilities are underground or as shown on this survey.
14. No water or sewer was located for this plat.

PURPOSE STATEMENT

The purpose of this plat is to establish boundaries around the existing sewage lift station which is being utilized by the Accomack County Public Works office.

SURVEYOR'S CERTIFICATION

I, George E. Young, III, a Registered Land Surveyor of the State of Virginia, do certify the land shown hereon has been laid out and plat thereof prepared in accordance with the provisions of Part V, Sections 18VAC 10-20-370 – 18VAC 10-20-380, Rules and Regulations of the Virginia Department of Commerce. This survey was based on an actual field survey.

PRELIMINARY

George E. Young, III
Professional Land Surveyor, VA No. 1700

Date

LEGEND	
R/W	– RIGHT-OF-WAY LINE
℄	– CENTERLINE OF ROAD
P/L	– PROPERTY LINE
●	– IRON ROD FOUND
●	– IRON ROD w/ CAP SET
☎	– TELEPHONE PEDESTAL

Date Plotted: 12/9/2022

DIVISION
OF THE LANDS OF
BLUE BARN PROPERTIES, LLC
TAX MAP 101-5-A16
PARCEL ID 101000500A00016
ACCOMACK COUNTY, VIRGINIA

REVISIONS:

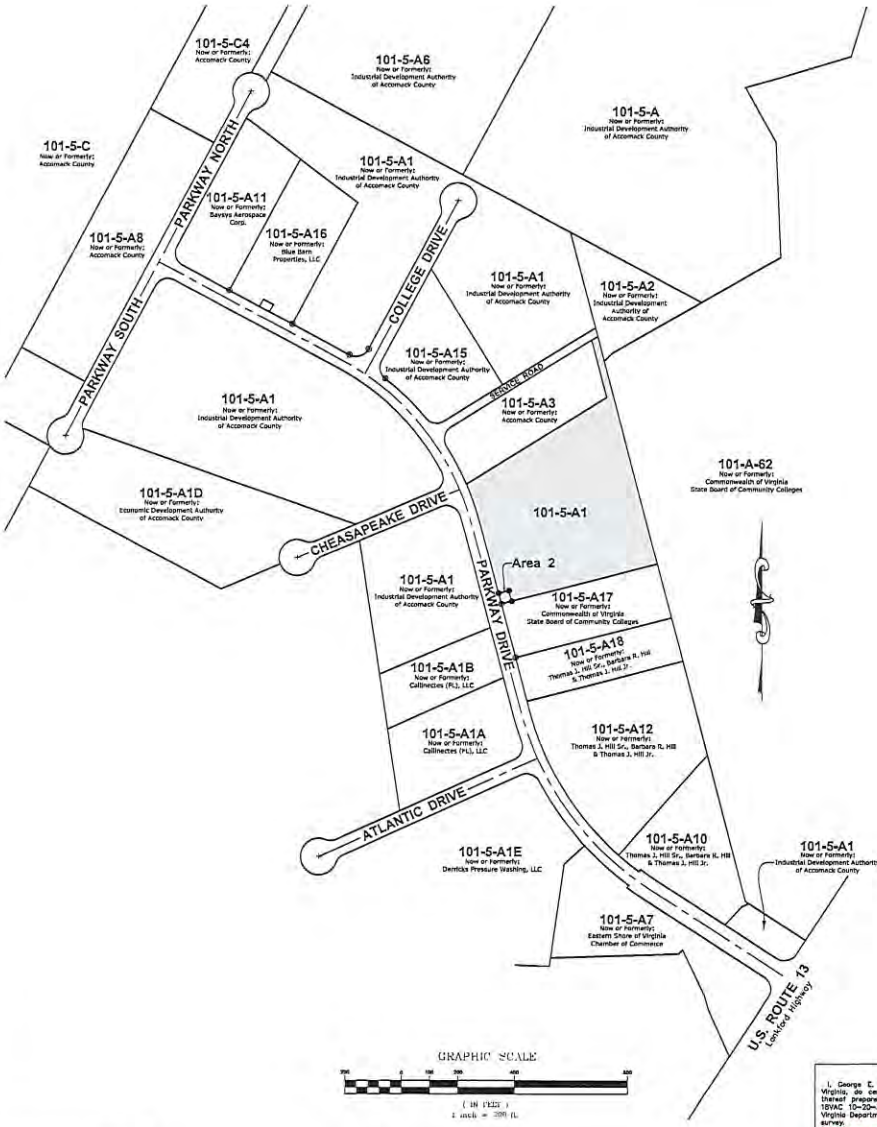
GEORGE E. YOUNG, III, P.C.
ENGINEERS & SURVEYORS
1603 MARKET STREET
POCOMOKE MARYLAND 21851
PHONE: (410)-957-2149
FAX: (410)-957-2928

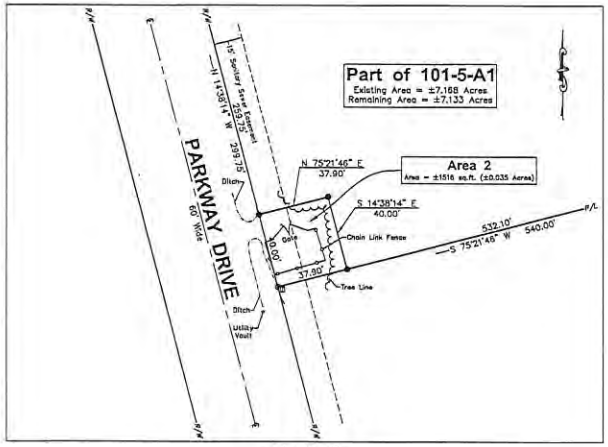
SCALE: 1" = 30'
DRAWN BY: MPB
DATE DRAWN: Dec. 2022
DESIGNED BY: GEY
CHECKED BY: GEY
CADD DWG. NAME:
V22186.dwg

PROJECT NUMBER
V22186

SHEET OF
1 1

Exhibit B-1





AREA 2
Scale: 1" = 30'

VICINITY MAP
SCALE: 1" = 2000'±

SITE NOTES:

1. OWNER:
Industrial Development Authority of Accomack County
P.O. Box 420
Melfa, VA 23410
2. Tax Map No. 101-5-A1
3. Parcel ID 101000500A00001
4. Deed Ref.: 24/52
5. Plat Ref.: 88/84, 88/85, 200705136 Pg. 4
6. Zoned: Industrial
7. Existing Area of 101-5-A1 = ±140.35 Acres
8. Area 2 = ±64.00 Acres
Remaining Area of 101-5-A1 = ±76.35 Acres
9. By scaled map location and graphic plotting only, the subject property appears to lie entirely in Zone X (Areas determined to be outside the 0.2% annual chance floodplain) according to the Flood Insurance Rate Map for Accomack County, VA, Community Panel No. 51001C0020D, Effective Date May 18, 2015.
10. Based on the Accomack County, VA Mapping Web Site, this site lies within the Chesapeake/Atlantic Preservation Area, Resource Management Area.
11. Based on the Accomack County, VA Mapping Web Site, there appear to be wetlands located on this site.
12. No abstract title was provided prior to this survey.
13. All utilities are underground or as shown on this survey.
14. No water or sewer was located for this plat.

PURPOSE STATEMENT

The purpose of this plat is to establish boundaries around the existing sewage lift station which is being utilized by the Accomack County Public Works office.

DIVISION
OF THE LANDS OF
INDUSTRIAL DEVELOPMENT AUTHORITY OF ACCOMACK COUNTY
TAX MAP 101-5-A1
PARCEL ID 101000500A00001
ACCOMACK COUNTY, VIRGINIA

SURVEYOR'S CERTIFICATION

I, George E. Young, III, a Registered Land Surveyor of the State of Virginia, do certify the land shown hereon has been laid out and plat thereof prepared in accordance with the provisions of Part V, Sections 18VAC 10-20-370 – 18VAC 10-20-380, Rules and Regulations of the Virginia Department of Commerce. This survey was based on an actual field survey.

PRELIMINARY

George E. Young, III
Professional Land Surveyor, VA No. 1700

Date

LEGEND

R/W	– RIGHT-OF-WAY LINE
℄	– CENTERLINE OF ROAD
P/L	– PROPERTY LINE
⊕	– IRON ROD FOUND
●	– IRON ROD w/ CAP SET
⊠	– TELEPHONE PEDESTAL

Date Plotted: 12/9/2022

REVISIONS:

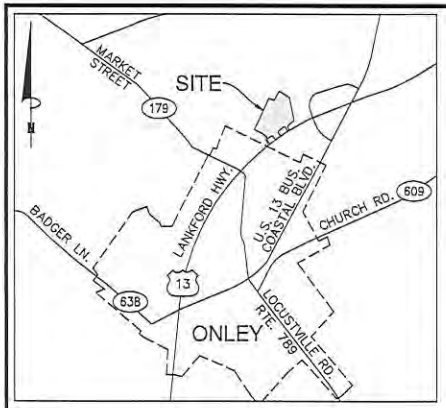
GEY
GEORGE E. YOUNG, III, P.C.
ENGINEERS & SURVEYORS
1603 MARKET STREET
POCOMOKE MARYLAND 21851
PHONE: (410)-957-2149
FAX: (410)-957-2928

SCALE: 1" = 30'
DRAWN BY: MPB
DATE DRAWN: Dec. 2022
DESIGNED BY: GEY
CHECKED BY: GEY
CADD DWG. NAME:
V22186.dwg

PROJECT NUMBER
V22186

SHEET OF
1 1

Exhibit B-2



VICINITY MAP
NOT TO SCALE

NOTES

1. THE MERIDIAN SOURCE AND COORDINATES, IF SHOWN, REFER TO THE VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD 83), (U.S. SURVEY FOOT).
2. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY NOT SHOW ANY/ALL ENCUMBRANCES UPON THE TITLE.
3. SHOPPING CENTER TRACT, "6.106 ACRES", "701,530 SQ. FT." (P.B. 98, PG. 24) SHOWN HEREON IS LOCATED IN ACCOMACK COUNTY, VIRGINIA AND IS COMPRISED OF THE FOLLOWING TAX PARCELS PER ACCOMACK COUNTY GIS RECORDS: TAX MAP NUMBER 93-A-87A4.
4. TAX MAP NUMBER 93-A-87A4 AS SHOWN HEREIN IS CLASSIFIED AS "GENERAL BUSINESS" PER ACCOMACK COUNTY GIS RECORDS.
5. THIS PLAT DOES NOT INTEND TO DEPICT THE LOCATIONS OF BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS SITUATED ON THE PROPERTY.
6. THIS PLAT DOES NOT INTEND TO DEPICT ANY WETLANDS, HAZARDOUS WASTE, AND OTHER ENVIRONMENTAL CONDITIONS UNLESS OTHERWISE NOTED OR SHOWN.
7. THE PROPERTY SHOWN HEREON APPEARS TO FALL WITHIN ZONE "X" (AREAS OF MINIMAL FLOOD HAZARD) ACCORDING TO F.E.M.A.'S FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR ACCOMACK COUNTY, VIRGINIA, MAP NUMBER 51001C0630G, MAP EFFECTIVE DATE: MAY 8, 2015.

   FLOOD ZONE DESIGNATIONS NOTED OR SHOWN HEREON ARE APPROXIMATE AND ARE PER FEMA'S NATIONAL FLOOD HAZARD LAYER (NFHL) VIEWER GIS DATA FOR THE CITY OF FRANKLIN, VIRGINIA. THIS FLOOD ZONE DETERMINATION IS NOT A RECOMMENDATION TO PURCHASE OR NOT PURCHASE FLOOD INSURANCE COVERAGE AND DOES NOT IMPLY THAT THE PROPERTY SHOWN HEREON WILL OR WILL NOT BE FREE FROM FLOOD DAMAGE.
8. AREAS SHOWN HEREIN WERE DETERMINED USING FIELD MEASUREMENTS WHERE NOTED.

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, IS CORRECT, AND COMPLIES WITH THE REQUIREMENTS, ORDINANCES, AND REGULATIONS OF ACCOMACK COUNTY, VIRGINIA, REGARDING THE PLATTING OF SUBDIVISIONS HAVE BEEN COMPLIED WIDTH.

GIVEN UNDER MY HAND THIS _____ DAY OF_____, 20____.

JOSEPH L. DORAN, L.S. VIRGINIA LIC. NO. 002841

SOURCE OF TITLE

TAX MAP NUMBER: 93-A-87A4
GRANTOR: SW CHESAPEAKE, LLC, A LOUISIANA LIMITED LIABILITY COMPANY
GRANTEE: CHESAPEAKE SQUARE ASSOCIATES, LLC, A VIRGINIA LIMITED LIABILITY COMPANY
INSTRUMENT NUMBER 000004297 DATED SEPTEMBER 1, 2001

OWNER'S CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND "SUBDIVISION OF SHOPPING CENTER TRACT, "16.106 ACRES", "701,530 SQ. FT." AS SHOWN ON PLAT BOOK 98 AT PAGE 24" IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS, AND TRUSTEES, IF ANY.

CHESAPEAKE SQUARE ASSOCIATES, LLC

SIGNATURE DATE

PRINT NAME

PRINT TITLE

NOTARY CERTIFICATE

STATE OF VIRGINIA,
CITY OR COUNTY OF _____, TO WIT:
I, _____, A NOTARY PUBLIC IN AND FOR THE CITY OR COUNTY OF _____, VIRGINIA, DO HEREBY CERTIFY THAT _____, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING HAS ACKNOWLEDGED THE SAME BEFORE ME IN MY CITY OR COUNTY AND STATE AFORESAID.

GIVEN UNDER MY HAND THIS _____ DAY OF_____, 20____.
MY COMMISSION EXPIRES: _____

REGISTRATION NO. NOTARY PUBLIC

OWNER'S CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND "SUBDIVISION OF SHOPPING CENTER TRACT, "16.106 ACRES", "701,530 SQ. FT." AS SHOWN ON PLAT BOOK 98 AT PAGE 24" IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS, AND TRUSTEES, IF ANY.

NORTH OF MARKET HOLDINGS, LLC

SIGNATURE DATE

PRINT NAME

PRINT TITLE

NOTARY CERTIFICATE

STATE OF VIRGINIA,
CITY OR COUNTY OF _____, TO WIT:
I, _____, A NOTARY PUBLIC IN AND FOR THE CITY OR COUNTY OF _____, VIRGINIA, DO HEREBY CERTIFY THAT _____, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING HAS ACKNOWLEDGED THE SAME BEFORE ME IN MY CITY OR COUNTY AND STATE AFORESAID.

GIVEN UNDER MY HAND THIS _____ DAY OF_____, 20____.
MY COMMISSION EXPIRES: _____

REGISTRATION NO. NOTARY PUBLIC

Exhibit B-3

OWNER'S CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND "SUBDIVISION OF SHOPPING CENTER TRACT, "16.106 ACRES", "701,530 SQ. FT." AS SHOWN ON PLAT BOOK 98 AT PAGE 24" IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS, AND TRUSTEES, IF ANY.

BNE RESTAURANT GROUP II, LLC

SIGNATURE DATE

PRINT NAME

PRINT TITLE

NOTARY CERTIFICATE

STATE OF VIRGINIA,
CITY OR COUNTY OF _____, TO WIT:
I, _____, A NOTARY PUBLIC IN AND FOR THE CITY OR COUNTY OF _____, VIRGINIA, DO HEREBY CERTIFY THAT _____, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING HAS ACKNOWLEDGED THE SAME BEFORE ME IN MY CITY OR COUNTY AND STATE AFORESAID.

GIVEN UNDER MY HAND THIS _____ DAY OF_____, 20____.
MY COMMISSION EXPIRES: _____

REGISTRATION NO. NOTARY PUBLIC

OWNER'S CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND "SUBDIVISION OF SHOPPING CENTER TRACT, "16.106 ACRES", "701,530 SQ. FT." AS SHOWN ON PLAT BOOK 98 AT PAGE 24" IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS, AND TRUSTEES, IF ANY.

EILEEN M. DILLEY DATE

NOTARY CERTIFICATE

STATE OF VIRGINIA,
CITY OR COUNTY OF _____, TO WIT:
I, _____, A NOTARY PUBLIC IN AND FOR THE CITY OR COUNTY OF _____, VIRGINIA, DO HEREBY CERTIFY THAT EILEEN M. DILLEY, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING HAS ACKNOWLEDGED THE SAME BEFORE ME IN MY CITY OR COUNTY AND STATE AFORESAID.

GIVEN UNDER MY HAND THIS _____ DAY OF_____, 20____.
MY COMMISSION EXPIRES: _____

REGISTRATION NO. NOTARY PUBLIC

OWNER'S CONSENT

THE PLATTING OR DEDICATION OF THE FOLLOWING DESCRIBED LAND "SUBDIVISION OF SHOPPING CENTER TRACT, "16.106 ACRES", "701,530 SQ. FT." AS SHOWN ON PLAT BOOK 98 AT PAGE 24" IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS, AND TRUSTEES, IF ANY.

HARRY T. PARKER DATE

PATRICIA H. PARKER DATE

NOTARY CERTIFICATE

STATE OF VIRGINIA,
CITY OR COUNTY OF _____, TO WIT:
I, _____, A NOTARY PUBLIC IN AND FOR THE CITY OR COUNTY OF _____, VIRGINIA, DO HEREBY CERTIFY THAT HARRY T. PARKER & PATRICIA H. PARKER, WHOSE NAMES AR SIGNED TO THE FOREGOING WRITING HAS ACKNOWLEDGED THE SAME BEFORE ME IN MY CITY OR COUNTY AND STATE AFORESAID.

GIVEN UNDER MY HAND THIS _____ DAY OF_____, 20____.
MY COMMISSION EXPIRES: _____

REGISTRATION NO. NOTARY PUBLIC

Bowman
© Bowman Consulting Group, Ltd.
Phone: 804.616.3240
www.bowman.com
947 MEYERS STREET, SUITE B
RICHMOND, VIRGINIA 23230

REVISIONS

REVISION	DESCRIPTION	DATE

SUBDIVISION OF
SHOPPING CENTER TRACT
"16.106 ACRES"
"701,530 SQ. FT."
AS SHOWN ON
PLAT BOOK 98 AT PAGE 24

LEE MAGISTERIAL DISTRICT
ACCOMACK COUNTY, VIRGINIA

COMMONWEALTH OF VIRGINIA
JOSEPH L. DORAN
Lic. No. 002841
03/13/2023
LAND SURVEYOR

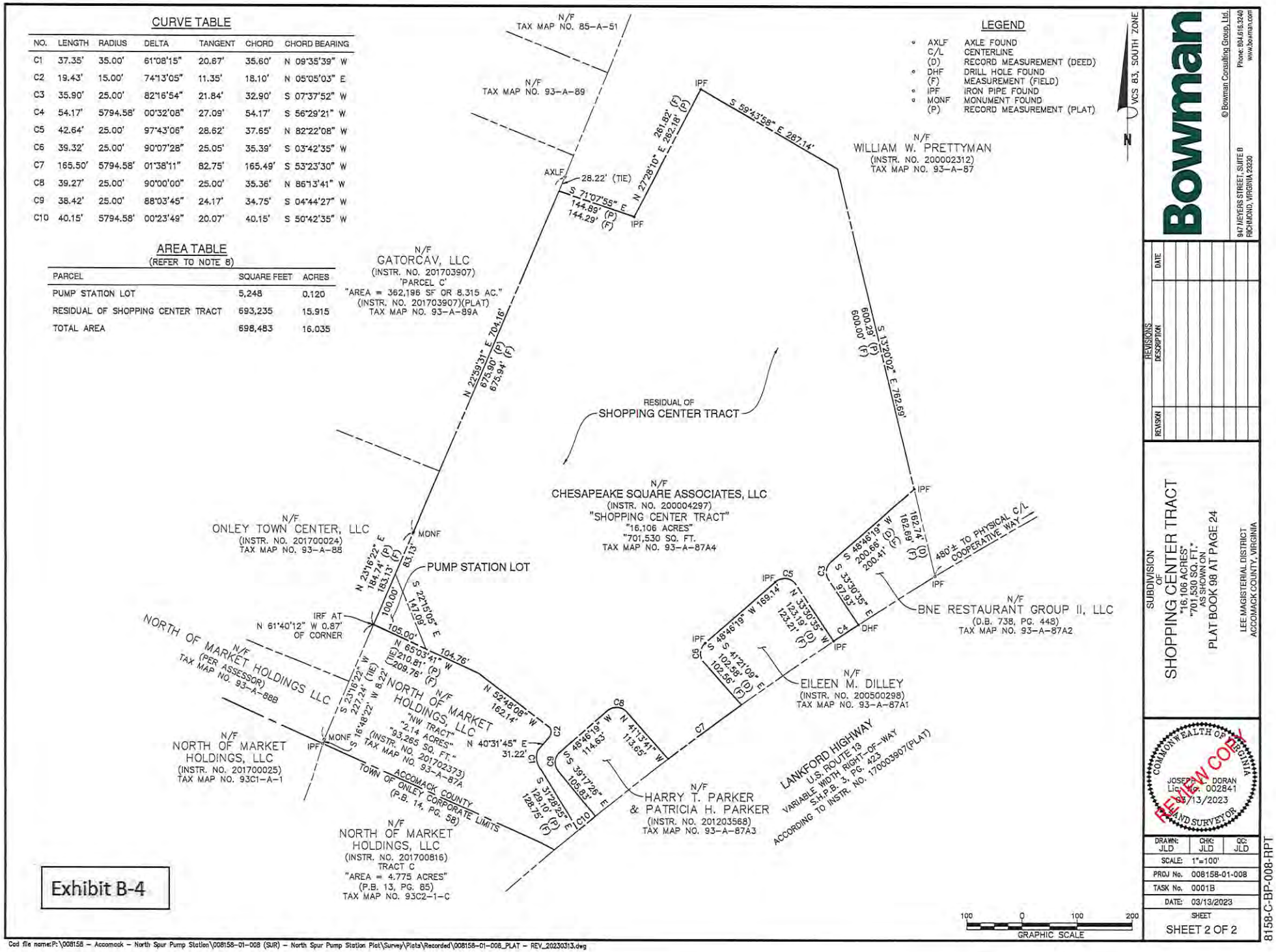
REVIEW COPY

DRAWN:	CHK:	QC:
JLD	JLD	JLD

SCALE:	NONE
PROJ No.	008158-01-008
TASK No.	0001B
DATE:	03/13/2023
SHEET	SHEET 1 OF 2

8158-C-BP-008-RPT

Cad file name:P:\008158 - Accomack - North Spur Pump Station\008158-01-008 (SUR) - North Spur Pump Station Plat\Survey\Plats\Recorded\008158-01-008_PLAT - REV_20230313.dwg



Cad file name:P:\008158 - Accomack - North Spur Pump Station\008158-01-008 (SJR) - North Spur Pump Station Plat\Survey\Plats\Recorded\008158-01-008_PLAT - REV_20230313.dwg

EXHIBIT C

The HRSD Sewer Service Areas

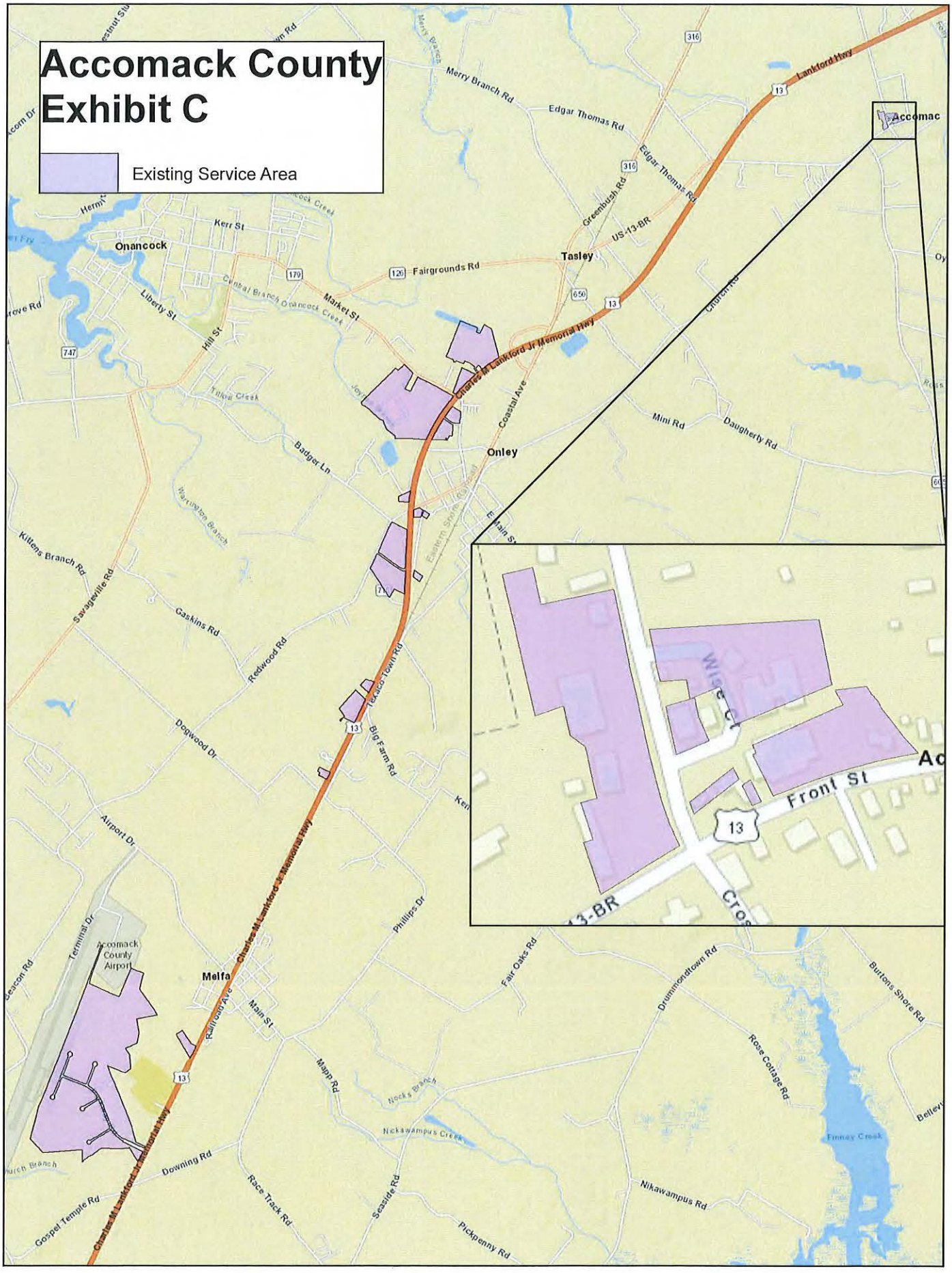
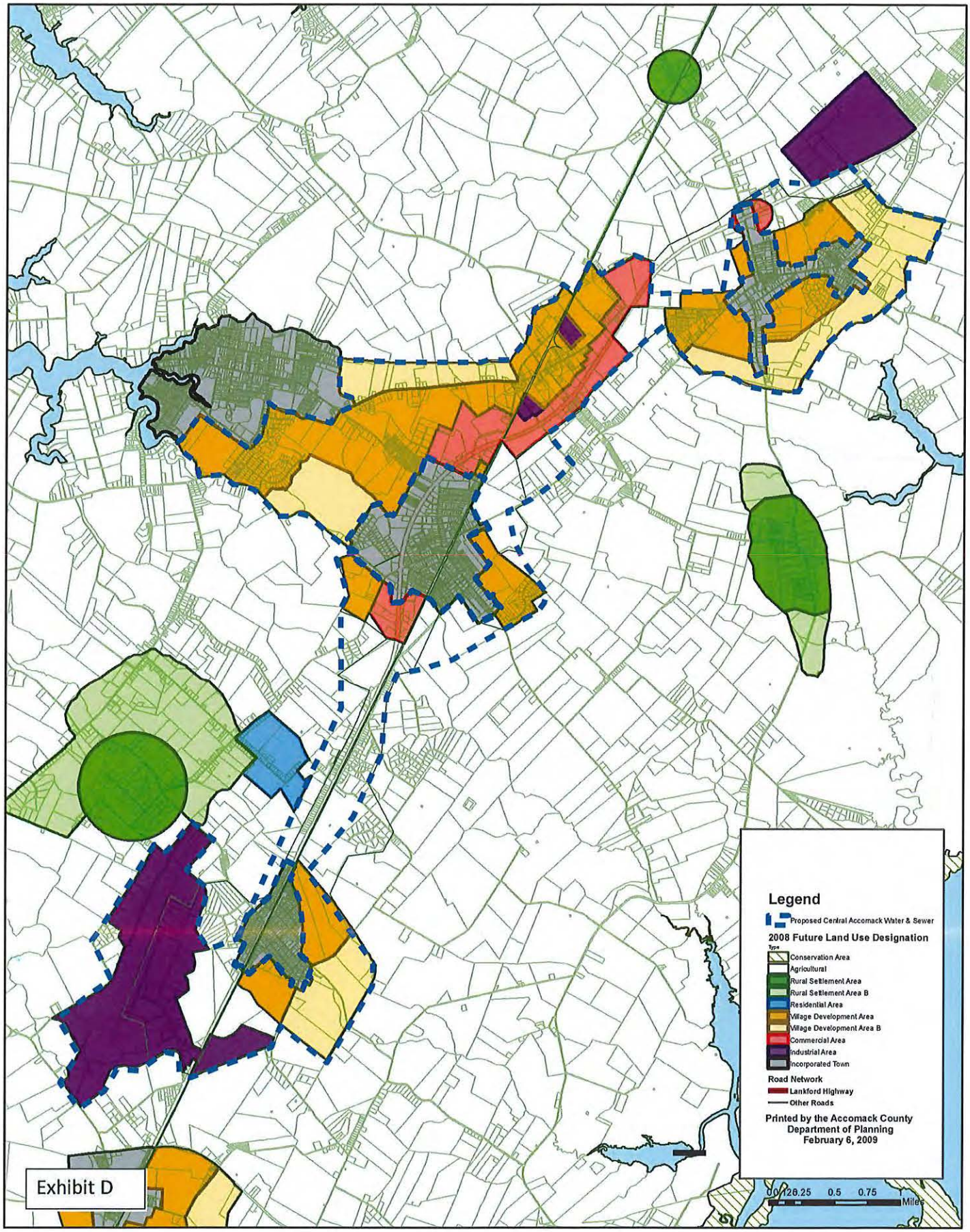

Accomack County
Exhibit C
Existing Service Area
Onancock
Tasley
Onley
Melfa
Accomac
Accomack County Airport
Merry Branch Rd
Edgar Thomas Rd
Greenbush Rd
US-13-BR
Fairgrounds Rd
Market St
Kerr St
Liberty St
Hill St
Central Branch Onancock Creek
Charles M Lankford Jr Memorial Hwy
Coastal Ave
Church Rd
Mini Rd
Daugherty Rd
Badger Ln
Kittens Branch Rd
Savageville Rd
Gaskins Rd
Redwood Rd
Dogwood Dr
Texaco Town Rd
Big Farm Rd
Airport Dr
Terminal Dr
Phillips Dr
Fair Oaks Rd
Drummondtown Rd
Burtons Shore Rd
Rose Cottage Rd
Railroad Ave
Main St
Mapp Rd
Nocks Branch
Nickawampus Creek
Downing Rd
Race Track Rd
Seaside Rd
Pickpenny Rd
Nikawampus Rd
Gospel Temple Rd
Finney Creek
Wise Ct
Front St
13
Lankford Hwy

EXHIBIT D

County's designated Central Accomack Water and Sewer Service Areas

Central Accomack Water & Sewer Service Area



9. Town of Accomac
Reimbursement Agreement

REIMBURSEMENT AGREEMENT
BETWEEN THE HAMPTON ROADS SANITATION DISTRICT, AND
THE TOWN OF ACCOMAC, VIRGINIA

THIS REIMBURSEMENT AGREEMENT (the "Agreement"), by and between the HAMPTON ROADS SANITATION DISTRICT ("HRSD"), and the TOWN OF ACCOMAC, VIRGINIA ("TOWN"), is entered into this 5 day of June, 2023 (the "Effective Date").

RECITALS

R:1. The TOWN is within the territory served by HRSD.

R:2. By that certain Sewer Transfer and Service Agreement dated June 5, 2023, the County of Accomack, Virginia, wherein the TOWN is located, transferred ownership and operational responsibility of the sewer collection and conveyance systems connected to the Onancock Treatment Plant in the County, and all associated real and person property interests, to HRSD (the "Facilities").

R:3. In association with its ownership and operation of the Facilities, the Town has requested that HRSD construct certain improvements to and expansions of the sanitary sewer infrastructure associated with the Facilities as described in more detail in the Scope of Work attached hereto and incorporated herein as **Exhibit A** (the "Project").

R:4. The total estimate cost of Project is approximately $7,667,143 (the "Project Cost"), which is comprised of the collection system and pump station estimate cost of $2,167,141 and the estimate cost of $5,500,000 to connect the force main to the HRSD system.

R:5. The parties intend to fund the Project Costs through American Rescue Plan Act ("ARPA") funding that is being administered by the Clean Water Financing and Assistance Program ("CWFAP") on behalf of the Virginia Department of Environmental Quality ("DEQ").

R:6. The TOWN has been awarded funding under the ARPA program in the amount of $4,500,000 (the "ARPA Funds") which qualifies under ARPA to be used to pay the Project Costs.

R:7. The ARPA Funds will first be used to fund the pump station, collection system, and eighteen (18) water meter replacements constructed as part of the Project. The remaining ARPA Funds will be applied to reimbursement of the force main constructed as part of the Project.

R:8. The TOWN agrees to reimburse HRSD for Project Costs under the terms and conditions set forth herein.

AGREEMENT

NOW THEREFORE, in consideration of the above provisions and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

I. REIMBURSEMENT

A. The TOWN's sole obligation hereunder shall be to reimburse HRSD in an amount equal to the amount of grant funds received and retained by the TOWN from the ARPA program less any reasonable and ordinary administrative costs incurred by the TOWN. The TOWN shall have no further obligation to reimburse HRSD for any project costs in excess of said amounts received and retained by the TOWN under the ARPA program. HRSD shall timely provide access to all records and support all payment requests with appropriate documentation. HRSD shall assist the TOWN with any and all accountings or documentation required under the ARPA program. In the event of any deficiency thereunder resulting in a loss of funds or a change in the amount of the anticipated grant, HRSD agrees to assume sole liability for any said loss of funds or change in the grant amount and hold the TOWN safe and harmless from any and all claims arising therefrom.

B. The Town and HRSD agree to cooperate with each other and take all necessary steps to secure the ARPA Funds.

II. PROJECT

A. Payment of Project Costs

1. HRSD will administer and be responsible for the initial payment of the Project Costs. During the course of construction, HRSD shall compensate the Contractors and other individuals and entities providing materials and/or services related to the Project for all Project Costs.

2. The TOWN and HRSD acknowledge that HRSD will be paying the Project Cost in progress payments to the Contractors and other entities during phases of the Project's completion. The TOWN agrees to reimburse the HRSD for all progress payments made in accordance with Section I, above. HRSD shall provide the TOWN with an invoice detailing the portion of the Project Costs due at intervals during the Project.

3. The ARPA Funds will first be used to fund the pump station, collection system, and eighteen (18) water meter replacements constructed as part of the Project. The remaining ARPA Funds will be applied to reimbursement of the force main constructed as part of the Project.

4. HRSD and the TOWN will review and approve change orders related to the Project that increase the Project Costs. Upon written approval of any such change order by the TOWN, the Project Costs will be increased as provided in the change order and reimbursed to HRSD as provided herein. At no time will the Town be responsible for more than the Proposed ARPA funding.

B. Operation and Maintenance of the Improvements during and after Construction

1. HRSD shall be responsible for operation and maintenance of the Facilities during and after construction.

2. Public sanitary sewer infrastructure constructed as part of the Project shall be owned and operated by HRSD.

III. GENERAL PROVISIONS

A. Governing Law. This Agreement shall be governed as to all matters whether of validity, interpretations, obligations, performance or otherwise exclusively by the laws of the Commonwealth of Virginia, and all questions arising with respect thereto shall be determined in accordance with such laws. Regardless of where actually delivered and accepted, this Agreement shall be deemed to have been delivered and accepted by the parties in the Commonwealth of Virginia.

B. Notice. Any notice, communication or request under this Agreement shall be provided in writing by either (a) a nationally recognized overnight delivery service (next business day service), (b) electronic mail with confirmation of receipt, or (c) hand-delivery, if the receipt of the same is evidenced by the signature of the addressee or authorized agent, to TOWN and to HRSD at the respective addresses herein shown, unless this Agreement is modified in writing to reflect other addresses:

For: HRSD
General Manager
1434 Air Rail Avenue
Virginia Beach, VA 23455
Telephone: (757) 318-4335
Email: generalmanager@hrsd.com

With Copy to:
Robyn H. Hansen, Esquire
Sands Anderson PC

4801 Courthouse Street, Suite 203
Williamsburg, VA 23188
Telephone: (757) 276-8243
Email: rhansen@sandsanderson.com

For: TOWN
Name: _____
Title: _____
Town of Accomac
Address: _____
Telephone: _____
Email: _____

With Copy to:
Town Attorney _____
Address: _____
Telephone: _____
Email: _____

C. Assignment. No party may assign its rights under this Agreement without the prior written consent of the other party.

D. Amendment. This Agreement may be amended only by a written instrument duly executed by the parties.

E. Severability. If any provision of this Agreement or the application thereof to any circumstance shall be determined to be invalid, illegal or unenforceable to any extent, the remainder of this Agreement and the application thereof shall not be affected and shall continue to be valid, in effect and enforceable to the fullest extent permitted by law.

F. Term of Agreement. The term of the Agreement will commence on the date the Agreement is entered into and be completed when each party has completely performed its obligations hereunder.

G. Force Majeure. No Party shall be responsible for its failure to fulfill an obligation pursuant to this Agreement to the extent that such failure is due to acts of God; labor strikes; war or terrorism; epidemics/pandemics; fires; floods; the actions of a third party; lockouts; strikes, freight embargos, and unusually severe weather or delays of subcontractors due to such causes. A Party experiencing a force majeure event that prevents fulfillment of a material obligation hereunder shall (a) give the other Party prompt written notice describing the particulars of the event; (b) suspend performance only to the extent and for the duration that is reasonably required by the force majeure event; (c) use reasonable efforts to overcome or mitigate the effects of such

occurrence; and (d) promptly resume performance of the affected obligation if and when such Party is able to do so.

H. Waiver. No waiver of breach of any term or provision of this Agreement shall be construed to be, or shall constitute, a waiver of any other breach of this Agreement. No waiver shall be binding unless in writing and signed by the parties waiving the breach. The failure of any party to seek redress for violation of or to insist upon the strict performance of any covenant or condition of this Agreement shall not prevent a subsequent act, which would have originally constituted a violation, from having the effect of an original violation. The rights and remedies provided by this Agreement are cumulative and the use of any one right or remedy by any party shall not preclude or waive the right to use any or all other remedies. Such rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance or otherwise.

I. Integration. This Agreement constitutes the entire understanding among the parties. No provision of this Agreement may be waived, modified or amended except by an instrument signed by the party against whom the enforcement of such waiver, modification or amendment is sought.

J. Authority. TOWN and HRSD both warrant that they have permission and authority derived under their respective corporate Charters and Enabling Acts to execute and undertake this Agreement. This Agreement shall apply to, and be binding upon both parties, their elected officials, officers, agents, employees, successors, and assigns, to the maximum extent permitted by law.

K. Compliance with Law. Each party warrants that it has complied with all aspects of applicable federal, state, and local law in entering this Agreement and further warrants that it shall comply with all applicable federal, state, and local laws in the performance of this Agreement.

L. Binding Effect. This Agreement shall inure to the benefit of the Parties and shall, to the maximum extent permitted by law, be binding on the Parties and their successors and assigns.

M. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original as against any Party whose signature appears thereon, and all of which shall together constitute one and the same instrument. A signature affixed or delivered electronically will be considered an original.

N. Recitals. The Recitals above are incorporated into this Agreement as if fully set forth therein.

Signature pages follow

IN WITNESS WHEREOF, the Hampton Roads Sanitation District (HRSD) 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 April 25, 2023.

HAMPTON ROADS SANITATION DISTRICT

By: _____
Jay A. Bernas, PE, General Manager

Date: 5/22/2023

IN WITNESS WHEREOF, the Town of Accomac has caused this Agreement to be signed.

TOWN OF ACCOMAC, VIRGINIA

By: Patricia T. Smith
Printed Name: Patricia T. Smith
Title: Mayor
Date: 6/5/23

REIMBURSEMENT AGREEMENT BETWEEN
HRSD AND TOWN OF ACCOMAC
Exhibit A – Scope of Work

CHANGE ORDER NO.: 03

Date Issued: December 20, 2022 Effective Date of Change Order: December 20, 2022

Owner:	Hampton Roads Sanitation District	Owner's Contract No.:	6220749
Owner's Consultant:	HDR Engineering, Inc.	Consultant's Contract No.:	6212273
Design-Builder:	Garney Companies, Inc.		
Contract:	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase I (ES010100; C-515660)		
Date of Contract:	July 27, 2021	Notice to Proceed Date:	September 17, 2021

The Contract is modified as follows upon execution of this Change Order:

Description: Add the following work to the Project

1. Additional gravity sewer repairs needed on the Accomack County-Onancock gravity interceptor. The change in Contract Price in this Change Order augments the $800,000 allowance in this stipulated price. This cost is required due to more repairs needed to be made over the allowance.
2. Perform Phase I Environmental Assessments on 6 wastewater pumping stations HRSD will be assuming maintenance and ownership of these stations.
3. Survey and Closed Circuit Television Inspection (CCTV) of approximately 8,000 LF of 12-inch gravity sewer along the North Branch gravity interceptor in Onancock.
4. Installation of additional 8 Automatic Air Release Valves.
5. Furnish and install Explosion-Proof panel boxes for all three pumping stations being built.
6. Installation of 20,600 LF of force main pipeline to connect the Town of Accomac to the force main carrying flows to the Onancock WWTP.

Attachments: (List documents related to the change)

1. Change Request Summary Form (with attachments) from Design-Builder dated 12/12/2022.
2. Letter dated 12/12/2022 from Design-Builder providing breakdown between pump station and force main costs for the proposed pump station and force main serving the Town of Accomac

Change in Contract Price	Change in Contract Times
Original Contract Price: $ 15,764,700.00	Original Contract Times: Substantial Completion (days/date): June 30, 2023 Ready for final payment (days/date): September 30, 2023
[Increase] ~~[Decrease]~~ from previously approved Change Orders No. 1 to No. 2 $ 7,197,028.00	[Increase] [Decrease] from previously approved Change Orders No.1 to No. 1: Substantial Completion (days): N/A Ready for final payment (days): N/A
Contract Price prior to this Change Order: $ 22,961,728.00	Contract Times prior to this Change Order: Substantial Completion (days/date): June 30, 2023 Ready for final payment (days/date): September 30, 2023
[Increase] [~~Decrease~~] this Change Order: $ 6,007,946.00	[Increase] [~~Decrease~~] this Change Order: Substantial Completion (days): ~~365~~ calendar days 339 Ready for final payment (days): ~~365~~ calendar days 366
Contract Price incorporating this Change Order: $ 28,969,674.00	Contract Times with all approved Change Orders: Substantial Completion (days/date): July 3, 2024 Ready for final payment (days/date): September 30, 2024

By acceptance of this contract modification, parties hereby agree that the modification represents an equitable adjustment to the Contract and the Design-Builder further agrees to waive all rights to file further claims arising out of, or as a result of, this change.

The agreement and all subsequent changes to the agreement will be approved and executed using HRSD's Project Management system. Physical signatures will not be required if acknowledged by Design-Builder through the Online system.

This document is a MODIFIED version of EJCDC® C-941, Change Order.
Copyright® 2018 National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers. All rights reserved

*SRICE updated calendar days to match updated Contract Time dates.

ADVANCING WATER

RE: Eastern Shore Change Order Summary
DATE: 12/12/2022

CHANGE REQUEST SUMMARY FORM

PROJECT NAME: Eastern Shore Infrastructure Improvements Ph 1
OWNER: HRSD
ENGINEER: AECOM

GCI NO: 3376
NO:
NO:

ORIGINAL CONTRACT VALUE:	$	15,764,700.00
FIELD DIRECTIVES TO DATE:		
CHANGE ORDERS TO DATE:	$	7,197,028.00
THIS CHANGE REQUEST:	$	6,007,946.00
REVISED CONTRACT VALUE:	$	28,969,674.00

SUMMARY DESCRIPTION OF CHANGE REQUEST

1. Additional gravity sewer repairs needed on the Accomack County-Onancock gravity interceptor. This $300,000 augments the $800,000 allowance in this stipulated price. This cost is required due to more repairs needed to be made over the allowance.

2. Perform Phase I Environmental Assessments on 6 wastewater pumping stations HRSD will be assuming maintenance and ownership of these stations

3. Survey and Closed Circuit Television Inspection (CCTV) of approximately 8,000 LF of 12-inch gravity sewer along the North Branch gravity interceptor in Onancock.

4. Installation of additional 8 Automatic Air Release Valves

5. Furnish and install Explosion-Proof panel boxes for all three pumping stations being built

6. Installation of 20,600 LF of force main pipeline to connect the Town of Accomac to the force main carrying flows to the Onancock WWTP.

Pricing Summary

Item NO.	Description	Quantity	Unit	Unit Price	Total
1	Additional Gravity Sewer Repairs in Onancock	1	LS	$ 300,000.00	$ 300,000.00
2	Phase 1 ESAs	1	LS	$ 14,000.00	$ 14,000.00
3	North Branch Gravity Sewer Investigation	1	LS	$ 86,171.00	$ 86,171.00
4	Install Auto ARVs	1	LS	$ 46,895.00	$ 46,895.00
5	Provide Explosion Proof Panel Boxes	1	LS	$ 60,880.00	$ 60,880.00
6	Accomac Force Main	1	LS	$ 5,500,000.00	$ 5,500,000.00
					$ 6,007,946.00

Signature of Owner Representative Authorizing work — Date

Print

Signature of Garney Representative — Date

Print

CC: File - GCI

ATTACHMENTS:

CHANGE ORDER NO.: 04

Date Issued: March 28, 2023 Effective Date of Change Order: March 28, 2023

Owner:	Hampton Roads Sanitation District	Owner's Contract No.:	6220749
Owner's Consultant:	HDR Engineering, Inc.	Consultant's Contract No.:	6212273
Design-Builder:	Garney Companies, Inc.		
Contract:	Eastern Shore Infrastructure Improvements - Transmission Force Main Phase I (ES010100; C-515660)		
Date of Contract:	July 27, 2021	Notice to Proceed Date:	September 17, 2021

The Contract is modified as follows upon execution of this Change Order:

Description: Add the following work to the Project

1. Design and construct a new pump station serving the Town of Accomac that will convey wastewater through a new transmission force main to the Onancock WWTP ($1,137,746) and approximately 1,700 linear feet of gravity sewer main, including five manholes, and abandon the existing pumping facilities and septic tank system currently serving public facilities in the Town of Accomac ($1,029,395). (Combined Total Increase in Contract Price = $2,167,141)
2. Design and construct approximately 1,200 LF of 8-inch gravity sewer, five manholes, and reconnection of ten existing laterals to provide sewer service to a development project in the Town of Onancock in an area formerly known as "Carnival Grounds" (Increase in Contract Price = $1,500,000).
3. Complete repairs to the gravity sewer interceptor in the Town of Onancock that runs parallel to the North Branch of Onancock Creek to address deficiencies (Increase in Contract Price = $1,500,000).

Attachments: (List documents related to the change)

1. Letter dated 3/7/2023 from Design-Builder (with subject line "Accomac Pump Station and Gravity Sewer – ESDB" and 3 pages of attached exhibits) describing scope of work and change in Contract Price.
2. Letter dated 3/10/2023 from Design-Builder (with subject line "Carnival Grounds Gravity Sewer – ESDB" and 4 pages of attached exhibits) describing scope of work and change in Contract Price.
3. Letter dated 3/16/2023 from Design-Builder (with subject line "Onancock North Branch Gravity Sewer – ESDB") describing scope of work and change in Contract Price.

Change in Contract Price	Change in Contract Times
Original Contract Price: $ 15,764,700.00	Original Contract Times: Substantial Completion (days/date): June 30, 2023 Ready for final payment (days/date): September 30, 2023
[Increase] ~~[Decrease]~~ from previously approved Change Orders No. 1 to No. 3 $ 13,204,974.00	[Increase] ~~[Decrease]~~ from previously approved Change Orders No.1 to No. 3: Substantial Completion (days): 369 calendar days Ready for final payment (days): 366 calendar days
Contract Price prior to this Change Order: $ 28,969,674.00	Contract Times prior to this Change Order: Substantial Completion (days/date): July 3, 2024 Ready for final payment (days/date): September 30, 2024
[Increase] ~~[Decrease]~~ this Change Order: $ 5,167,141.00	[Increase] [Decrease] this Change Order: Substantial Completion (days): N/A Ready for final payment (days): N/A
Contract Price incorporating this Change Order: $ 34,136,815.00	Contract Times with all approved Change Orders: Substantial Completion (days/date): July 3, 2024 Ready for final payment (days/date): September 30, 2024

By acceptance of this contract modification, parties hereby agree that the modification represents an equitable adjustment to the Contract and the Design-Builder further agrees to waive all rights to file further claims arising out of, or as a result of, this change. The agreement and all subsequent changes to the agreement will be approved and executed using HRSD's Project Management system. Physical signatures will not be required if acknowledged by Design-Builder through the Online system.

This document is a MODIFIED version of EJCDC® C-941, Change Order.
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3959 Pender Drive, Suite 100, Fairfax, VA 22030
Phone: 703.794.6194
Fax: 703.738.1117
www.garney.com

Accomac Pump Station and Gravity Sewer - ESDB March 07, 2023

Mr. Phil Hubbard,

Garney is providing the following pricing to design and construct the new pump station, gravity sewer, and abandonment of existing septic facilities in the Town of Accomac. This proposal includes a new package pump station on Accomack County property, approximately 1,700 linear feet of 8" SDR26 PVC gravity sewer with 5 polymer manholes, and abandonment of existing drain field components. Abandonment of the existing facilities is detailed further in Exhibit A. The total cost for this work is **$2,167,141.00.**

If you have any questions, please feel free to contact me by phone at (785) 213-4788 or by email at CHarding@garney.com.

Sincerely,

GARNEY COMPANIES, INC.

Craig Harding
Project Manager

CC:
Dan Buckley
Tim Kearney

10. Town of Wachapreague
Sewer Transfer and Service Agreement

SEWER TRANSFER AND SERVICE AGREEMENT

This SEWER TRANSFER AND SERVICE AGREEMENT, is made on this 11th day of MAY, 2023 (the "**Effective Date**") by and between the TOWN OF WACHAPREAGUE, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as the "**Town**") and HAMPTON ROADS SANITATION DISTRICT, a political subdivision of the Commonwealth of Virginia (hereinafter referred to as "**HRSD**") (each individually a "**Party**" and collectively, the "**Parties**").

RECITALS

R:1. The Town plans to construct certain wastewater collection and conveyance systems situated in the Town of Wachapreague, Virginia described in more detail herein and further shown on **Exhibit A**. As used herein, wastewater conveyance system means the terminal pump station, effluent force main, and appurtenances (the "**Conveyance System**"), and wastewater collection system means the individual pumping stations, low pressure force mains and appurtenances that discharge to the Conveyance System located in the Town (the "**Collection System**"). The portion of the Collection System that serves more than one property and is located entirely beneath, upon, or over public rights of way or roadways in easements and property interests owned exclusively by the Town or HRSD, as further shown and delineated on Exhibit A, is referred to herein as the "**Public Collection System**" and, together with the Conveyance System, the "**Systems**."

R:2. The Conveyance System and Public Collection System are located beneath, upon, and over easements, rights of way, strips of land, and other real property interests, including but not limited to fee simple interests in the real property underlying the Conveyance System's pump stations, (the "**Property Interests**") as further shown on that certain plat titled "Subdivision Plat For Property of Commonwealth Of Virginia, College Of William And Mary In Virginia To Be Conveyed To Hampton Roads Sanitation District", attached hereto as **Exhibit B** (the "**Plat**").

R:3. The Town has determined that it would be in the best interests of its citizens to transfer ownership and operational responsibility of the Conveyance System and the Public Collection System to HRSD, and has therefore requested that HRSD work with the Town to have the Systems and Property Interests transferred to and accepted by HRSD. HRSD has agreed to accept and operate the Systems and Property Interests upon the terms and conditions stated in this Agreement.

AGREEMENT

NOW THEREFORE, for and in consideration of the mutual covenants contained herein and the sum of Ten Dollars ($10.00) cash in hand, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Transfer of the Facilities. The Town agrees to convey, and HRSD agrees to accept, upon the terms, provisions, and conditions hereinafter set forth, the Systems, as well as all Property Interests and any other Town owned real property interests that the Parties have

determined are needed for the operation of the Systems in the Town. Said Property Interests shall include the improvements thereon and fixtures thereto attached that are owned by the Town as of the date of this Agreement. The Town will acquire and convey to HRSD fee simple interests as part of the Property Interests. Furthermore, should any easement, right of way, strip of land, or other real property interest necessary to operate the Systems be discovered at any time to be lacking from the Property Interests herein conveyed, the Town shall take the necessary action, and execute and deliver any other documents reasonably necessary or appropriate, to convey such interest to HRSD.

The Town further agrees to transfer to HRSD all easements, highway permits, and all rights, including rights for installation, operation, maintenance, repair, relocation, renewal of, and access, to the Systems that lie either within or without public streets or public places of rights of way, together with all documents and information in the Town's possession relating to the Systems and Property Interests. The Systems, Property Interests, and other associated interests, real and personal, are referred to herein as the "**Facilities**". The Parties agree to execute such further documentation or instruments as are necessary to confirm, effect, and memorialize the conveyance and transfer of the Facilities from the Town to HRSD, including but not limited to a general or special warranty deed in recordable form and an assignment of all easements, permits, and other contractual rights relating to the Facilities. Within thirty (30) days of the Effective Date, the Town will deliver to HRSD, at no cost to HRSD, without representations or warranties, true and complete copies of all documents and information relating to or affecting the Facilities that are within the Town's possession or control.

2. **Title to the Facilities**. The Town represents and warrants that it owns fee simple absolute title to all of the real estate herein conveyed. The Town shall convey marketable title to the Property Interests and other property interests that are among the Facilities by general or special warranty deed, free and clear of any liens or encumbrances which, in the reasonable judgment of HRSD, have a materially adverse effect upon the right of HRSD to use such lands or property in the performance of the functions of HRSD or would preclude HRSD from obtaining owners title insurance on the Facilities at reasonable rates. Prior to accepting the Property Interests conveyed pursuant to this Agreement, HRSD shall have received a commitment for an owner's policy of title insurance, which commitment shall include a report of the state of title to such Property Interests showing title to be marketable, in all ways satisfactory to HRSD and free and clear of all liens and encumbrances except those that will be satisfied at closing and the usual utility easements not adversely affecting title to the Property Interests.

3. **HRSD Sewer Services.** When all of the Facilities are transferred to HRSD and incorporated into its system, HRSD agrees to provide collection, transmission and sewer treatment services to all areas currently designated as Sewer Service Areas by the Town, which are identified on **Exhibit C** hereto (the "**Sewer Service Areas**"), pursuant to and in accordance with its standard practices and controlling law and the provisions stated herein. HRSD shall be responsible for and entitled to all rights, obligations, and responsibilities associated with the provision of sewer service, including but not limited to the installation, maintenance, operation, and repair of the Systems (except as otherwise provided herein) and the collection of payment for such services. HRSD agrees to provide adequate capacity to treat all sewage generated within the areas currently designated as Sewer Service Areas in accordance with all applicable

laws and regulations at HRSD's cost, provided HRSD has permitted treatment plant capacity to treat and discharge the sewage. HRSD's determination of adequate capacity will be reasonably anticipated and based upon current and future land use as approved in the Town's Comprehensive Plan. Town agrees to notify HRSD of any proposed future changes to the Comprehensive Plan's land use designations that will impact HRSD's treatment capacity in order to allow HRSD the opportunity to evaluate and advise the Town as to whether HRSD can reasonably accommodate any such impact.

4. **Expansion of Sewer Service Area.** The Town's sewer service areas may be subsequently amended or expanded by the Town, through designation in the Town's Comprehensive Plan (including any necessary §15.2-2232 review) and an approved resolution of the Town Council. HRSD may expand the HRSD Sewer Service Area to be in alignment with the Town's sewer service areas if requested by the Town, and the provision of conveyance and treatment are viable as determined by HRSD.

5. **Sewer Collection Systems.** HRSD is not responsible for the construction or funding of any sewer collection systems and/or extensions of existing collection systems. The Public Collection System shall be constructed by the Town and transferred to HRSD pursuant to the terms of this Agreement. The Town may enter into agreements with third parties for such purposes and may impose and collect connection and other fees for such costs in addition to any charges that may be imposed and collected by HRSD. Charges and/or connection fees due to Town resulting from agreements between Town and third parties existing on the date of this Agreement shall continue to be collected by the Town and HRSD shall have no rights or responsibilities related to such charges. The Town will be responsible for establishing all necessary new accounts for any such new or extended system, after which established accounts shall be transferred to HRSD and billed by HRSD in accordance with Section 8 (Billing) hereof and the applicable HRSD Billing Agreement. Any such new or extended sewer collection systems shall be built to HRSD standards and connected to the Conveyance System only upon written approval and acceptance by HRSD. HRSD will not accept, own, or operate the portions of the Collection System, including but not limited to all low pressure force main collection systems, that are located beyond the valved connection point to the Public Collection System or are located on or under private property. Further, for clarity, HRSD will not accept, own, or operate any grinder pump systems, all of which will be located within the private portion of the Collection System that is not being transferred to HRSD hereunder. Accordingly, HRSD will not respond to the alarms of grinder pump systems. Upon meeting HRSD's final inspection requirements and before being placed in service, any such new or extended sewer collection systems may be conveyed to HRSD in the same manner and upon the same terms and conditions as prescribed for the transfer of the Systems herein.

6. **HRSD Operation of Facilities.** HRSD shall maintain and operate the Facilities, including the Systems, and all treatment facilities, in accordance with all applicable laws and regulations, with the goal of providing the following levels of service:

   a. Treatment Facilities: Permit compliance for ninety-nine percent (99%) of all permit parameters in a calendar year.

b. Conveyance System Facilities: Investigation into system failures and/or overflows within two (2) hours of notification. Corrective action to remediate as soon as possible thereafter.

c. Public Collection Systems: Investigation into facility failures and/or overflows within four (4) hours of notification. Corrective action to remediate as soon as possible thereafter.

d. System Odors: Investigation into source and/or cause of odor complaints within two (2) days of notification. Corrective action to remediate as soon as possible thereafter.

7. **HRSD Expansion / Town Cooperation.** The Town shall cooperate with and support HRSD in the planning, scheduling, locating, and constructing of new or replacement facilities that HRSD determines are required for the provision of HRSD's services or the operation of the Facilities, including as follows:

a. The Town shall promptly notify HRSD in writing of any proposed changes to the Town's Comprehensive Plan, as well as any proposed developments in the Town pursuant to the existing Comprehensive Plan, with potential to add sewer flow to HRSD Facilities or require expansion of the Facilities.

b. The determination of whether to expand the HRSD Facilities, undertake new construction, or accept new sewer flow shall be in HRSD's sole discretion. Projects requiring HRSD Facilities expansion or construction of new facilities will only be incorporated into the Systems once HRSD agrees to undertake and thereafter completes the work necessary to accept the proposed new sewer flow. HRSD Facilities expansion may include but is not limited to:
   i. Facilities expansion and/or construction;
   ii. Extension of conveyance service; and/or
   iii. Additional treatment capacity, beyond current permitted capacity.

c. If HRSD Facilities expansion or new construction requires Town zoning, site plan, or other administrative approvals, the Town agrees to provide reasonable cooperation and assistance with regard to the same.

d. Town-owned real property, including easements and fee simple interests, required for new or expanded HRSD conveyance facilities, including pipelines and pump stations, shall be provided to HRSD at no cost to HRSD. Any relocation of HRSD Facilities at the request of the Town shall be at the Town's cost, including facilities on Town owned land or within public rights-of way.

8. **Billing.** All sewer customers shall be HRSD customers and billed for services in accordance with the current HRSD Rate Schedule and applicable policies. The Town agrees to provide HRSD with any information in its possession that is necessary to bill current customers. The process by which new connections and customers are added to the System shall be agreed to by HRSD and the Town by separate billing agreement. If requested by HRSD, Town agrees to

assist in debt collection efforts on delinquent accounts within the Town and not to interfere with any such efforts.

9. Third Party Services. HRSD, at its sole discretion, may self-perform or contract for provision of any or all services required to fulfill HRSD's obligations under this Agreement.

10. Town Right of First Refusal. At such time as HRSD shall determine, in its sole discretion, that any real property portion of the Facilities conveyed by the Town hereunder to be no longer useful in the performance by HRSD in its function or to fulfill any obligations under this Agreement, HRSD shall offer to convey to the Town, at no cost and liability to the Town, said portion of real property, before otherwise disposing of said property pursuant to the HRSD Commission adopted policy for Disposition of Real Property.

11. General Provisions.

a. Entire Agreement. This Agreement, and any exhibits or attachments made hereto, represent the full agreement and understanding of the Parties hereto, there being no additional agreements written, oral or otherwise.

b. Amendment. This Agreement may be amended only with written approval of both of the parties hereto.

c. Assignment. HRSD may assign or transfer this Agreement in whole or in part with written approval from the Town.

d. Authority. Town and HRSD both represent and warrant that they have permission and authority derived under their respective controlling law, corporate charters, and enabling acts to execute and undertake this Agreement and that all necessary actions of the Wachapreague Town Council to allow execution of this Agreement have been completed, and that all necessary Resolutions and actions of the Commission of HRSD to allow execution of this Agreement have been completed. This Agreement shall apply to, and be binding upon both parties, their elected officials, officers, successors, and assigns, in their official capacity, to the maximum extent permitted by law.

e. Notices. All notices, communication or request required pursuant to the terms of this Agreement shall be provided in writing by either (1) hand-delivery if the receipt of the same is evidenced by the signature of the addressee or authorized agent, (2) electronic mail with confirmation of receipt, (3) a nationally recognized overnight delivery service (next business day service), addressed to Town and to HRSD at the respective addresses herein shown, unless this Agreement is modified in writing to reflect other addresses:

For: HRSD
General Manager
1434 Air Rail Avenue
Virginia Beach, VA 23455
Telephone: (757) 318-4335
Email: generalmanager@hrsd.com

With Copy to:
Robyn Hansen, Esquire
Sands Anderson PC
4801 Courthouse Street, Suite 203
Williamsburg, VA 23188
Telephone: (757) 276-8243

For: Town of Wachapreague
Mayor
PO Box 242
Wachapreague, VA 23480
Email: town@wachapreague.org

With Copy to:
Wachapreague Town Attorney
Carl Bundick Esq.
23318 Wise Ct.
Accomack, VA. 23301
shoreadvocacygroup@gmail.com

f. Compliance with Law. Each Party warrants that it has complied with all aspects of applicable federal, state, and local law in entering this Agreement and further warrants that it shall comply with all applicable federal, state, and local laws in the performance of this Agreement.

g. No Violation. The execution of this Agreement by the Parties will not violate any covenant, condition, or contract to which the Parties hereto are subject at the time of execution.

h. Governing Law; Venue. This Agreement shall be governed as to all matters whether of validity, interpretations, obligations, performance or otherwise exclusively by the laws of the Commonwealth of Virginia, and all questions arising with respect thereto shall be determined in accordance with such laws. Regardless of where actually delivered and accepted, this contract shall be deemed to have been delivered and accepted by the parties in the Commonwealth of Virginia.

i. Enforcement. The failure of either Party to enforce the terms of this Agreement shall not be considered a waiver as to the enforceability of such terms. If any provision of

this Agreement is found to be unenforceable, the remainder of this Agreement shall remain in full force and effect.

j. Survival. This Agreement shall survive settlement and conveyance of title and shall terminate only upon the written agreement of both parties.

k. Force Majeure. No Party shall be responsible for its failure to fulfill an obligation pursuant to this Agreement to the extent that such failure is due to acts of God; labor strikes; war or terrorism; the actions of another Party; lockouts; or other events not reasonably within the control of the Party claiming force majeure. A party experiencing a force majeure event that prevents fulfillment of a material obligation hereunder shall (a) give the other party prompt written notice describing the particulars of the event; (b) suspend performance only to the extent and for the duration that is reasonably required by the force majeure event; (c) use reasonable efforts to overcome or mitigate the effects of such occurrence; and (d) promptly resume performance of the affected obligation if and when such Party is able to do so.

l. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original as against any Party whose signature appears thereon, and all of which shall together constitute one and the same instrument. A signature affixed or delivered electronically will be considered an original.

m. Binding Effect. This Agreement shall inure to the benefit of the parties and shall, to the maximum extent permitted by law, be binding on the Parties and their successors and assigns.

n. Survival. All representations and warranties contained herein shall survive closing and conveyance of the Property Interests.

o. Reservation. Except as expressly provided herein, nothing in this Agreement shall be construed to limit or otherwise affect the authority, rights, or responsibilities of the parties.

p. Regulatory Approvals. Notwithstanding anything in this Agreement to the Contrary, HRSD approval is contingent on receipt of a release, in a form satisfactory to HRSD, of any and all security interests in the Facilities related to grants and/or loans from USDA, VRA and DEQ. Failure to provide this release shall nullify this Agreement.

q. Commission Approval. This Agreement is contingent on the review and approval by Hampton Roads Sanitation District Commission and upon such Commission granting authorization to the General Manager to proceed under the terms of this Agreement.

r. Town Approval. The Agreement is contingent on approval by majority vote of the Wachapreague Town Council and the granting of authority to the Town Administrator or designee to take such action as may be necessary to implement the

terms of this Agreement, provided that any proposed conveyance of property shall be approved by the Wachapreague Town Council in accordance with state law.

[*Signatures on following pages*]

IN WITNESS WHEREOF, the Town has caused this Sewer Transfer and Service Agreement to be signed on its behalf by its duly authorized officers in accordance with authorization granted at its regular meeting held on April, 2023.

TOWN:

Approved as to form:

Town Attorney

Date: 5/16/23

Town of Wachapreague, Virginia

By: _____

Title: Mayor

Date: 5-16-2023

IN WITNESS WHEREOF, the Hampton Roads Sanitation District Commission has caused this Sewer Transfer and Service Agreement to be signed on its behalf by its General Manager in accordance with authorization granted at its regular meeting held on April 25, 2023.

HRSD:

By: _____

Jay Bernas, General Manager

Date: MAY 4, 2023

Sewer Transfer and Service Agreement
Between HRSD and the town of Wachapreague

Exhibit A

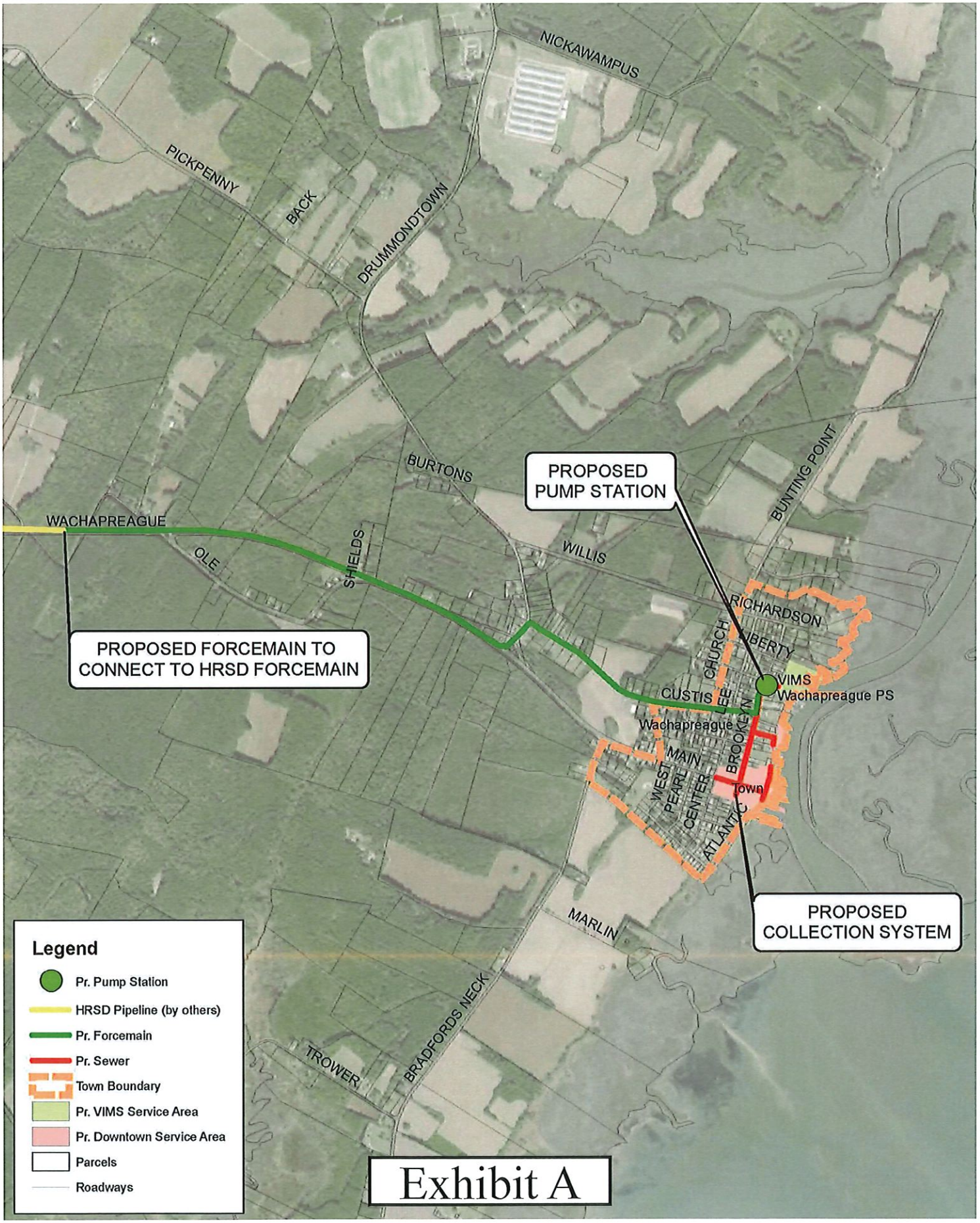

NICKAWAMPUS
PICKPENNY
BACK
DRUMMONDTOWN
BURTONS
PROPOSED PUMP STATION
BUNTING POINT
WACHAPREAGUE
OLE
SHIELDS
WILLIS
RICHARDSON
LIBERTY
CHURCH
VIMS
Wachapreague PS
CUSTIS LEE
Wachapreague
MAIN
BROOKEAVEN
WEST
PEARL
CENTER
ATLANTIC
Town
PROPOSED FORCEMAIN TO CONNECT TO HRSD FORCEMAIN
PROPOSED COLLECTION SYSTEM
MARLIN
BRADFORDS NECK
TROWER
Legend
Pr. Pump Station
HRSD Pipeline (by others)
Pr. Forcemain
Pr. Sewer
Town Boundary
Pr. VIMS Service Area
Pr. Downtown Service Area
Parcels
Roadways

Exhibit A

Sewer Transfer and Service Agreement
Between HRSD and the town of Wachapreague

Exhibit B

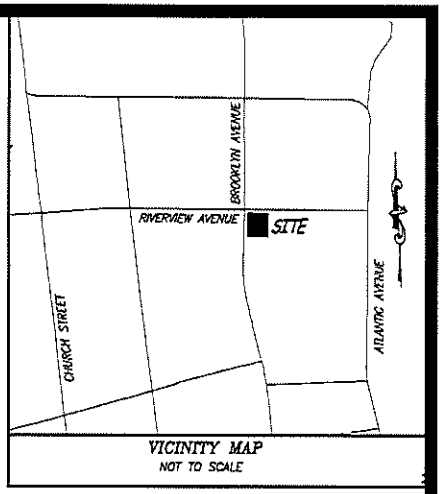
NOTES:

1. THE TOTAL AREA ENCOMPASSED BY THIS SUBDIVISION CONTAINS 9,018 SQ. FEET OR 0.207 ACRES.
2. THE MERIDIAN SOURCE OF THIS PLAT IS BASED ON VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD 1983 (1993 HARN ADJUSTMENT) COORDINATE VALUES ARE EXPRESSED IN U.S. SURVEY FEET.
3. THIS SURVEY WAS PERFORMED WITHOUT BENEFIT OF A TITLE REPORT AND MAY NOT REFLECT ALL EASEMENTS OR RESTRICTIONS THAT AFFECT THE PROPERTY.
4. PROPERTY AND RIGHT OF WAY INFORMATION IS BASED ON VARIOUS PLATS AND DEEDS OF RECORD AND ACTUAL FIELD MEASUREMENTS.
5. THIS PLAT IS NOT INTENDED TO SHOW ALL PHYSICAL IMPROVEMENTS THAT MAY AFFECT THE PROPERTY.
6. ALL WETLAND PERMITS REQUIRED BY LAW SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF GRADING OR OTHER ON-SITE ACTIVITIES BY OWNER.
7. THIS PROPERTY APPEARS TO BE IN FLOOD ZONE X (SHADED), AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE & FLOOD ZONE AE BASE FLOOD ELEVATION 7.0, FEDERAL EMERGENCY MANAGEMENT AGENCY COMMUNITY PANEL NUMBER 51001 0805 C. MAP REVISED MAY 15, 2015.

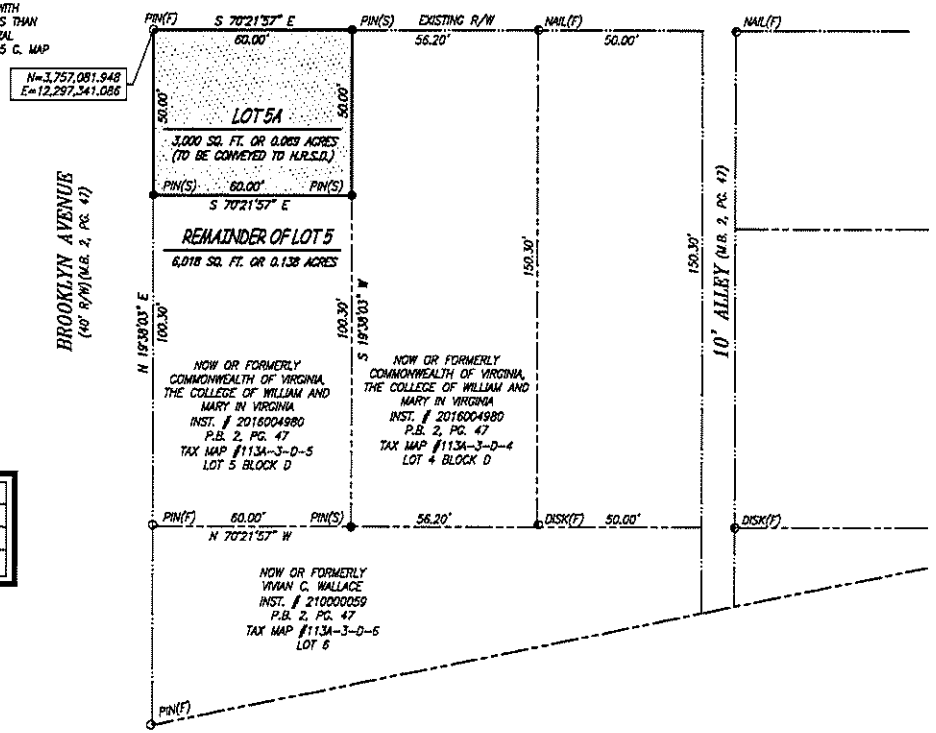
TYPICAL MONUMENT LEGEND	
●	IRON PIN SET
⊙	NAIL FOUND (UNLESS NOTED OTHERWISE)
○	IRON PIN FOUND

DIRECTORS NOTE:
I HEREBY CERTIFY THAT THE SUBDIVISION SHOWN HEREON HAS BEEN APPROVED IN ACCORDANCE WITH THE SUBDIVISION ORDINANCE OF ACCOMACK COUNTY. THE UNDERSIGNED DOES NOT CERTIFY AS TO THE CORRECTNESS OF THE BOUNDARIES, STREETS OR OTHER LINES ON THIS PLAT.

APPROVED: _____ DATE: _____
ACCOMACK COUNTY REPRESENTATIVE



VICINITY MAP
NOT TO SCALE



VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD83(1993HARN)

AREA TABLE	
ORIGINAL PARCEL LOT 5	9,018 SQ. FT. OR 0.207 ACRES
NEW PARCEL LOT 5A (H.R.S.D.)	3,000 SQ. FT. OR 0.069 ACRES
REMAINDER OF LOT 5	6,018 SQ. FT. OR 0.138 ACRES

SURVEYORS NOTE:
I, HEREBY CERTIFY THAT THE PLAT SHOWN AND DESCRIBED HEREON IS A TRUE AND CORRECT SURVEY OF THE ACCURACY REQUIRED, THAT THE SOURCE OF TITLE IS CORRECT, AND THAT THE MONUMENTS SHALL BE PLACED AS SHOWN HEREON IN ACCORDANCE WITH THE REQUIREMENTS OF THE COUNTY SUBDIVISION ORDINANCE.

SOURCE OF TITLE AND LAST PLACE OF RECORD:
THE PROPERTY EMBRACED WITHIN THE LIMITS OF THIS SUBDIVISION WAS CONVEYED TO: COMMONWEALTH OF VIRGINIA, THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA, FROM THOMAS N. RICHARDSON, JR. BY DEED DATED NOVEMBER 30, 2016 AND RECORDED AS INSTRUMENT NUMBER 2016004980 BEING RECORDED IN THE CLERKS OFFICE OF THE CIRCUIT COURT OF ACCOMACK COUNTY, VIRGINIA.

SIGNED: PRELIMINARY

VIRGINIA:
IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF ACCOMACK COUNTY, VIRGINIA ON THE _____ DAY OF _____, 2023, THIS PLAT WAS RECEIVED AND ADMITTED TO RECORD IN MAP BOOK _____ AT PAGE _____

TESTE: _____, CLERK

I (WE) HEREBY CERTIFY THAT I (WE) AM/ARE THE OWNER(S) OF THE PROPERTY DEPICTED ON THIS PLAT. THE PLATTING OR DEDICATION OF THE FOLLOWING PROPERTY SHOWN ON THIS PLAT IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS AND TRUSTEES, IF ANY, I (WE) HEREBY ESTABLISH THE LOT LINES SHOWN HEREON AND DEDICATE ALL STREETS, ALLEYS, WALKS, RIGHTS-OF-WAY, PARKS, EASEMENTS, OPEN SPACES AND OTHER AREAS AND FACILITIES TO PUBLIC OR PRIVATE USE AS INDICATED ON THE PLAT. I (WE) FURTHER CERTIFY THAT ANY ENVIRONMENTAL PERMITS, APPROVALS OR CORRECTIVE ACTION REQUIRED BY STATE, FEDERAL OR LOCAL LAW SHALL BE OBTAINED IN A TIMELY MANNER.

COMMONWEALTH OF VIRGINIA, COLLEGE OF WILLIAM AND MARY IN VIRGINIA

BY: _____ DATE

NAME: _____ TITLE: _____

STATE OF _____
CITY OF _____ TO WIT:

I, _____, A NOTARY PUBLIC IN AND FOR THE CITY AND STATE AFORESAID, DO HEREBY CERTIFY THAT _____, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING BEARING DATE THE _____ DAY OF _____, 20__, HAS ACKNOWLEDGED THE SAME BEFORE ME IN MY CITY AND STATE AFORESAID.

GIVEN UNDER MY HAND THIS _____ DAY OF _____, 20__

MY COMMISSION EXPIRES: _____

_____
NOTARY PUBLIC

Exhibit B

SUBDIVISION PLAT
FOR PROPERTY OF
COMMONWEALTH OF VIRGINIA, COLLEGE OF WILLIAM AND MARY IN VIRGINIA
TO BE CONVEYED TO
HAMPTON ROADS SANITATION DISTRICT
BEING DESCRIBED AS
LOT 5 PLAT BOOK 2, PAGE 47
ACCOMACK COUNTY, VIRGINIA
SCALE: 1" = 25' DATE: MARCH 15, 2023

COMMONWEALTH OF VIRGINIA
PRELIMINARY
Lic. No. 003230
LAND SURVEYOR

PRECISION MEASUREMENTS, INC.
SURVEYORS • GPS • 3-D SCANNING • UAS • HYDROGRAPHIC
VIRGINIA BEACH-RICHMOND-NEWPORT NEWS-CHANTILLY, VIRGINIA
770 LYNNHAVEN PARKWAY, SUITE 240
VIRGINIA BEACH, VIRGINIA 23452
TEL: (757) 595-7570

SHEET 1 OF 2

0' 25' 50' 75 FEET
GRAPHIC SCALE

Sewer Transfer and Service Agreement
Between HRSD and the town of Wachapreague

Exhibit C

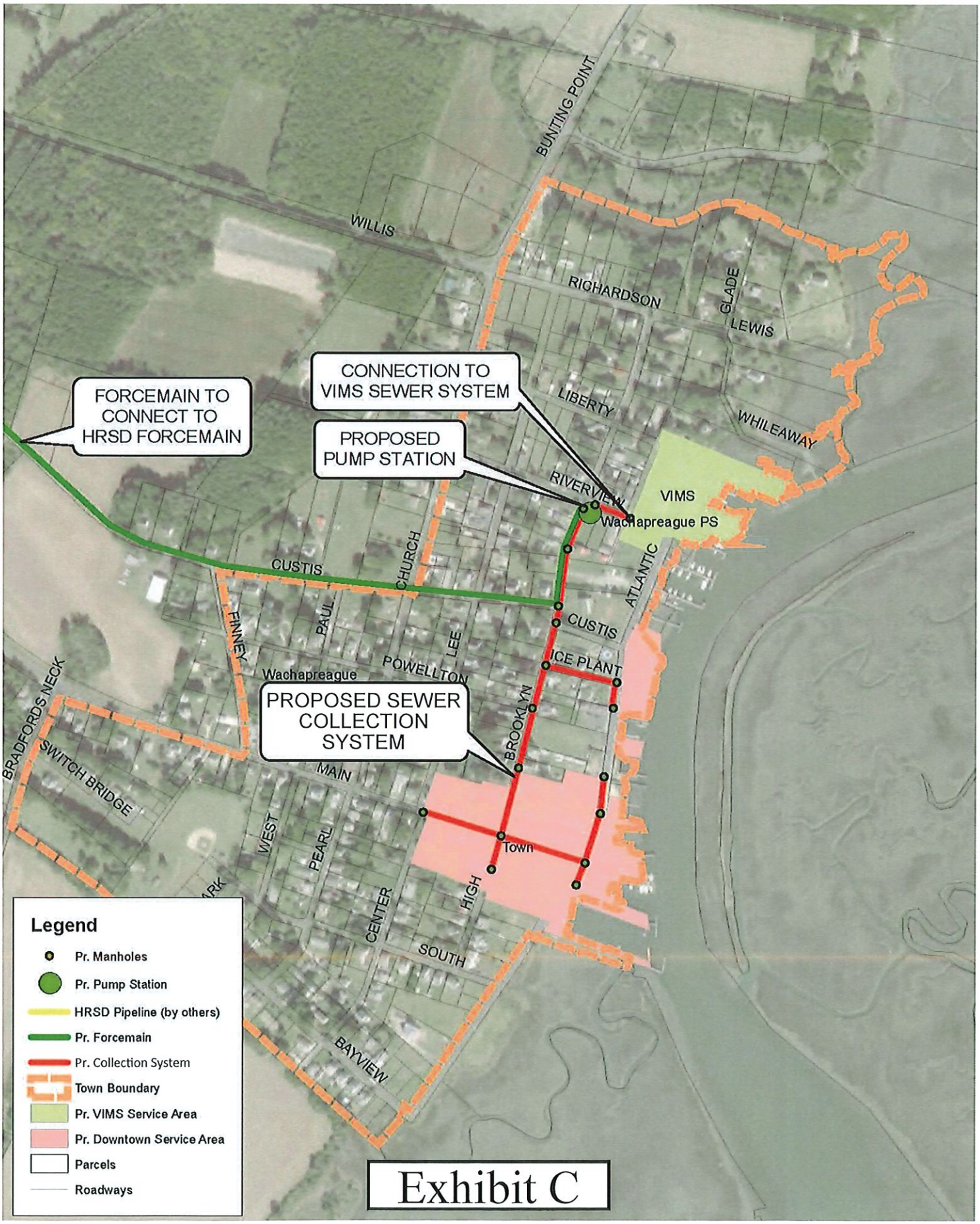

FORCEMAIN TO CONNECT TO HRSD FORCEMAIN
CONNECTION TO VIMS SEWER SYSTEM
PROPOSED PUMP STATION
PROPOSED SEWER COLLECTION SYSTEM
BUNTING POINT
WILLIS
RICHARDSON
GLADE
LEWIS
LIBERTY
WHILEAWAY
RIVERVIEW
VIMS
Wachapreague PS
CUSTIS
CHURCH
ATLANTIC
PAUL
FINNEY
LEE
POWELLTON
ICE PLANT
BROOKLYN
Wachapreague
BRADFORDS NECK
SWITCH BRIDGE
MAIN
WEST
PEARL
CENTER
HIGH
SOUTH
Town
BAYVIEW
Legend
Pr. Manholes
Pr. Pump Station
HRSD Pipeline (by others)
Pr. Forcemain
Pr. Collection System
Town Boundary
Pr. VIMS Service Area
Pr. Downtown Service Area
Parcels
Roadways

Exhibit C

11. Town of Wachapreague
Reimbursement Agreement

REIMBURSEMENT AGREEMENT
BETWEEN THE HAMPTON ROADS SANITATION DISTRICT, AND
THE TOWN OF WACHAPREAGUE, VIRGINIA

THIS REIMBURSEMENT AGREEMENT (the "Agreement"), by and between the HAMPTON ROADS SANITATION DISTRICT ("HRSD"), and the TOWN OF WACHAPREAGUE, VIRGINIA ("TOWN"), is entered into this 11th day of MAY _____, 2023 (the "Effective Date").

RECITALS

R:1. The TOWN is within the territory served by HRSD.

R:2. By that certain Sewer Transfer and Service Agreement dated May 11, 2023, the TOWN transferred ownership and operational responsibility of the sewer collection and conveyance systems it plans to construct, and all associated real and person property interests, to HRSD (the "Facilities").

R:3. In association with its ownership and operation of the Facilities, the Town has requested that HRSD construct the sanitary sewer infrastructure associated with the Facilities as described in more detail in the Scope of Work attached hereto and incorporated herein as **Exhibit A** (the "Project").

R:4. The total estimate cost of Project is $3,920,000 (the "Project Cost"), which is comprised of the pump station estimate and force main estimate cost of $3,070,000, and the collection system estimate cost of $850,000.

R:5. The TOWN has been awarded funding from both the Commonwealth of Virginia and United States Government through the following funding programs: Commonwealth of Virginia ($2,400,000), ARPA (American Rescue Plan Act) ($180,000), and DEQ grant ($590,000) (the "Funding Programs") for a total award in the amount of $3,070,000 (the "Program Funds"), all of which qualify under the respective programs to be used to pay the Project Costs. Award of US Government funds in the amount of ($750,000) is pending.

R:6. The parties intend to fund the Project Costs with the Program Funds.

R:7. The Program Funds will first be used to fund the pump station and force main parts of the Project. The collection system will be constructed provided remaining Program Funds are available.

R:8. The TOWN agrees to reimburse HRSD for all Project Costs under the terms and conditions set forth herein.

AGREEMENT

NOW THEREFORE, in consideration of the above provisions and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

I. REIMBURSEMENT

A. The TOWN shall reimburse HRSD for the Project Costs. Except as otherwise provided herein, all payments due hereunder shall be made within sixty (60) days of demand by HRSD or as the funds are disbursed to the TOWN by the Funding Program administrators, whichever is later. All allowable costs associated with design, easement acquisition, construction, inspection, and administration related to the Project shall be included in the Project Costs and reimbursed to HRSD by the TOWN. HRSD shall provide access to all records and support all payment requests with appropriate documentation.

B. The TOWN agrees to each take all necessary steps to comply with any requirements of the Programs to secure the Program Funds and ensure that they are sufficient for the reimbursement for all Project Costs.

II. PROJECT

A. Payment of Project Costs

1. HRSD will administer and be responsible for the initial payment of the Project Costs. During the course of construction, HRSD shall compensate the Contractors and other individuals and entities providing materials and/or services related to the Project for all Project Costs.

2. The TOWN and HRSD acknowledge that HRSD will be paying the Project Cost in progress payments to the Contractors and other entities during phases of the Project's completion. The TOWN agrees to reimburse the HRSD for all progress payments made in accordance with Section I, above. HRSD shall provide the TOWN with an invoice detailing the portion of the Project Costs due at intervals during the Project.

3. The Program Funds will first be used to fund the pump station and force main. The collection system will be constructed provided remaining Program Funds are available.

4. HRSD and the TOWN will review and approve change orders related to the Project that increase the Project Costs. Upon written approval of any such change order by the TOWN, the Project Costs will be

increased as provided in the change order and reimbursed to HRSD as provided herein.

B. Operation and Maintenance of the Improvements during and after Construction

1. HRSD shall be responsible for operation and maintenance of the Facilities during and after construction.

2. Public sanitary sewer infrastructure constructed as part of the Project shall be owned and operated by HRSD.

III. GENERAL PROVISIONS

A. Governing Law. This Agreement shall be governed as to all matters whether of validity, interpretations, obligations, performance or otherwise exclusively by the laws of the Commonwealth of Virginia, and all questions arising with respect thereto shall be determined in accordance with such laws. Regardless of where actually delivered and accepted, this Agreement shall be deemed to have been delivered and accepted by the parties in the Commonwealth of Virginia.

B. Notice. Any notice, communication or request under this Agreement shall be provided in writing by either (a) a nationally recognized overnight delivery service (next business day service), (b) electronic mail with confirmation of receipt, or (c) hand-delivery, if the receipt of the same is evidenced by the signature of the addressee or authorized agent, to TOWN and to HRSD at the respective addresses herein shown, unless this Agreement is modified in writing to reflect other addresses:

For: HRSD
General Manager
1434 Air Rail Avenue
Virginia Beach, VA 23455
Telephone: (757) 318-4335
Email: generalmanager@hrsd.com

With Copy to:
Robyn H. Hansen, Esquire
Sands Anderson PC
4801 Courthouse Street, Suite 203
Williamsburg, VA 23188
Telephone: (757) 276-8243
Email: rhansen@sandsanderson.com

For: TOWN
Town of Wachapreague
Charles Elliott, Mayor
PO Box 242
Wachapreague, VA 23480
town@wachapreague.org

With Copy to:
Wachapreague Town Attorney
Carl Bundick Esq.
23318 Wise Ct.
Accomack, VA. 23301
shoreadvocacygroup@gmail.com

C. Assignment. No party may assign its rights under this Agreement without the prior written consent of the other party.

D. Amendment. This Agreement may be amended only by a written instrument duly executed by the parties.

E. Severability. If any provision of this Agreement or the application thereof to any circumstance shall be determined to be invalid, illegal, or unenforceable to any extent, the remainder of this Agreement and the application thereof shall not be affected and shall continue to be valid, in effect and enforceable to the fullest extent permitted by law.

F. Term of Agreement. The term of the Agreement will commence on the date the Agreement is entered into and be completed when each party has completely performed its obligations hereunder.

G. Force Majeure. No Party shall be responsible for its failure to fulfill an obligation pursuant to this Agreement to the extent that such failure is due to acts of God; labor strikes; war or terrorism; epidemics/pandemics; fires; floods; the actions of a third party; lockouts; strikes, freight embargos, and unusually severe weather or delays of subcontractors due to such causes. A Party experiencing a force majeure event that prevents fulfillment of a material obligation hereunder shall (a) give the other Party prompt written notice describing the particulars of the event; (b) suspend performance only to the extent and for the duration that is reasonably required by the force majeure event; (c) use reasonable efforts to overcome or mitigate the effects of such occurrence; and (d) promptly resume performance of the affected obligation if and when such Party is able to do so.

H. Waiver. No waiver of breach of any term or provision of this Agreement shall be construed to be, or shall constitute, a waiver of any other breach of this Agreement. No waiver shall be binding unless in writing and signed by the

parties waiving the breach. The failure of any party to seek redress for violation of or to insist upon the strict performance of any covenant or condition of this Agreement shall not prevent a subsequent act, which would have originally constituted a violation, from having the effect of an original violation. The rights and remedies provided by this Agreement are cumulative and the use of any one right or remedy by any party shall not preclude or waive the right to use any or all other remedies. Such rights and remedies are given in addition to any other rights the parties may have by law, statute, ordinance or otherwise.

I. Integration. This Agreement constitutes the entire understanding among the parties. No provision of this Agreement may be waived, modified, or amended except by an instrument signed by the party against whom the enforcement of such waiver, modification or amendment is sought.

J. Authority. TOWN and HRSD both warrant that they have permission and authority derived under their respective corporate Charters and Enabling Acts to execute and undertake this Agreement. This Agreement shall apply to, and be binding upon both parties, their elected officials, officers, agents, employees, successors, and assigns, to the maximum extent permitted by law.

K. Compliance with Law. Each party warrants that it has complied with all aspects of applicable federal, state, and local law in entering this Agreement and further warrants that it shall comply with all applicable federal, state, and local laws in the performance of this Agreement.

L. Binding Effect. This Agreement shall inure to the benefit of the Parties and shall, to the maximum extent permitted by law, be binding on the Parties and their successors and assigns.

M. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original as against any Party whose signature appears thereon, and all of which shall together constitute one and the same instrument. A signature affixed or delivered electronically will be considered an original.

N. Recitals. The Recitals above are incorporated into this Agreement as if fully set forth therein.

Signature pages follow

IN WITNESS WHEREOF, the Hampton Roads Sanitation District (HRSD) Commission has caused this Reimbursement Agreement with the Town of Wachapreague to be signed on its behalf by its General Manager in accordance with authorization granted at its regular meeting held on April 25, 2023.

HAMPTON ROADS SANITATION DISTRICT

By_____
Jay A. Bernas, PE, General Manager

Date: MAY 4, 2023

IN WITNESS WHEREOF, the Town of Wachapreague has caused this Reimbursement Agreement with Hampton Roads Sanitation District (HRSD) to be signed by the Mayor.

TOWN OF WACHAPREAGUE, VIRGINIA

By: _____

Printed Name: Charles Elliott

Title: Mayor

Date: 5-16-2023

Reimbursement Agreement
Between HRSD and the Town of Wachapreague

Exhibit A – Scope of Work

3959 Pender Drive, Suite 100, Fairfax, VA 22030
Phone: 703.794.6194
Fax: 703.738.1117
www.garney.com

Town of Wachapreague Force Main and Pump Station - ESDB April 18, 2023

Mr. Phil Hubbard,

Garney is providing the following pricing to design and construct the new package pump station, town collection system, and remaining force main to the town of Wachapreague. This proposal includes a new package pump station on property acquired from VIMS, approximately 9,800 linear feet of 6" HDPE force main, approximately 3,500 linear feet of 4" or less HDPE force main within the town, and 17 grinder pumps with house connections and laterals. The total cost for this work is **$3,920,000.00.**

Design Services	1.0	LS	$ 300,000.00
Builder Support During Design	1.0	LS	$ 80,000.00
Engineering Service During Construction	1.0	LS	$ 60,000.00
General Requirements, Bonds, Insurance, Mobilization/Demobilization	1.0	LS	$ 200,000.00
Construction	1.0	LS	$ 3,280,000.00

Construction Breakdown:

Force Main - $1,230,000
Collector System/Grinder Pumps - $850,000
Pump Station - $1,200,000

If you have any questions, please feel free to contact me by phone at (785) 213-4788 or by email at CHarding@garney.com.

Sincerely,

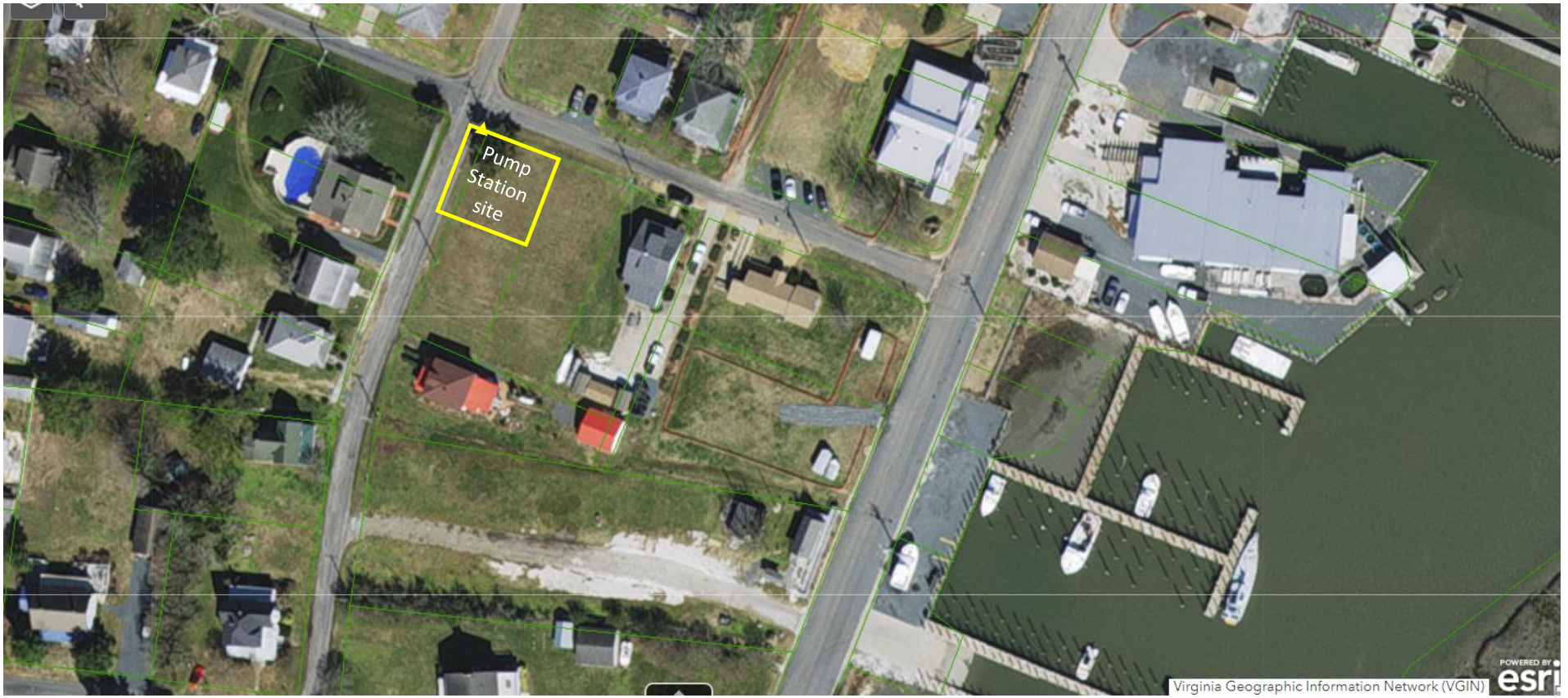
GARNEY COMPANIES, INC.

Craig Harding
Project Manager

CC:
Dan Buckley

Location Map

Town of Wachapreague, Virginia



12. Eastern Shore Infrastructure Improvements – Transmission Force Main Phase I
Property Acquisition – Commonwealth of Virginia, The College of William and Mary in Virginia

Prepared by and return to:
Sands Anderson PC
Stefan M. Calos (VSB# 27405)
1111 E. Main Street, Suite 2400
Richmond, Virginia 23219
(804) 783-7215
(Va. Code § 17.1-223)

Tax ID# 113A-3-D-5 (Va. Code §17.1-252)
Consideration: $0.00
Title Insurance Company: Fidelity National

Exempt from recordation tax (Va. Code § 58.1-811(A)(3)), grantor's tax (Va. Code § 58.1 (C)(4)), and clerk's fees (Va. Code § 17.1-279(E))

This Deed of Gift is made the _____ day of _____, 202__, by and between Commonwealth of Virginia, The College of William and Mary in Virginia, an institution of higher education and a body corporate and politic 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, Virginia 23417-0911.

Witnesseth:

That for no consideration, Grantor does hereby grant and convey with general warranty and English covenants of title unto Grantee, in fee simple, the following-described real estate:

> All that certain lot, piece or parcel of land with the buildings and improvements thereon and the appurtenances thereunto belonging, lying, situate and being in the Town of Wachapreague, County of Accomack, State of Virginia, known, numbered and designated as Lot numbered 5A, in Block D, as shown on a plat made by Precision Measurements, Inc., March 15, 2023, to be recorded in the Clerk's Office of the Circuit Court of Accomack County, Virginia, as the attached "Exhibit A" to this deed, and which may also be recorded separately.
>
> Being part of the same property conveyed to Commonwealth of Virginia, The College of William and Mary in Virginia by deed dated November 30, 2016 and recorded in the Clerk's Office of the Circuit Court of Accomack County, Virginia in Instrument No. 160004980.

Together with all buildings, privileges, rights, tenements, hereditaments, appurtenances, and rights of way thereunto belonging or in anywise appertaining. Subject to any valid conditions, easements, reservations, and restrictions in the chain of title.

Witness the following signature and seal:

COMMONWEALTH OF VIRGINIA, THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA

By:_____(Seal)

Name:_____

Title:_____

Commonwealth of Virginia
City/County of _____

The foregoing instrument was acknowledged and executed before me this _____ day of _____, 202___, by _____(name) as _____ (title) of the Commonwealth of Virginia, The College of William and Mary in Virginia.

My commission expires: / /

_____
Notary Public

IN WITNESS WHEREOF, the Hampton Roads Sanitation District Commission has caused the acceptance of this transfer of property to occur on its behalf by its General Manager in accordance with the authorization granted at its regular meeting held on _____, 2023.

Accepted by:

HAMPTON ROADS SANITATION DISTRICT

By:_____
Jay A. Bernas, P.E.
General Manager

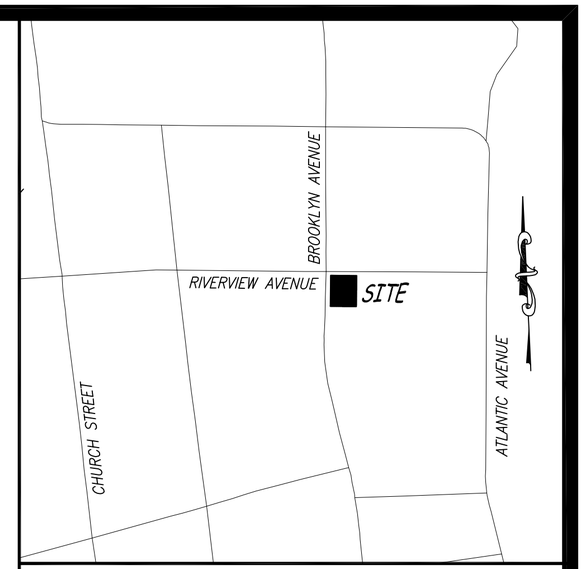
NOTES:

1. THE TOTAL AREA ENCOMPASSED BY THIS SUBDIVISION CONTAINS 9,018 SQ. FEET OR 0.207 ACRES.
2. THE MERIDIAN SOURCE OF THIS PLAT IS BASED ON VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD 1983 (1993 HARN ADJUSTMENT) COORDINATE VALUES ARE EXPRESSED IN U.S. SURVEY FEET.
3. THIS SURVEY WAS PERFORMED WITHOUT BENEFIT OF A TITLE REPORT AND MAY NOT REFLECT ALL EASEMENTS OR RESTRICTIONS THAT AFFECT THE PROPERTY.
4. PROPERTY AND RIGHT OF WAY INFORMATION IS BASED ON VARIOUS PLATS AND DEEDS OF RECORD AND ACTUAL FIELD MEASUREMENTS.
5. THIS PLAT IS NOT INTENDED TO SHOW ALL PHYSICAL IMPROVEMENTS THAT MAY AFFECT THE PROPERTY.
6. ALL WETLAND PERMITS REQUIRED BY LAW SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF GRADING OR OTHER ON-SITE ACTIVITIES BY OWNER.
7. THIS PROPERTY APPEARS TO BE IN FLOOD ZONE X (SHADED), AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE & FLOOD ZONE AE BASE FLOOD ELEVATION 7.0. FEDERAL EMERGENCY MANAGEMENT AGENCY COMMUNITY PANEL NUMBER 51001 0805 G. MAP REVISED MAY 18, 2015.

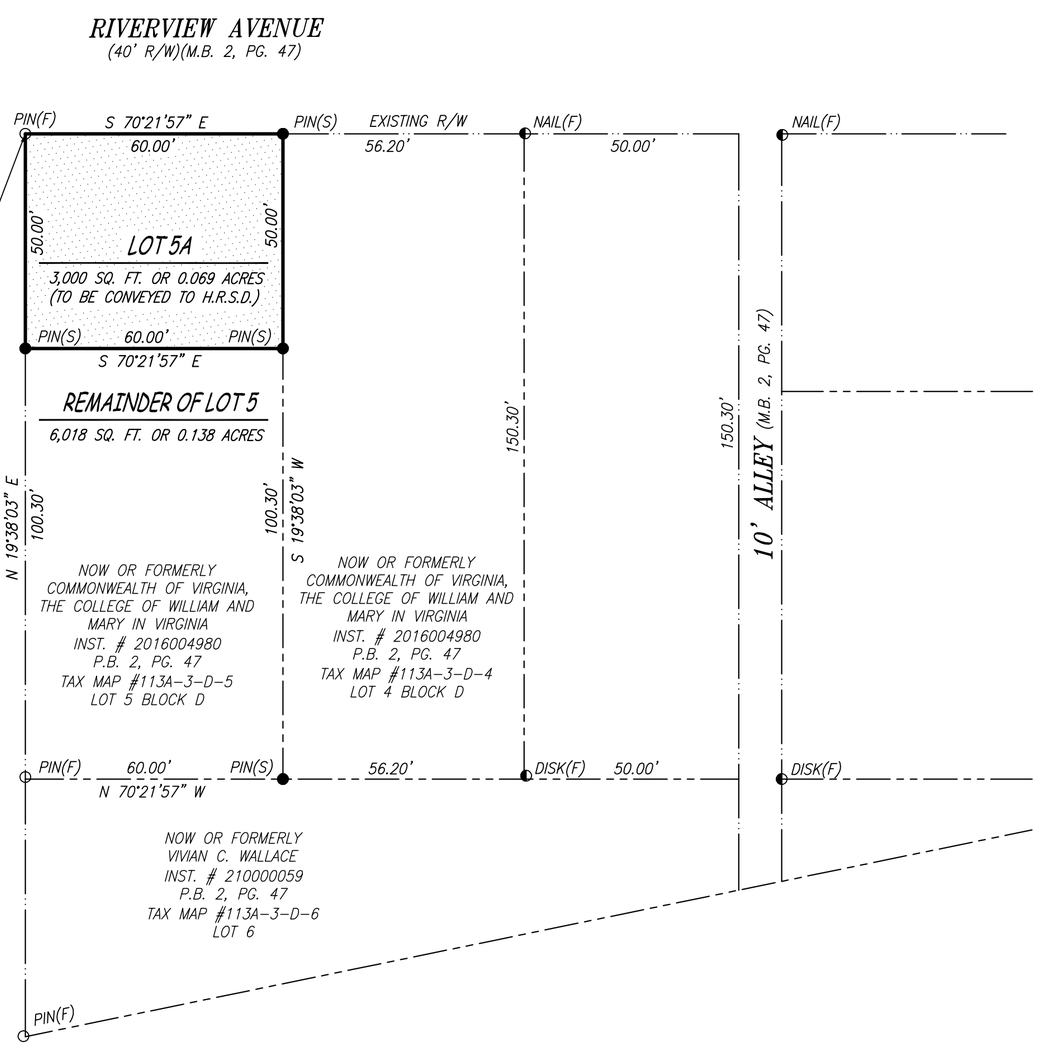
TYPICAL MONUMENT LEGEND	
●—	IRON PIN SET
◐—	NAIL FOUND (UNLESS NOTED OTHERWISE)
○—	IRON PIN FOUND

DIRECTORS NOTE:
I HEREBY CERTIFY THAT THE SUBDIVISION SHOWN HEREON HAS BEEN APPROVED IN ACCORDANCE WITH THE SUBDIVISION ORDINANCE OF ACCOMACK COUNTY. THE UNDERSIGNED DOES NOT CERTIFY AS TO THE CORRECTNESS OF THE BOUNDARIES, STREETS OR OTHER LINES ON THIS PLAT.

APPROVED: _____ DATE: _____
ACCOMACK COUNTY REPRESENTATIVE



VICINITY MAP
NOT TO SCALE



VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD83(1993HARN)

AREA TABLE	
ORIGINAL PARCEL LOT 5	9,018 SQ. FT. OR 0.207 ACRES
NEW PARCEL LOT 5A (H.R.S.D.)	3,000 SQ. FT. OR 0.069 ACRES
REMAINDER OF LOT 5	6,018 SQ. FT. OR 0.138 ACRES

VIRGINIA:
IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF ACCOMACK COUNTY, VIRGINIA ON THE _____, DAY OF _____, 2023, THIS PLAT WAS RECEIVED AND ADMITTED TO RECORD IN MAP BOOK _____ AT PAGE _____.

TESTE: _____, CLERK

I (WE) HEREBY CERTIFY THAT I (WE) AM/ARE THE OWNER(S) OF THE PROPERTY DEPICTED ON THIS PLAT. THE PLATTING OR DEDICATION OF THE FOLLOWING PROPERTY SHOWN ON THIS PLAT IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE UNDERSIGNED OWNERS, PROPRIETORS AND TRUSTEES, IF ANY, I (WE) HEREBY ESTABLISH THE LOT LINES SHOWN HEREON AND DEDICATE ALL STREETS, ALLEYS, WALKS, RIGHTS-OF-WAY, PARKS, EASEMENTS, OPEN SPACES AND OTHER AREAS AND FACILITIES TO PUBLIC OR PRIVATE USE AS INDICATED ON THE PLAT. I (WE) FURTHER CERTIFY THAT ANY ENVIRONMENTAL PERMITS, APPROVALS OR CORRECTIVE ACTION REQUIRED BY STATE, FEDERAL OR LOCAL LAW SHALL BE OBTAINED IN A TIMELY MANNER.

COMMONWEALTH OF VIRGINIA, COLLEGE OF WILLIAM AND MARY IN VIRGINIA

BY: _____ DATE

NAME: _____ TITLE: _____

STATE OF _____
CITY OF _____ TO WIT:
I, _____, A NOTARY PUBLIC IN AND FOR THE CITY AND STATE AFORESAID, DO HEREBY CERTIFY THAT _____, WHOSE NAME IS SIGNED TO THE FOREGOING WRITING BEARING DATE THE _____ DAY OF _____ ,20__ HAS ACKNOWLEDGED THE SAME BEFORE ME IN MY CITY AND STATE AFORESAID.

GIVEN UNDER MY HAND THIS ____ DAY OF _____ ,20__

MY COMMISSION EXPIRES: _____

_____
NOTARY PUBLIC

SURVEYORS NOTE:

I, HEREBY CERTIFY THAT THE PLAT SHOWN AND DESCRIBED HEREON IS A TRUE AND CORRECT SURVEY OF THE ACCURACY REQUIRED, THAT THE SOURCE OF TITLE IS CORRECT, AND THAT THE MONUMENTS SHALL BE PLACED AS SHOWN HEREON IN ACCORDANCE WITH THE REQUIREMENTS OF THE COUNTY SUBDIVISION ORDINANCE.

SOURCE OF TITLE AND LAST PLACE OF RECORD:
THE PROPERTY EMBRACED WITHIN THE LIMITS OF THIS SUBDIVISION WAS CONVEYED TO: COMMONWEALTH OF VIRGINIA, THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA, FROM THOMAS N. RICHARDSON, JR. BY DEED DATED NOVEMBER 30, 2016 AND RECORDED AS INSTRUMENT NUMBER 2016004980 BEING RECORDED IN THE CLERKS OFFICE OF THE CIRCUIT COURT OF ACCOMACK COUNTY, VIRGINIA.

SIGNED: PRELIMINARY

COMMONWEALTH OF VIRGINIA
PRELIMINARY
CRAIG L. LEBERNA
Lic. No. 003230
LAND SURVEYOR

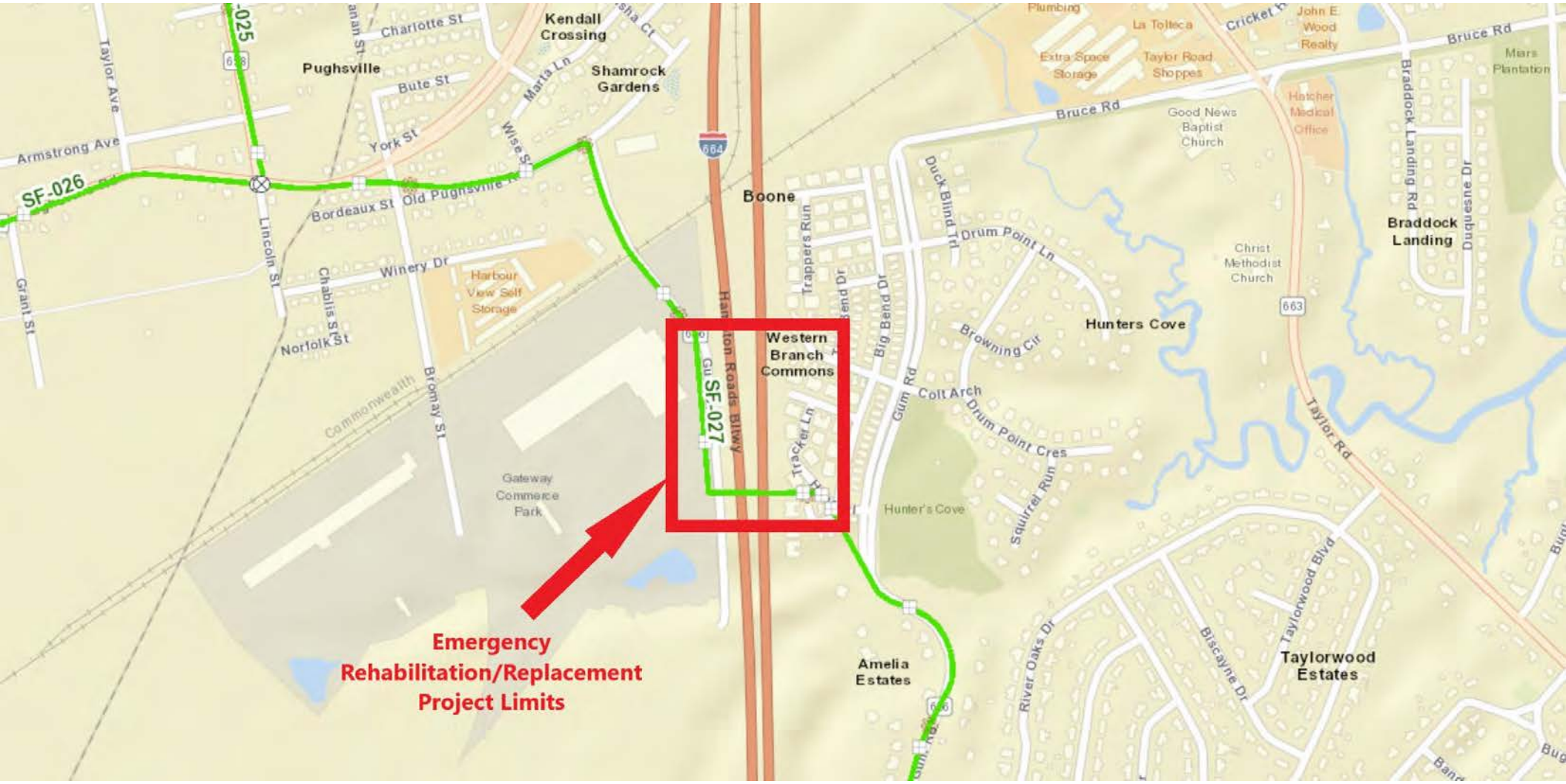
SUBDIVISION PLAT
FOR PROPERTY OF
COMMONWEALTH OF VIRGINIA, COLLEGE OF WILLIAM AND MARY IN VIRGINIA
TO BE CONVEYED TO
HAMPTON ROADS SANITATION DISTRICT
BEING DESCRIBED AS
LOT 5 PLAT BOOK 2, PAGE 47
ACCOMACK COUNTY, VIRGINIA
SCALE: 1" = 25' DATE: MARCH 15, 2023

PRECISION MEASUREMENTS, INC.
SURVEYORS • GPS • 3-D SCANNING • UAS • HYDROGRAPHIC
VIRGINIA BEACH-RICHMOND-NEWPORT NEWS-CHANTILLY, VIRGINIA
770 LYNNHAVEN PARKWAY, SUITE 240
VIRGINIA BEACH, VIRGINIA 23452
TEL: (757) 595-7570

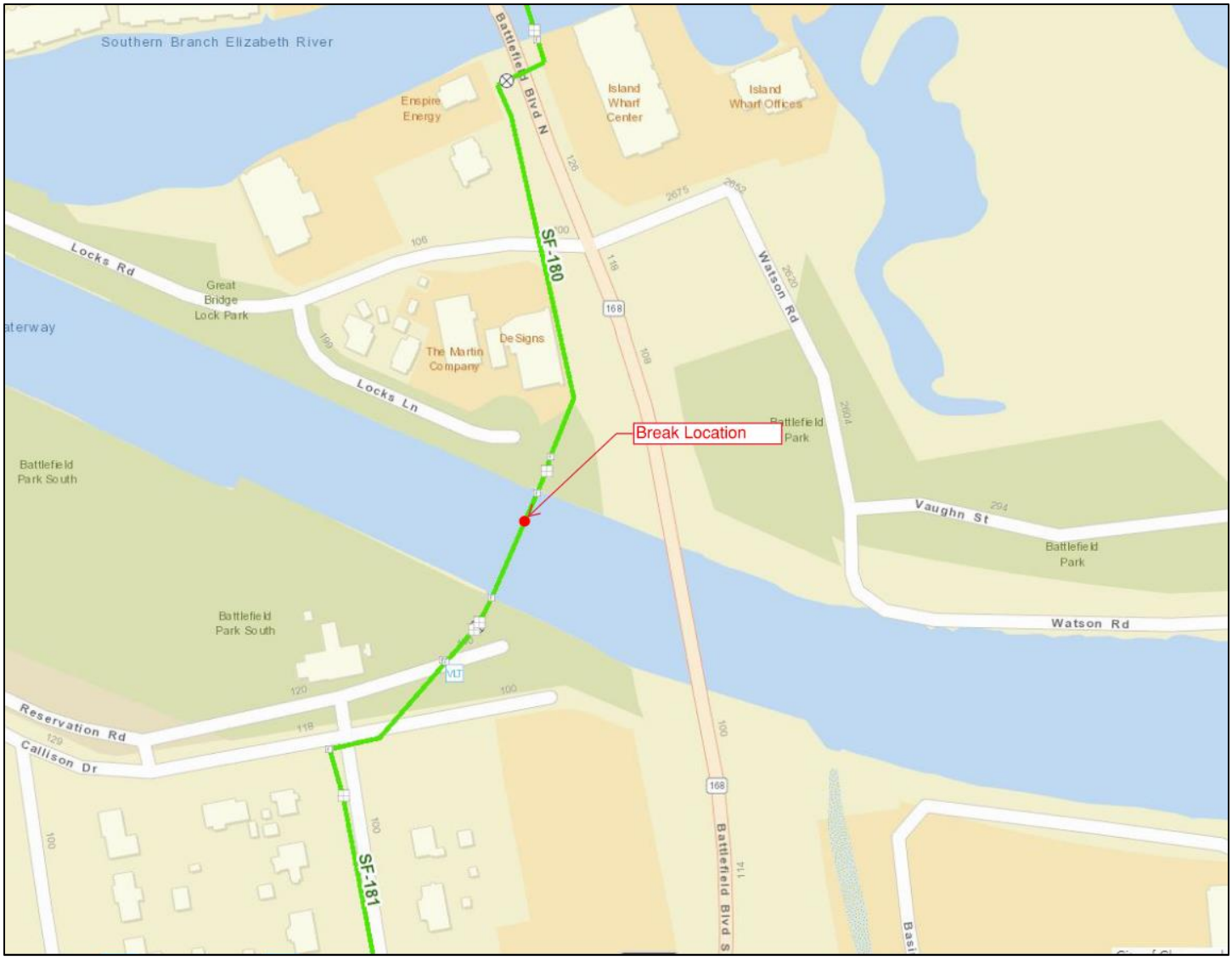
SHEET 1 OF 2

0' 25' 50' 75 FEET
GRAPHIC SCALE

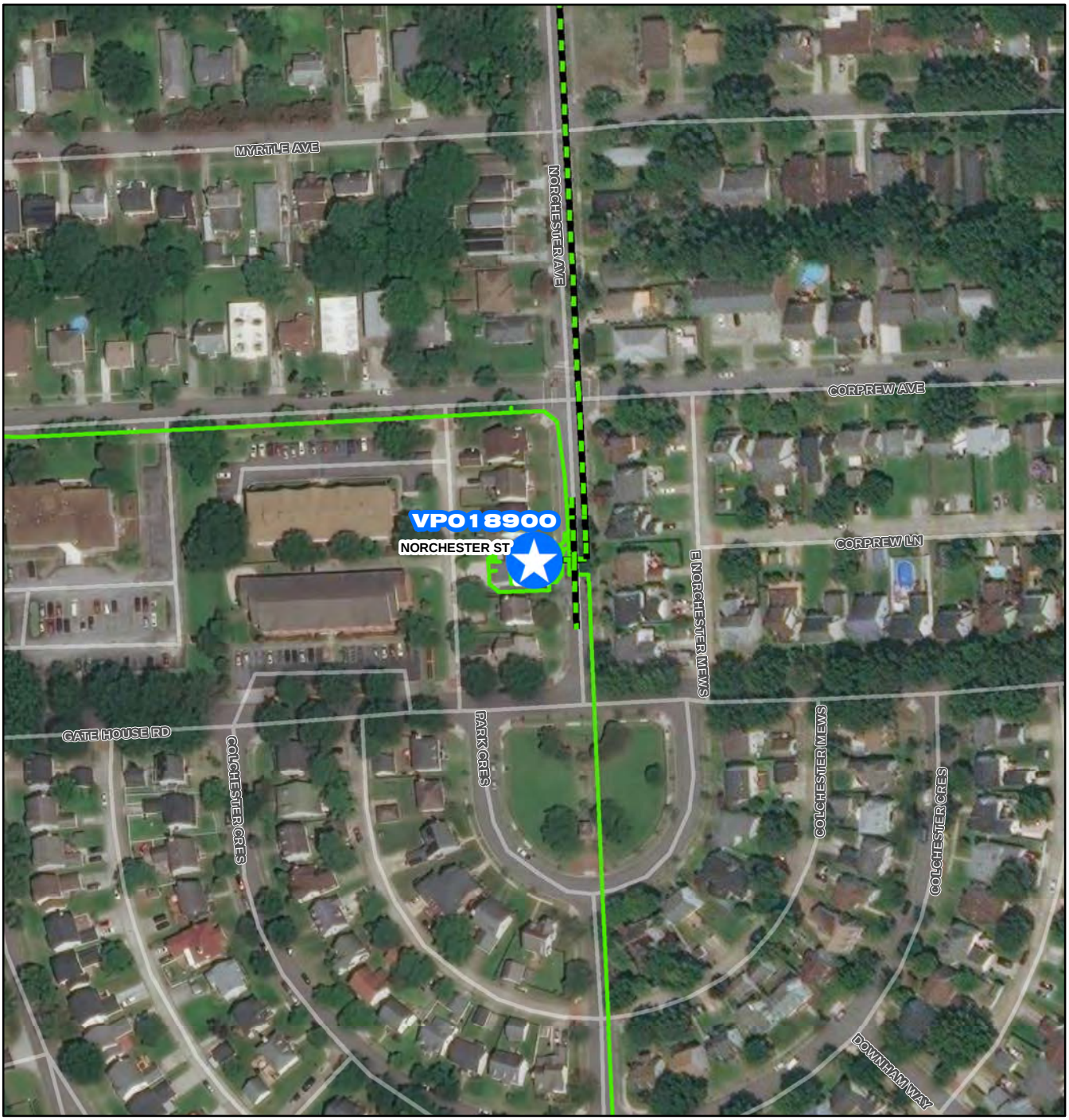
13. Bowers Hill Interceptor Force Main Section I Emergency Replacement Additional Appropriation


SF-026
SF-027
Pughsville
Kendall Crossing
Shamrock Gardens
Boone
Western Branch Commons
Hunters Cove
Braddock Landing
Gateway Commerce Park
Amelia Estates
Taylorwood Estates
Emergency Rehabilitation/Replacement Project Limits

14. Great Bridge Interceptor Force Main Emergency Replacement (SF-180)
New CIP and Initial Appropriation


Southern Branch Elizabeth River
Enspire Energy
Island Wharf Center
Island Wharf Offices
Battlefield Blvd N
SF-180
Locks Rd
Great Bridge Lock Park
The Martin Company
DeSigns
Locks Ln
Break Location
Watson Rd
Battlefield Park
Battlefield Park South
Vaughn St
Reservation Rd
Callison Dr
SF-181
Battlefield Blvd S

15. Norchester Pump Station Screening Improvements
Initial Appropriation



VP018900

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
WTP HRSD Treatment Plant
PRS HRSD Pressure Reducing Station
PS HRSD Pump Station

0 55 110 220 330 440 Feet

N
W E
S

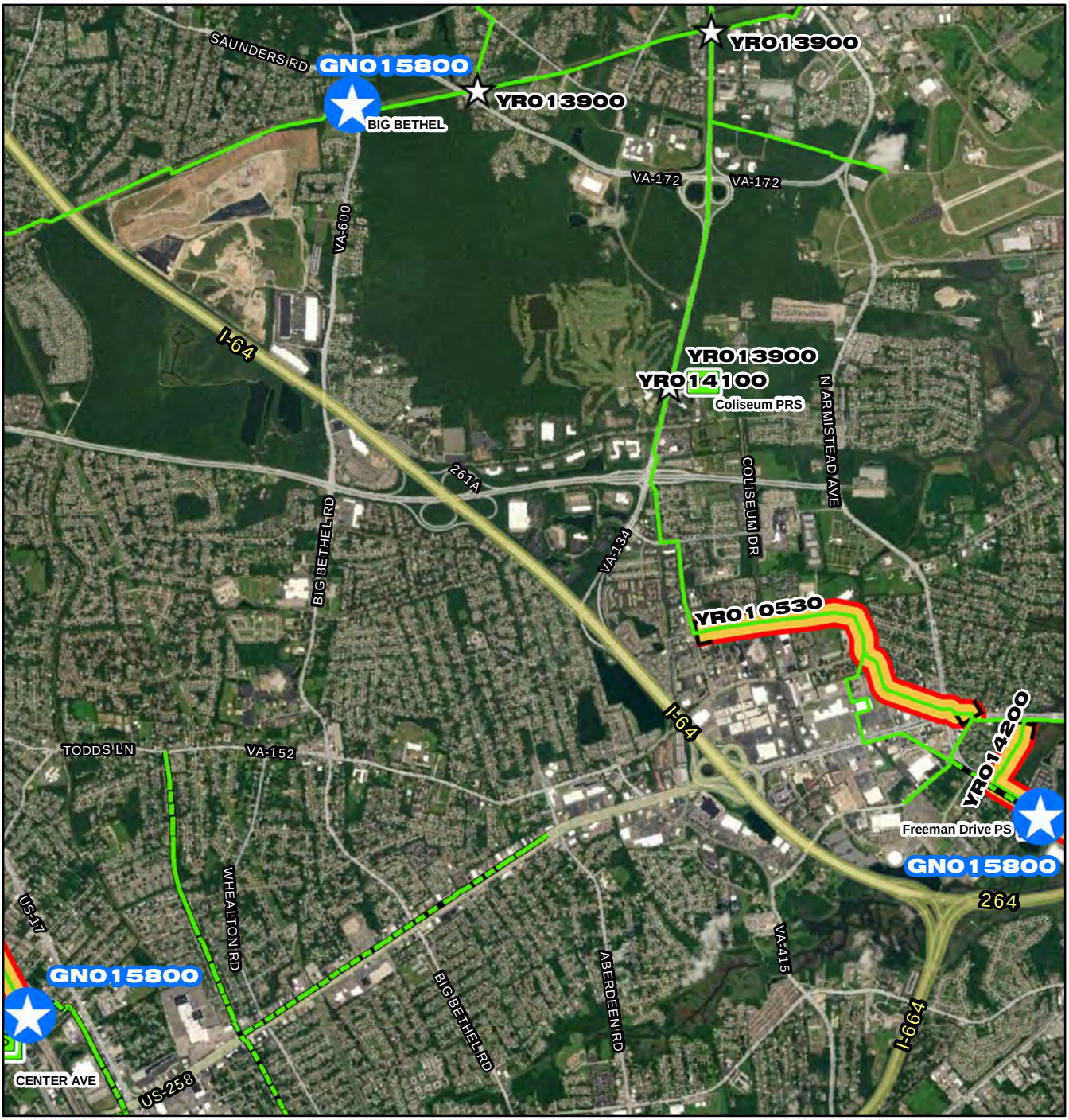
CIP Location

VP018900

Norchester Pump Station Screening Improvements

HRSD

16. North Shore Automated Diversion Facilities
Additional Appropriation, Contract Award (>$200,000), Task Order (>$200,000)



GN015800

- 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
- WTP HRSD Treatment Plant
- PRS HRSD Pressure Reducing Station
- PS HRSD Pump Station

0 1,200 2,400 4,800 7,200 9,600 Feet

GN015800

North Shore Automated Diversion Facilities

HRSD

N
W E
S

CIP Location

22. Informational Items

Resource: Jay Bernas

AGENDA ITEM 22. – April 25, 2023

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) Wastewater Surveillance Data

(10) Report of Internal Audit Activities

b. Strategic Planning Metrics Summary

April 14, 2023

Re: General Manager's Report

Dear Commissioners:

The EPA released the long-awaited proposed per- and polyfluoroalkyl substances (PFAS) drinking water limits. These are relevant for HRSD's SWIFT program as SWIFT Water™ must comply with the Safe Drinking Water Act's (SDWA) National Primary Drinking Water Standards prior to being recharged to the Potomac Aquifer System. As expected, the Maximum Contaminant Levels (MCLs) for PFOA (perfluorooctanoic acid) and PFOS (perfluorooctane sulfonic acid) were proposed at 4 parts per trillion (ppt) each, with an MCL Goal (MCLG) of 0 ppt (also expressed as ng/L). The SWIFT process includes Granular Activated Carbon (GAC) which has been demonstrated to effectively remove PFAS to the levels proposed in this draft regulation. Optimization of GAC performance is currently under evaluation at the SWIFT Research Center with a goal of meeting the PFAS removal objectives while minimizing operational costs.

Working with Delegate Robert Bloxom from the Eastern Shore, staff submitted a $10 million congressionally-directed spending request to our Senators and Congresswoman Kiggans for three Eastern Shore projects: Wachapreague, Chincoteague and the Onancock treatment plant upgrades, in respective priority-funded order. In addition, staff submitted a $344 million Water Quality Improvement Fund (WQIF) grant for the James River SWIFT project. If approved, this would be the largest WQIF grant approved by the Department of Environmental Quality (DEQ). Currently, $35.7 million in grants have been awarded out of $585 million requested.

HRSD held an internal conference called LIFE (Learning, Innovating & Fostering Excellence) to kick-off our Strategic Plan implementation and highlight the great work of each department. This event had rave reviews from staff and provided a significant morale boost for our organization.

The Low-Income Household Water Assistance Program (LIHWAP) continues to assist more customers with more than $5.5 million applied to over 10,000 accounts. We understand that Virginia is close to expending their funding allocation and staff are working on a national level to lobby for continued funding of this important program.

The highlights of March's activities are below. The detailed version is in the attached monthly reports.

A. **Treatment Compliance and System Operations:** On March 10, staff were notified that water was bubbling in the Great Bridge Locks where our pressurized interceptor force main crosses the canal. Staff quickly developed a plan and diverted the flow around the crossing to stop the flow into the canal. A dredge reportedly had a spud get "stuck on something" that day. When divers inspected the damage, there was a 7-foot-long linear hole along the pipe which could not be repaired. Staff are working on plans for a new crossing and on a claim with our insurance company.

B. **Water Quality:** An Enforcement Order was issued to Bottling Group, LLC for four technical violations that included a $6,000 civil penalty notice. The violations were for failing to follow special conditions, repeat failure within two years and permit limit exceedances for pH.

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

1. Attended a Q&A session with the Division Leaders.
2. Attended Paula Hogg and Harry Hardy's retirement celebrations.
3. Had lunch with the Engineering Department.
4. Attended the Climate Change Plan briefing.
5. Attended the Atlantic Treatment Plant master planning charette.
6. Met with staff on re-evaluating King William Treatment Plant upgrade options.

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

1. Attended the WateReuse conference and spoke on two panels: Protecting the Chesapeake Bay through Collaboration and Stories of Water Reuse: HRSD's Integrated Plan.
2. Provided an interview to WAVY news on HRSD's rate increases. The interview was held at the SWIFT Research Center and the reporter stayed for almost an hour and a half to learn more about this important program.
3. Met with Virginia Beach Economic Development on potential partnership opportunities.
4. Attended the monthly Director of Utilities meeting.
5. Attended the Environment Virginia conference and had a chance to network with the Secretary of Natural Resources, Director of DEQ, Virginia Marine Resources Commission (VMRC) Commissioner, Norfolk Army Corps of Engineers Colonel and others.

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 Newport News at 9 am on Tuesday, April 25, 2023**.

Respectfully submitted,

Jay Bernas, P.E.
General Manager

TO: General Manager

FROM: Director of Communications

SUBJECT: Monthly Report for March 2023

DATE: April 11, 2023

A. Publicity and Promotion

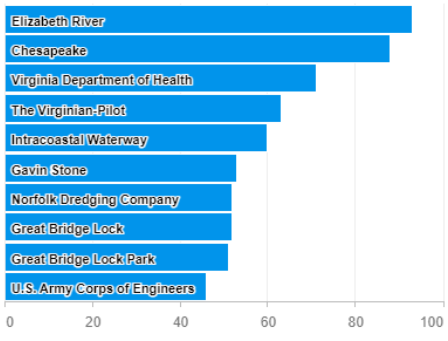
1. HRSD and/or SWIFT were mentioned or featured in 22 news stories or media/social media mentions. Topics included:

   a. Initial stories about force main damage at Great Bridge Locks
   b. Bill increases expected over next several years
   c. Follow-up stories citing wastewater volume lost with Great Bridge Locks incident
   d. Follow-up stories citing health advisory, restrictions for Great Bridge Locks due to wastewater spill
   e. Follow-up stories of pipe damage assessments

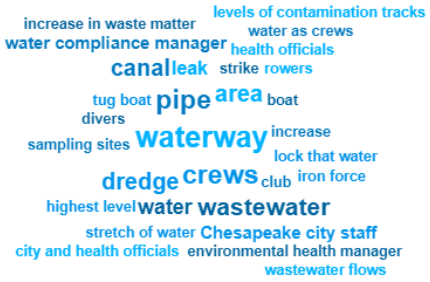
2. Analysis of media coverage

What are the top entities and keywords?

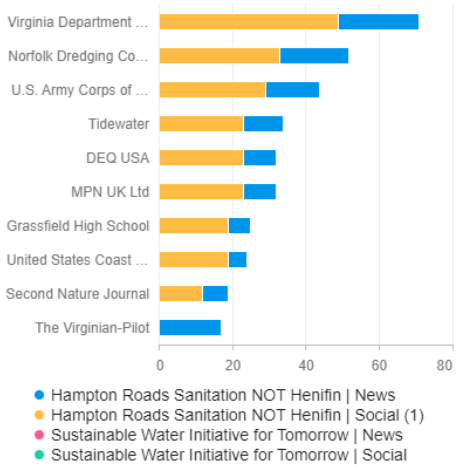
Top Entities



Top Keywords

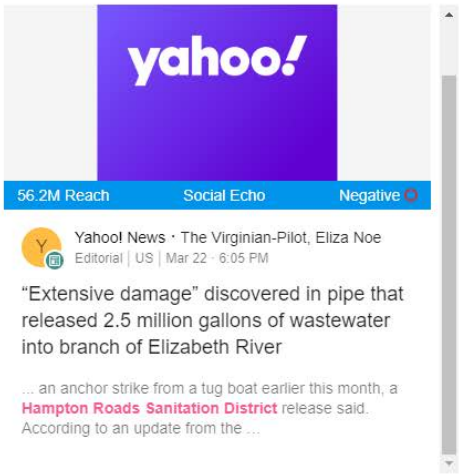


Top Organizations



What is the top performing news content?

Top Article by Reach

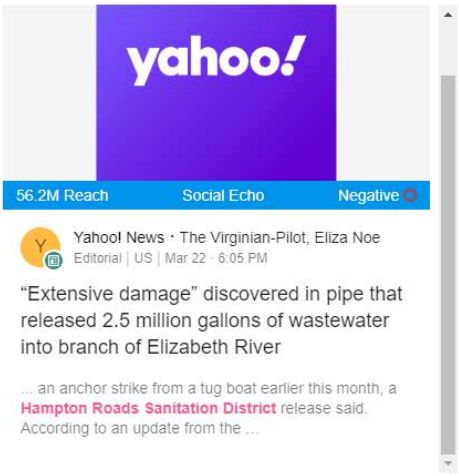


Yahoo! News · The Virginian-Pilot, Eliza Noe
Editorial | US | Mar 22 · 6:05 PM

"Extensive damage" discovered in pipe that released 2.5 million gallons of wastewater into branch of Elizabeth River

... an anchor strike from a tug boat earlier this month, a **Hampton Roads Sanitation District** release said. According to an update from the ...

Top Article by Reach and Volume



Yahoo! News · The Virginian-Pilot, Eliza Noe
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"Extensive damage" discovered in pipe that released 2.5 million gallons of wastewater into branch of Elizabeth River

... an anchor strike from a tug boat earlier this month, a **Hampton Roads Sanitation District** release said. According to an update from the ...

Top Article by Social Echo

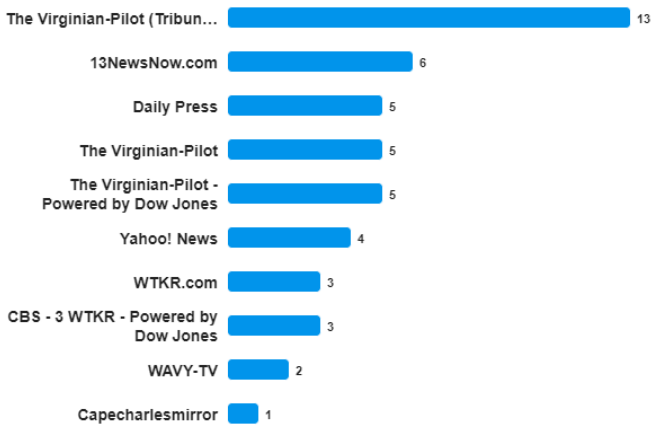
WVEC-TV · Angelique Arintok
Editorial | US | Mar 15 · 7:57 PM

Health advisory in effect for area of Great Bridge Lock following massive sewage spill

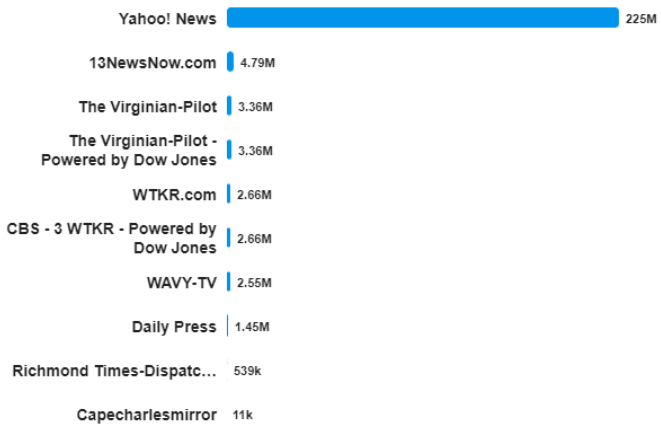
... to stay away from recreational activities involving water. **Hampton Roads Sanitation District** (HRSD) Director of Communications Leila R...

What are the top publishers?

Top Publications by Volume

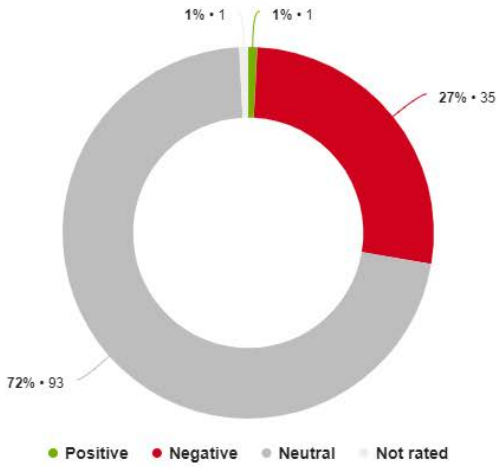


Top Publications by Reach

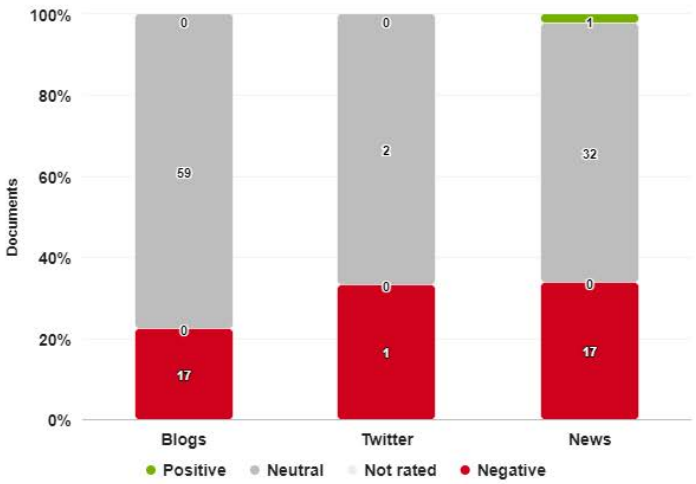


How favorable is the content?

Sentiment Share of Voice

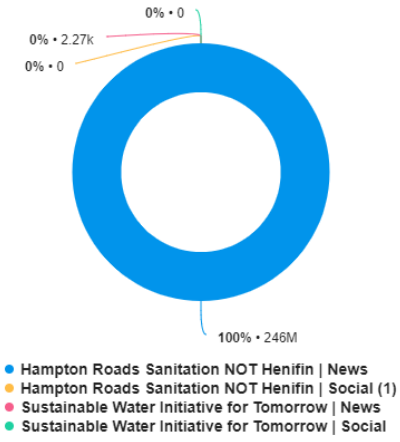


Sentiment by Source Type

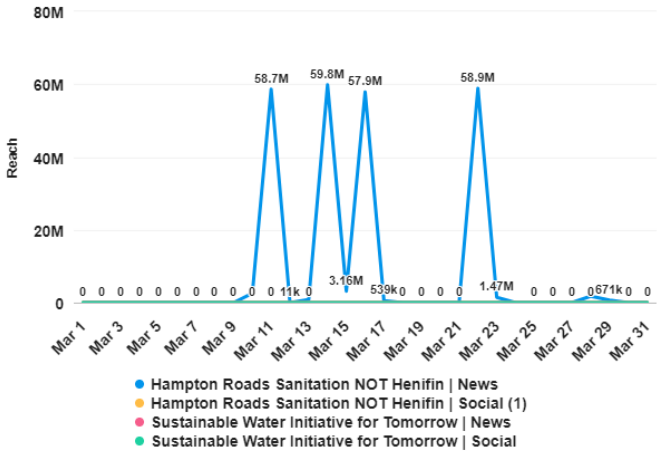


What is the potential reach?

Share of Voice by Reach

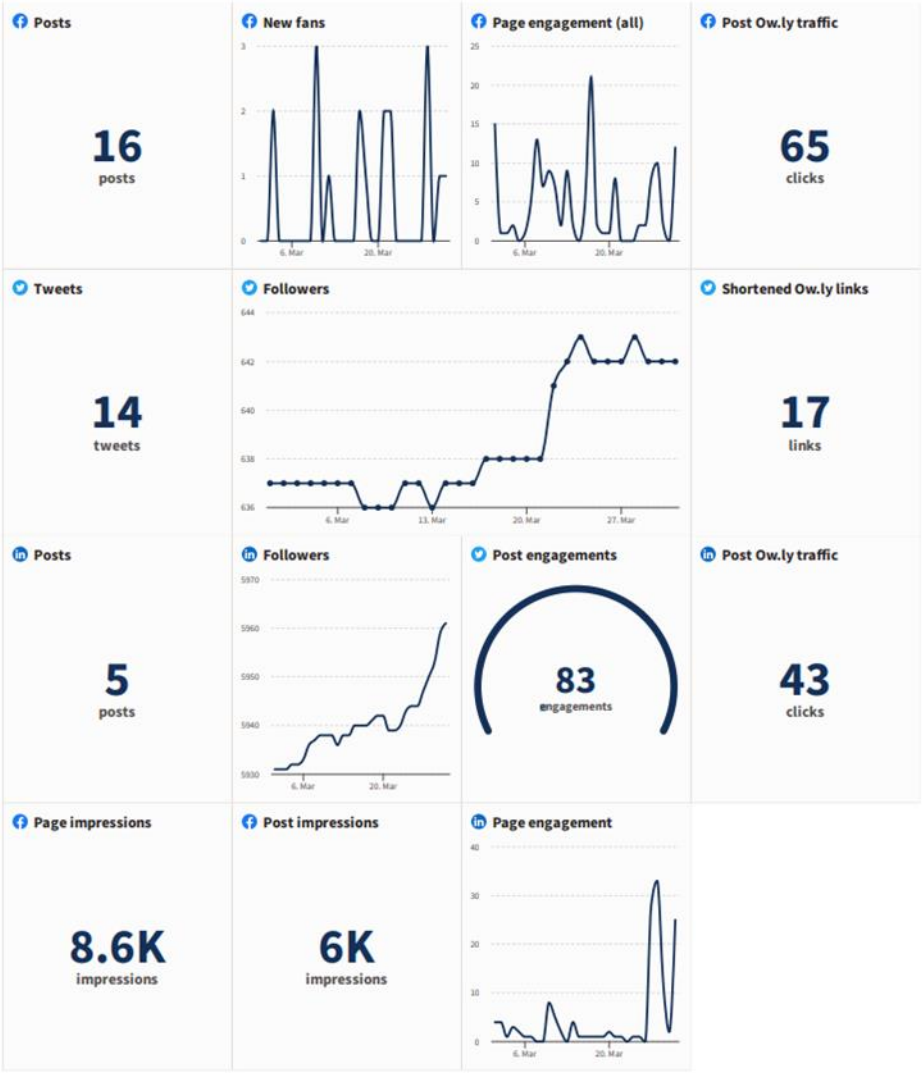


Potential News Reach

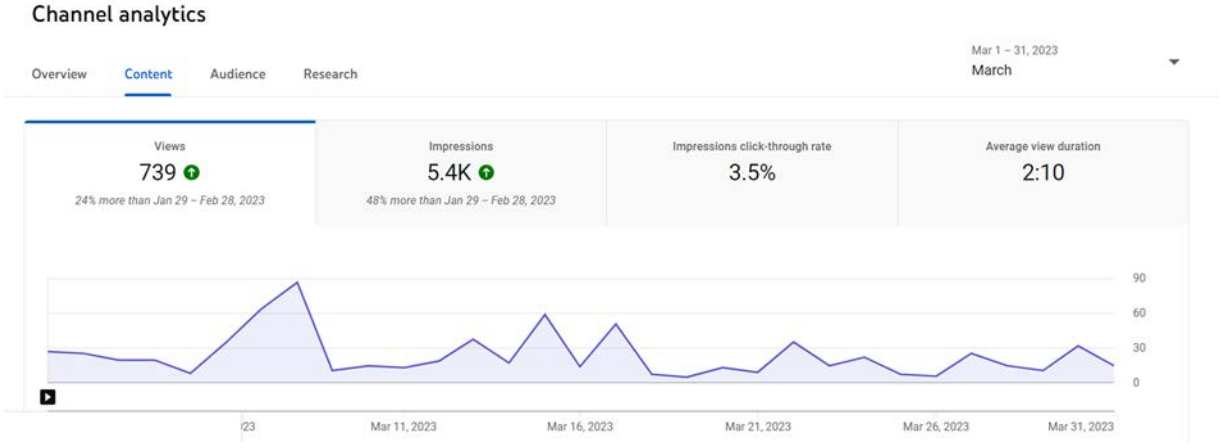


B. Social Media and Online Engagement

1. Metrics – Facebook, Twitter and LinkedIn



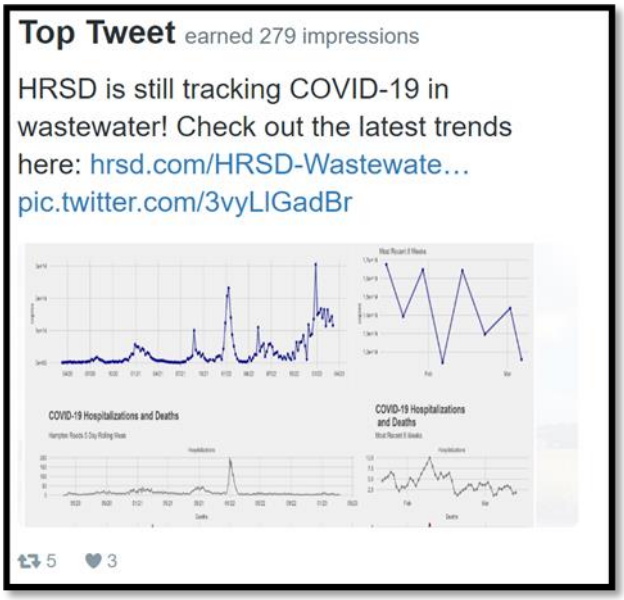
2. YouTube



3. Top posts on Facebook, Twitter, and YouTube

a. Top Facebook post

b. Top Tweet



c. Top YouTube Videos
- The Wastewater Treatment Process (189 views)
- SWIFT Research Center: What is the Potomac Aquifer (160 views)
- Rapid Fire Questions with HRSD Engineers for Engineers Week (72 views)
- What is Asset Management (53 views)
- HRSD Employee Testimonials - Robert (31 views)

4. Website and Social Media Impressions and Visits

a. Facebook:
- 8,647 page impressions
- 5,986 post impressions reaching 5,613 users
- Facebook Engagement of 148 (127 reactions, 19 shares, and 2 comments)

b. Twitter:
- 2,019 tweet impressions
- 559 profile visits
- 9 mentions

c. HRSD.com/SWIFTVA.com: 1,381 page visits

d. LinkedIn Impressions:
- 4,379 page impressions
- 3,918 post impressions

e. YouTube: 739 views

f. Next Door unique impressions: 20,8134 post impressions from 12 targeted neighborhood postings shared with 560,771 residents

g. Blog Posts: (0)

h. Construction Project Page Visits – 2,506 total visits (not including direct visits from home page, broken down as follows:

- 2,145 visits to individual pages
- 358 to the status page

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

1. News Releases: 3

2. Traffic Advisories: 2

3. Construction Notices and/or notices to neighbors: 9

4. Advertisements: 0

5. Project Notices:9 (via door hangings, email and U.S. mail reaching 1,048 residents)

6. Project/Community Meetings: 1 (in partnership with the City of Newport News Parks & Recreation Department for the James River SWIFT Full Scale Project)

7. New Project Web Pages: 2

8. New Project Videos: 0

D. Special Projects and Highlights

1. Director and Communications staff participated in the HRSD LIFE (Learning, Innovating & Fostering Excellence) Conference. The department staffed an exhibit table to provide information about the Communications department and resources available and also attended presentations in the afternoon.
2. Director managed media and community inquiries, coordinated interviews and participated in meetings and coordinated with the City of Chesapeake Health District, the Department of Environmental Quality and the Virginia Department of Health related to the force main break at the Great Bridge Locks in Chesapeake.
3. Director and staff participated in an open house event with the City of Newport News Parks and Recreation Department for the James River SWIFT full-scale implementation project.
4. Director and customer care staff met with representatives from James City County Service Authority to discuss their billing communication plan for upcoming billing changes.

E. Internal Communications

1. Director participated in the following internal meetings and events:

    a. Annual CIP Review meeting
    b. Strategic Carbon Footprint Reduction committee meeting
    c. Web and SharePoint update meetings
    d. Climate Change Plan briefing
    e. Atlantic Treatment Plant Progress Farm Charette #3 meetings
    f. Security Update meetings
    g. HRSD LIFE (Learning, Innovating and Fostering Excellence) Internal Conference planning meeting
    h. SWIFT Community Commitment Plan steering team meeting
    i. Bi-weekly GM briefings
    j. HRSD security assessment meeting
    k. Discharge Monitoring Report (DMR), SWIFT Quality Steering Team (QST) and HRSD QST meetings

2. Director also conducted biweekly Communications department status meetings and weekly team and one-on-one check-in meetings.

3. Staff attended 18 project progress and outreach development meetings with various project managers.

F. Metrics

1. Educational and Outreach Activities: 52 (49 virtual, 3 in-person)
   a. Self-guided SWIFT Virtual Tours – 49 views (analytics specify number of times "Take a Tour" button was selected)
   b. 03/10/2023 – Western Branch Primary STEM Day | 200 students
   c. 03/27/2023 – Cox High School wastewater presentation | 45 students
   d. 03/28/2023 – Cox High School wastewater presentation | 45 students

2. Number of Community Partners: 5

   a. Chesapeake City Public Schools
   b. Norfolk Public Schools
   c. Old Dominion University
   d. Virginia Beach Public Schools
   e. Virginia Water Environment Association

3. Additional Activities Coordinated by Communications Department: 7

   a. 03/22/2023 SWIFT Tours (2) VWEA Young Professionals | 40 participants
   b. 03/23/2023 Touch a Truck Event | St. Helena Elementary Career Day | 200 students
   c. 03/28/20 23 VIP Plant Tour ODU Civil and Environmental Engineering Students | 20 participants
   d. 03/29/2023 Atlantic Treatment Plant tour for Cox High School AP Environmental Science Students | 20 participants
   e. 03/30/2023 SWIFT Technical Tour for ODU Master's Program Students | 11 participants
   f. 03/31/2023 Nansemond Suffolk Academy Interview with Nansemond Treatment Plant staff member | 1 participant

4. Monthly Metrics Summary

Item #	Strategic Planning Measure	Unit	March 2023
M-1.4a	Total Training Hours per Full Time Employee (4) - Current Month	Hours / #FTE	1.31
M-1.4b	Total Training Hours per Full Time Employee (4) - Cumulative Fiscal Year-to-Date	Hours / #FTE	7.85
M-5.2	Educational and Outreach Events	Number	52
M-5.3	Number of Community Partners	Number	5

Respectfully,

Leila Rice, APR
Director of Communications

TO: General Manager

FROM: Director of Engineering

SUBJECT: Engineering Monthly Report for March 2023

DATE: April 12, 2023

A. General

1. Capital Improvement Program (CIP) spending for the eighth month of Fiscal Year (FY) 2023 was above the planned spending target.

CIP Spending ($M):

	Current Period	FYTD
Actual	37.33	204.04
Plan	34.25	254.00

2. Staff retention and recruitment remain significant priorities for the Engineering Department. A total of three positions are needed to fully staff the Engineering Department. Two new employees have joined the Engineering Department this month:

- Virginia Opp – Design & Construction Project Manager
- Rebecca Currall – Design & Construction Project Manager

We have offered jobs to two more Project Managers and hope to have them on board in April. Finding qualified candidates remains challenging, but we are making progress to reduce the number of open positions in the Engineering Department.

B. Asset Management Division

1. As part of a long-term condition inspection effort, staff are coordinating with a local contractor, Crofton Diving, to inspect the Army Base Treatment Plant outfall and diffuser. Each of the treatment plant outfalls are inspected on a rotating basis to verify the condition and make minor repairs if needed. The Army Base Treatment Plant outfall will be inspected in the coming month.

2. The annual condition assessment of force main assets continues. Assessment of a section of force main along Kempsville Road has revealed isolated pockets of trapped gas within the pipe. If left unaddressed, this can cause internal corrosion and possible premature failure. Planning and permitting are underway for the installation of air vents where gas pockets were detected.

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

1. Construction continues on the combined CIP projects entitled Nansemond Treatment Plant (NTP) Struvite Recovery Facility and NTP Digester Capacity Upgrades. Construction of the needed foundations is underway and piping work to serve these facilities has begun. Recent damage to an existing stairwell caused by the contractor's

electrician has resulted in the need to modify this structure. A final decision to install a new stairwell was approved and this work has begun.

2. Construction continues on the Park Avenue Pump Station Replacement project. Recent problems with the sheeting/shoring for the new foundation have delayed the project. A sheeting failure in January caused the contractor to remove the initial work effort. A revised sheeting/shoring plan is under review by the project team and some concerns have been raised. The safety of the project team could be impacted by this work and if the sheeting is not suitable, this could also affect the new construction. These concerns will impact the project schedule and a resolution has yet to be determined on the proper sheeting/shoring design.

3. An emergency declaration has been issued to address the recent failure of the existing 20-inch force main under the Intracoastal Waterway at the Great Bridge Locks. An initial inspection of the damage was completed in March and efforts are underway to connect an existing City of Chesapeake sewer pump station to a new location to eliminate the temporary pump and haul efforts. Long term replacement options for the damaged force main are under review. A new CIP project will be initiated to address this work due to the cost and complexity of the needed replacement.

4. An important SWIFT Program milestone was reached in March with the submittal of the Water Quality Improvement Fund (WQIF) for the James River SWIFT project to the Virginia Department of Environmental Quality (VDEQ). This submittal is HRSD's first application directly related to the SWIFT Program and includes many project components that are unique to the specific project, including the recharge wells and portions of the SWIFT treatment train. The application included a reimbursement amount of $344 million which is the largest application made by HRSD and would likely be the largest WQIF grant issued by VDEQ. We expect to learn about the approval of this request later this year.

D. Planning & Analysis Division

1. Staff are studying the impacts of the recent failure of the sewer force main at the Great Bridge Locks in Chesapeake. This study includes a detailed hydraulic analysis of the impacts of closing this pipeline. Scenarios under consideration include the impacts of peak wet weather flows and the impact to other CIP projects that require the diversion of flows when the pipes are shutdown to facilitate tie-ins into the existing interceptor sewer system. This analysis will provide important information as HRSD determines how long this section of damaged pipe can be kept out of service without compromising operations.

2. Staff began creating a new visualization tool using MS PowerBI to share the status of the various projects included in the Integrated Plan as defined in the Fifth Amendment to the Consent Decree with the US EPA to address regional sewer overflows and water quality issues. This dashboard will provide staff with an easy-to-use tool to track the status of the various initiatives required as part of this program and provide alerts of upcoming regulatory deadlines. Due to the complexity of many of the projects included in this program, this will be a time-consuming effort to capture all important metrics that must be met to fulfill the Consent Decree requirements.

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 7

   a. 03/08/2023 – Staff made five presentations at the HRSD LIFE Conference.

   b. 03/17/2023 – Staff member served as a panelist discussing the topic of "The Best is Yet to Come: A Look at the Evolution of the Design-Build Institute of America (DBIA) Best Practices" at the DBIA Water/Wastewater Conference.

   c. 03/22/2023 – Staff participated in the Canstruction Hampton Roads Event for the Foodbank of Southeastern Virginia and the Eastern Shore.

   d. 03/23/2023 – Staff moderated a DBIA–Hampton Roads Chapter webinar entitled, How Owners Attract the Best Design-Build Teams.

   e. 03/28/2023 – Staff participated in a workshop entitled, The Value of Asset Management at the WEF/AWWA Utility Management Conference.

   f. 03/30/2023 – Staff provided the keynote address at the Annual VWEA Collection System Conference entitled, The Future of Find & Fix.

   g. 03/30/2023 – Staff member served as a guest lecturer for a course entitled Professional & Legal Issues at Virginia Tech on the HRSD SWIFT Program.

2. Number of Community Partners: 6

   a. DBIA
   b. Foodbank of Southeastern Virginia and the Eastern Shore
   c. WEF/AWWA
   d. VWEA
   e. Virginia Tech

3. Number of Research Partners: 1

   a. Old Dominion University – Joint Institute on Advanced Computational Methods for Health and Climate.

4. Monthly Metrics Summary:

Item #	Strategic Planning Measure	Unit	March 2023
M-1.4a	Total Training Hours per Full Time Employee (53) - Current Month	Hours / #FTE	10.72
M-1.4b	Total Training Hours per Full Time Employee (53) - Cumulative Fiscal Year-to-Date	Hours / #FTE	28.82
M-5.2	Educational and Outreach Events	Number	7
M-5.3	Number of Community Partners	Number	6
M-5.4	Number of Research Partners	Number	1

Bruce W. Husselbee

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

TO: General Manager

FROM: Director of Finance

SUBJECT: Monthly Report for March 2023

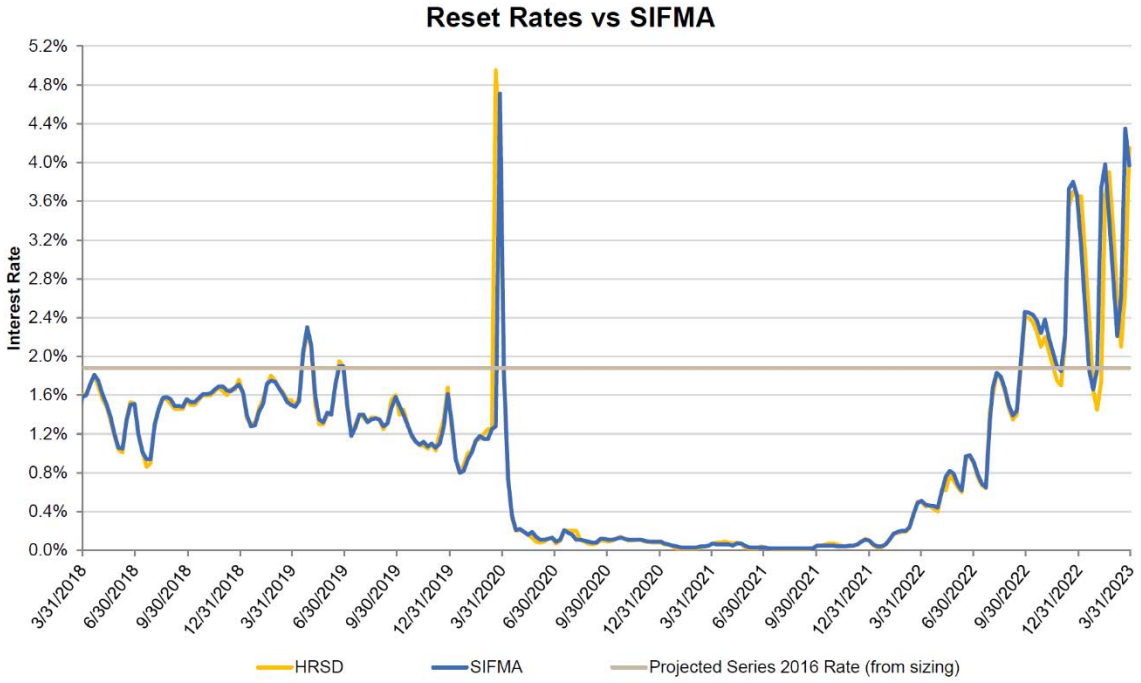
DATE: April 17, 2023

A. General

1. HRSD currently has $50 million in variable rate demand bonds outstanding. The rate on the bonds is remarketed weekly to investors. In March, the interest rate on the bonds fluctuated significantly, ranging from 2.10 percent to 4.15 percent, ending the month at 3.85 percent.

   Relative to the Securities Industry and Financial Markets Association (SIFMA) rate (the weekly index of tax-exempt variable rates), the trading levels of the HRSD bonds were favorable. Additionally, trading levels compared to peer organizations was in line.

   Some interest rate volatility stemming from the turmoil in the banking market in mid-March was expected. Staff spoke to representatives from remarketing agent JP Morgan this month and they indicated they do not see an elevated risk of a failed remarketing – only elevated pricing in the short-term.



2. Staff from across the department participated in the HRSD Life Conference. Several members made presentations to HRSD staff.

3. Staff presented the draft FY2024-FY2033 Capital Improvement Project (CIP) to the Finance and CIP Review Committees. Adjustments will be made and the final CIP will be included in the FY-2024 budget package.

4. Staff continue to work on the long-term financial plan that will be presented to the Finance Committee in April.

5. Staff continue to work with Environmental Protection Agency (EPA) on the request for minor modifications to the Integrated Plan. All additional information requested by EPA has been provided as of March 13.

6. Customer Care:

   a. Accounts Receivable +30 Days Past Due continues to follow a decreasing trend for the month of March 2023. All arrearage grouping's (31-60 days, 61-90 days, 90+ days) continue to trend downward, falling below a combined $18.3 million in past due account balances.

   b. As of the end of March 2023, a total of $5,541,979.72 in Low-Income Household Water Assistance Program (LIWHAP) funding has been applied to over 10,000 low-income qualified customer accounts for water, sewer and wastewater charges. HRSD accepts LIHWAP payments on behalf of locality HRUBS partners. The following is a breakdown of combined water, sewer and wastewater treatment assistance received for all HRSD and locality HRUBS charges:

	LIHWAP	Count
HRSD	**$2,697,495.41**	**10,111**
Norfolk	$1,899,606.00	2,669
Suffolk	$580,793.60	1,913
Chesapeake	$316,595.20	863
JCSA	$34,528.46	179
Smithfield	$9,307.59	15
Urbanna	$1,593.71	4
King William	$1,235.82	7
Surry County	$756.10	2
Town of Surry	$67.83	1
	$5,541,979.72	15,764

   c. Field staff delivered 5,849 warning door tags and disconnected water service to 1,130 accounts during March: over 1,200 more field activities than the previous month. However, emphasis was placed on pairing warning tags with a LIHWAP informational tag to promote the availability of assistance. Approvals of LIHWAP funding are uploaded daily in the billing system to prevent disconnection for customers awaiting assistance.

   d. Customer call and email volumes remained steady throughout the month.

In spite of increased field activities, service level increased to 79% of calls answered within three minutes (up from 69% in February). Call abandonment is slightly down to 7% (11% in February). Average wait time has decreased to 1 minute 45 seconds (down from 2 minutes 57 seconds in February). New hires continue to have a positive effect on service levels and staff continue to balance absenteeism, extend chat feature, disable call back feature in the evening hours and review individual metrics to ensure HRSD is delivering the best possible level of service to customers.

7. Interim Financial Report:

The accompanying Interim Financial Report indicates that most revenue and expense accounts are generally in line with the adopted budget. This report does not include certain adjustments that would be made to reflect accrual basis accounting.

With the completion of the ninth month of FY-2023, revenues and expenses are expected to be at 75% of the annual budgeted amounts. The two largest operating revenue sources, Wastewater and Indirect Discharge, are at 77% and 103% of budget, respectively. Wastewater revenue is slightly higher than budget and consistent with last year. Interest Income is at 281% of budgeted expectations, primarily due to upward market value adjustments and improved interest rates, a large improvement over last year's large downward market adjustments. Build America Bond Subsidies are received twice per year and the first payment has been collected. Total revenues and transfers are at 78%, slightly above budget and last year.

B. Interim Financial Report

1. Operating Budget for the Period Ended March 31, 2023

	Amended Budget	Current YTD	Current YTD as % of Budget (75% Budget to Date)	Prior YTD as % of Prior Year Budget
Operating Revenues				
Wastewater	$ 366,882,000	$ 281,061,110	77%	77%
Surcharge	1,755,000	1,201,272	68%	75%
Indirect Discharge	3,200,000	3,287,510	103%	73%
Fees	2,910,000	2,586,553	89%	4%
Municipal Assistance	800,000	452,836	57%	111%
Miscellaneous	1,254,000	1,496,586	119%	147%
Total Operating Revenue	376,801,000	290,085,867	77%	77%
Non Operating Revenues				
Facility Charge	7,150,000	5,463,343	76%	70%
Interest Income	1,570,000	4,408,042	281%	-136%
Build America Bond Subsidy	2,026,000	1,031,088	51%	51%
Other	302,000	801,466	265%	97%
Total Non Operating Revenue	11,048,000	11,703,939	106%	45%
Total Revenues	387,849,000	301,789,806	78%	76%
Transfers from Reserves	18,868,701	14,151,526	75%	75%
Total Revenues and Transfers	$ 406,717,701	$ 315,941,332	78%	76%
Operating Expenses				
Personal Services	$ 63,288,297	$ 48,237,701	76%	77%
Fringe Benefits	26,520,561	19,360,840	73%	71%
Materials & Supplies	13,385,885	8,373,658	63%	72%
Transportation	1,797,226	1,108,135	62%	63%
Utilities	15,055,652	12,072,594	80%	76%
Chemical Purchases	13,026,120	8,908,184	68%	74%
Contractual Services	57,808,888	29,529,875	51%	51%
Major Repairs	12,409,035	6,328,129	51%	39%
Capital Assets	625,737	129,168	21%	69%
Miscellaneous Expense	3,657,334	2,132,091	58%	60%
Total Operating Expenses	207,574,735	136,180,375	66%	65%
Debt Service and Transfers				
Debt Service	69,470,000	59,930,079	86%	84%
Transfer to CIP	129,412,966	107,844,139	83%	79%
Transfer to Risk management	260,000	195,003	75%	75%
Total Debt Service and Transfers	199,142,966	167,969,221	84%	81%
Total Expenses and Transfers	$ 406,717,701	$ 304,149,596	75%	72%

2. Notes to Interim Financial Report

The Interim Financial Report summarizes the results of HRSD's operations on a basis of accounting that differs from generally accepted accounting principles. **Revenues are recorded on an accrual basis, whereby they are recognized when billed**, and expenses are generally recorded on a cash basis. No provision is made for non-cash items such as depreciation and bad debt expense.

This interim report does not reflect financial activity for capital projects contained in HRSD's CIP.

Transfers represent certain budgetary policy designations as follows:

a. Transfer to CIP: represents current period's cash and investments that are designated to partially fund HRSD's capital improvement program.

b. Transfers to Reserves: represents the current period's cash and investments that have been set aside to meet HRSD's cash and investments policy objectives.

3. Reserves and Capital Resources (Cash and Investments Activity) for the Period Ended March 31, 2023

HRSD - RESERVE AND CAPITAL ACTIVITY March 31, 2023

	General Reserve				Capital	
	General	CARES - ARPA	Debt Service	Risk Mgmt Reserve	Paygo	Debt Proceeds
	Unrestricted	Restricted	Restricted	Unrestricted	Unrestricted	Restricted
Beginning - July 1, 2022	**$ 189,168,885**	**$ 420**	**$ 33,134,065**	**$ 4,279,547**	**$ 32,535,033**	**$ -**
Current Year Sources of Funds						
Current Receipts	311,017,077					
Line of Credit						
VRA Draws					46,912,574	
WIFIA Draws					49,934,717	
Transfers In	-			195,003	107,844,139	
Sources of Funds	311,017,077	-	-	195,003	204,691,430	-
Total Funds Available	**$ 500,185,962**	**$ 420**	**$ 33,134,065**	**$ 4,474,550**	**$ 237,226,463**	**$ -**
Current Year Uses of Funds						
Cash Disbursements	207,235,294				235,575,610	-
CARES Adjustment		(3,968)				
Transfers Out	108,039,142					
Uses of Funds	315,274,436	(3,968)	-	-	235,575,610	-
End of Period - March 31, 2023	**$ 184,911,526**	**$ 4,388**	**$ 33,134,065**	**$ 4,474,550**	**$ 1,650,853**	**$ -**
Unrestricted Funds	**$ 191,036,929**					

4. Capital Improvements Budget and Activity Summary for Active Projects for the Period Ended March 31, 2023

HRSD - PROJECT ANALYSIS March 31, 2023

Classification/ Treatment Service Area	Appropriated Funds	Expenditures prior to 7/1/2022	Expenditures Year to Date FY2023	Total Project Expenditures	Encumbrances	Available Funds
Administration	73,738,240	24,017,666	4,238,838	28,256,504	1,321,346	44,160,390
Army Base	163,448,800	124,990,776	679,327	125,670,103	792,946	36,985,751
Atlantic	234,329,164	79,425,640	2,045,203	81,470,843	17,691,819	135,166,502
Boat Harbor	391,690,953	55,428,123	26,389,823	81,817,946	181,035,397	128,837,610
Ches-Eliz	183,518,801	118,083,285	3,098,916	121,182,201	4,752,862	57,583,738
Eastern Shore	40,206,468	3,409,844	15,711,857	19,121,701	18,440,690	2,644,077
James River	349,972,248	40,526,157	47,807,192	88,333,349	230,686,974	30,951,925
Middle Peninsula	102,724,107	19,904,529	6,682,985	26,587,514	10,618,594	65,517,999
Nansemond	495,013,018	41,289,643	26,901,953	68,191,596	344,498,734	82,322,688
Surry	60,391,465	38,362,111	2,298,018	40,660,129	11,609,494	8,121,842
VIP	180,644,256	17,792,976	14,037,954	31,830,930	41,449,629	107,363,697
Williamsburg	28,535,758	20,517,874	3,947,324	24,465,198	912,545	3,158,015
York River	77,255,863	13,910,493	3,314,447	17,224,940	14,980,123	45,050,800
General	1,147,886,755	153,413,076	76,948,258	230,361,334	333,854,075	583,671,346
	3,529,355,896	751,072,193	234,102,095	985,174,288	1,212,645,228	1,331,536,380

5. Debt Management Overview

HRSD - Debt Outstanding ($000's) March 31, 2023

	Principal Feb 2023	Principal Payments	Principal Draws	Principal Mar 2023	Interest Payments
Fixed Rate					
Senior	166,437	(1,344)	-	165,093	(221)
Subordinate	692,331	(5,503)	8,726	695,554	(1,730)
Variable Rate					
Subordinate	50,000	-	-	50,000	(118)
Line of Credit	33,721	-	-	33,721	(124)
Total	$ 942,489	$ (6,847)	$ 8,726	$ 944,368	$ (2,193)

HRSD- Series 2016VR Bond Analysis March 31, 2023

	SIFMA Index	HRSD	Spread to SIFMA
Maximum	4.71%	4.95%	0.24%
Average	0.67%	0.60%	-0.07%
Minimum	0.01%	0.01%	0.00%
As of 03/31/23	3.97%	3.85%	-0.12%

* Since October 20, 2011 HRSD has averaged 60 basis points on Variable Rate Debt

6. Financial Performance Metrics for the Period Ended March 31, 2023

HRSD - UNRESTRICTED CASH

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	**$**	**191,036,929**		**336**
Risk Management Reserve	$	(4,474,550)	(8)	328
Capital (PAYGO only)	$	(1,650,853)	(3)	325
Adjusted Days Cash on Hand	**$**	**184,911,526**		**325**

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

March 31, 2023

Primary Source	Beginning Market Value July 1, 2022	YTD Contributions	YTD Withdrawals	YTD Income Earned	Ending Market Value March 31, 2023	Allocation of Funds	Credit Quality	Current Mo Avg Yield
BAML Corp Disbursement Account	25,498,734	417,813,532	433,292,510	332,007	10,351,763	7.0%	N/A	0.55%
VIP Stable NAV Liquidity Pool	144,268,153	10,000,000	20,000,000	3,550,626	137,818,779	93.0%	AAAm	4.84%
Total Primary Source	**$ 169,766,887**	**$ 427,813,532**	**$ 453,292,510**	**$ 3,882,633**	**$ 148,170,542**	100.0%		

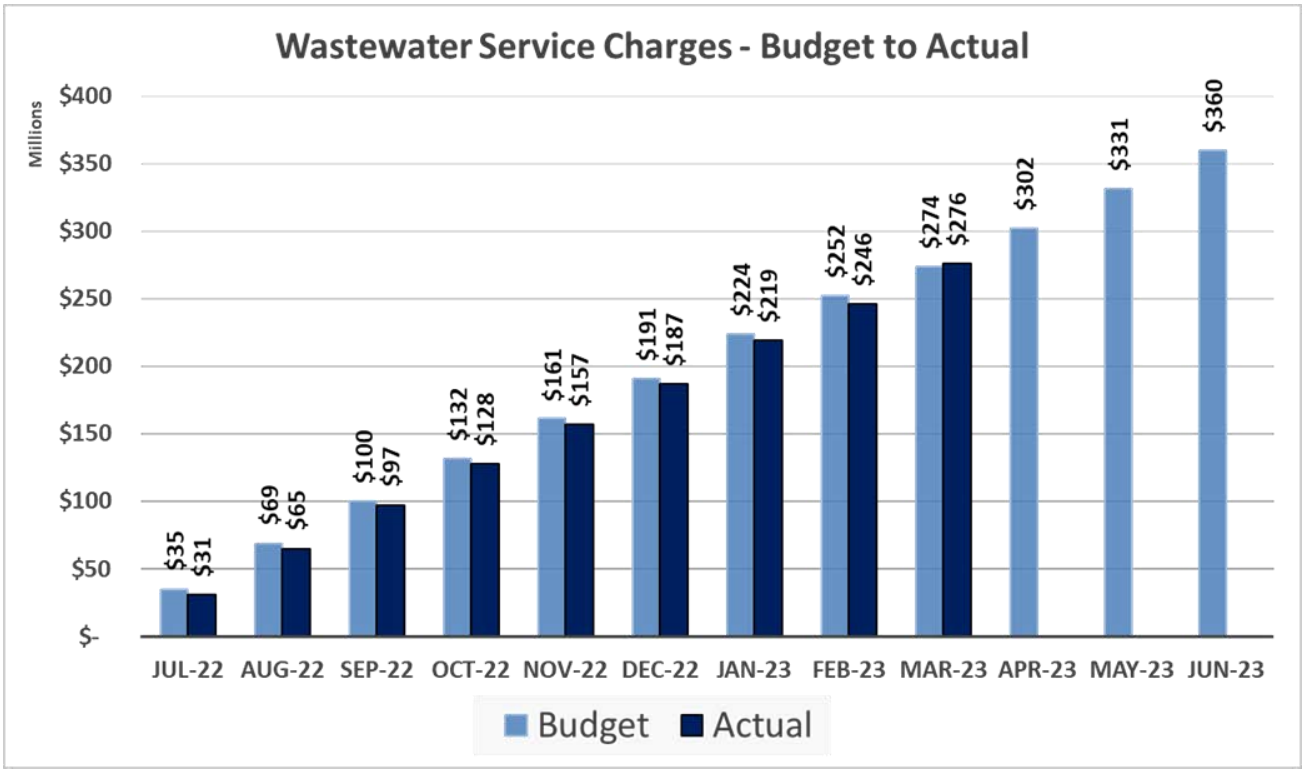
VIP Stable NAV Liquidity Pool performed 0.01% above Va Local Government Investment Pool's (the market benchmark) in the month of March 2023.

Secondary Source	Beginning Market Value July 1, 2022	YTD Contributions	YTD Withdrawals	YTD Income Earned & Realized G/L	Ending Market Value March 31, 2023	Ending Cost	LTD Mkt Adj	Yield to Maturity at Market
VIP 1-3 Year High Quality Bond Fund	62,932,017	-	9,356	739,953	63,378,993	64,474,614	(1,095,621)	4.23%
Total Secondary Source	**$ 62,932,017**	**$ -**	**$ 9,356**	**$ 739,953**	**$ 63,378,993**	**$ 64,474,614**	**$ (1,095,621)**	

VIP 1-3 Year High Quality Bond Fund performed 0.01% above ICE BofA ML 1-3 yr AAA-AA Corp/Gov Index (the market benchmark) in March 2023.

	Total	Fund Alloc
Total Primary Source	**$ 148,170,542**	**70.0%**
Total Secondary Source	**$ 63,378,993**	**30.0%**
TOTAL SOURCES	**$ 211,549,535**	**100.0%**

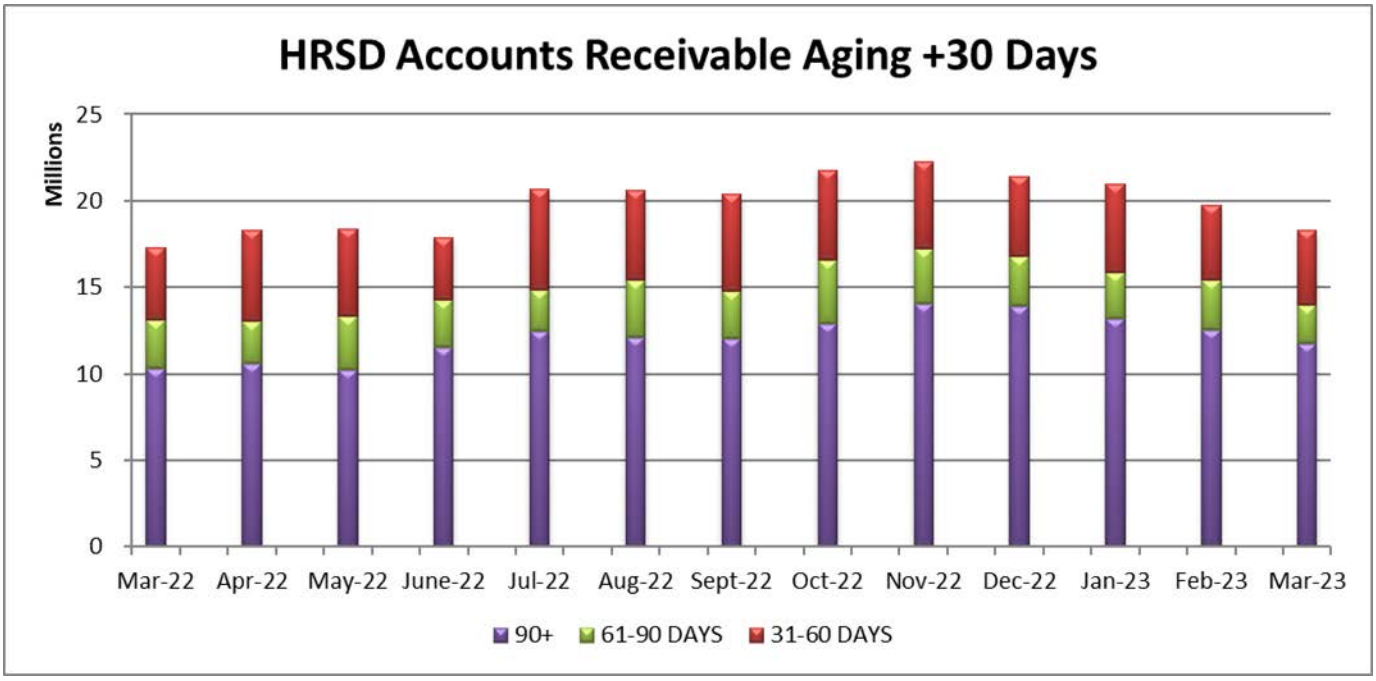
7. Summary of Billed Consumption

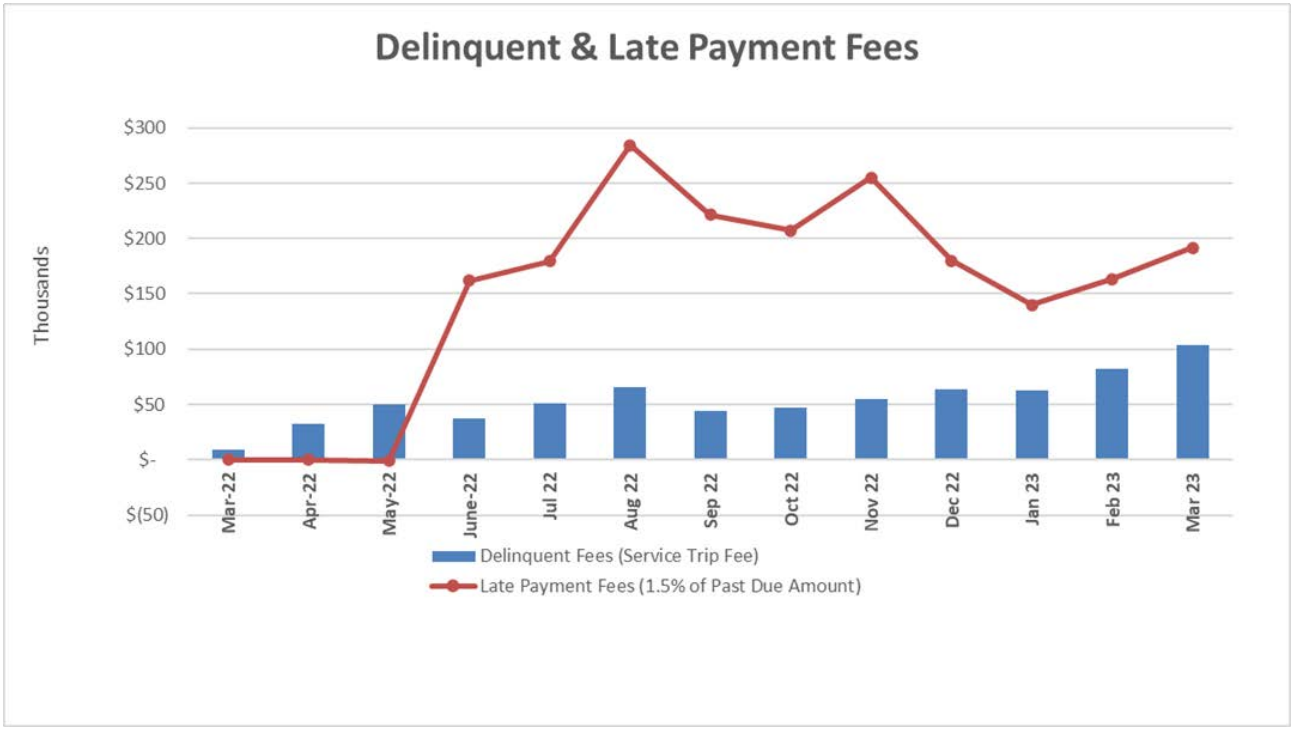


Summary of Billed Consumption (,000s ccf)							
			% Difference		% Difference		% Difference
Month	*FY2023 Cumulative Budget Estimate*	*FY2023 Cumulative Actual*	*From Budget*	*Cumulative FY2022 Actual*	*From FY2022*	*Cumulative 3 Year Average*	*From 3 Year Average*
July	5,015	4,682	-6.6%	4,976	-5.9%	4,947	-5.4%
Aug	9,883	9,651	-2.3%	9,518	1.4%	9,641	0.1%
Sept	14,413	14,207	-1.4%	14,347	-1.0%	14,345	-1.0%
Oct	18,892	18,679	-1.1%	19,048	-1.9%	18,955	-1.5%
Nov	23,125	22,776	-1.5%	22,953	-0.8%	22,412	1.6%
Dec	27,336	27,133	-0.7%	27,541	-1.5%	27,558	-1.5%
Jan	32,088	31,669	-1.3%	31,865	-0.6%	32,148	-1.5%
Feb	36,182	35,601	-1.6%	36,188	-1.6%	36,087	-1.3%
March	39,309	39,806	1.3%	40,229	-1.1%	40,452	-1.6%
Apr	43,360	-	N/A	44,569	N/A	44,644	N/A
May	47,508	-	N/A	48,315	N/A	48,656	N/A
June	51,620	-	N/A	53,243	N/A	53,324	N/A

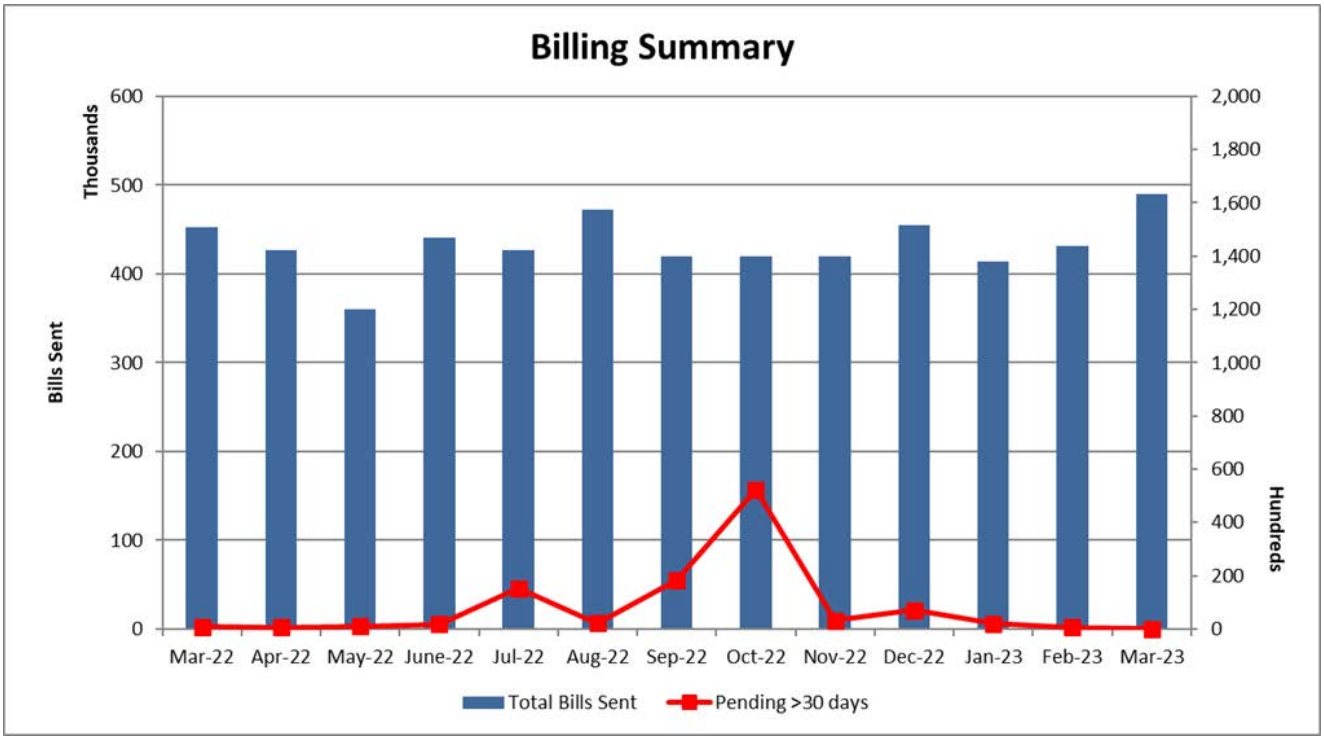
C. Customer Care Center

1. Accounts Receivable Overview

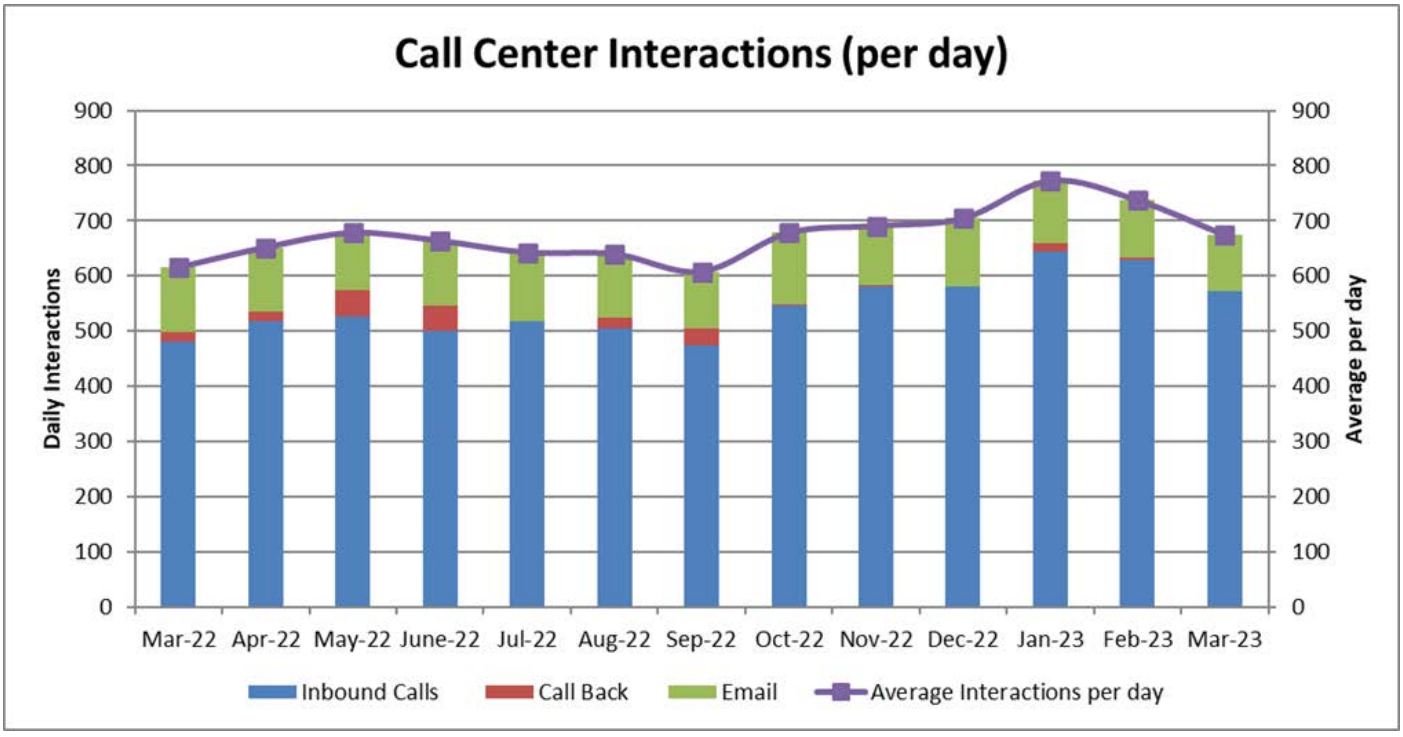


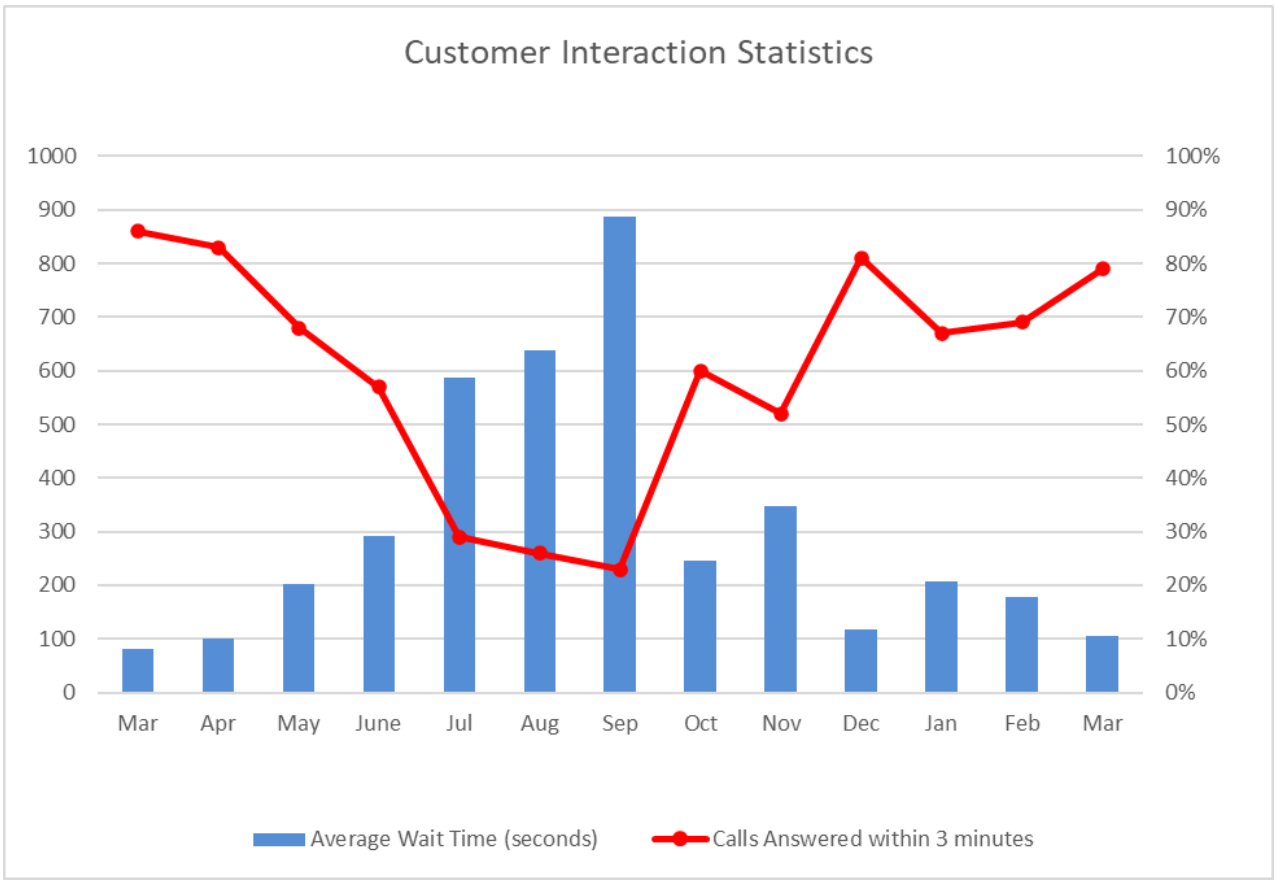


Apr 20-Feb 22 Field Activity was suspended late March 2020 in response to COVID-19

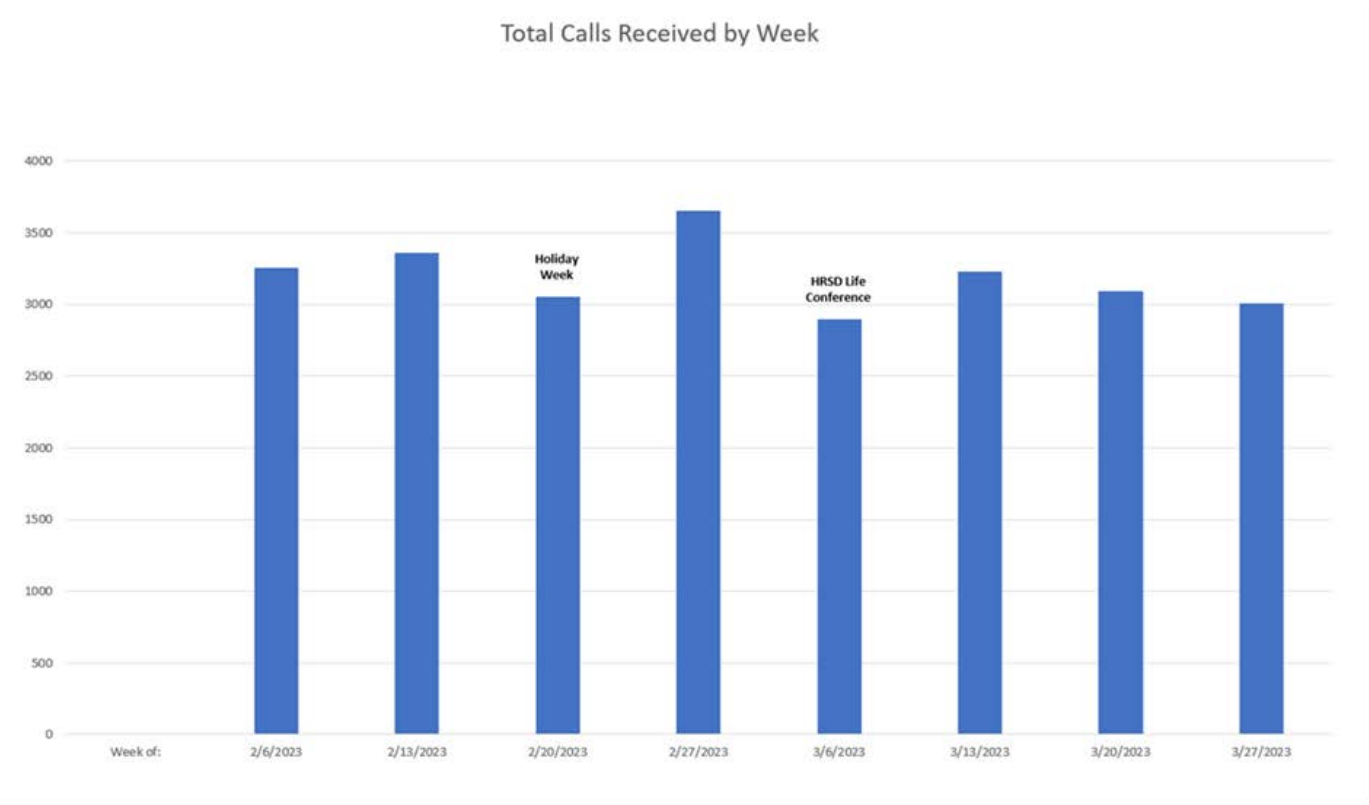


2. Customer Care Center Statistics



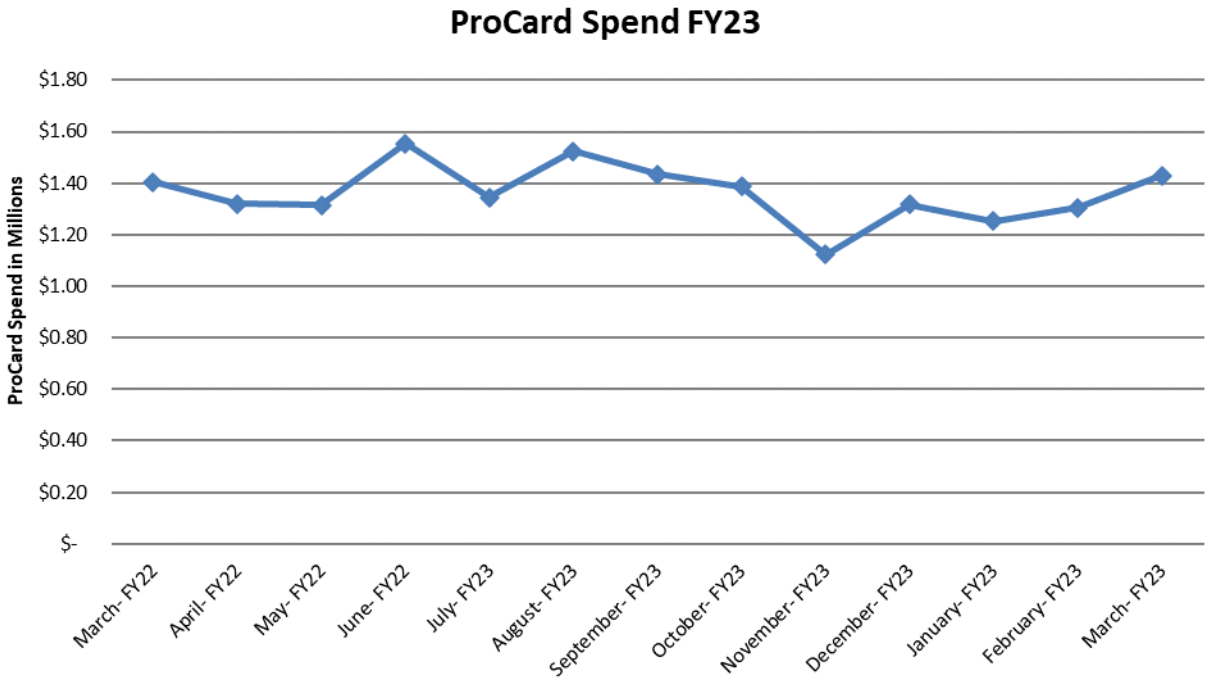


Customer Interaction Statistics	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Calls Answered within 3 minutes	86%	83%	68%	57%	29%	26%	23%	60%	52%	81%	67%	69%	79%
Average Wait Time (seconds)	81	101	203	291	587	638	887	246	347	117	206	177	105
Calls Abandoned	7%	7%	12%	15%	25%	25%	31%	14%	18%	8%	12%	11%	7%


Total Calls Received by Week
4000
3500
3000
2500
2000
1500
1000
500
0
Holiday Week
HRSD Life Conference
Week of:
2/6/2023
2/13/2023
2/20/2023
2/27/2023
3/6/2023
3/13/2023
3/20/2023
3/27/2023

D. Procurement Statistics

Savings	Current Period	FYTD
Competitive Savings[1]	$276,488	$644,312
Negotiated Savings[2]	$40,582	$69,394
Salvage Revenues	$7,838	$30,259
Corporate VISA Card - Estimated Rebate	$21,287	$180,534



[1] Competitive savings are those savings obtained through the informal/formal bidding process. All bids received (except for the lowest responsive/responsible bid) added together and averaged. The average cost is subtracted from the apparent low responsive/responsible bidder.

[2] Negotiated savings are savings obtained during a Request for Proposal process, or if all bids received exceed the budgeted amount, or if only one bid is received.

E. Monthly Strategic Planning Metrics Summary

1. Educational and Outreach Events: 2

   a. 03/08/2023 - HRSD LIFE Conference

   b. 03/12-15/2023 – VAGP Spring Conference – Amy Murphy, Shanna Pankey and Jackie Starowicz

2. Community Partners: 0

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	March 2023
M-1.4a	Training During Work Hours Per Full Time Employee (103) – Current Month	Hours / #FTE	0.84
M-1.4b	Total Training During Work Hours Per Full Time Employee (103) – Cumulative Fiscal Year-to-Date	Hours / #FTE	5.94
M-5.2	Educational and Outreach Events	Number	2
M-5.3	Number of Community Partners	Number	0
	Wastewater Revenue	Percentage of budgeted	103%
	General Reserves	Percentage of Operating Budget less Depreciation	105%
	Liquidity	Days Cash on Hand	336 Days
	Accounts Receivable (HRSD)	Dollars	$37,001,555
	Aging Accounts Receivable	Percentage of receivables greater than 90 days	31.7%

Respectfully,

Steven G. de Mik

Steven G. de Mik
Deputy General Manager/CFO

TO: General Manager

FROM: Director of Information Technology

SUBJECT: Information Technology Department Report for March 2023

DATE: April 12, 2023

A. General

1. IT staff continue working on data migration and application configuration tuning for the recently installed Oracle Database Appliance.

2. Renovations occurring at the Atlantic Treatment Plant provide an opportunity to remove old network, telephone, and data circuit equipment, in lieu of abandoning them in place. ITD is working with Verizon and other third-party vendors to clean up and remove the old facilities, while ensuring the new infrastructure is properly installed and functional.

3. The IT Help Desk processed 448 work orders and requests for assistance in March, ensuring availability of computing resources to those working locally and remotely.

4. A thorough review and analysis of the Help Desk's business processes and procedures is underway in preparation for the implementation of a Privileged Access Management platform (PAM). Once implemented, the PAM system will facilitate the granting of escalated rights and permissions on a limited basis to complete tasks requiring such rights and permissions. Users will be granted sufficient privileges to complete system upgrades with third parties (OEM technicians, vendor representatives, etc.) for a specific amount of time.

5. Staff are working to upgrade conference rooms' Audio/Visual (A/V) capabilities in conjunction with ViCom, our current provider for A/V equipment and support. This effort has been delayed several times due to global shipping challenges, but the equipment is now arriving and the upgrades can begin.

B. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 1

   - 03/08/2023 – HRSD LIFE Conference

2. Number of Community Partners: 0

3. Metrics Summary

Item #	Strategic Planning Measure	Unit	March 2023
M-1.4a	Training During Work Hours Per Full-Time Employee (54) – Current Month	Total Training Hours / # FTE	9.29
M-1.4b	Total Training During Work Hours Per Full-Time Employee (54) – Cumulative Fiscal Year-to-Date	Total Training Hours / # FTE	27.9
M-5.2	Educational and Outreach Events	Number	1
M-5.3	Number of Community Partners	Number	0

Respectfully,
Don Corrado

TO: General Manager

FROM: Director of Operations

SUBJECT: Operations Report for March 2023

DATE: April 17, 2023

A. Interceptor Systems

1. North Shore (NS) Interceptors

a. There were no Sanitary Sewer Overflows (SSOs) this month.

b. There were three interceptor complaints, and four system alarms reported this month. All system alarms and complaints were relatively minor and fully resolved by staff.

c. There were zero Miss Utility “No Shows” and eight after hour emergency tickets reported this month.

d. NS Operations and Engineering staff continue to support the numerous capital project under design and construction.

e. The Supervisory Control and Data Acquisition (SCADA) project progression continued this month with several site cutovers and global changes performed.

f. Hilton School Pump Station (PS) Architectural improvements reached substantial completion this month.

2. South Shore (SS) Interceptor Systems

a. There were no odor complaints reported this month.

b. There were zero Miss Utility “No Shows” reported this month.

c. There were three interceptor complaints reported this month.

(1) On March 21, City of Norfolk Utilities staff reported a missing air vent casting lid at the intersection of East Virginia Beach Boulevard and Jett Street. Staff replaced the valve lid and sealed it with an epoxy.

(2) On March 25, a Smithfield resident reported sewage spilling from a manhole on Lawnes Neck Drive. Staff responded and resolved the minor blockage.

(3) On March 28, HRSD’s utility locator contractor called about an air vent casting that was displaced. Staff replaced the casting, restored the surrounding area, and re-staked the location.

d. On March 27, staff operated a system valve on Carolina Road near Coleman Court to assist the City of Suffolk Department of Public Utilities staff with a new city connection installation.

e. On March 28, staff operated a system valve near the intersection of Swannanoa Drive and Summerset Drive to assist the City of Portsmouth Department of Public Utilities with a force main repair.

B. Major Treatment Plant Operations

1. Army Base Treatment Plant (ABTP), Virginia Initiative Plant (VIP), Treatment Projects Team (TPT) (ACV Group)

a. ABTP

(1) Incinerator #1 repairs are nearly complete, and it will be baked in and placed online in early April.

(2) Incinerator #2 repairs will be complete in early April, and it will remain on standby for the spring.

(3) Hauling utilizing the alternate cake chute continued in March.

(4) Staff installed a new eductor on the secondary clarifier #3. The eductor will replace the older foam pumps.

(5) The contract for the Chlorine Contact tank gate repair was awarded this month.

(6) The plant met all Virginia Pollutant Discharge Elimination System (VPDES) permit requirements with no odor complaints.

b. VIP

(1) There was one reportable event for use of the incinerator bypass stack during a power outage that occurred on March 20.

(2) There were three reportable events for invalid THC readings from the incinerator off-gas monitoring system on March 22-24, each caused by malfunction of the THC analyzer. The analyzer cabinet was replaced with a spare unit on March 24.

(3) Ammonia-Based Aeration Control (ABAC) is operating at a dissolved oxygen low-end setpoint of 0.7 mg/L, ortho-phosphate setpoint of 2.5 mg/L and ammonia setpoint of 1.00 mg/L. The average DO level in the aeration tanks was 0.8 mg/L for March. No supplemental carbon chemical addition was used for denitrification.

(4) Staff coordinated cleaning and inspection of Incinerator 2 by contractors.

(5) Staff rebuilt one solids feed pump and replaced one waste solids pump.

(6) Staff are investigating an overheating problem on pillow block support bearings for one dewatering centrifuge.

(7) Staff continue work to rebuild one primary clarifier, with assistance from the Operations Project Team.

(8) Staff began rebuilding one non-potable water pump and the annual inspection of one odor control scrubber tower.

(9) Plant QST participated in planning sessions for upcoming projects including Incinerator and Blower Building Motor Control Center (MCC) Upgrades, Solids Thickening, Dewatering Centrifuge Replacement, Army Base Solids Diversion, Incinerator Burner Replacement, and Administration Building Renovation.

c. TPT

(1) Staff were able to surplus five pieces of woodworking equipment in the North Shore Carpenter shop.

(2) Staff supported the Onancock Treatment Plant (OTP) with maintenance activities two days a week on average.

(3) Staff are progressing with the installation of new primary sludge pumps and motors #1 & #3 at the Williamsburg Treatment Plant (WBTP).

(4) Staff are progressing with the Incinerator valves replacement project at the WBTP.

(5) TPT and VIP staff started work on the VIP Primary #2 rebuild.

(6) Staff continued scoping and planning efforts for future projects.

2. Atlantic (ATP), Boat Harbor (BHTP), and Nansemond (NTP) Treatment Plant (ABN Group)

a. ATP

(1) The plant met all VPDES permit requirements.

(2) On March 3, Drain Pump Station (DPS) 1 overflowed due to ragging. This resulted in an estimated 500 gallons of untreated waste overflowing into the storm drain. Plant staff secured the stormwater outfall gate and recovered the spilled liquid. Staff notified the Technical Services Division (TSD) and determined that this was a non-reportable event.

(3) On March 23, Odor Control Station (OCS) B was offline for approximately two hours due to multiple electrical issues. Electrical and Instrumentation (E&I) staff completed the required repairs and it was placed back in service. TSD was notified.

(4) Staff continue to work with TSD to help identify and mitigate off-site odors.

(5) Staff along with the consultant (Black and Veatch) continue to work on the Reliability and Odor Control Improvements (ROCI) project design.

(6) Staff completed the phase two cured cake curing pilot this month. To test stability over time, plant staff created a pile of cured cake on the South pad. In a few months, staff will record odor measurements when the pile is moved to a new location. This will help better understand if the cured product will remain odorless if stored over longer timeframes. The phase three pilot began this month as well. For this phase, the product will be turned twice a day on Monday through Friday to see if a final cured product can be made in a shorter amount of time.

(7) Buildout of the Digester Solids Storage Tank (DSST) pilot for struvite control continues. Struvite jar testing is planned for April that will help advise optimization of struvite control at final dewatering. Struvite is a hard product that forms in pipes and tanks because of various compounds that form with phosphorus found in the centrifuge liquid.

(8) Staff assisted with testing a camera that is being developed to detect methane.

(9) An Evoqua technician, Crowder engineer, HDR engineer, and plant staff met to inspect the Dystor cover on Digester # 5. The cover became discolored shortly after installation and staff raised concerns to the project team to determine the best resolution, which may include an extended warranty on the cover.

(10) Staff and HRSD leadership completed the final charette for ATP site planning of the current 200-acre Progress Farm. The consultant, Tetra Tech continues to lead the effort and will submit a written deliverable that summarizes the group's consensus. The next step is to present the results to the HRSD Commission in May.

(11) Staff replaced a broken 16-inch plug valve in the digester gas piping. Staff also replaced media for one of the siloxane removal vessels and ordered additional media for replacement in the #2 vessel. Staff also removed and cleaned the secondary flame arrestor for the digester gas blower. After completion of this work, staff restored digester gas for use at steam boiler and for the Combined Heat and Power (CHP) engines.

(12) Primary clarifier # 5 failed this month due to a heavy amount of scum and solids. Staff are working on clearing and inspecting this tank to ensure it is operational.

(13) Contractors completed a chemical trench between odor system B and odor system D. The chemical tanks at odor B require replacement but instead of replacing the tanks, it is more economical to feed odor system B using the chemical tanks from odor system D.

(14) Contractors set the new scrubber tower for odor system D train # 1. Additional equipment for this system should be arriving in the next couple of weeks, with completion scheduled in early June.

(15) Secondary clarifier #2 failed this month due to a wiring short circuit. Staff replaced the wiring, and the clarifier is ready for service.

(16) Staff replaced carbon media for odor control system C this month.

(17) Staff are prepping # 6 secondary clarifier so that a contractor can remove, rebuild, and re-install the drive unit for this clarifier. This work should be completed in April.

(18) Staff completed preventative maintenance and cleaning of odor system D this month. We are back to operating three out of the 4 trains at odor system D.

b. BHTP

(1) No odor complaints were reported.

(2) No MACT 129 deviations occurred in the month.

(3) Plant and TSD staff, successfully completed the MACT 129 testing on Incinerator #2. Results of the MACT 129 test are still pending, but preliminary results indicate a successful test. Testing results may even show a decrease in required testing due to being 75% below the permit limits.

(4) Two Total Hydrocarbon (THC) reportable events occurred this month. On March 4, the THC unit failed calibration for THC zero. A manual calibration was performed, and the unit passed. On March 18, the THC unit failed calibration on the Oxygen (O_2) parameter. E&I staff repaired it and performed a manual calibration allowing the THC unit to run properly.

(5) The new side stream programming and pumps were tested again this month. The suction and discharge pipe lengths were shortened, and a flexible coupling was installed to help with the vibrations noticed last month during testing. The additional pipe supports are being installed. The contractors programming the side stream functional are progressing. The side stream programming is slated for testing in the first week of April. Nitrification efforts will begin the end of April as well.

(6) Contractors completed the coatings work in Grit tank #2. The plant staff began assembling the buckets and chain and plan to have that tank fully back in service in the beginning of April.

(7) Centrifuge # 3 replacement is almost complete. Wiring and electrical work is installed, which allowed for testing of the rotation of the centrifuge. A speed switch and cake boot still need to be installed before further testing

with washout water or feed.

(8) The mixers in Aeration tank #5 have been out of service for over a year due to material supply issues. Mixer 5B was finally returned after it was overhauled, and it was inspected, laser aligned, and tested. Mixer 5C was also inspected and laser aligned.

(9) Contractors completed the Infrared heat scanning of the electrical components around the plant. Results are pending. The contractors will provide a detailed report in the coming weeks.

(10) Contractors completed pipe modifications for the primary scum removal system upgrade. Staff will be testing and finishing the modifications in early April.

c. NTP/Sustainable Water Initiative for Tomorrow (SWIFT) Research Center (RC)

(1) There were no odor exceptions or odor complaints during the month.

(2) On March 8, contractors accidentally struck a buried 2-inch Non-Potable Water (NPW) line while digging in the road by the primary clarifier building, spilling 500 gallons of NPW. Contractors also struck a buried 6-inch Secondary Scum recycle line while digging in the road by the primary clarifier building on the same day, spilling 1500 gallons of scum and non-potable water in the excavation.

(3) The total volume of SWIFT recharge into the Potomac aquifer for the month of March was 12.88 million gallons (MG) (44.7% Recharge Time based on 650gpm).

(4) Contractors continue construction of the Fats, Oils and Grease (FOG) handling facility.

(5) On March 1, NTP began using the HACH CL-17 analyzer for chlorine residual permit compliance, which is a major innovation for the industry. This new process eliminates the requirement for the operator to collect and analyze manual chlorine residuals every two hours.

(6) On March 15, SWIFT staff started feeding alum as a coagulant to only one flocculation/sedimentation (F/S) train to do a side-by-side comparison in operation performance, and to learn if there is any opportunity to save money while not impacting downstream processes like ozonation and biofiltration.

(7) On March 30, SWIFT staff shut down operations to perform the quarterly maintenance.

3. James River (JRTP), Williamsburg (WBTP), and York River (YRTP) Treatment Plant (JWY Group)

a. JRTP

(1) The plant met all VPDES permit requirements.

(2) There were no reportable wastewater events and three odor scrubber deviations. The odor scrubber deviations were scrubber effluent exhaust over five parts per million (ppm) due to chemical optimization efforts or issues with the chemical control system.

(3) Staff provided support to several onsite contractors for various projects.

(4) Staff installed two new, higher capacity polymer pumps for the gravity belt thickeners (GBT). The two existing pumps were inadequate for meeting waste thickened solid performance expected from a GBT.

(5) Staff began installing new media in Integrated Fixed Film Activated Solids (IFAS) tanks #2 and #3. This is the first phase of a multiyear plan to increase all IFAS tanks' media fill fractions from 45 percent to 60 percent for SWIFT startup and to replace aging media. The higher fill fractions will help meet nutrient reduction requirements needed for SWIFT influent.

(6) A contractor installed a waterproof coating on the digester building roof.

(7) The contractor drilling on-site wells worked on wells near the solids holding tank and along the shoreline.

(8) The contractor drilling off-site wells worked on wells in the northwest corner of Riverview Farm Park near the high school.

(9) The contractor began work on the new # 1 secondary clarifier for the Advanced Nutrient Removal Improvements/SWIFT Project. The IFAS effluent channel foundation was poured at IFAS effluent tanks #1, #2, and #3. Rebar and forms were set for the channel's vertical structures. At the SWIFT location, work on the foundation for SWIFT buildings #1 and #2, the main power supply building, SWIFT equalization, and moving bed bioreactor tank continued. Underground piping and conduit were set in the foundations.

(10) The contractor completed leveling the bank in preparation for trail construction for the Shoreline Stabilization Project.

b. WBTP

(1) The plant met all VPDES permit requirements.

(2) There were no reportable wastewater events, two reportable air events, five incinerator deviations, and three odor scrubber deviations. The air events were a use of the incinerator emergency bypass stack due to the induced draft fan or the incinerator building main breaker tripping. Three incinerator deviations were a failure of the THC meter to record two valid readings per an hour due to calibration issues. The other two were less

than the minimum twelve-hour average scrubber water flow due to a clogged non-potable water strainer. The odor scrubber deviations were effluent exhaust hydrogen sulfide readings over five ppm due to issues with chemical or recirculation pumps.

(3) A contractor inspected steel piping from the primary clarifier influent distribution chamber to primary clarifiers #1 and #2. The pipeline to primary clarifier #2 was in good condition. Corrosion was found in the pipeline to primary clarifier #1 with corrosion all the way through the pipe wall in one location. Repair plans are underway.

(4) The contractor completed work in the men's restroom and locker rooms for the Administration Building Renovation Project. Some piping, duct work, and punch list items are still outstanding.

c. YRTP

(1) The plant met all VPDES permit requirements.

(2) There were no reportable wastewater events or odor scrubber deviations.

(3) Staff assisted the Administration Building Renovation Project contractor in moving chemical lines located just within the northwest corner of the main expansion.

(4) The contactor erected metal wall framing and roof trusses on the main expansion, northwest of the existing administration building. Concrete slabs were poured, and block walls constructed for the lunchroom and locker room expansion.

d. Multiple Hearth Incinerator (MHI) Operations Events Summary

(1) All plants (Army Base, Boat Harbor, Virginia Initiative, and Williamsburg) met the 100 PPM THC limit with continuous emissions monitoring valid data captured of greater than 92%.

(2) The MHIs had three deviations from the required 129 Sewage Sludge Incineration (SSI) rule minimum operating parameters and three minor bypass events (<60 minute).

C. Small Communities (SC) Division (SCD)

1. Middle Peninsula

a. There were no odor complaints.

b. There were zero Miss Utility "no shows" and seven after-hour emergency tickets for the month.

c. Seven new single-family home connections were made in March.

d. West Point Treatment Plant (WPTP)

(1) Staff performed a Clean in Place on the Aqua Disk Filter to improve tertiary filter performance. Staff have been working on fine-tuning the Tertiary Filter performance.

(2) Further improvements and optimizations were made to the solids dewatering process and the final product is much drier and reduces storage and cleanup issues in the drying beds.

e. King William Treatment Plant (KWTP)

(1) Staff completed Clean in Place procedures on the plant membranes.

(2) Staff contracted a crane to remove the membranes on Train # 2 to perform a visual inspection and thorough cleaning.

(3) Several meetings with SCD and E&I staff were held to maximize flow through the plant. Programming changes with the equalization tanks along with more routine membrane maintenance has increased plant performance.

(4) Approximately one million gallons of flow was pump and hauled from the KWTP to WPTP in the month of March.

f. Mathews Collection System

There were multiple service calls on the vacuum system and several repairs were made, and blockages cleared. One blockage led to staff having to excavate and replace a portion of pipe downstream of a vacuum pit.

2. Surry Systems

a. There were no SSOs this month.

b. There were no odor complaints and no collections system complaints.

c. There were zero Miss Utility “no shows” and no after-hour emergency tickets reported for the month.

d. Sussex Sewer Authority (SSA) staff salvaged everything of value from the town treatment plant to facilitate demolition efforts. The county plant tanks are currently being cleaned for future demolition as well.

3. Lawnes Point (LP)

a. There were no SSOs this month.

b. Pump and Haul operations continue at Lawnes Point. Atlantic Heating and Cooling performed five days of pump and haul of the Sequential Batch Reactor

(SBR) tank this month.

c. Two Telog telemetry pressure sensors were deployed at Lawnes Point end-of-line locations to provide information on system pressures and provide alarming for any potential future problems. This effort was completed in response to a prior event at Lawnes Point that led to an SSO.

4. Eastern Shore (ES)

a. There were no SSOs this month.

b. There were no odor complaints and no collections system complaints.

c. Onancock Treatment Plant (OTP)

Ultraviolet (UV) Bank A has been down for years. Staff researched and purchased the equipment necessary to rebuild the system and were able to get the UV bank back online this month. This provides redundancy in our effluent disinfection process.

d. Nassawadox Treatment Plant

No permit issues this month

e. Chincoteague Treatment Plant

Planning is underway for HRSD to assume ownership of the package plant in mid-2023.

D. Electrical & Instrumentation (E&I)

1. Staff and electrical contractor Infralogix conducted thermographic heat inspections at WBTP, North Shore Main Complex, South Shore Pump Stations , NTP, ABTP, VIP, BHTP, and SS Main Complex. Some heat signatures were identified during heat scans of the electrical equipment, and staff were able to correct the issues immediately by cleaning and tightening loose connections.

2. Staff met with SCD staff to discuss the present functionality and ways to improve the operation and adapt to the increased daily plant flow. The KWTP staff will move forward with programming the plant control system to implement the desired changes to make data available on the Telog Data Acquisition System (DAS).

3. Staff installed two End of Line Solar Pressure Sites on Creekway Drive and Lawnes Neck Road near the LP Treatment Plant . These pressure sites will provide NS Interceptors with informative pressure data that they did not have prior to this installation.

4. Staff installed an I-Grid power monitor to detect incoming poor power quality and record any power anomalies that may affect operations or affect equipment at OTP.

5. Staff coordinated with electrical contractor, REW Corporation, to repair damaged feeder

cables at WPTP. The contractor installed new conduits, electrical handhole and new feeder cables that served the lab and Effluent Pump #2, respectively.

6. Staff worked with contractors, CEC Controls Company, and Systems East Inc. (SEI), to update the existing controls to the new SCADA Remote Terminal Unit (RTU) controls at Deep Creek, Quail Avenue Pressure Reducing Station's (PRSs) and Elberon PS. Preproposal walk throughs were completed at Ferebee, Colley, Richmond Crescent, Jamestown Crescent, and Hanover PSs. Proposal reviews were submitted for Suffolk, Ingleside, and Powhatan PSs.

7. Staff participated in the successful completion of cutover testing for the new Ovation SCADA System at Green Springs and North Avenue PSs, Deep Creek, Route 199 Interim, and Quail Avenue PRSs. The final site testing was completed by SEI staff, CEC Staff, Emerson staff, IAPs, E & I staff, and Interceptor Systems staff. These sites are now active on the new Ovation SCADA systems.

8. Staff participated in the successful application of Global Changes for SCADA at 25th Street and Bloxoms Corner PSs. The final site testing was completed by SEI staff, Interceptors Systems staff, IAPs, and E & I staff. These changes further standardize the system between sites and within the Ovation software to enhance future support and maintenance of the system.

9. Staff assisted Automotive staff with diesel generator load bank testing at Ferguson Park, Providence Road Offline Storage Facility (PROLSF), Triton Court, Virginia Beach Boulevard, and Williamsburg PSs. The generators operated as designed and were returned to service.

10. Staff worked with a contractor to repair the Uninterrupted Power Supplies (UPS) that provide emergency backup power to Information Technology (IT) critical servers at SS Main Office Complex. Equipment was reprogrammed to accommodate changes that were made during the last contracted Preventative Maintenance (PM) cycle.

E. Support Systems

1. Facilities Maintenance

a. Renovation of the electrical shop at ATP continues. The HVAC contractor installed a 3-ton HVAC unit for the locker room, the bathroom, and storage area. The electrical contractor will install new light fixtures the first week of April.

b. The Machine Shop had a total of 16 projects with six pump rebuilds. There were two notable projects for March. The first is for an old Ingersoll Rand Chlorinated effluent pump for JRTP. The parts are no longer available and were manufactured using stainless steel and brass to improve and prolong its useful life. The second is a project for ABTP regarding oil impregnated Nylon compactor bushings. These are expensive when sourced from the factory, but with the help of VIP staff, they were able to source the material from a local vendor and perform the work themselves.

2. Infrastructure Assessment

a. Staff continue to work with TSD and Automotive on the transition of Underground Storage Tanks (UST) inspections to the IA group.

b. The Concrete Coatings staff oversaw several coating and concrete rehabilitation projects at ATP, BHTP, NTP, JRTP, LP, NTP and WBTP.

F. Resource Recovery

1. Methane reduction: Staff met with Interceptor System staff to go over the implementation of the Proof-of-Concept of flaring high methane locations. The discussion led to the following: a) make the flare easy and safe to transport and maneuver in the field. The process must be safe and compatible with existing vehicles; b) two applications were identified: an air vent near a fenced-in PS site and test the flare at a PS that generates high sulfides. Both locations will be visited. The PS with high sulfides is an interesting one because the sulfides can be flared with a controlled flame using propane. Flaring sulfides is a safe and inexpensive option that eliminates/reduces sulfides. The odor control for this PS is not planned for upgrade which makes it a good pilot site. The passive flare was purchased and is ready for use.

2. Carbon Footprint Reduction Charter: Staff generated a draft statement charter to be submitted to the Director of Operation for review.

G. Water Technology and Research

Last month, staff reported on the outcome that biological phosphorus removal (bioP) is not always reliable, and that there are numerous considerations that impact the efficiency of this process. The research program at HRSD will be focusing more on optimizing the efficiency of bioP in preparation for new treatment limits. The bacteria that carry out bioP are known as polyphosphate accumulating organisms (PAOs). There is another group of bacteria that compete with PAO for substrate in the anaerobic zone but do not take up phosphorus, and these are known as glycogen accumulating organisms (GAOs). It is well known that GAOs can best compete with PAOs at warm wastewater temperatures, low aeration tank pH, and long solids residence time (SRT) in excess of that needed for nitrification. For this reason, unlike other biological processes, warm wastewater temperatures in the summer tend to impact bioP most severely. Much of the current guidance for achieving reliable bioP and low effluent TP suggests that aeration tanks should be designed and operated at high dissolved oxygen (DO) concentration. In the last few years, this convention has been challenged, and now there is good evidence that low DO may allow for much more effective competition of PAO over GAO, exactly the opposite of existing guidance. This is being studied in detail both at the new VIP BNR Pilot Facility, focusing on mechanisms and kinetics, and at the VIP full-scale plant, focusing on practical issues through ammonia-based aeration control. In both cases, data are emerging suggesting very significant benefits of controlled low DO operation in summer.

H. 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)	4	3	4	3	2	3	5	4	3			
2.7	# of PS Annual PMs Performed (SS)	3	6	7	8	3	1	2	2	5			
2.7	# of Backup Generator PMs Performed (Target is 4.6)	17	15	10	13	16	12	15	12	12			
2.8	# of FM Air Release Valve PMs Performed (NS)	105	192	136	181	403	337	184	305	225			
2.8	# of FM Air Release Valve PMs Performed (SS)	8	193	135	98	149	131	258	241	189			
2.9	# of Linear Feet of Gravity Clean (NS) (Target is 2,417 for HRSD)	2,685	4,501	4,298	2,197	3,549	3,935	5,602	1,553	2,512			
2.9	# of Linear Feet of Gravity Clean (SS) (Target is 2,417 for HRSD)	0	6130	7044	14,051	6,967	0	8,964	13,303	8,515			
2.9	# of Linear Feet of Gravity CCTV Inspection (HRSD Target 3,300 LF)	0	10,896	11,845	17,293	0	0	2,274	0	0			

I. Strategic Measurement Data

1. Education and Outreach Events: 19

a. 03/03/2023 - Virginia Peninsula Community College Tour - Kshitiz Uprety

b. 03/05/2023 - Water Reuse Symposium “Drivers, Successes, & Opportunities for Water Reuse on the East Coast” – Germano Salazar-Benites

c. 03/05/2023 – Water Reuse Symposium, Podium Presentation: Ozone Disinfection Credit Without a Residual – Samantha Hogard

d. 03/05/2023 – Water Reuse Symposium, Podium Presentation, Optimizing CBAT: A Pilot Study Comparing Direct vs Conventional Filtration - Savannah Moretz and Samantha Hogard

e. 03/05/2023 – Water Reuse Symposium, Poster Presentation: Multi-barrier Approach 1,4-Dioxane in O3-BAC Based Reuse Systems without UVAOP – Mack Pearce

f. 03/07/2023 - Water Reuse Symposium, “Collaborative Delivery for Reuse: Comparing Design-Build, CMAR and Non-Traditional Project Delivery Water Reuse Symposium - Germano Salazar-Benites

g. 03/08/2023 – HRSD LIFE Conference presentation on Surry Design-Build – Ann Copeland and Sam McAdoo

h. 03/08/2023 - HRSD LIFE Conference presentation on HRSD on the Easter Shore – Sam McAdoo and Stephanie Klaus

i. 03/10/2023 - Touch-A-Truck event at Bayside Baptist Church in Virginia Beach - Phil Miltier, Blake Ramsey, and Bryan Patterson

j. 03/19/2023 - Intensification Resource Recovery Conference – Sami Ghosn

k. 03/13/23 – 03/23/23 – Charles Wright and Eddie Abisaab attended the University of North Carolina Kenan Flagler Business School – Water and Wastewater Leadership Center

l. 03/21/2023 – Christel Dyer joined the VWEA in building oyster cages for the Chesapeake Bay Foundation – Christel Dyer

m. 03/22/2023 - SWIFT staff provided a tour for the VWEA Young Professionals.

n. 03/23/2023 - Touch-A-Truck event at St. Helena School in Norfolk - Phil Miltier, Blake Ramsey, Bryan Patterson, and Keegan Shepard

o. 03/23/2023 - SWIFT staff provided a tour for Jefferson Lab.

p. 03/28/2023 – VIP tour for ODU CEE 350 Class - Josh Coyle, Rocky Taylor, and Matt Poe

q. 03/29/2023 - Cox High School AP Environmental Science class plant tour – Davis Ewing

r. 03/30/2023 - SWIFT staff provided a tour for William and Mary (MBA group).

s. 03/30/2023:- Emergency response training for Hampton Roads Public Works Academy (HRPWA). – Sam McAdoo

2. Community Partners: 9

a. Atlantic Treatment Plant Roundtable Group, OLHS, OL Neighborhood, Lynnhaven River NOW, City of VBVirginia Beach, Navy

b. Chesapeake Bay Foundation

c. City of Norfolk Public Schools

d. City of Virginia Beach Public Schools

e. DOE Jefferson Lab

f. Hampton Roads Public Works Academy

g. Ocean Lakes (OL) High School (OLHS)

h. Old Dominion University (ODU)

i. Virginia Peninsula Community College

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	March 2023
M-1.4a	Training During Work Hours per Full Time Employee (FTE) (524) – Current Month	Hours / FTE	5.14
M-1.4b	Total Training During Work Hours per FTE (524) – Cumulative Year-to-Date	Hours / FTE	25.21
M-2.3a	Planned Maintenance Total Maintenance Hours	Total Recorded Maintenance Labor Hours	32,751.70
M-2.3b	Planned Maintenance – Preventive and Condition Based	percent of Total Maintenance Hours	58.79%
M-2.3c	Planned Maintenance - Corrective Maintenance	percent of Total Maintenance Hours	17.12%
M-2.3d	Planned Maintenance - Projects	percent of Total Maintenance Hours	24.09%
M- 4.1a	Energy Use: Treatment	kWh/MG	2,844
M-4.1b	Energy Use: Pump Stations	kWh/MG	318
M-4.1c	Energy Use: Office Building	kWh/MG	97
M-5.2	Educational and Outreach Events	Number	19
M-5.3	Number of Community Partners	Number	9

Respectfully submitted,
Eddie M. Abisaab, PE
Director of Operations

TO: General Manager

FROM: Director of Talent Management (TM)

SUBJECT: Monthly Report for March 2023

DATE: April 12, 2023

A. Talent Management Executive Summary

1. Recruitment Summary

Current Vacancies	52
New Recruitment Campaigns	10
Job Offers Accepted – Internal Selections	3
Job Offers Accepted – External Selections	13
Internal Applications	54
External Applications	157
Average Days to Fill Position	280.06

2. Employee Separation Summary

	March 2023	Total (April 2022-March 2023)
Career/Better Opportunity	1	20
Content of work	0	5
Family circumstances	0	5
Dismissal	0	9
Going to school	0	1
Lack of Opportunity for Advancement	0	1
Moving from the area	1	6
Salary	0	5
Retirement	2	17
End of Assignment (PT)	1	24
Administrative Separation	0	2
Unknown	0	1

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

Description	March 2023	Total (March 2020 – March 2023)
Quarantines due to illness or direct exposure (household or external)	0	452
Work Related Quarantines	0	106
Personal Travel Quarantines	0	61
Confirmed Employee COVID-19 Cases	3	333
Work Related Confirmed COVID-19 Cases	0	13
Contractor COVID-19 Cases on HRSD Sites*	0	12
Work Related exposure no quarantine required*		91
Vaccine Acknowledgements	6	913
Booster Acknowledgements	2	490
Vaccination Rate	93%	
Boosted*	44%	

*Added May 2022

4. Enterprise Resource Planning (ERP)

   a. HRSD continued work with the consultant on system enhancements to benefit interfaces and benefit plan changes.

   b. HR Business Analyst worked with HR, Accounting, and Information Technology (IT) staff to review Affordable Care Act reporting. The reports were electronically submitted to the IRS prior to the March 31st deadline.

5. Benefits and Compensation

   a. Open enrollment starts in May and the virtual schedule has been created and posted to SharePoint.

   b. Benefit Request for Proposal (RFP) has been developed with the assistance of Marsh and McClellan (MMA) and is being finalized.

   c. Compensation study RFP has been posted for bids.

6. Wellness Program

a. Participation

Year Ten Participation Activities	Unit	March 2023	Year to Date (March 2022–February 2024)
My Spark Central Registrations	Number	24	24
Biometric Screenings	Number	4	4
Biometric Outcomes	Number	3	3
Annual Physicals	Number	3	3
Preventive Health Exams	Number	9	9
Preventive Health Assessments (PHA)	Number	80	80
Health coaching	Number	3	3
Age-appropriate vaccine	Number	2	2
Complete Smoke Attestation	Number	144	144
HRSD Lunch & Learns	Number	160	160
Wellness Activity/Challenges	Number	191	191

a. The WellSpark Wellness Specialist conducted three onsite visits this month at Boat Harbor Treatment Plant, Nansemond Treatment Plant, and Atlantic Treatment Plant.

b. Virtual presentations on the updated wellness program and lunch and learns were held for employees and evening presentations were conducted for spouses.

c. The wellness program was presented to 20 new employees during New Employee Orientation (NEO).

d. The Spark Social 12-week group coaching program was promoted, and two group classes have been filled.

7. Organizational Development and Training (ODT):

a. Worked with consultant Hicks-Carter-Hicks (H-C-H) and the HRSD sponsor on several Diversity, Equity, and Inclusion (DE&I) initiatives.

b. Facilitated the half day Your Role in Quality (YRIQ) workshop.

c. Began working on the 2023 Workcenter Planning Day initiative.

d. Worked with consultant H-C-H on executive coaching. Interviewed certified coach to begin an executive coaching partnership.

e. Continued work on the Corporate Training software. We are currently reviewing courses to finalize offerings.

f. Continued work with the Customer Care Division to curate online learning paths and integration of available Corporate Training courses.

g. Continued work with the Water Quality Department to increase quality assurance training courses.

h. Collaborated with the Wellness Specialist to conduct training on employee burnout which was one of the recommended outcomes of the first LAMA cohort capstone project presentations.

i. Conducted the first portion of LEAP Supervisor training.

j. Facilitated a Train-The-Trainer Workshop for the Water Quality Communication Team.

k. Continued to work with a cross-departmental team to advance the functionality of Canvas.

8. Apprenticeship Program

Work continued on the following:

a. Apprenticeship Mentoring Program

b. Building and structuring a day Apprenticeship Program

c. Developing Standard Operating Procedures for ODT responsibilities

d. Trade curricula revisions and course development to update and enhance course offerings

9. Safety

Mishaps and Work-Related Injuries Status to Date (OSHA Recordable)

	2022	**2023**
Mishaps	36	5
Lost Time Mishaps	4	2
Numbers subject to change pending HR review of each case.		

10. Safety Division Monthly Activities

Safety Training Classes	19
Work Center Safety Inspections	54
Reported Accident Investigations	4
Construction Site Safety Evaluations	9
Contractor Safety Briefings	7
Hot Work Permits Issued	0
Confined Space Permits Issued/Reviewed	169
Industrial Hygiene Monitoring Events	2

B. Monthly Strategic Planning Metrics Summary

1. Education and Outreach Events: (11)

a. 03/01/2023 Virginia Beach Vocational and Technical School
b. 03/07/2023 Veterans Employment Center
c. 03/14/2023 ODU Internship Fair
d. 03/15/2023 Norfolk Transition Assistance Program (TAP)
e. 03/17/2023 Tallwood High School Career Day
f. 03/17/2023 Veteran/Spouse Employer Panel
g. 03/22/2023 Fort Eustis Transition Assistance Program (TAP)
h. 03/23/2023 Oceana Transition Assistance Program (TAP)
i. 03/28/2023 Workforce Council Internship Summit
j. 03/29/2023 Adult Learning Center Transition Fair
k. 03/30/2023 Outwork 757LGBTQ Career Expo

2. Community Partners: (4)

a. City of Virginia Beach Public Schools
b. Organizational Development Regional Committee
c. Workforce Development Center
d. Old Dominion University

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	March 2023
M-1.1a	Employee Turnover Rate (Total)	Percentage	0.48%
M-1.1b	Employee Turnover - Service Retirements	Percentage	0.24%
M-1.4a	Total Training Hours Per Full Time Employee (18)	Total Training Hours/ FTE	6.33
M-1.4b	Total Training During Work Hours Per Full Time Employee (18) – Cumulative Fiscal Year-to-Date	Hours / FTE	22.19
M-5.2	Educational and Outreach Events	Number	11
M-5.3	Community Partners	Number	4

Respectfully submitted,

Dorissa Pitts-Paige
Director of Talent Management

TO: General Manager

FROM: Director of Water Quality (DWQ)

SUBJECT: Monthly Report for March 2023

DATE: April 13, 2023

A. General

1. One civil penalty was issued by the Pretreatment and Pollution (P3) Division in March.

   Bottling Group, LLC - Newport News
   An Enforcement Order was issued to Bottling Group, LLC, a soft drink manufacturing facility in Newport News, on February 7, 2023, for four technical violations. The Enforcement Order included a $6,000 civil penalty invoice. Technical violations included failing to follow special conditions of the permit-repeat failure within two years, and permit limit exceedances for pH. A Show Cause meeting was held February 2, 2023, and the permittee outlined steps taken to ensure compliance with pH monitoring and pH neutralization systems. Bottling Group, LLC recently completed an Administrative Order for pH monitoring, pH neutralization, and pH data collection that was closed on December 20, 2022. The Enforcement Order was accepted, and the civil penalty was paid in full on March 7, 2023.

2. Nansemond Treatment Plant (NTP) implemented online total residual chlorine analysis March 1, 2023. Central Environmental Laboratory (CEL) Quality Assurance staff will include review of performance as part of the semi-annual treatment lab Sample and Testing auditing scheduled for April, and will make any necessary adjustments to documentation, the SOP or training materials if needs are identified.

3. Technical Services Division (TSD) and CEL staff conducted environmental monitoring and analysis following the release of 2.5 million gallons of wastewater into the intracoastal waterway and Southern Branch of the Elizabeth River that resulted from force main damage from a passing vessel. Though a comprehensive background data set was not available, within one week of the spill, fecal indicator bacteria results at all monitored sites were less than 60 MPN/100 mL (**M**ost **P**robable **N**umber), which is the more stringent of the Environmental Protection Agency (EPA) recommended Beach Action Values for Enterococci. Out of an abundance of caution, the Chesapeake Local Health District released an advisory regarding recreational use of the waters to cover a two-week period from the date of the release.

4. EPA released its long-anticipated draft drinking water standards for per- and polyfluoroalkyl substances (PFAS). These are relevant for HRSD's SWIFT program as SWIFT Water™ must comply with the Safe Drinking Water Act's (SDWA) National Primary Drinking Water Standards prior to being recharged to the Potomac Aquifer System. As expected, the Maximum Contaminant Levels

(MCLs) for PFOA and PFOS were proposed at 4 parts per trillion (ppt) each, with an MCL Goal (MCLG) of 0 ppt (also expressed as ng/L). Furthermore, a Hazard Index (HI) was proposed to protect against the potential combined effects of 4 additional PFAS (PFNA, PFHxS, PFBS, and Gen-X). The SWIFT process includes Granular Activated Carbon (GAC) which has been demonstrated to effectively remove PFAS to the levels proposed in this draft regulation. Optimization of GAC performance is currently under evaluation at the SWIFT Research Center with a goal of meeting the PFAS removal objectives while minimizing operational costs.

5. WQ continued work with Operations staff to address ongoing odor issues at the Atlantic Treatment Plant (ATP). TSD maintained increased odor surveillance and worked with ATP staff to identify and mitigate odor sources and provide immediate response to odor complaints. Further information on odor complaints for HRSD facilities can be found in the Effluent and Air Emissions Summary.

6. DWQ participated in the following HRSD activities:

   a. Consultant brief on HRSD's Climate Change Planning Study
   b. HRSD LIFE conference
   c. HRSD Quality Steering Team (QST)
   d. Master Planning for the Atlantic Plant Progress Farm
   e. SWIFT QST

6. Advocacy and external activities:

   a. Attended the Environment Virginia Symposium and participated in two panel discussions: 1) a discussion of the SWIFT program and its oversight by the Potomac Aquifer Recharge Oversight Committee and 2) a discussion on modern biosolids management and its challenges.
   b. Inter-agency coordination calls related to incident response for the Great Bridge Locks force main break. Agencies involved included the Department of Environmental Quality (DEQ), the Virginia Department of Health (VDH) – Waterborne Hazards, VDH – Chesapeake Local Health District, City of Chesapeake Public Utilities, and the Army Corps of Engineers.
   c. Virginia Association of Municipal Wastewater Agencies (VAMWA) Board meeting and membership meeting

B. Quality Improvement and Strategic Activities

1. The Sustainability Environment Advocacy (SEA) Group reported the following activities for the month of March:

   a. Participated in the HRSD LIFE conference by hosting an exhibit that featured the HRSD Closet, opportunities to sign up for cleanup events, and raffle prizes.
   b. Hosted a community cleanup event at Elizabeth River Park in Chesapeake where 15 volunteers gave two hours of their time cleaning up litter at the park.

2. The Water Quality Communication Team met with HRSD Facilitators to prepare the team to conduct focus groups to determine ways to improve collaboration and communication between Water Quality Divisions.

C. Municipal Assistance Program (MAP)

1. HRSD provided sampling and analytical services to the following to support monitoring required for their respective VPDES permits:

   a. Northumberland County
   b. Virginia American Water – Dale City
   c. Westmoreland County

2. MAP Billed Reimbursements for service provided from January 1 to March 31, 2023.

3. MAP Invoice Summary for the first Quarter 2023 calendar year.

D. Microbial Source Tracking (MST)

Hampton Roads Projects - HRSD provided sampling and analytical services to:

1. City of Chesapeake (Southern Branch)
2. City of Hampton (New Market Creek)
3. City of Newport News (Southeast Newport News)
4. City of Norfolk (Mason Creek)
5. City of Suffolk (downtown)
6. City of Virginia Beach (Thalia Creek)
7. James City County

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: (1)

   a. 03/12/2023 - WQ Staff participated as judges in the Tidewater Science & Engineering Fair

2. Community Partners: (7)

   a. City of Chesapeake
   b. City of Virginia Beach
   c. Hampton Roads Planning District Commission (HRPDC) Fats, Oils & Grease (FOG) Subcommittee
   d. Lynnhaven River Now Citizen Monitoring project
   e. VDH – Chesapeake Local Health District
   f. VDH – Division of Shellfish Sanitation
   g. VDH – Wastewater Surveillance Program

3. Discharge Monitoring Report (DMR) Summary and Items of Interest: Effluent and Air Emissions Summary

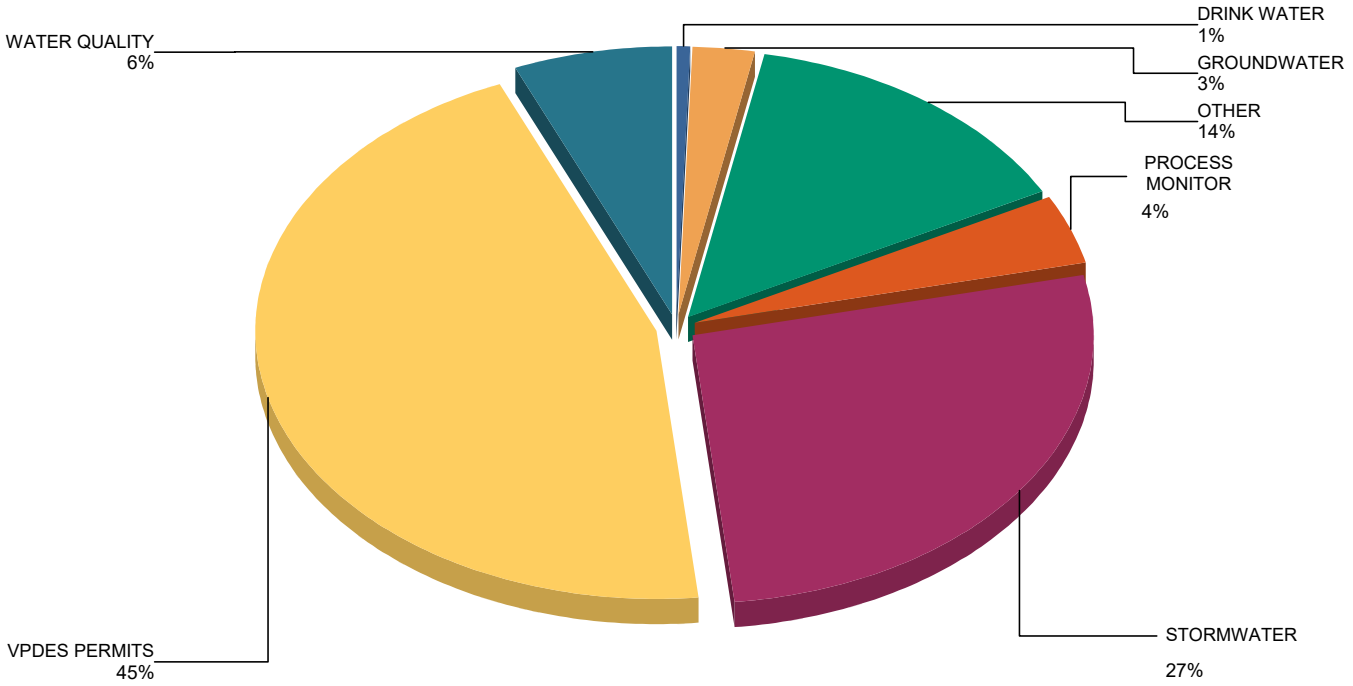
4. Monthly Metrics

Item #	Strategic Planning Measure	Unit	March 2023
M-1.4a	Training During Work Hours Per Full Time Employee (120) (Current Month)	Total Hours / # FTE	13.28
M-1.4b	Total Training During Work Hours Per Full Time Employee (120) (Cumulative Fiscal Year-to-Date)	Total Hours / # FTE	49.62
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	10:46,267
M-3.2	Odor Complaints	#	12
M-3.4	Pollutant Removal (Cumulative Fiscal Year-to-Date)	Total Pounds Removed	169,893,154
M-3.5	Pollutant Discharge (Cumulative Fiscal Year-to-Date)	% Pounds Discharged/ Pounds Permitted	16%
M-5.2	Educational and Outreach Events	#	1
M-5.3	Community Partners	#	7
	Average Daily Flow	Total MGD for all Treatment Plants	139.79
	Pretreatment Related System Issues	#	0

Respectfully submitted,
Jamie Heisig-Mitchell
Director of Water Quality

Municipal Assistance Billed Reimbursements per Service
From 01/01/2023 to 03/31/2023

Attachment 1



Notes: Other = Equipment purchase, consultation, validation studies, boater pump-out program, etc.

Municipal Assistance Invoice Summary
From 01/01/2023 - 03/31/2023

Municipality	Reimbursements
Accomack County	$4,477.06
Buckingham County	$1,267.68
Chesapeake Public Works	$229.76
City of Boise	$1,441.10
City of Chesapeake	$2,288.85
City of Emporia	$377.61
City of Franklin	$1,648.27
City of Fredericksburg	$823.96
City of Hampton	$5,451.54
City of Meridian WRRF	$993.07
City of Norfolk	$4,985.56
City of Portsmouth	$4,417.60
City of Suffolk	$2,821.49
City of Virginia Beach	$6,285.82
Exmore WWTP	$1,940.66
HRPDC	$46,884.95
Henrico County	$1,960.89
Hopewell RWTF	$5,983.30
Lynnhaven River NOW	$331.95
New Kent County	$11,382.61
Northampton County WWTP	$1,834.56
Northumberland Co. - Callao WWTP	$2,884.87
Rivanna Water and Sewer Authority	$825.51
Spotsylvania County	$1,619.99
St Brides Corr Ctr WWTP	$10,242.94
Stafford County	$11,006.96
Town of Cape Charles	$11,628.72
Town of Lawrenceville	$1,486.45
Virginia Department of Health	$9,648.36
Western VA Water Authority	$14,258.14
Westmoreland County	$2,166.21
Totals:	**$173,596.44**

EFFLUENT SUMMARY FOR MARCH 2023

PLANT	FLOW mgd	% of Design	BOD mg/l	TSS mg/l	FC #/UBl	ENTERO #/UBl	TP mg/l	TP CY Avg	TN mg/l	TN CY Avg	CONTACT TANK EX
ARMY BASE	9.09	51%	4	5.8	2	1	0.32	0.37	3.0	3.6	4
ATLANTIC	43.65	81%	14	11	1	<1	NA	NA	NA	NA	18
BOAT HARBOR	11.17	45%	7	6.0	2	3	0.64	0.51	26	25	12
CENT. MIDDLESEX	0.013	51%	<2	1.1	<1	<1	NA	NA	NA	NA	NA
JAMES RIVER	11.87	59%	8	4.4	2	1	0.57	0.54	11	11	23
KING WILLIAM	0.058	58%	<2	<1.0	NA	<1	0.025	0.034	2.4	2.1	NA
NANSEMOND	15.77	53%	4	7.0	2	2	0.51	0.51	4.7	4.2	3
NASSAWADOX	0.013	13%	2	12	<1	1	0.33	0.36	18	15	NA
ONANCOCK	0.207	28%	<2	<1.0	1	1	0.09	0.094	1.1	1.5	NA
URBANNA	0.046	46%	3	11	3	11	3.5	3.3	16	13	NA
VIP	27.54	69%	6	3.5	3	1	0.29	0.24	3.9	3.8	3
WEST POINT	0.389	65%	26	20	1	5	3.2	2.7	21	19	0
WILLIAMSBURG	7.96	35%	4	3.4	4	1	1.1	0.69	2.6	2.5	12
YORK RIVER	12.00	80%	1	<1.0	1	<1	0.25	0.26	4.9	4.8	0
	139.79										

	% of Capacity
North Shore	52%
South Shore	68%
Small Communities*	42%

Tributary Summary

	Annual Total Nitrogen			Annual Total Phosphorus		
	Discharged	Operational		Discharged	Operational	
	YTD	Projection CY23		YTD	Projection CY23	
Tributaries	%	Lbs	%	%	Lbs	%
James River	14%	2,173,337	61%	9%	238,426	76%
York River	18%	194,213	67%	18%	13,735	71%
Rappahannock	14%	NA	NA	12%	NA	NA

Permit Exceedances:Total Possible Exceedances, FY23 to Date: 10:46,267

Pounds of Pollutants Removed in FY23 to Date: 169,893,154

Pollutant Lbs Discharged/Permitted Discharge FY23 to Date: 16%

*Small Communities includes Eastern Shore

Rainfall (inch)

	North Shore (PHF)	South Shore (ORF)	Small Communities (FYJ)
Month	2.48"	2.00"	1.26"
Normal for Month	3.83"	3.27"	3.39"
Year to Date Total	7.63"	7.63"	6.25"
Normal for YTD	10.23"	9.37"	9.66"

AIR EMISSIONS SUMMARY FOR MARCH 2023

	No. of Permit Deviations below 129 SSI Rule Minimum Operating Parameters								Part 503e Limits		
MHI PLANT	Temp 12 hr ave (F)	Venturi(s) PD 12 hr ave (in. WC)	Precooler Flow 12 hr ave (GPM)	Spray Flow 12 hr ave (GPM)	Venturi Flow 12 hr ave (GPM)	Tray/PBs Flow 12 hr ave (GPM)	Scrubber pH 3 hr ave	Any Bypass Stack Use	THC Mo. Ave (PPM)	THC DC (%)	BZ Temp Daily Ave Days >Max
ARMY BASE	*	*	*	*	*	*	*	*	*	*	*
BOAT HARBOR	0	0	0	n/a	0	0	0	0	24	92	0
VIP	0	0	0	n/a	0	0	0	1	34	98	0
WILLIAMSBURG	0	0	0	n/a	2	1	0	2	19	92	0

* MHIs did not operate in March.

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:	12
HRSD Odor Scrubber H2S Exceptions:	7

Items of Interest – March 2023

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 92%.

The MHIs had three deviations from the required 129 SSI rule minimum operating parameters and three (3) minor bypass event (<60 minute).

Boat Harbor successfully completed their 129 emissions limits stack test on March 7. Draft test results demonstrate compliance with all MACT 129 permitted emission limits.

Submitted Williamsburg's compliant MHI 129 stack test report to DEQ.

AIR PERMITS and ODOR CONTROL.

Submitted to DEQ the annual thruput updates for the Atlantic and Nansemond Plants.

DEQ air compliance inspected Nansemond on March 13. The facility was deemed in compliance with their state operating permit.

Submitted additional permit application information to DEQ in support of Williamsburg's Title V permit renewal.

Seven (7) odor control scrubber system hydrogen sulfide (H_2S) exceptions were measured and documented in March.

Atlantic Plant received twelve (12) odor complaints from Ocean Lakes and Lago Mar neighbors. Plant Staff and TSD responded to all complaints and followed up with our neighbors with investigation results as documented and relayed to them accordingly.

TREATMENT

DEQ was notified of the following reportable events:

<u>James River</u>

On March 15, a doghouse manhole installed for plant construction overflowed releasing aeration foam. A foam control sprayer was available but had been turned off at the time of the overflow. The sprayer was immediately turned back on with additional spray to knock foam down and defoamer was added for expedited reduction. Of the 500 gallons of aeration foam released, 450 gallons were recovered; the remaining 50 gallons soaked into the ground.

<u>Nansemond</u>

On March 2, a chlorine residual less than 0.10 was recorded. Plant staff were replacing a broken sodium hypochlorite line and while testing the new line inadvertently caused a decrease in contact tank residual. Flow was diverted to the onsite holding pond until the 30-minute residual recovered. The event lasted 6 minutes.

Nansemond

On March 22, Primary clarifier #1 leaked approximately 65 gallons from a wall joint and soaked into the ground. Upon discovery, the wall joint was packed with foam and staff pumped out the tank to stop the leak. The joint has been temporarily repaired until a permanent repair can be completed.

On March 29, during a power outage at SWIFT the drain pump station overflowed. Once power was restored, both drain pumps were manually restarted from the DCS as they did not automatically restart. Approximately 1,500 gallons of ozonated water went into the grass area / swale with 1,300 gallons recovered and pumped back to the drain pump station. The remaining 200 gallons soaked into the ground.

SYSTEM

On March 10, an anchor strike from a vessel caused damage to a 20-in cast iron pipe force main in the water crossing between the Great Bridge Bridge and Great Bridge Locks. HRSD staff isolated the crossing using main line valves and put a diversion in place. HRSD was notified at 5:05 PM with a subsequent data review indicating system pressure dropped at 1:15 PM. Approximately 2,500,000 gallons of raw wastewater was released into the Intracoastal Waterway.

On March 28, HRSD staff observed damage to a 12-in cast iron force main near the intersection of Bainbridge Blvd and Virginia Avenue created by a horizontal directional drilling (HDD) machine. The force main was isolated by pumping and hauling from an upstream pump station and repaired by installing a full circle clamp. Once the repair was completed, the road surface was restored and impacted areas were cleaned and treated. Information gathered from locality staff and the HDD contractor indicated the force main damage may have occurred as early as March 9, however, no release was witnessed prior to March 28. Approximately 450 gallons of raw wastewater entered a storm drain to Gilligan Creek/Southern Branch of the Elizabeth River.

SYSTEM/TREATMENT, SMALL COMMUNITIES, SURRY, AND EASTERN SHORE

King William

The required TKN monitoring frequency for the week of March 5, 2023 was not met for Outfall 001. A sample was collected on March 7, 2023, but was not analyzed due to a laboratory sample handling error. By the time the error was discovered, there was not sufficient time left to collect another TKN composite sample for the week at Outfall 001 and meet the required monitoring frequency for final effluent that is directed to reuse. All other subsequent weekly Outfall 001 TKN monitoring requirements were met and in permit compliance for the month.

2023 Metals, Ammonia, and TKN

		Limit	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Central Middlesex	Ammonia	0.56	0.02	NA	NA									
	TKN	3.0	NA	<0.50	NA									
King William	Zinc	*	54	NA	NA									
	TKN	3.0	1.9	1.1	1.6									
Nassawadox Riverside	Cadmium	2.0	<0.50	<0.50	<0.50									
	Copper	23	<5.0	<5.0	<5.0									
	Nickel	38	14	18	14									
	Zinc	150	<50	<50	<50									
	Ammonia	1.7	0.31	0.67	0.44									
Onancock	Copper	12	2.2	NA	NA									
	Ammonia	0.90, 2.0	0.04	0.03	0.03									
Surry County	Copper	5.9	2.0	NA	NA									
	Zinc	56	24	NA	NA									
	Ammonia	0.77	NA	NA	NA									
	TKN	3.0	NA	NA	NA									
Urbanna	Ammonia	3.83, 9.08	0.04	0.16	0.02									

*No limit. Treatment objective 53 ug/L

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

2023 MONTHLY FLOW AVERAGES

	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YR AVG	FY AVG
Army Base	9.10	9.87	9.09										9.36	8.29
Atlantic	44.58	46.31	43.65										44.85	44.08
Boat Harbor	11.60	12.95	11.17										11.91	10.57
C.Middlesex	0.013	0.013	0.013										0.013	0.012
James River	12.46	13.31	11.87										12.55	12.01
King William	0.070	0.065	0.058										0.064	0.069
Lawnes Point	0.000	0.000	0.000										0.000	0.000
Nansemond	15.97	16.61	15.77										16.12	15.23
Nassawadox	0.016	0.015	0.013										0.015	0.014
Onancock	0.170	0.194	0.207										0.190	0.171
Surry, County	0.011	0.000	0.000										0.004	0.025
Surry, Town	0.000	0.000	0.000										0.000	0.017
Urbanna	0.035	0.039	0.046										0.040	0.056
VIP	27.26	30.12	27.54										28.31	23.43
West Point	0.466	0.470	0.389										0.442	0.356
Williamsburg	7.73	8.09	7.96										7.92	8.79
York River	12.69	13.74	12.00										12.81	11.31
North Shore	44.47	48.09	43.00										45.19	42.68
South Shore	96.91	102.91	96.06										98.63	91.03
Small Communities	0.78	0.80	0.73										0.77	0.72
TOTAL	142.16	151.79	139.79										144.58	134.43

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

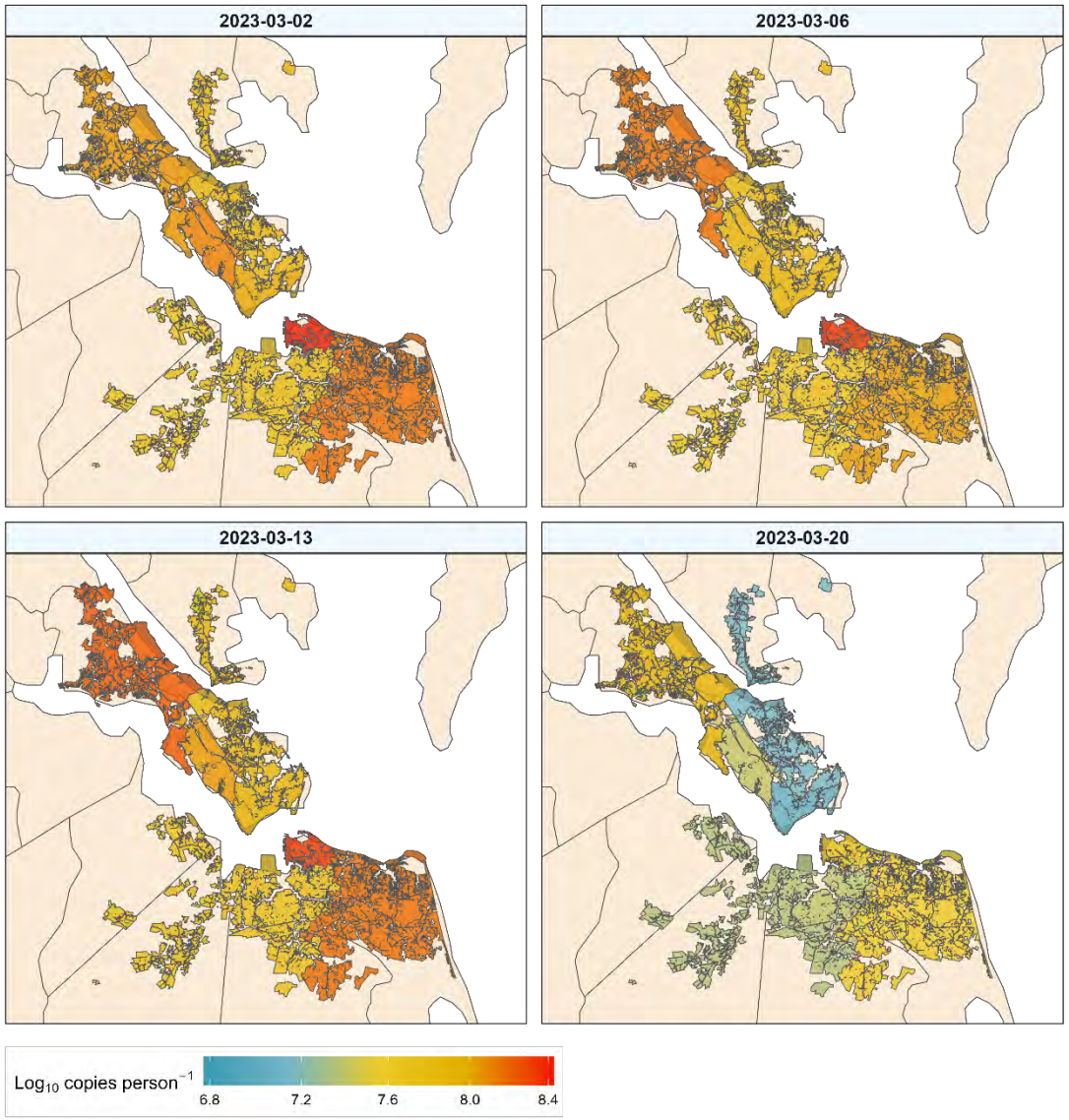
HRSD

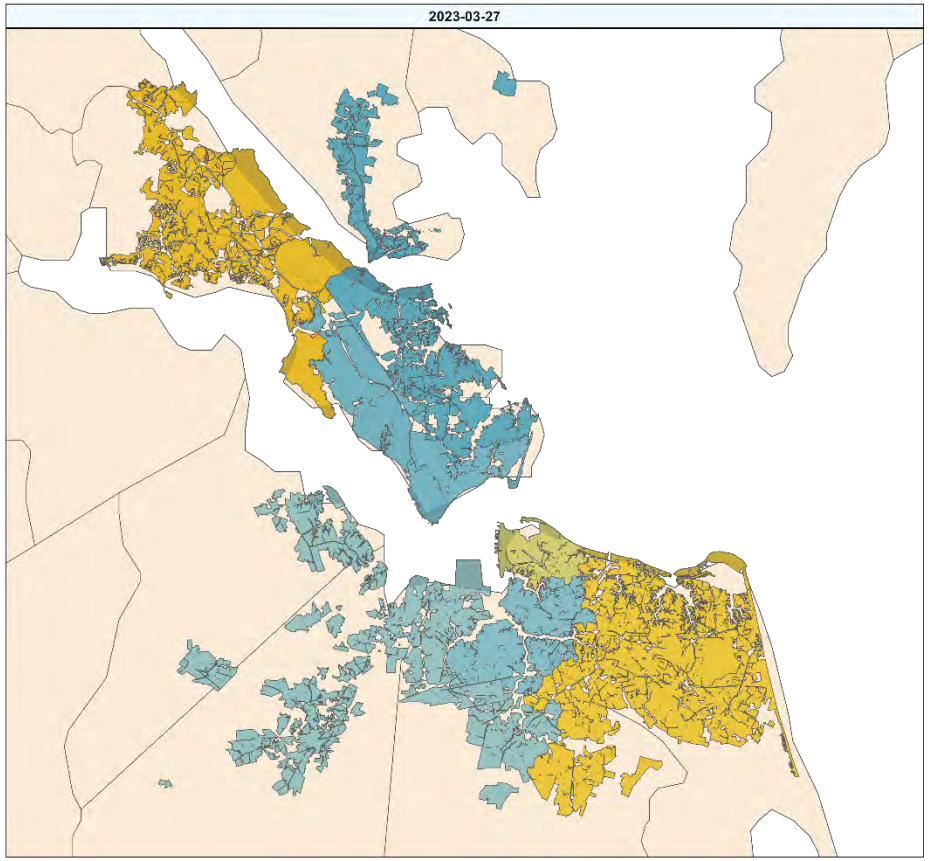
Cleaning wastewater every day for a better Bay.

Wastewater Surveillance Commission Report

March 2023

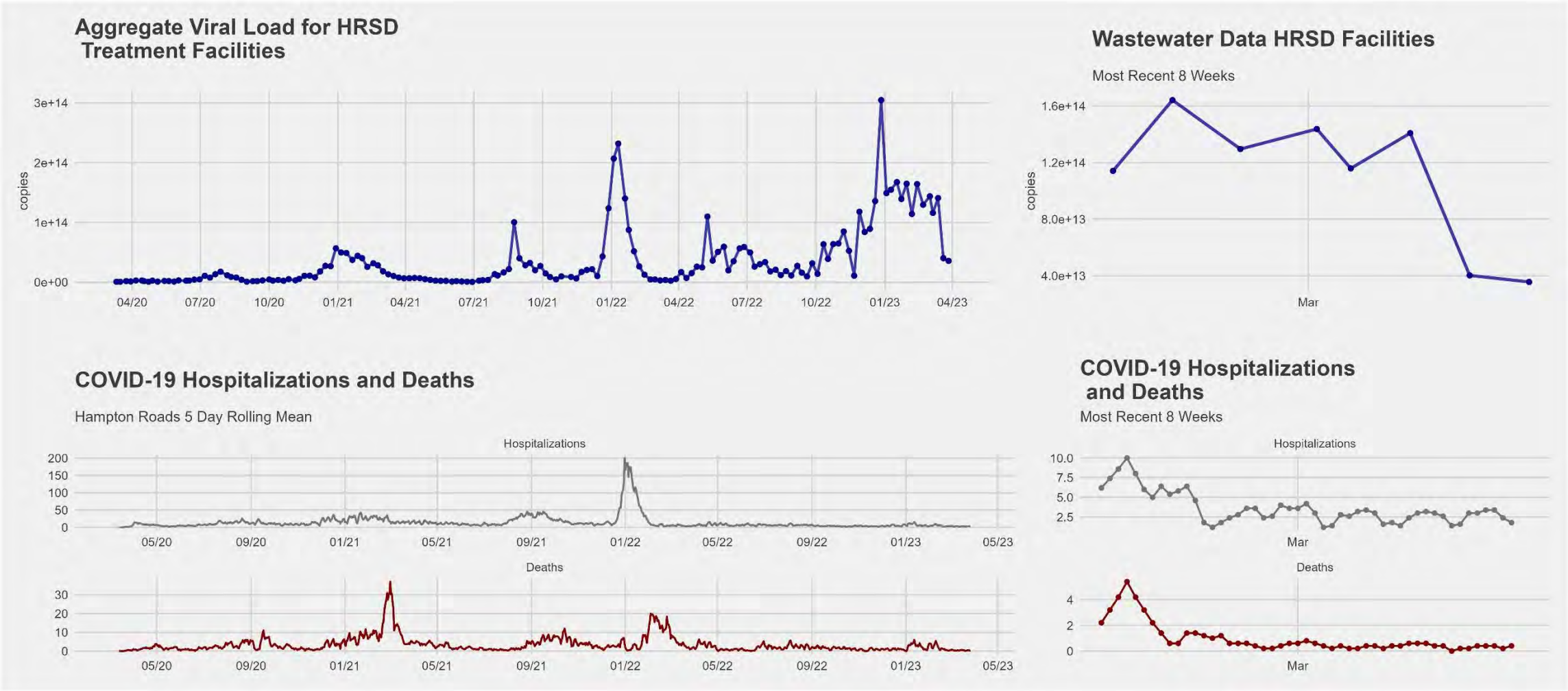
SARS-CoV-2 Most Recent 5 Weeks



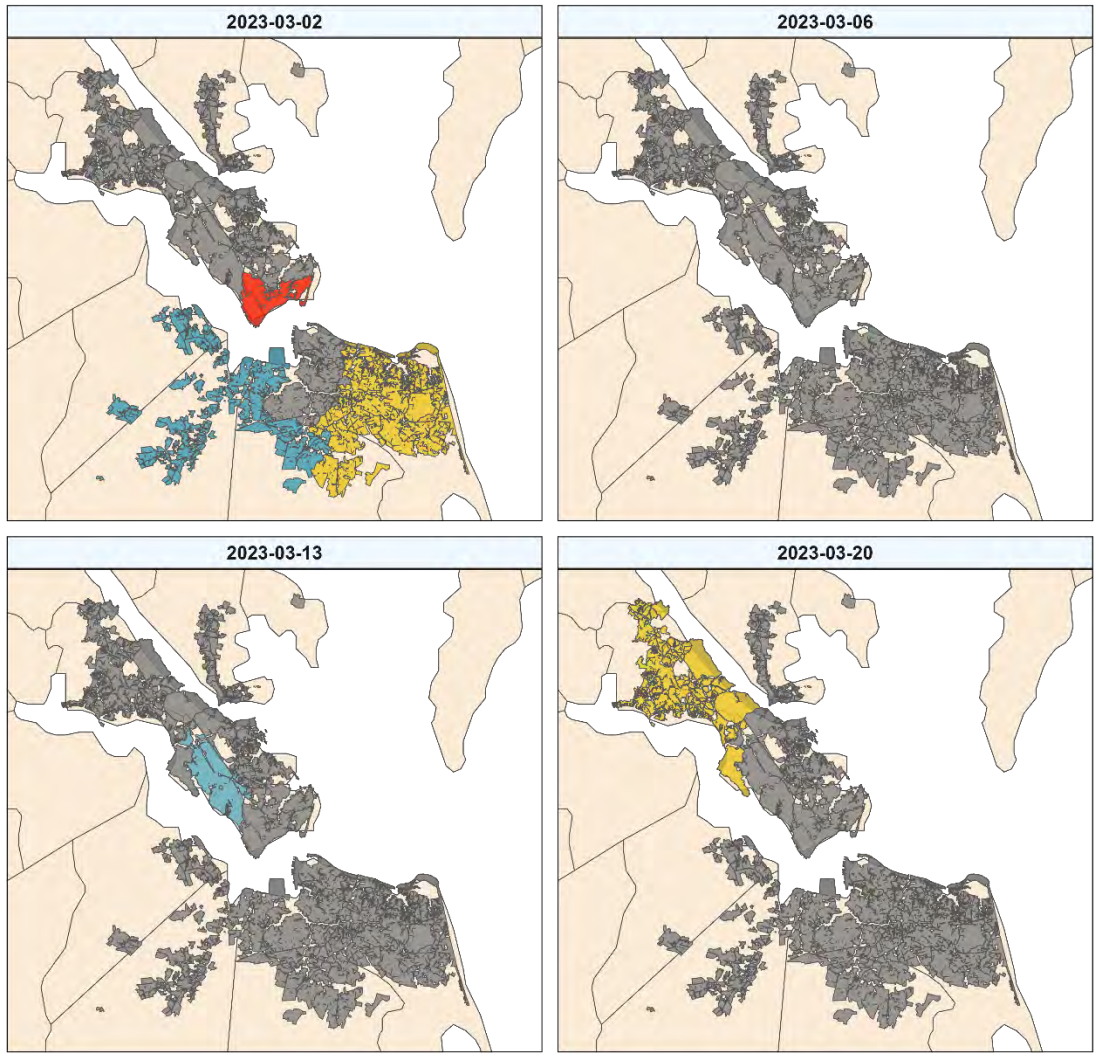


** Note that the scale for this heatmap is now based on the range of the most recent 5 weeks of data.

Regional Viral Load, Hospitalizations, and Deaths



Influenza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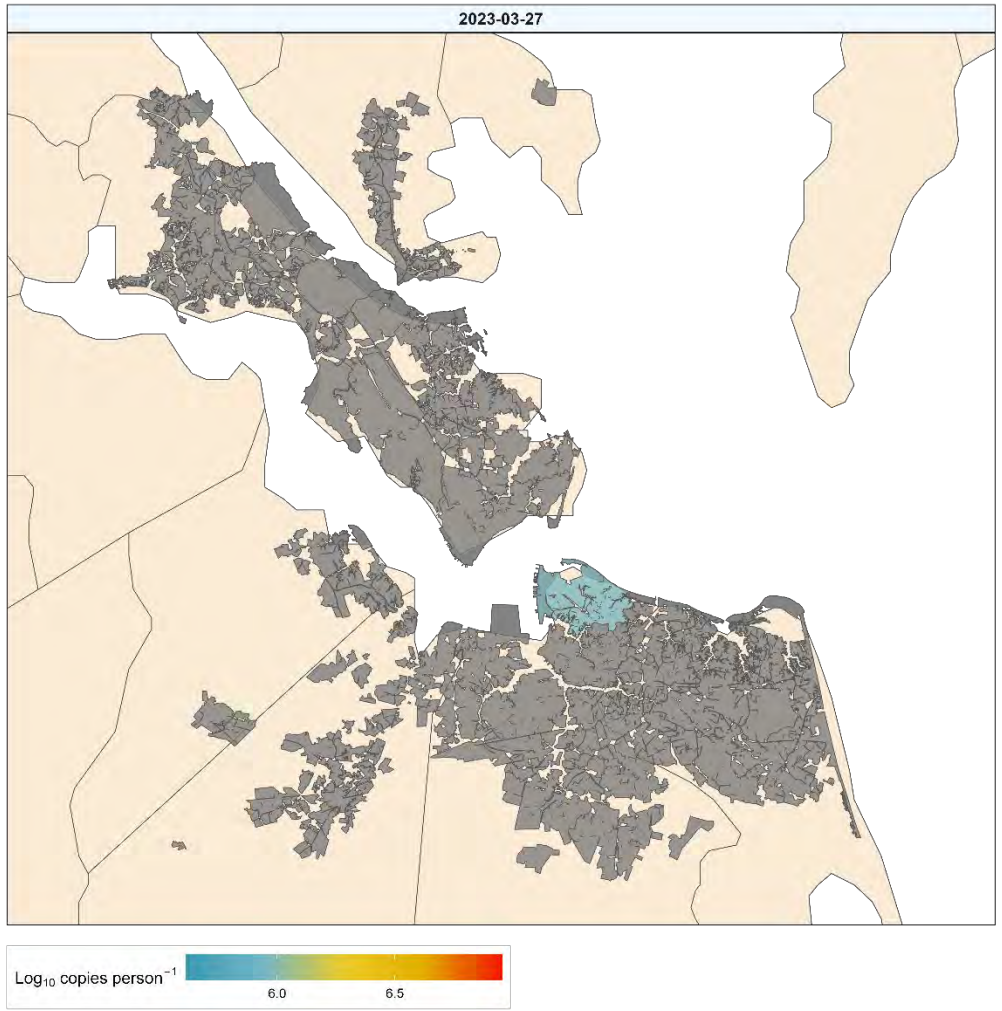
6.5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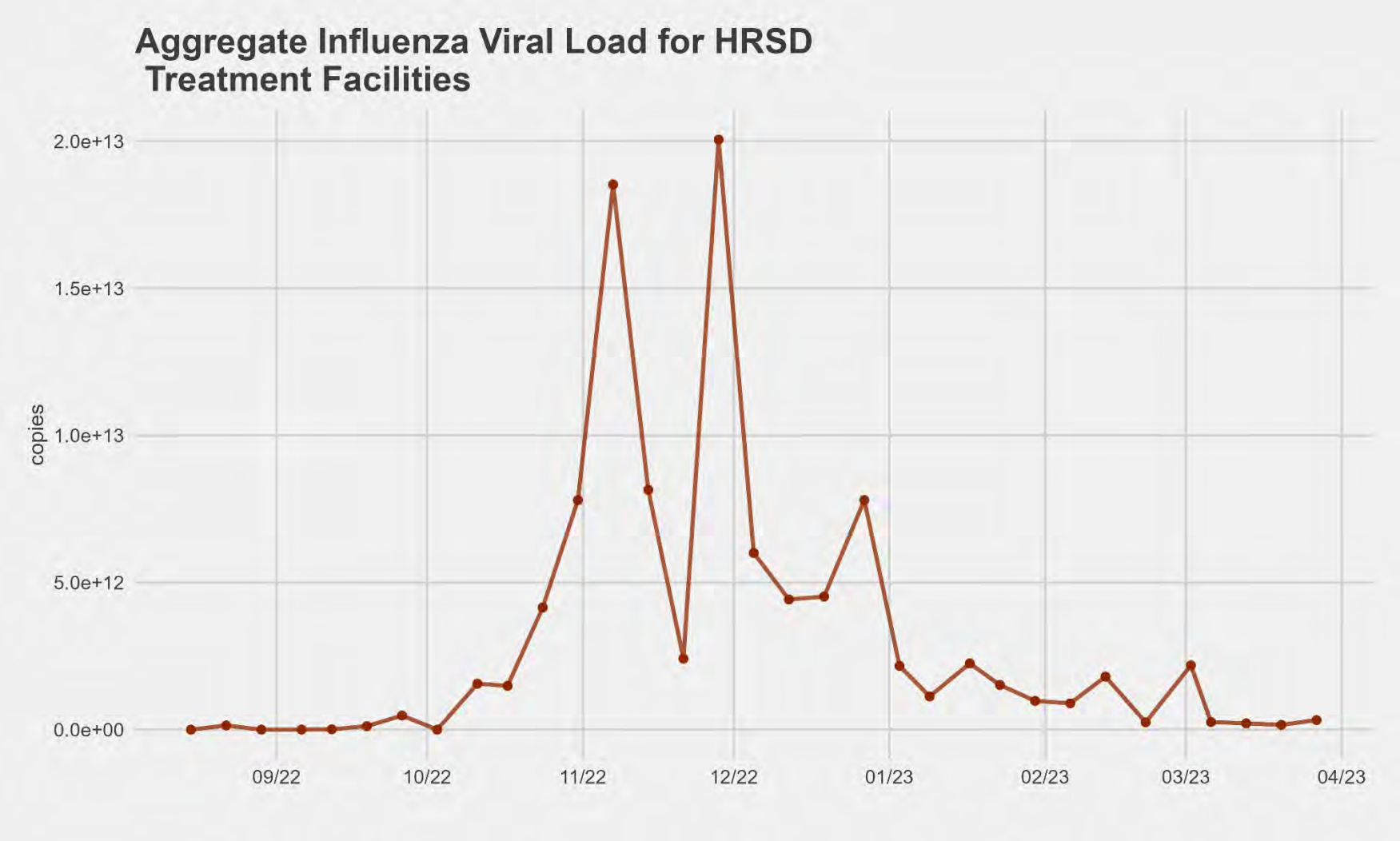
Influenza


Aggregate Influenza Viral Load for HRSD Treatment Facilities
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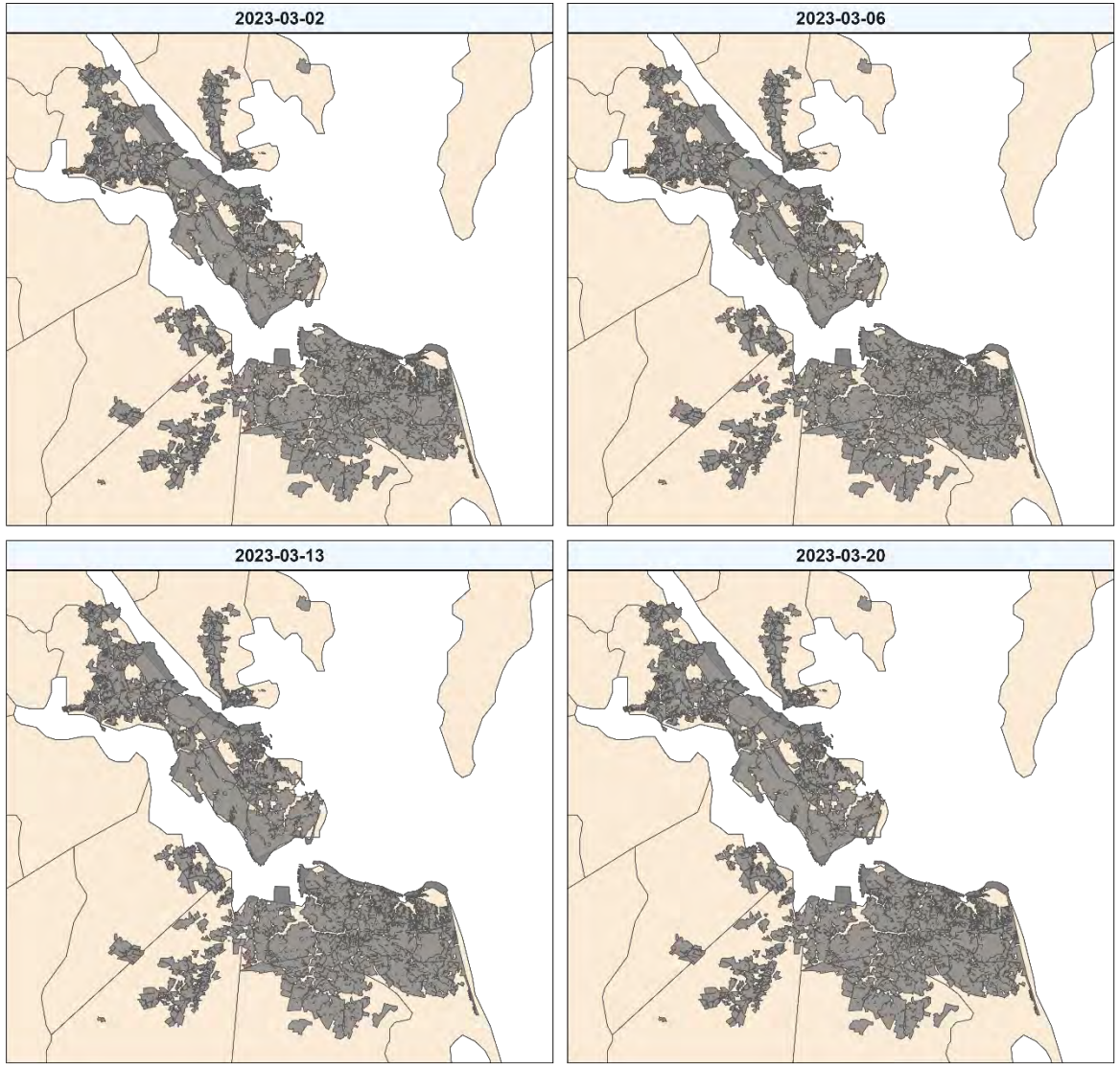
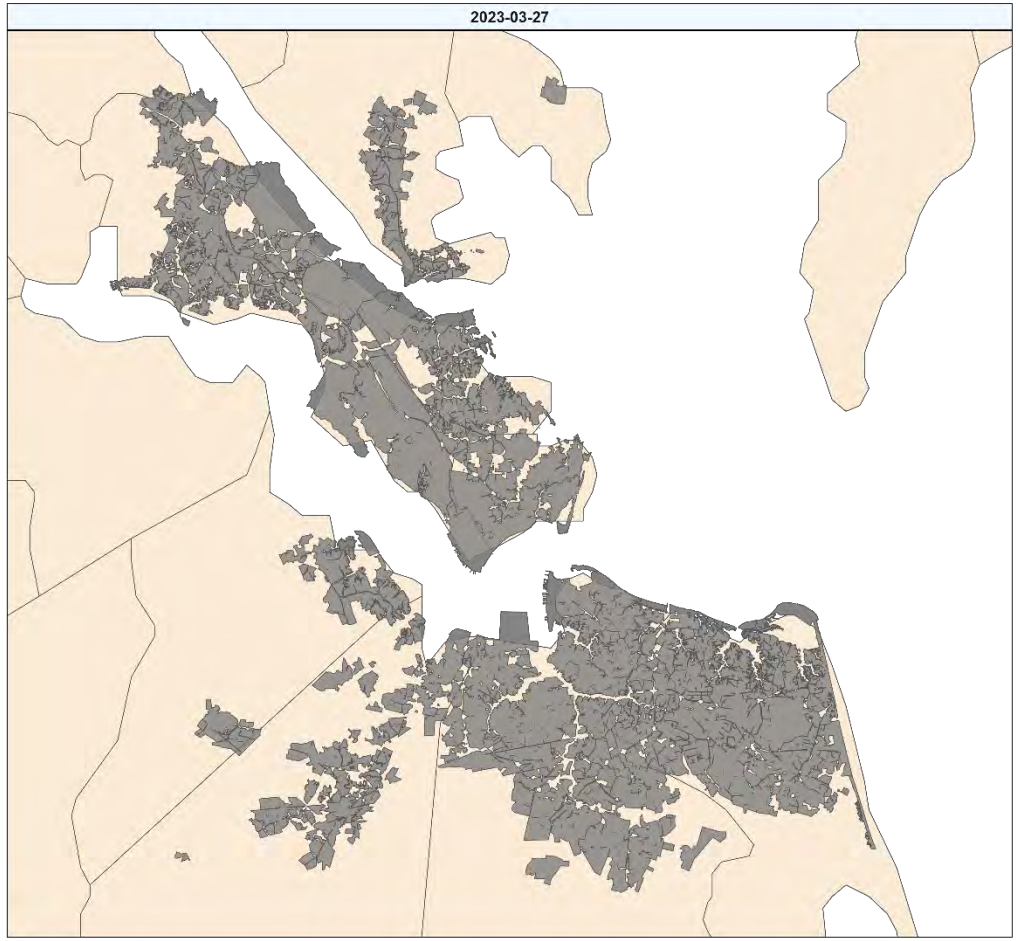
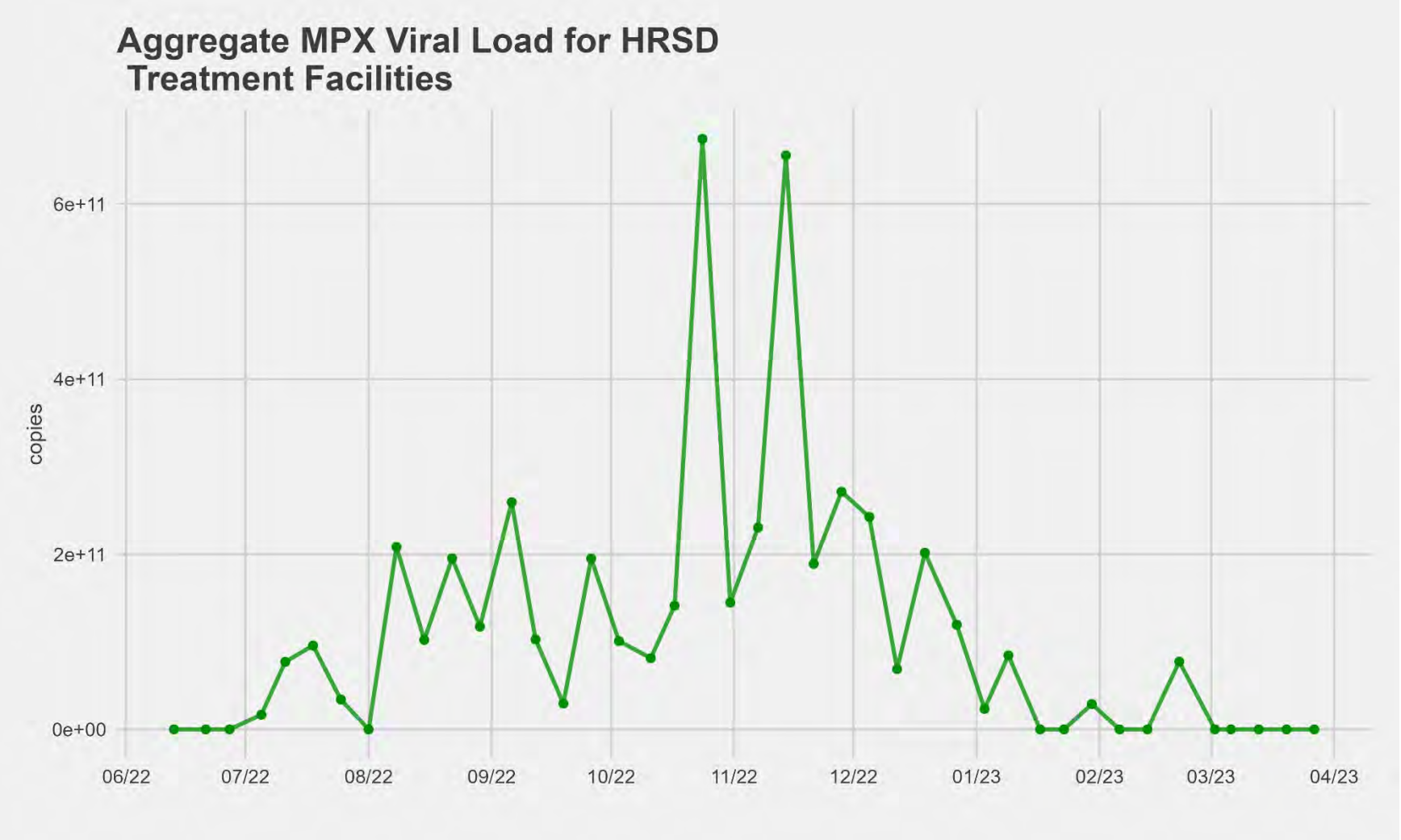
Mpox





MPOX


Aggregate MPX Viral Load for HRSD Treatment Facilities
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Hampton Roads Sanitation District
Internal Audit Status
March 31, 2023

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

Remote Access

- **Tasks Completed (March 2023)**
  - Conducted entrance meeting
  - Sent initial documentation request
- **Upcoming Tasks (April 2023)**
  - Follow up on documents requested; review as received
  - Schedule initial planning meetings

Personally Identifiable Information

- **Tasks Completed (March 2023)**
  - Conducted fieldwork walkthrough meetings
  - Requested documentation to support fieldwork objectives
  - Begin documenting fieldwork procedures
- **Upcoming Tasks (April 2023)**
  - Follow up with POCs regarding documentation requested
  - Continue documenting fieldwork procedures
  - Begin drafting report

Risk Assessment

- **Tasks Completed (March 2023)**
  - Finalized risk assessment procedures
  - Drafted internal audit plan
- **Upcoming Tasks (April 2023)**
  - Present planned internal audit plan to HRSD and Commission

Grants Management

- **Tasks Completed (March 2023)**
  - Met with Finance to discuss preliminary improvement opportunities
- **Upcoming Tasks (April 2023)**
  - Finalize and closeout project

Family Medical Leave Act (FMLA)

- **Tasks Completed (March 2023)**
  - Provided draft report to Talent Management and received feedback
- **Upcoming Tasks (April 2023)**
  - Provide final report to HRSD

II. Management Action Plan Monitoring

SC&H performs on-going management action plan (MAP) monitoring for completed internal audits/projects. SC&H begins MAP follow-up approximately one year following the completion of each audit and periodically follows up until conclusion.

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.

			Recommendations		
Audit	**Report Date**	**Next Follow-up**	**Closed**	**Open**	**Total**
SWIFT Program	2/24/2021	April 2023	11	1	12
Succession Planning	6/4/2021	July 2023	1	3	4
Safety Division	9/12/19	September 2023	2	1	3
Freedom of Information Act	12/21/2022	December 2023	0	1	1
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
Treatment Plant Operations	10/15/18	Closed	9	0	9
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
Fleet Services	2/24/2021	Closed	17	0	17
Biosolids Recycling	10/8/16	Closed	8	0	8
Unifier/ERP Integration	6/27/2022	Closed	4	0	4
Emergency Repairs	1/18/2022	Closed	3	0	3
		Totals	129	6	135

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	FY-22
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%	16.04%
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%	1.64%
M-1.2	Internal Employee Promotion Eligible	Percentage	100%		59%	80%	70%	71%	64%	69%	68%	85%	85%	63%	78%	65%
M-1.3	Average Time to Fill a Position	Calendar Days	< 30		70	60	52	43.76	51	56	67	67	66	60	95	74.52
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	32.3
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	4.53
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	1.09
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	3.43
M-2.1	CIP Delivery - Budget	Percentage			113%	96%	124%	149%	160%	151%	156%	160%	170%	170%	123%	120%
M-2.2	CIP Delivery - Schedule	Percentage			169%	169%	161%	150%	190%	172%	173%	167%	159%	159%	155%	152%
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	28,030
M-2.3b	Planned Maintenance	Percentage of Total Mtc Hours Monthly Avg			20%	27%	70%	73%	48%	41%	43%	44%	59%	59%	62%	61%
M-2.3c	Corrective Maintenance	Percentage of Total Mtc Hours Monthly Avg			63%	51%	12%	10%	18%	25%	25%	24%	18%	19%	16%	15%
M-2.3d	Projects	Percentage of Total Mtc Hours Monthly Avg			18%	22%	20%	18%	32%	34%	32%	32%	27%	25%	22%	24%
M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	2%		8.18%	6%	6%	4%	7%	7%	5%	5%	4	5%	7%	6%
M-3.3	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	1.89
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	53,931,273
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	2,439
M-4.1b	Energy Use: Pump Stations	kWh/MG Monthly Avg			197	173	152	159	168	163	173	170	181	174	170	218
M-4.1c	Energy Use: Office Buildings	kWh/MG Monthly Avg			84	77	102	96	104	97	104	104	95	102	82	136
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%	1.4%
M-4.3	Total Labor Cost/MGD	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	$1,542
M-4.4	Affordability	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%	0.65%
M-4.5	Total Operating Cost/MGD	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	$4,436
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	N/A
M-5.4	Value of Research	Percentage - Total Value/HRSD Investment			129%	235%	177%	149%	181%	178%	143%	114%	117%	143%	138%	128%
M-5.5	Number of Research Partners	Annual Total Number			42	36	31	33	28	35	15	20	26	32	27	39
	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	145.75
	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	38.18
	Billed Flow	Annual Percentage of Total Treated		71.9%	82.6%	78%	71%	73%	74%	72%	73%	76%	72%	78%	72%	84%
	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%	7.55%
	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%	3.04%

*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-23 Feb-23	FY-23 Mar-23
	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	131.3	151.8	139.8
	Industrial Waste Related System Issues	Number	0		3	6	6	6	2	4	7	4	7	1	2	4	0	0
	Wastewater Revenue	Percentage of budgeted	100%		97%	96%	98%	107%	102%	104%	103%	103%	104%	104%	106%	106%	101%	103%
	General Reserves	Percentage of Operating and Improvement Budget	75% - 100%		72%	82%	84%	92%	94%	95%	104%	112%	117%	119%	108%	106%	111%	105%
	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	$39,539,639	$39,724,461	$37,001,555
	Aging Accounts Receivable	Percentage of receivables greater than 90 days			21%	20%	18%	19%	21%	20%	18%	18%	17%	18%	29%	33%	32%	32%
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	0
M-3.1	Permit Compliance	# of Exceedances to # of Permitted Parameters	0		12:55,045	1:51995	2:52491	1:52491	2:52491	2:52,491	9:53236	9:58338	2:60879	9:60879	23:60879	9:60879	10:41126	10:46267
M-3.2	Odor Complaints	Number	0		6	2	7	11	5	9	7	6	9	15	31	51	5	12
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	177,322,331	154,000,577	169,893,154
M-3.5	Pollutant Discharge (% of permitted)	Pounds Discharged/Pounds Removed	< 40%		25%	22%	25%	22%	22%	20%	22%	17%	17%	17%	18%	14%	16%	16%
M-5.2	Educational and Outreach Events	Number			302	184	238	322	334	443	502	432	367	256	145	687	70	89
M-5.3	Number of Community Partners	Number			280	289	286	297	321	354	345	381	293	230	128	125	37	22