

REVISED - HRSD COMMISSION MEETING AGENDA
9:00 A.M. – September 22, 2020

LOCATION: Electronic Meeting in Accordance with Chapter 1283,
Virginia 2020 Acts of Assembly

Limited SKYPE observation is available by reservation on a first come, first served basis and must be received by Jennifer Cascio at jcascio@hrsd.com by noon one business day prior to the meeting.

Public Comments to be made during the meeting should be submitted to Jennifer Cascio by email to jcascio@hrsd.com or by phone to 757.460.7003, and must be received by noon one business day prior to the meeting.

<u>No.</u>	<u>Topic</u>	<u>Resource</u>
	Call to Order	Elofson
	Roll Call of HRSD Commission	Cascio
1.	Awards and Recognition	Henifin
	a. Service Award	
	b. WEF Laboratory Analyst Excellence Award	
	c. HRSD 27th Annual Pretreatment Excellence and Pollution Preventions Awards	
2.	Consent Agenda	Henifin
	a. Approval of Minutes	
	b. Contract Awards	
	c. Task Orders	
	d. Change Orders	
	e. Sole Source	
3.	Water Infrastructure and Innovation Act (WIFIA) Master Financing Agreement Resolution	Bernas
4.	Water Infrastructure and Innovation Act (WIFIA) Tranche 1 Closing Resolution	Bernas

<u>No.</u>	<u>Topic</u>	<u>Resource</u>
5.	<u>Solids System Improvements for Army Base Multiple Hearth Incinerator (MHI) Offline Initial Appropriation and Task Order</u>	Husselbee
6.	<u>Boat Harbor Outlet Sewer Improvements Additional Appropriation</u>	Husselbee
7.	<u>Mathews Main Vacuum Pump Station Replacement Additional Appropriation</u>	Husselbee
8.	<u>Suffolk Interceptor Force Main Section I Main Line Valving Replacement Additional Appropriation and Contract Award</u>	Husselbee
9.	<u>Treatment Plant Grease Handling Facilities Additional Appropriation, Contract Award and Task Order</u>	Husselbee
10.	<u>COVID-19 Wastewater Surveillance Study</u>	Curtis
11.	<u>Unfinished Business – Tabb Pressure Reducing Station and Offline Storage Facility – Acquisition of Real Property – 900 Yorktown Road</u>	Henifin
12.	<u>New Business</u>	Henifin
13.	<u>Commissioner Comments</u>	
14.	<u>Public Comments Not Related to Agenda</u>	
15.	<u>Informational Items</u>	Henifin
a.	<u>Management Reports</u>	
b.	<u>Strategic Planning Metrics Summary</u>	
c.	<u>Effluent Summary</u>	
d.	<u>Air Summary</u>	
e.	<u>Emergency Designation - Cedar Lane Interceptor Force Main Repair</u>	
16.	<u>Closed Meeting</u>	Henifin
17.	<u>Reconvened Meeting</u>	Henifin

NEXT REGULAR COMMISSION MEETING DATE: October 27, 2020

AGENDA ITEM 1. – September 22, 2020

Subject: Awards and Recognition

Recommended Action: No action is required.

Brief:

a. **Service Award**

Chair Elofson will present a service award to Tom Morris who will mark his 20th year of service with HRSD on September 25. Tom was hired in September 2000 as the Facilities Maintenance Superintendent, the position he still holds today. Tom currently oversees the Machine shop, Housekeeping, and both North and South shore Carpenter shops. Tom completed his associate degree in Business from Saint Leo University in 2012. One of his most notable contributions is in the HVAC projects where he helped with the installation of several Water Source Heat Pumps (WSHP) units using the treatment plants non-potable water. Tom also served on the original Sustainability Team which created and implemented the HRSD recycling program. Tom is one of HRSD's unsung heroes. When he takes on an assignment, whether it's a complete building renovation, a campus cleaning, plantings, an HVAC project or any number of other activities, you can be confident that it will be done right.

b. **WEF Laboratory Analyst Excellence Award**

Shannon Labocki, Supervising Laboratory Chemist, was recently awarded the Laboratory Analyst Excellence Award by the Water Environment Federation (WEF). This award recognizes individuals for outstanding performance, professionalism and contributions to the water quality analysis profession through:

- Making outstanding efforts in the area of wastewater and environmental aquatic analyses, including such items as innovative sampling techniques or solutions to a treatment, analytical or environmental problem.
- Involvement in community activities or public relations.
- Presentations at professional conferences, meetings, etc. relevant to water quality analysis.
- Professional certifications.
- Continuing education.
- Contributions that have been beneficial to the nominee's facility.
- Unusual initiative or performance "beyond the call of duty"

Shannon has been a Supervising Laboratory Chemist for six years. Shannon is a transplant from northern Virginia, but since putting down roots and starting a family in Virginia Beach, protecting public health and the waters of Hampton Roads has become increasingly important to her. She earned her Bachelor of Science degree in geology, and her Master of Science degree in geochemistry from Old Dominion University. Shannon enjoys teaching Wastewater Analysis lecture to treatment plant operators for HRSD's Apprenticeship program. She has also worked in various positions throughout HRSD's CEL since 2004.

c. **HRSD 27th Annual Pretreatment Excellence and Pollution Preventions Awards**

Each year HRSD recognizes local businesses for environmental excellence with Pretreatment Excellence and Pollution Prevention awards. This event is generally held as a luncheon with award winners and other special guests present. Unfortunately, COVID-19 forced the cancellation of the in-person event this year. However, HRSD still publicly recognized all award winners and would like to highlight several special awards for the Commission.

There were 103 Pretreatment Excellence award winners for calendar year 2019. These facilities met 100% of their permit requirements. Facilities reaching major milestones included:

- **20 years of perfect compliance**
College of William and Mary
Virginia Institute of Marine Science
- **10 years of perfect compliance**
Atlantic Septic Systems Incorporated
Brockwell's Septic & Service, Incorporated
Stihl Incorporated
US Navy, Joint Expeditionary Base, Fort Story
- **5 years of perfect compliance**
Advex Corporation
Auxiliary System, Incorporated
Ball Metal Beverage Container Corporation
Goodman's Septic Tank Service
Miller's Septic Service, Incorporated
Suburban Plumbing Company
US Navy, Naval Air Station Oceana
US Navy, Naval Station Norfolk
Wanchese Fish Company, Incorporated
Z. Artis Septic Tank Cleaning Service

The Pollution Prevention (P2) Award distinguishes organizations for success in multi-media (air, land and water) efforts in reducing waste or its toxicity at the source. Earning Pollution Prevention (P2) awards this year were:

- **BASF Corporation – Williamsburg** (less than 100 employees)
The project for BASF-Corporation Williamsburg focused on a stormwater management and leachate treatment system. This system retains and treats stormwater runoff and landfill leachate from a 53-acre drainage basin located within the former 650-acre plant site. A Constructed Treatment Wetlands System (CTWS) was installed in 1999 and has been enhanced over the years to improve performance, mainly for the removal of zinc and low pH mitigation. The enhancements have significantly improved the quality of the water, reduced runoff volume, and have eliminated discharges to HRSD through direct release to Wood Creek since April of 2018.

Cost savings projected with sustaining current system performance have been estimated at approximately \$600,000 per year.

Other benefits from this project include supporting site redevelopment plans, sequestered greenhouse gases, enhanced water reuse opportunities, and the site was awarded a *Wildlife at Work Certification* from the Wildlife Habitat Council.

BASF, its employees and consultants are fully committed to preventing pollution at all its sites world-wide.

- **Anheuser Busch, LLC** (101-1,000 employees)
The project for Anheuser Busch, LLC was made up of several smaller projects which allowed the Williamsburg Brewery to set records in 2019 for their lowest water, electrical, and fuel usage ever, while achieving excellent safety and environmental results. Operational changes included soft water reduction, residuals reduction, adjusted pump runtimes, programming changes to air conditioners and dehumidifiers, and steam usage reductions. Savings from water, fuel and electrical totaled over \$115,000.

The Brewery also recycled 99.84% of the solid waste generated, which equates to over 88,000 tons. This recycling also generated approximately \$3 million in revenue in addition to landfill avoidance costs.

Anheuser Busch has long been committed to strong environmental principals and has a company Global Environmental Policy. The policy emphasizes regulatory compliance, employee participation, and the integration of environmental considerations in business planning and decision making. The policy, which all employees receive within their first week, revolves around a simple mission statement of: *Our dream is to be the Best Beer Company Bringing People Together For a Better World.*

- **Canon Virginia, Incorporated** (greater than 1,000 employees)
The project for Canon Virginia, Incorporated (CVI) was an oil/water evaporator project in their Sleeve Manufacturing Department. The evaporator system was designed to boil wastewater and reduce emissions. Prior to the implementation of this evaporator system the oily water could not be disposed of to the sanitary sewer system and had to be sent off-site to a properly permitted waste treatment facility, which resulted in a high disposal cost to CVI. This evaporator system resulted in Canon no longer having any wastewater that would have to be disposed of by an outside company, a savings of over \$29,000.

Other benefits were that the evaporator was designed to utilize natural gas instead of electricity, making operational costs approximately 25% less. A reduction in labor, around 36 hours, also resulted as the system was set up to directly pump wastewater rather than manually moving large containers of water. CVI continually demonstrates and promotes environmental stewardship through the corporate policy of “Kyosei”, translating into “living and working together for the common good.”

All award winners were recognized in a news release on September 1, 2020 and an [advertisement](#) in the September 9 edition of the Daily Press and Virginian Pilot newspapers. The Chief of the Pretreatment & Pollution Prevention (P3) Division also recorded a congratulatory [video](#) which was sent to all award winners.

P3 staff will strive to hand deliver the awards to the winners, though there may be cases where awards must be mailed if the winner is outside of our Service Area (e.g. waste hauler).

27th Annual Pretreatment Excellence and Pollution Prevention Awards

HRSD Honors Local Businesses

Congratulations to the following businesses for exemplary permit compliance and outstanding pollution prevention measures in 2019. These businesses pretreat their industrial wastewater before discharging it to HRSD's system. Their efforts help protect our waterways and other natural resources.

POLLUTION PREVENTION (P2) AWARDS

LESS THAN 100 EMPLOYEES:

BASF CORPORATION - WILLIAMSBURG

101-1,000 EMPLOYEES:

ANHEUSER-BUSCH, LLC

GREATER THAN 1,000 EMPLOYEES:

CANON VIRGINIA, INCORPORATED

DIAMOND EXCELLENCE AWARDS

PERFECT COMPLIANCE (2000-2019)

VIRGINIA INSTITUTE OF MARINE SCIENCE

PERFECT COMPLIANCE (2002-2019)

MDM SEPTIC SERVICES, INCORPORATED

PERFECT COMPLIANCE (2003-2019)

NAVAL WEAPONS STATION YORKTOWN -
CHEATHAM ANNEX

PERFECT COMPLIANCE (2004-2019)

ROYAL SILVER MANUFACTURING COMPANY
INCORPORATED

PERFECT COMPLIANCE (2005-2019)

WASTE INDUSTRIES, LLC
WASTE MANAGEMENT OF VIRGINIA,
INCORPORATED

PERFECT COMPLIANCE (2008-2019)

PARSLEY SEPTIC TANK SERVICE, INCORPORATED
U.S. DEPARTMENT OF HOMELAND SECURITY,
U.S. COAST GUARD, TRAINING CENTER
YORKTOWN

PERFECT COMPLIANCE (2009-2019)

NEWPORT NEWS SHIPBUILDING NORTH YARD
OWENS-BROCKWAY GLASS CONTAINER,
INCORPORATED
RIVERSIDE REGIONAL MEDICAL CENTER
SENTARA NORFOLK GENERAL HOSPITAL

DIAMOND AWARDS

PERFECT COMPLIANCE (2010-2019)

ATLANTIC SEPTIC SYSTEMS INCORPORATED
BROCKWELL'S SEPTIC & SERVICE, INCORPORATED
STIHL INCORPORATED
U.S. NAVY, JOINT EXPEDITIONARY
BASE FORT STORY

PLATINUM ACHIEVEMENT AWARDS

PERFECT COMPLIANCE (2011-2019)

A CLEAN BAY PLUMBING & DRAIN CLEANING
J&J ENTERPRISES OF SUFFOLK CORPORATION
THE VIRGINIAN-PILOT MEDIA COMPANIES, LLC

PERFECT COMPLIANCE (2012-2019)

LIFETOUCH NATIONAL SCHOOL STUDIOS,
INCORPORATED
TOWN OF SMITHFIELD - RESERVE OSMOSIS PLANT

PERFECT COMPLIANCE (2013-2019)

BUNDICK WELL & PUMP COMPANY
U.S. NAVY, NAVAL AIR STATION OCEANA,
DAM NECK ANNEX

PERFECT COMPLIANCE (2014-2019)

BROWN PLUMBING AND SEPTIC LLC /
BUDGET SEPTIC
CITY OF NORFOLK MOORES BRIDGES
WATER TREATMENT PLANT
EASTERN VIRGINIA MEDICAL SCHOOL
FLOWSERVE US INCORPORATED
HAMPTON ROADS TRANSIT LIGHT RAIL
VEHICLE STORAGE AND MAINTENANCE FACILITY
J.L. BISHOP CONTRACTOR, INCORPORATED
KINYO VIRGINIA, INCORPORATED -
BLANKET BUILDING
WHEELABRATOR PORTSMOUTH INCORPORATED -
REFUSE DERIVED FUEL FACILITY

PLATINUM AWARDS

PERFECT COMPLIANCE (2015-2019)

ADVEX CORPORATION
AUXILIARY SYSTEMS, INCORPORATED
BALL METAL BEVERAGE CONTAINER CORPORATION
GOODMAN'S SEPTIC TANK SERVICE
MILLER'S SEPTIC SERVICE, INCORPORATED
PENINSULA HOSPITAL SERVICES, INCORPORATED
SUBURBAN PLUMBING COMPANY
U.S. NAVY, NAVAL AIR STATION OCEANA
U.S. NAVY, NAVAL STATION NORFOLK
WANCHESE FISH COMPANY, INCORPORATED
Z. ARTIS SEPTIC TANK CLEANING SERVICE

GOLD AWARDS

A.B.A. WELL AND SEPTIC SERVICES, INCORPORATED
ADVANCED FINISHING SYSTEMS, INCORPORATED
ADVANCED SEPTIC AND SEWER
ANHEUSER-BUSCH, LLC
BAE SYSTEMS NORFOLK SHIP REPAIR, INCORPORATED
BETHPAGE CAMPGROUND
BIRSCH INDUSTRIES, INCORPORATED
BON SECOURS DEPAUL MEDICAL CENTER
BON SECOURS MARY IMMACULATE HOSPITAL
CATALINA CYLINDERS, INCORPORATED
CHEMRES, LLC
CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS
CINTAS CORPORATION
CITY OF NEWPORT NEWS
RECOVERY OPERATIONS CENTER (ROC)
CITY OF NORFOLK 37TH STREET WATER TREATMENT PLANT
COASTAL VA ENVIRONMENTAL COATINGS
CULLIGAN OF GREATER VIRGINIA
DEPARTMENT OF DEFENSE, AFETA CAMP PEARY
DEPARTMENT OF THE AIR FORCE,
LANGLEY AIR FORCE BASE, JOINT BASE LANGLEY - EUSTIS
DOMINION ENERGY, COAL COMBUSTION
BYPRODUCT LANDFILL SITE
ELIZABETH RIVER CROSSINGS OPCO, LLC
GREYSTONE OF VIRGINIA, INCORPORATED
HAMPTON ROADS TRANSIT SOUTHSIDE
OPERATIONS COMPLEX
HAMPTON/NASA STEAM PLANT
HAMPTON VETERANS AFFAIRS MEDICAL CENTER
HARWOOD'S MILL WATER TREATMENT PLANT
HEPACO, LLC
HIGH LINER FOODS - NEWPORT NEWS PLANT
HOGGE'S SEPTIC TANK SERVICE, LLC
JMS FOODSERVICE, LLC - SUFFOLK
NASA, LANGLEY RESEARCH CENTER
NAVAL WEAPONS STATION YORKTOWN
NEW REALM BREWING COMPANY
NEWPORT NEWS SHIPBUILDING MAIN YARD
NORFOLK AIRPORT AUTHORITY
NORFOLK INTERNATIONAL AIRPORT
NORFOLK PUBLIC HEALTH CENTER
NORFOLK SOUTHERN RAILWAY COMPANY
PLASSER AMERICAN CORPORATION
PORTSMOUTH MARINE TERMINAL
QUATRA ENVIRONMENTAL SOLUTIONS, INCORPORATED
REX COMPANIES, INCORPORATED
RILLCO, INCORPORATED
RYDER TRUCK RENTAL, INCORPORATED
SENTARA CAREPLEX HOSPITAL
SENTARA OBICI HOSPITAL
SENTARA PRINCESS ANNE HOSPITAL
SENTARA VIRGINIA BEACH GENERAL HOSPITAL
SENTARA WILLIAMSBURG REGIONAL MEDICAL CENTER
SHARED HOSPITAL SERVICES
SMITHFIELD FARMLAND CORPORATION
SMITHFIELD FACILITY
SOUTHEASTERN PUBLIC SERVICE AUTHORITY OF VIRGINIA,
REGIONAL LANDFILL
STILLWATER SEPTIC SERVICE SEWER & DRAIN CLEANER,
INCORPORATED
SUEZ WATER TECHNOLOGIES AND SOLUTIONS
TABET MANUFACTURING COMPANY, INCORPORATED
UNITED STATES DEPARTMENT OF ENERGY,
THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY
VA BIO SUPPLY LLC
VIRGINIA INTERNATIONAL GATEWAY
VIRGINIA PUMP AND MOTOR COMPANY, INCORPORATED
VIRGINIA SILVER PLATING, INCORPORATED
WESTERN BRANCH DIESEL, INCORPORATED
WHEELABRATOR PORTSMOUTH INCORPORATED -
WASTE TO ENERGY FACILITY

HRSD VISION:

*Future Generations will inherit clean
waterways and be able to keep them clean.*

HRSD MISSION:

*We protect public health and the waters of
Hampton Roads by treating wastewater effectively.*

AGENDA ITEM 2. – September 22, 2020

Subject: Consent Agenda

Recommended Action: Approve the Consent Agenda.

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

a. Approval of Minutes

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

b. Contract Awards

- | | | |
|----|--|-------------|
| 1. | Risk Assessment and Internal Audit Services | \$1,276,675 |
| 2. | Sodium Bisulfite Blanket Purchase Agreement | \$2,478,700 |
| 3. | Sodium Hypochlorite Blanket Purchase Agreement | \$8,904,636 |

c. Task Orders

- | | | |
|----|--|-----------|
| 1. | Climate Change Planning | \$315,000 |
| 2. | South Norfolk Area Gravity Sewer Improvements, Phase 1 (Interstate Crossing) | \$224,771 |

d. Contract Change Orders

- | | | |
|----|---|-------------|
| 1. | SWIFT Nansemond Full Scale Managed Aquifer Recharge (MAR) Well Installation | \$1,995,600 |
| 2. | Thermo Scientific™ SampleManager Laboratory Information Management System Upgrade | \$43,000 |

e. Sole Source

- | | | |
|----|--|--|
| 1. | Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements Phase II
Dragos Cybersecurity Assessment Services | |
| 2. | Payment Plans | |

CONSENT AGENDA ITEM 2.b.1. – September 22, 2020

Subject: Risk Assessment and Internal Audit Services
Contract Award (>\$200,000)

Recommended Action: Award a contract for Risk Assessment and Internal Audit Services to SC&H Group Inc. in the estimated amount of \$255,335 for year one with four annual renewal options and an estimated cumulative value in the amount of \$1,276,675.

Type of Procurement: Competitive Negotiation

Proposers	Technical Points	Recommended Selection Ranking
SC&H Group Inc.	86	1
Baker Tilly Virchow Krause LLP	81	2
Plante and Moran PLLC	76	3
Keiter Stephens Hurst Gary and Shreaves DBA Keiter	74	4
Brown Edwards and Company LLP	68	5
Citrin Cooperman & Company LLP	68	5

HRSD Estimate: \$250,000

Contract Description: This contract is an agreement for risk assessment and internal audit professional services. The risk assessment findings of SC&H Group will serve as the basis of recommendations on yearly examination of specific areas. The agreed upon areas and scope of audit will be included in their annual audit plan to HRSD. A Public Notice was issued on June 24, 2020. Six firms submitted proposals on July 20, 2020 and all firms were determined to be responsive and deemed fully qualified, responsible and suitable to the requirements in the Request for Proposals. Two firms were short listed, interviewed and technically ranked. The proposal submitted by SC&H Group Inc. was ranked by technical points to be the highest qualified.

Analysis of Cost: The hours for internal audit services are estimates and based on averages. SC&H submitted competitive labor rates with the increases relating mostly to Director/Principal and Senior Manager/Consultant staff. In addition, the best and final offer included SC&H maintaining the hourly labor rates the same for the first two years of the contract.

CONSENT AGENDA ITEM 2.b.2. – September 22, 2020

Subject: Sodium Bisulfite Blanket Purchase Agreement
Contract Award (>\$200,000)

Recommended Action: Award a blanket purchase contract for Sodium Bisulfite to Univar USA Inc. in the estimated amount of \$495,740 for year one with four annual renewal options and an estimated cumulative value in the amount of \$2,478,700.

Type of Procurement: Competitive Bid (Bulk only amounts shown)

Bidder	Bid Amount
Univar USA Inc.	\$287,265
Southern Ionics Incorporated	\$294,665
PVS Solutions Inc.	\$343,848

HRSD Estimate: \$274,208 (Bulk only), \$454,179 (Annual)

Contract Description: This contract is an agreement for a supplier to furnish and deliver Sodium Bisulfite, 38-40 percent solution. This product is used to remove chlorine residual from treatment streams downstream of sodium hypochlorite addition, which may be toxic to aquatic organisms near surface water outfalls and downstream biological treatment processes (e.g. SWIFT Research Center Biofilters). Sodium bisulfite is routinely added after HRSD's disinfection systems in order to meet VPDES permit requirements for maximum final effluent chlorine residual.

Analysis of Cost: The Solicitation requested a unit price for Bulk, Small Bulk, Totes and Mini Bulk Tank services (including lease of tanks and equipment). Bidders would not be disqualified if unable to price all options. Bid Amounts shown above reflect the Bulk delivery only to show lowest responsive and responsible bidder evaluation and cost savings. The overall annual amount being awarded to Univar is lower than the FY-2021 Budget Projections with the exception of the Bulk and Small Bulk deliveries which increased an additional five percent.

CONSENT AGENDA ITEM 2.b.3. – September 22, 2020

Subject: Sodium Hypochlorite Blanket Purchase Agreement
Contract Award (>\$200,000)

Recommended Action: Award a blanket purchase contract for Sodium Hypochlorite to Univar USA Inc. in the estimated amount of \$1,780,927 for year one with four annual renewal options and an estimated cumulative value in the amount of \$8,904,636.

Type of Procurement: Competitive Bid

Bidder	Bid Amount
Univar USA Inc.	\$1,780,927

HRSD Estimate: \$1,754,614

Contract Description: This contract is an agreement for Univar to supply and deliver Sodium Hypochlorite, 12.5 percent solution to HRSD treatment plants. This product is used for final disinfection in order to meet the permit limits for Total Coliform and Enterococcus in the surface water discharge. Sodium Hypochlorite is used to a lesser extent throughout HRSD's treatment plants to control to growth of nuisance microorganisms in the biological process and for the production of Monochloramine that is used at the SWIFT Research Center.

Analysis of Cost: The Solicitation requested a unit price for Bulk, Small Containers and Mini Bulk Tank services (including lease of tanks, equipment and accessories). Bidders would not be disqualified if unable to price all options. The overall annual amount being awarded to Univar is lower than the FY-2021 Budget Projections with the small exception of the Bulk deliveries which has increased an additional two percent.

CONSENT AGENDA ITEM 2.c.1. – September 22, 2020

Subject: Climate Change Planning
Task Order (>\$200,000)

Recommended Action: Approve a task order with CDM Smith, Inc. in the amount of \$315,000.

CIP Project: GN017100

Budget	\$3,000,000
Previous Expenditures and Encumbrances	(\$1,416,220)
Available Balance	<u>\$1,583,780</u>

Contract Status:	Amount
Original Contract with CDM Smith, Inc.	\$828,000
Total Value of Previous Task Orders	\$587,000
Requested Task Order	\$315,000
Total Value of All Task Orders	\$902,000
Revised Contract Value	\$1,730,000

Project Description: The Hampton Roads Planning District Commission (HRPDC) has adopted a range of 3 to 4.5 feet as the planning range for sea level rise by 2100. When this elevation is added to the Virginia Institute of Marine Science (VIMS) 100-year flood projections, the Hampton Roads region could be significantly impacted by the year 2060. In addition, there are several other climate change scenarios that will also have impacts to our facilities. These include recurrent flooding and extreme storm events (those beyond the level of service) which could cause damage to HRSD equipment. This study will look at ensuring continuing operation of HRSD facilities during these events and to prepare for Sea Level Rise. From this analysis, additional CIP projects will be determined in order to prepare HRSD for resiliency today and future climate change.

Task Order Description and Analysis of Cost: The task order is for Work Order 4, Flood Water Level Evaluation for HRSD Treatment, Pumping, and Administration Facilities. CDM Smith, Inc. will perform analysis to determine the flood water elevations at HRSD facilities to determine the level of risk at each of those locations. A fee of \$315,000 was negotiated and was considered to be appropriate for this next phase of the study.

Schedule: Final Report

September 2021

CONSENT AGENDA ITEM 2.c.2. – September 22, 2020

Subject: South Norfolk Area Gravity Sewer Improvements, Phase 1 (Interstate Crossing)
Task Order (>\$200,000)

Recommended Action: Approve a task order with Bridgeman Civil, Inc. in the amount of \$224,771.

CIP Project: AT013100

Budget	\$ 805,000
Previous Expenditures and Encumbrances	(\$ 141,191)
Available Balance	\$ 663,809

Contract Status:	Amount
Original Contract with Bridgeman Civil	\$0
Total Value of Previous Task Orders	\$1,385,582
Requested Task Order	\$224,771
Total Value of All Task Orders	\$1,610,353
Revised Contract Value	\$1,610,353

Project Description: The project will rehabilitate and/or replace gravity sewer segments and manholes in the [South Norfolk area](#). Condition assessment activities indicate that these assets present a material risk of failure due to Inflow/Infiltration and physical condition defects. This work is listed in Phase 2 of the U.S. EPA Consent Decree Rehabilitation Action Plan and must be complete by May 5, 2025. Project AT013100 (Phase 1) encompasses the gravity pipeline that runs under I-264 and presents a high consequence of failure. Due to the poor condition of the pipeline, this portion of the project will be expedited with a plan to complete the work from study through substantial completion by the end of calendar year 2020. Project AT013110 (Phase 2) includes the remainder of the gravity sewer assets within the South Norfolk Area that must be addressed prior to the EPA 2025 deadline but have a lower likelihood and consequence of failure as compared to the Phase 1 work.

Task Order Description: This task order will provide for the installation of a temporary bypass pipe and pump rentals for the project while the existing gravity pipeline is inspected so that a repair method can be determined. The bypass pipe will pull flow off the aging gravity pipeline so that inspection can occur and so that an alternate route for sewer flow is available under the interstate if the old gravity pipeline is compromised at any point before a final repair can be made.


Analysis of Cost: The cost for this task order is based on the unit prices and labor rates in the Sewer Repair On-Call Contract with Bridgeman Civil.

Schedule:	PER	August 2020
	Design/Pipeline Inspection	September 2020
	Construction/Rehabilitation	November 2020
	Completion	January 2021


South Norfolk Area Gravity Sewer Improvements Project:
 AT013100: Phase 1 (called out below)
 AT013110: Phase 2 (remaining gravity pipelines and manholes upstream of State Street, Bainbridge, Steamboat Creek, and Quail Avenue Pump Stations as indicated below)

CIP# AT013100 - South Norfolk Area Gravity Sewer Improvements, Phase 1 (Interstate Crossing)


CIP Pump Stations

 Assets to be addressed


CIP Interceptor (Active)

 Gravity Interceptor


CIP Manholes (Active)




CIP Manholes (Abandoned)




CIP Network Structures




All Pump Stations




All Manholes (Active)




All Manholes (Abandoned)




All Network Structures (Active)




City Boundary




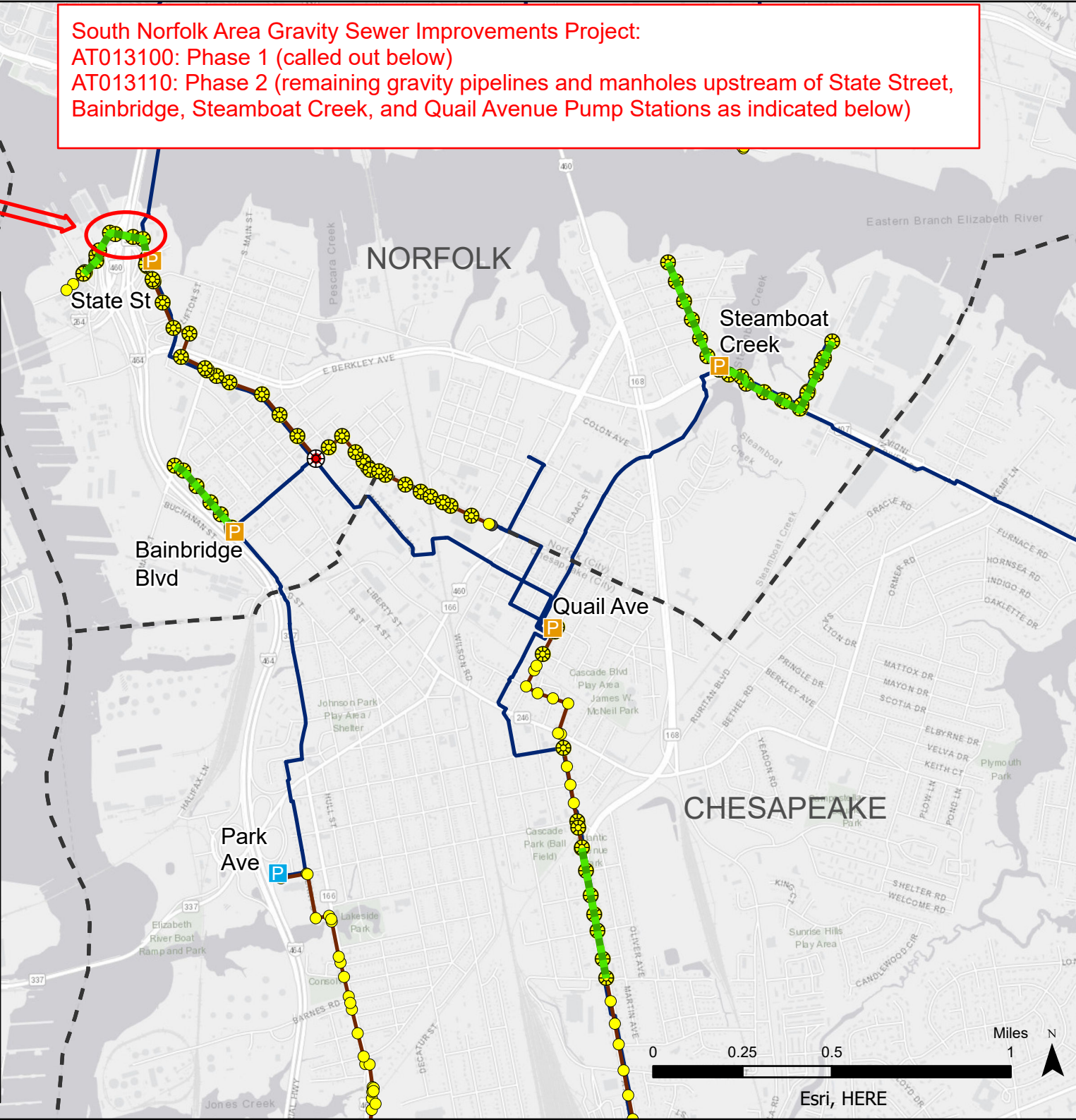
All Interceptor (Active)

 Force Interceptor

 Gravity Interceptor

All Interceptor (Abandoned)





CONSENT AGENDA ITEM 2.d.1. – September 22, 2020

Subject: SWIFT Nansemond Full-Scale Managed Aquifer Recharge (MAR) Well Installation
Contract Change Order (>25% or \$50,000)

Recommended Action: Approve a change order to the contract with A.C. Shultes of Maryland, Inc. in the amount of \$1,995,600.

CIP Project: GN016210

Budget	\$2,705,000
Previous Expenditures and Encumbrances	(\$65,548)
Available Balance	\$2,639,452

Contract Status:	Amount	Cumulative % of Contract
Original Contract with A.C. Shultes of Maryland, Inc.	\$5,409,955	
Total Value of Previous Change Orders	\$2,171,239	40%
Requested Change Order No. 5	\$1,995,600	
Total Value of All Change Orders	\$4,166,839	77%
Revised Contract Value	\$9,576,794	

Time (Additional Calendar Days)	0
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Project Description: This project will design and install (drill and case) a full-scale managed aquifer recharge well (NP-RW-1) at the Nansemond Treatment Plant. The new well will provide flexibility of recharge operation at the Research Center that will alleviate the challenges associated with reliance on a single asset for groundwater recharge; validation of well design and operating approaches prior to full-scale recharge well installations; and training opportunities for staff related to operation of a full-scale recharge well. This project will be conducted concurrently with GN016220.

Change Order Description: HRSD has an existing, competitively bid contract with A.C. Shultes of Maryland for well services. The previously assigned scope of work has been completed. This change order request includes additional scope to install a new full-scale managed aquifer recharge well (NP-RW-1) at the Nansemond Treatment Plant. The proposed scope includes labor, equipment, materials, and supplies necessary to complete the drilling, installation, development, and testing of the new well.

Analysis of Cost: A per-unit cost was negotiated at the time of contract award. The cost proposal for this change order request is based on an updated per-unit cost schedule and an estimate of the drilling lengths and testing activities. The final cost of the effort will reflect only the actual lengths drilled and tests conducted.

Schedule: Construction September 2020
Project Completion October 2021

CONSENT AGENDA ITEM 2.d.2. – September 22, 2020

Subject: Thermo Scientific™ SampleManager Laboratory Information Management System Upgrade
Contract Change Order (>25% or \$50,000)

Recommended Action: Approve a change order with Thermo Labsystems Inc. DBA Thermo Fisher Scientific Inc. in the amount of \$43,000.

Contract Status:	Amount	Cumulative % of Contract
Original Contract with Thermo Labsystems Inc. DBA Thermo Fisher Scientific Inc.	\$210,738	
Total Value of Previous Change Orders	\$71,400	34%
Requested Change Order No. 2	\$43,000	
Total Value of All Change Orders	\$114,400	54%
Revised Contract Value	\$325,138	

Time (Additional Calendar Days)		0
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Change Order Description: This change order includes services to perform an upgrade to version 12.3 with required modifications to the Laboratory Information Management System. The upgrade includes enabling of workflows; initial testing of upgraded system; upgrade and configuration of Integration Manager; migration of instrument interfaces and interface with electronic data deliveries from SWIFT; issue resolution; development of upgrade plan for Go Live; and Go Live assistance.

Analysis of Cost: Upgrade and implementation costs are based on a fixed per day cost for approximately 26 days including travel. The fixed per day cost has increased by seven percent since the last system upgrade in June 2017.

CONSENT AGENDA ITEM 2.e.1. – September 22, 2020

Subject: Interceptor Systems Pump Station Control and SCADA Upgrades and Enhancements Phase II
Dragos Cybersecurity Assessment Services
Sole Source (>\$10,000)

Recommended Action: Approve the use of Dragos Cybersecurity Assessment Services for use within the Information Technology Department.

CIP Project: GN017200

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: Services include cybersecurity assessment services which consists of testing the Supervisory Control and Data Acquisition (SCADA) system. Testing will include an overview of the SCADA architecture along with a penetration test to find vulnerabilities. The completion of these services is imperative before HRSD can assume control and ownership of the SCADA upgrade project from Emerson Automation in order to support any security modifications or recommendations resulting from the assessment.

CONSENT AGENDA ITEM 2.e.2. – September 22, 2020

Subject: Payment Plans
Sole Source (>\$10,000)

Recommended Action: Approve the use of Promise for assistance with establishing payment plans and collecting aging receivables from residential customers.

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

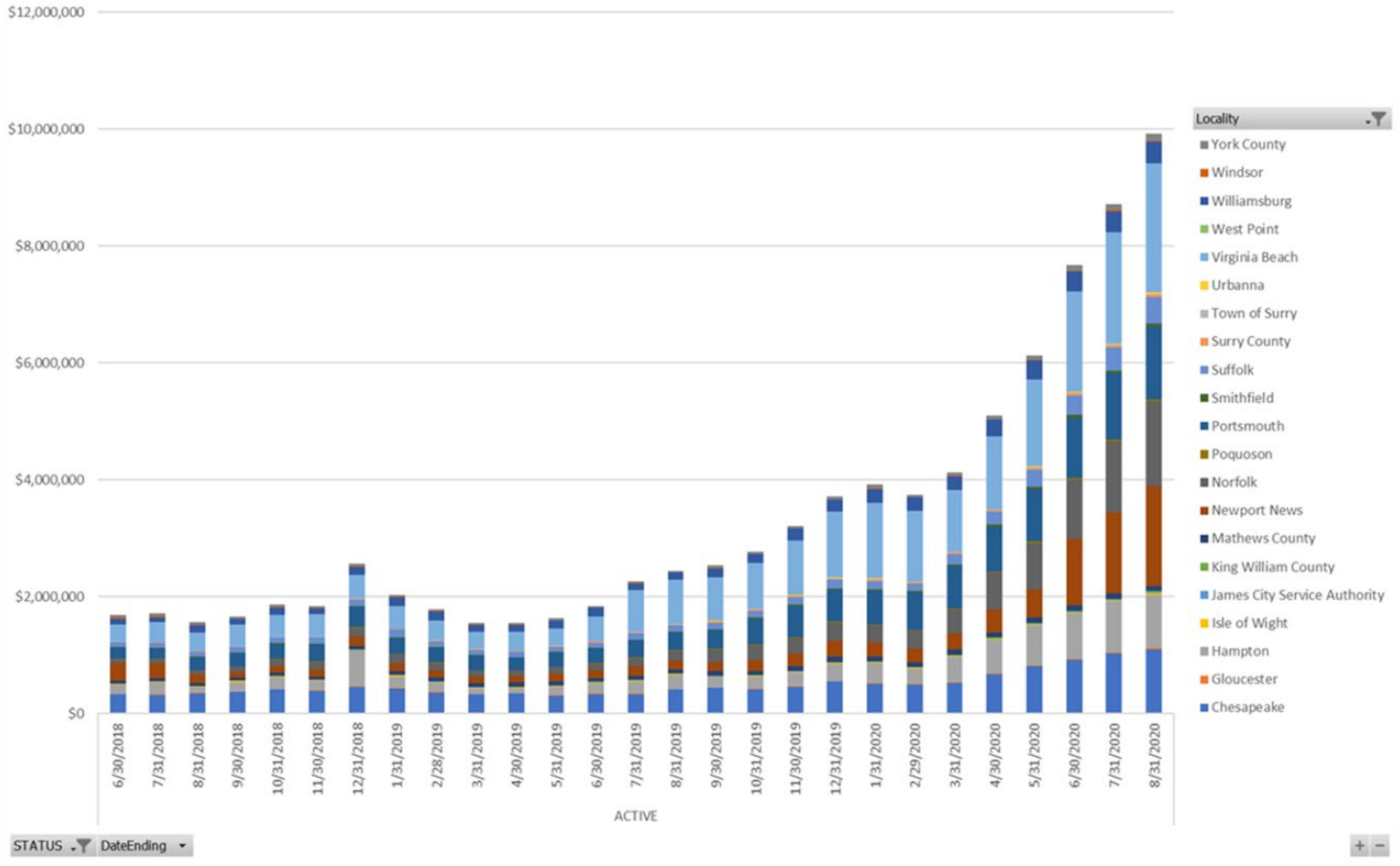
Details: Promise (a SWaM business start-up) will partner with HRSD to provide a mobile based payment solution for customers with past due balances. As HRSD, along with most water utilities, has deferred severance action to collect overdue balances during the COVID pandemic, the number of accounts with overdue balances continues grow. As these past due balances age, many of these accounts may grow too large for the customer to ever repay. Promise has shown success in the use of mobile technology to make the process of creating a payment plan easy along with regular reminders and a wide range of payment options. Promise is a young start-up working with several utilities across the United States, including Louisville MSD, a large regional utility using Oracle CC&B as their billing system.

There are no other similar focused vendors with this capability. Costs associated with setting up Promise with HRSD's existing systems are estimated to be less than \$35,000. Once fully operational, Promise will recover costs through a transaction fee. Staff will be developing a recommendation for future Commission action regarding the transaction fee – whether that is subsidized at some level or fully borne by the customer. Estimated transaction fee is \$2.50.

The graph below shows the magnitude of the aging receivable issue and the rapid increase month-to-month without severance processes. For this reason time is of the essence and staff is recommending this sole source approval to expedite this work with this uniquely qualified vendor.

Sum of BALANCE

For ACTIVE Accounts with Balances Greater than 90 days, Total Balance Due



AGENDA ITEM 3. – September 22, 2020

Subject: Water Infrastructure and Innovation Act (WIFIA) Master Financing Agreement Resolution

Recommended Action: Approve the terms and conditions of the Master Financing Agreement (MFA) to obtain subordinate wastewater bonds from the WIFIA program, administered by the Environmental Protection Agency (EPA), in an amount not to exceed \$1,049,000,000 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.

Brief: The WIFIA program accelerates investment in our nation's water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects. WIFIA loans allow borrowers to lock-in a rate equivalent to the US Treasury rate at closing. Similar to the Virginia Clean Water Revolving Loans, WIFIA loan requirements may increase total project costs as they require Davis-Bacon wages, American Iron and Steel and involve federal environmental reviews.

On May 28, 2019, the Commission authorized the General Manager to submit a WIFIA Letter of Interest (LOI) to the fund the SWIFT program. After being accepted to apply, on November 26, 2019, the Commission authorized the General Manager to submit a WIFIA application and the \$100,000 application fee. After going through the application process, it was determined that the \$1,049,000,000 WIFIA loan should be broken up into three (or more) separate loans or tranches due to the long duration of the program. The purpose of the MFA is to set the conditions for future WIFIA bond issuances which will help streamline future loan closings. Additionally, the MFA structure secures WIFIA funding for SWIFT, without the need to recompetete for funding in the future. This will be the largest loan in the history of the WIFIA program and the first to use this MFA concept to date.

Key Provisions of the Master Financing Agreement (MFA)

As part of HRSD's Trust Agreements, there are Additional Bonds Tests (ABTs) that outline whether or not HRSD has the financial capability to issue additional debt. Under the existing subordinate Trust Agreement, HRSD must meet one of the following tests:

1. 1.20X Maximum Annual Debt Service (based on 12 preceding months) or,
2. 1.20X debt service in each period of 5-year forward looking revenues or,
3. Proceeds are necessary to complete a project or during the first two fiscal years following the completion of the project, projected Net Revenues will satisfy the Rate Covenant (1.20X) or,
4. Satisfaction of the Rate Covenant (1.20X) in the prior year.

WIFIA had an issue with the fourth test, which essentially does not consider future debt service costs. Under the MFA, the fourth test cannot be used to determine HRSD's ability to issue more debt. This change is more restrictive than the existing subordinate Trust Agreement and impacts all future debt issuance as long as WIFIA loans are outstanding, but is more in-line with typical ABTs. PFM, our financial advisor, confirmed through financial analysis that this change would not negatively impact HRSD's financial plan. In the tightest modeled year (Fiscal Year 2029), this change would cap HRSD's debt issuance around \$1.6 billion which is 3 to 5 times more than any planned debt issuance in the financial forecast, which means that there is more than sufficient capacity with the proposed change.

WIFIA is adamant about anti-corruption and anti-money laundering certifications in the MFA. Staff tried to include a knowledge qualifier (i.e. we certify to the best of our knowledge), but they were insistent that HRSD's signatory certifies, without qualification, that there has been no breach of these laws under penalty of perjury.

WIFIA wants to ensure that the loan money is used to complete the project as submitted, which is why the concept of a Development Default is included in the MFA. Each tranche must be completed by the substantial completion date plus two years or else a default would be triggered. If the Development Default conditions are met, HRSD has ninety days to pre-pay the amount borrowed to avoid a default. Ninety days is the typical amount of time it takes to issue a new revenue bond. Alternatively, HRSD could prepay the loan with cash, if available.

Parity (same rights to other subordinate debt holders) is very important to WIFIA. In HRSD's Master Financing Agreement with VRA, there is a provision that would allow VRA to accelerate payment of outstanding loans in the unlikely event of a default. The Intercreditor Agreement provides parity between VRA and WIFIA if the event of a default.

A Covenant Default would occur for any of the following:

- Not making timely principal and/or interest payments
- Failure to comply with American Iron and Steel or Davis-Bacon
- Failure to notify EPA of construction status

An important point for the second and third bullets is timing in which the clock starts to remedy this issue, particularly as these failures could be found weeks and months later. The MFA states that HRSD has 30-days from when either EPA or HRSD's Senior Management (General Manager and Directors) becomes knowledgeable of the issue. Since AECOM is HRSD's program manager that would identify these failures, staff confirmed with them that they can meet this requirement.

The maximum amount that can be borrowed under this WIFIA application is \$1,048,516,459. The agreement requires that HRSD certify the SWIFT program will

not exceed the 80% federal funding threshold from all sources. Since Clean Water loans are partially funded by federal grants and HRSD does not have direct knowledge of the actual amounts, the Virginia Resources Authority (VRA) will provide a certification of their source of funding at loan closing.

The estimated gross interest savings, over market rate bonds, using a combination of WIFIA and Virginia Clean Water Revolving Loans is approximately \$305 million, with \$184 million being derived from WIFIA savings. Also, HRSD has the ability to prepay the loan at any time, with no penalty, which is more flexible than typical bond market financing. Additionally, HRSD will only incur interest on loan proceeds it draws from WIFIA.

The WIFIA program will fund 49% of all eligible project costs with a substantial completion deadline of seven years from loan closing. As the SWIFT program extends into 2031, we estimate there will be three separate loan closings that will set the terms and interest rates for each tranche:

Tranche	Amount	Closing Date
1	\$225,865,648	September 23,2020
2	\$478,960,256*	March 2021*
3	\$343,690,553*	December 2024*

(*estimated)

The attached [resolution](#) will authorize the General Manager to enter into a Master Financing Agreement with the EPA that sets the conditions for obtaining WIFIA financing. Staff will present the key components in the MFA during the meeting. This document has been reviewed by HRSD bond and general counsel and EPA counsel.

**Hampton Roads Sanitation District
Resolution of
September 22, 2020**

HAMPTON ROADS SANITATION DISTRICT COMMISSION

**A RESOLUTION AUTHORIZING THE HAMPTON ROADS SANITATION DISTRICT
TO ENTER INTO A WIFIA MASTER AGREEMENT WITH THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY AND AUTHORIZING THE
EXECUTION AND DELIVERY OF RELATED DOCUMENTS.**

Adopted _____, 2020

Resolution

A RESOLUTION AUTHORIZING THE HAMPTON ROADS SANITATION DISTRICT TO ENTER INTO A WIFIA MASTER AGREEMENT WITH THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AND AUTHORIZING THE EXECUTION AND DELIVERY OF RELATED DOCUMENTS.

WHEREAS, the Hampton Roads Sanitation District (the “District”) was duly created under and pursuant to Chapter 407 of the Acts of Assembly of Virginia of 1940, and the Hampton Roads Sanitation District Commission (the “Commission”), created by said Chapter 407, is the governing body of the District; and

WHEREAS, by virtue of Chapter 66 of the Acts of Assembly of Virginia of 1960, as amended (the “Act”), the Commission is authorized and empowered:

(a) to construct, improve, extend, enlarge, reconstruct, maintain, equip, repair and operate a wastewater treatment system or systems, either within or without or partly within and partly without the corporate limits of the District;

(b) to issue, at one time or from time to time, revenue bonds, notes or other obligations of the District payable solely from the special funds provided under the authority of the Act and pledged for their payment, for the purpose of paying the cost of a wastewater treatment system or systems and extensions and additions thereto, and providing funds for any other authorized purpose of the Commission, and

(c) to fix, revise, charge and collect rates, fees and other charges for the use of, and for the services and facilities furnished or to be furnished by, any such wastewater treatment system; and

WHEREAS, as provided by the Act, the District is constituted a political subdivision of the Commonwealth of Virginia and established as a governmental instrumentality to provide for the public health and welfare; and

WHEREAS, the Congress of the United States of America enacted the Water Infrastructure Finance and Innovation Act, as amended by Section 1445 of the Fixing America’s Surface Transportation Act of 2015, as further amended by Section 5008 of the Water Infrastructure Improvements For the Nation Act of 2016 and by Section 4201 of America’s Water Infrastructure Act of 2018 (collectively, as the same may be amended from time to time, the “WIFIA Act” or “WIFIA”), which is codified as 33 U.S.C. §§ 3901-3914; and

WHEREAS, the WIFIA Act authorizes the United States Environmental Protection Agency, an agency of the United States of America, acting by and through the Administrator of the Environmental Protection Agency (the “WIFIA Lender”), to enter into agreements to provide financial assistance with one or more eligible entities to make secured loans with appropriate security features to finance a portion of the eligible costs of projects eligible for assistance; and

WHEREAS, the District has determined to undertake its Sustainable Water Initiative for Tomorrow (SWIFT) Program (the “SWIFT Program”) at an estimated total cost of \$2,139,829,508

and has requested an estimated \$1,048,516,458 in total financial assistance from the WIFIA Lender to pay a portion of the eligible costs of the projects under the SWIFT Program, which assistance is expected to be allocated across multiple loan tranches; and

WHEREAS, the Commission desires to authorize the District to enter into the following documents, which have been presented to this meeting, to set forth certain common terms and conditions applicable to each prospective WIFIA financing:

(a) a WIFIA Master Agreement (the “WIFIA Master Agreement”), by and between the District and the WIFIA Lender; and

(b) an Intercreditor Agreement (the “Intercreditor Agreement”), by and among the District, The Bank of New York Mellon Trust Company, N.A., as trustee for the District’s outstanding subordinate bonds, and the Virginia Resources Authority; and

Now, Therefore, the HAMPTON ROADS SANITATION DISTRICT COMMISSION DOES HEREBY RESOLVE, as follows:

Section 1. Participation in WIFIA Loan Program. The District’s participation in the WIFIA loan program is hereby approved.

Section 2. Authorization of Basic Documents. The forms, terms and provisions of each of the WIFIA Master Agreement and the Intercreditor Agreement (together, the “Basic Documents”) are hereby approved in all respects. The Chairman of the Commission, the Vice Chairman of the Commission, the General Manager or the Director of Finance (any one of whom may act and who are referred to collectively herein as the “Authorized Officer”) is hereby authorized and directed to execute and deliver the Basic Documents in substantially the forms presented to this meeting, together with such changes, modifications and deletions as such Authorized Officer, with the advice of counsel, may deem necessary and appropriate; such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the District.

Section 3. Further Actions. The Authorized Officer is authorized and directed (without limitation except as may be expressly set forth herein) to take such action and to execute and deliver any such documents, certificates, undertakings, agreements or other instruments as they, with the advice of counsel, may deem necessary or appropriate to effectuate the transactions contemplated by the Basic Documents.

Section 4. Authorized Officer’s Certificate. The Authorized Officer may execute a certificate or certificates evidencing the determinations made or other actions carried out pursuant to the authority granted in this Resolution, and any such certificate shall be conclusive evidence of the actions or determinations as stated therein.

Section 5. Effective Date. This Resolution shall take effect immediately upon its passage.

[END OF RESOLUTION]

Adopted by the Hampton Roads Sanitation District Commission on _____, 2020.

Frederick N. Elofson, Chair

AGENDA ITEM 4. – September 22, 2020

Subject: Water Infrastructure and Innovation Act (WIFIA)
Tranche 1 Closing
Resolution

Recommended Action: Approve the terms and conditions of the resolution authorizing the issuance of a subordinate wastewater bond, not to exceed \$225,865,648 in principal amount, for the purpose of providing funds, with other available money, to pay the costs of the implementation of Tranche 1 Project as set forth in the WIFIA Master Financing Agreement (MFA), fixing the principal installment maturity dates, the interest rate, the redemption provisions and certain other details of the bond, directing the authentication and delivery of the bond, authorizing the execution of a financing agreement with the Environmental Protection Agency 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.

Brief: The WIFIA program accelerates investment in our nation's water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects. The WIFIA loans allow borrowers to lock-in a rate equivalent to the US Treasury rate at closing. Similar to the Virginia Clean Water Revolving Loans, WIFIA loan requirements may increase total project costs as they require Davis-Bacon wages, American Iron and Steel and involve federal environmental reviews.

The attached [resolution](#) for the first Tranche of SWIFT projects funded through the WIFIA MFA is scheduled to close in September. The loan amount is set at a not-to-exceed amount of \$225,865,648 at 1.41 percent for 34 years. The interest savings compared to HRSD issuing debt in the open market is estimated at \$132,142,000.

These documents have been reviewed by HRSD bond and general counsel and EPA counsel.

**Hampton Roads Sanitation District
Resolution of
September 22, 2020**

HAMPTON ROADS SANITATION DISTRICT COMMISSION

**A RESOLUTION
AUTHORIZING THE ISSUANCE AND AWARD OF
A HAMPTON ROADS SANITATION DISTRICT
SUBORDINATE WASTEWATER REVENUE BOND**

Adopted _____, 2020

Resolution

**RESOLUTION AUTHORIZING THE ISSUANCE AND
AWARD OF A HAMPTON ROADS SANITATION DISTRICT
SUBORDINATE WASTEWATER REVENUE BOND.**

WHEREAS, the Hampton Roads Sanitation District (the “District”) was duly created under and pursuant to Chapter 407 of the Acts of Assembly of Virginia of 1940, and the Hampton Roads Sanitation District Commission (the “Commission”), created by said Chapter 407, is the governing body of the District; and

WHEREAS, by virtue of Chapter 66 of the Acts of Assembly of Virginia of 1960, as amended (the “Act”), the Commission is authorized and empowered:

(a) to construct, improve, extend, enlarge, reconstruct, maintain, equip, repair and operate a wastewater treatment system or systems, either within or without or partly within and partly without the corporate limits of the District;

(b) to issue, at one time or from time to time, revenue bonds, notes or other obligations of the District payable solely from the special funds provided under the authority of the Act and pledged for their payment, for the purpose of paying the cost of a wastewater treatment system or systems and extensions and additions thereto, and providing funds for any other authorized purpose of the Commission, and

(c) to fix, revise, charge and collect rates, fees and other charges for the use of, and for the services and facilities furnished or to be furnished by, any such wastewater treatment system; and

WHEREAS, as provided by the Act, the District is constituted a political subdivision of the Commonwealth of Virginia and established as a governmental instrumentality to provide for the public health and welfare; and

WHEREAS, the Commission has previously authorized the execution and delivery of a Master Trust Indenture dated as of December 1, 1993, as amended and restated March 1, 2008 (as supplemented and as further amended and supplemented from time to time, the “Senior Trust Agreement”), between the District and The Bank of New York, as Trustee (The Bank of New York Mellon Trust Company, N.A., as successor in interest to The Bank of New York, the “Senior Trustee”), to secure the payment of Senior Obligations (as defined in the Senior Trust Agreement) of the District, such Senior Obligations being payable from the Net Revenues (as defined in the Senior Trust Agreement) of the District; and

WHEREAS, pursuant to an Amendment dated as of October 1, 2019 (effective as of November 20, 2019) to the Trust Agreement (the “Amendment”), between the District and the Senior Trustee, the District agreed that, after the execution and delivery of the Amendment, it would not issue, incur or assume any Senior Obligations, except in connection with the exchange of Senior Obligations or the replacement of mutilated, destroyed, stolen or lost Senior Obligations; and

WHEREAS, the Senior Trust Agreement permits the issuance of Subordinated Indebtedness (as defined in the Senior Trust Agreement), the payment on which will be, in all cases, subordinate and junior in right of payment to the prior payment in full of the Senior Obligations; and

WHEREAS, to secure the payment of and provide for the issuance of such Subordinated Indebtedness, the Commission authorized the execution and delivery of a Trust Agreement dated as of October 1, 2011 (the “Original Trust Agreement”), as amended and restated as of March 1, 2016 (the “Amended and Restated Trust Agreement”, and the Amended and Restated Trust Agreement, as further supplemented and amended from time to time, the “Trust Agreement”), each by and between the District and The Bank of New York Mellon Trust Company, N.A., as trustee (in such capacity, the “Trustee”), to provide for the issuance of Parity Obligations (as defined in the Trust Agreement); and

WHEREAS, the Congress of the United States of America enacted the Water Infrastructure Finance and Innovation Act, as amended by Section 1445 of the Fixing America’s Surface Transportation Act of 2015, as further amended by Section 5008 of the Water Infrastructure Improvements For the Nation Act of 2016 and by Section 4201 of America’s Water Infrastructure Act of 2018 (collectively, as the same may be amended from time to time, the “WIFIA Act”), which is codified as 33 U.S.C. §§ 3901-3914; and

WHEREAS, the WIFIA Act authorizes the United States Environmental Protection Agency, an agency of the United States of America, acting by and through the Administrator of the Environmental Protection Agency (the “WIFIA Lender”) to enter into agreements to provide financial assistance with one or more eligible entities to make secured loans with appropriate security features to finance a portion of the eligible costs of projects eligible for assistance; and

WHEREAS, the District has determined to undertake its Sustainable Water Initiative for Tomorrow (SWIFT) Program (the “SWIFT Program”) at an estimated total cost of \$2,139,829,508 and has requested an estimated \$1,048,516,458 in total financial assistance from the WIFIA Lender to pay a portion of the eligible costs of the projects under the SWIFT Program, which assistance is expected to be allocated across multiple loan tranches; and

WHEREAS, by resolution adopted on September 22, 2020, the Commission has authorized the District to enter into a WIFIA Master Agreement (the “WIFIA Master Agreement”), pursuant to which the WIFIA Lender proposes to make funding available to the District for a portion of the eligible project costs of the projects under the SWIFT Program; and

WHEREAS, the District, acting by and through the Commission, and the WIFIA Lender desire to (a) execute that certain WIFIA Loan Term Sheet dated the date of execution and delivery thereof (the “WIFIA 2020 Term Sheet”), and (b) enter into that certain WIFIA Loan Agreement, dated the date of execution and delivery thereof (the “WIFIA 2020 Loan Agreement”), both addressing the terms by which the WIFIA Lender will make a loan to the District in a maximum principal amount of \$225,865,648 to pay a portion of the eligible costs related to the Sustainable Water Initiative for Tomorrow (SWIFT) – Tranche 1 Project (the “2020 Project”); and

WHEREAS, the Commission has determined to provide for the issuance under the Trust Agreement at this time of a revenue bond of the District (the “2020 Bond”) in the form of a draw-down bond, in the maximum principal amount of \$225,865,648, to evidence the District’s payment obligation to the WIFIA Lender, in its capacity as the Holder, for amounts drawn, from time to time, under the WIFIA 2020 Loan Agreement; and

WHEREAS, there have been presented at this meeting draft copies of the following documents relating to the issuance and sale of the 2020 Bond and the financing of the 2020 Project:

- (a) an Eighth Supplemental Trust Agreement (the “Supplemental Agreement”), by and between the District and the Trustee, supplementing the Trust Agreement and relating to the 2020 Bond;
- (b) the WIFIA 2020 Term Sheet; and
- (c) the WIFIA 2020 Loan Agreement, which is subject to the terms of the WIFIA Master Agreement; and

Now, Therefore, the HAMPTON ROADS SANITATION DISTRICT COMMISSION DOES HEREBY RESOLVE, as follows:

Section 1. Definitions. Capitalized words and terms used in this Resolution and not defined herein shall have the same meanings in this Resolution as such words and terms are given in the Supplemental Agreement (or, if not defined therein, in the Trust Agreement).

Section 2. Authorization of Bond. In order to provide funds required to finance a portion of the eligible costs of the 2020 Project and pay certain expenses incurred in connection with the 2020 Bond by the District and pursuant to the authority granted to it by the Act, the Commission hereby authorizes the issuance of a Hampton Roads Sanitation District Subordinate Wastewater Revenue Bond, Series 2020 (Federally Taxable), in a principal amount equal to the principal advances made thereunder up to Two Hundred Twenty-Five Million, Eight Hundred Sixty-Five Thousand, Six Hundred Forty-Eight Dollars (\$225,865,648) dated as of such date, payable in installments in such amounts and on such dates in such years not later than forty (40) years from the date of its issuance, and bearing interest at such rate set forth on such 2020 Bond, on a federally taxable basis, all as determined by the District Representatives (hereinafter defined), any of whom may act, and in accordance with the Supplemental Agreement.

The Commission hereby determines that the issuance of the 2020 Bond will be in the best interests of the District.

The 2020 Bond shall be issued as a single, registered bond, in a denomination of \$225,865,648, and shall be numbered R-1. Payments of principal of and interest on the 2020 Bond shall be made by the District or the Trustee to the registered owner of the 2020 Bond in such manner as is set forth in the Trust Agreement and Section 8(c) of the WIFIA Master Agreement.

Section 3. Method of Sale. The 2020 Bond shall be issued, sold and awarded to the WIFIA Lender pursuant to the terms of this resolution, the WIFIA 2020 Loan Agreement and the Supplemental Agreement.

Section 4. Redemption. The 2020 Bond shall be subject to optional redemption prior to maturity as set forth in the Supplemental Agreement.

Section 5. Application of Bond Proceeds. The proceeds of the 2020 Bond shall be applied as provided in Article III of the Supplemental Agreement.

Section 6. Authorization of Basic Documents. The forms, terms and provisions of each of the Supplemental Agreement, the WIFIA 2020 Term Sheet and the WIFIA 2020 Loan Agreement (together, the “Basic Documents”) are hereby approved in all respects, and the District Representatives are hereby authorized and directed to execute and deliver the Basic Documents in substantially the forms presented to this meeting, together with such changes, modifications and deletions as such District Representatives, with the advice of counsel, may deem necessary and appropriate; such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the District.

Section 7. Execution of Bond. The form of the 2020 Bond set forth in the Supplemental Agreement is hereby approved in all respects, and the Chairman or Vice Chairman and the Secretary or any Assistant Secretary of the Commission are hereby authorized and directed to execute, by manual or facsimile signature, as provided in such form of the 2020 Bond, and to deliver to the Bond Registrar for authentication on behalf of the District, the 2020 Bond in definitive form, with such changes, modifications and deletions as they, with the advice of counsel, may deem necessary, appropriate and consistent with the Amended and Restated Trust Agreement and the Supplemental Agreement; such execution and delivery shall be conclusive evidence of the approval and authorization thereof by the District.

Section 8. Authorization and Delivery of the 2020 Bond. Upon its execution in the form and manner set forth in the Trust Agreement, the 2020 Bond shall be deposited with the Bond Registrar for authentication, and the Bond Registrar is hereby authorized and directed to authenticate such 2020 Bond and, upon the due and valid execution of the Basic Documents, the Trustee shall cause the Bond Registrar to deliver the 2020 Bond to the WIFIA Lender, in accordance with and subject to the provisions of Section 209 of the Trust Agreement.

Section 9. District Representatives. Each of the Chairman of the Commission, Vice Chairman of the Commission, General Manager and Director of Finance are hereby appointed a “District Representative” within the meaning of such term under the Trust Agreement, with full power to carry out the duties set forth therein. Any one or more of the District Representatives may act for and on behalf of the District.

Section 10. Further Actions. The District Representatives are each authorized and directed (without limitation except as may be expressly set forth herein) to take such action and to execute and deliver any such documents, certificates, undertakings, agreements or other instruments as they, with the advice of counsel, may deem necessary or appropriate to effectuate the transactions contemplated by the Basic Documents and the Trust Agreement.

Section 11. Officer’s Certificate. Each District Representative may execute an Officer’s Certificate or Officer’s Certificates evidencing the determinations made or other actions

carried out pursuant to the authority granted in this Resolution, and any such Officer's Certificate shall be conclusive evidence of the actions or determinations as stated therein.

Section 12. Ratification of Prior Acts. The actions heretofore taken by the District Representatives in connection with the proposed issuance of the 2020 Bond are hereby ratified.

Section 13. Sunset Provision. The 2020 Bond may not be issued pursuant to the authority provided by this Resolution after December 31, 2020.

Section 14. Rate Schedule. In compliance with Section 22 of the Act, incorporated herein the same as if set forth verbatim herein, is the current "Rate Schedule For all Wastewater and Associated Charges effective July 1, 2020" for the use of, and for the services and facilities furnished or to be furnished by, the wastewater disposal system or systems and the wastewater improvements, for which the 2020 Bond is to be issued. Such schedule appears in full on the District's website, www.hrsd.com/finance.

Section 15. Effective Date. This Resolution shall take effect immediately upon its passage.

[END OF RESOLUTION]

Adopted by the Hampton Roads Sanitation District Commission on _____, 2020.

Frederick N. Elofson, Chair

AGENDA ITEM 5. – September 22, 2020

Subject: Solids System Improvements for Army Base Treatment Plant Multiple Hearth Incinerator (MHI) Offline
Initial Appropriation and Task Order (>\$200,000)

Recommended Actions:

- a. Appropriate total project funding in the amount of \$4,400,000.
- b. Approve a task order with HDR Engineering, Inc. in the amount of \$650,830.

CIP Project: GN017900

Contract Status:	Amount
Original Contract with HDR	\$0
Total Value of Previous Task Orders	\$0
Requested Task Order	\$650,830
Revised Contract Value	\$650,830
Engineering Services as % of Construction	21.2%

Project Description: The project will install thickened liquid solids load-out facilities at Army Base Treatment Plant (ABTP) and thickened liquid solids load-in facilities at Atlantic Treatment Plant (ATP) and Virginia Initiative Plant (VIP). Completed facilities will leverage existing solids handling capacity at receiving plants to remove solids handling facilities at ABTP from operation including dewatering and multiple hearth incinerator (MHI) operations.

Task Order Description: This task order will provide preliminary engineering, detailed design and bid phase services of the load-out facility at ABTP and load-in facilities at VIP and ATP.

Analysis of Cost: The cost for this task order is based on a detailed scope of work and hourly rates negotiated in the General Engineering Services annual services contract. The design fee is 21.2% of the estimated construction cost which is slightly higher than other similar projects. However, this project involves work at three treatment plant sites which requires more plan sheets and more site civil during design.

Funding Description: The total project cost estimate of \$4,400,000 includes approximately \$800,00 in design phase services, approximately \$3,000,000 in construction phase costs, and \$600,000 of project contingency and is based on a Class 5 CIP-prioritization level cost estimate prepared by HRSD.

<u>Schedule:</u>	Design	October 2020
	Bid	July 2021
	Construction	October 2021
	Project Completion	October 2022

AGENDA ITEM 6. – September 22, 2020

Subject: Boat Harbor Outlet Sewer Improvements
Additional Appropriation

Recommended Action: Appropriate additional funding in the amount of \$555,890.

CIP Project: BH014700

Budget	\$6,520,791
Previous Expenditures and Encumbrances	(\$5,979,742)
Available Balance	\$541,049
Change Order No. 1 to SAK Construction, LLC	(\$522,253)
Proposed Contingency	(\$574,686)
Project Shortage/Requested Additional Funding	(\$555,890)
Revised Total Project Authorized Funding	<u>\$7,076,681</u>

Project Description: This project will rehabilitate approximately 3,500 linear feet of gravity pipeline and associated manholes. Pipe diameters included in this project range in size from 48 to 54-inches. The work extends along Jefferson Avenue from 34th Street to 25th Street and along Terminal Avenue from 25th Street to 17th Street. The project also includes the 26th Street siphons and the associated chambers. This work is listed in Phase One of the U.S. EPA Consent Decree Rehabilitation Action Plan and must be completed by May 2021.

Funding Description: The original contract with SAK Construction, LLC is \$5,224,608. The original CIP project estimate did not anticipate Jack and Bore installation of the bypass pipe. The total cost change to Jack and Bore the bypass pipe increased the contract price by \$522,253 and reduced the available CIP budget to \$18,796. The negotiated cost of this work and contingency is \$1,130,576 and exceeds the balance available for the CIP by \$555,890. The change order is only 10% of the construction cost. This request includes a \$574,686 contingency to accommodate any additional unforeseen conditions to complete the project.

Analysis of Cost: The total cost for the installation method change for the bypass is \$522,253. The negotiated scope and Contractor's fee is within acceptable range of the engineer's estimate. Approval is recommended.

Change Order Description: During design plan approval, VDOT indicated the crossings at the 25th Street and 26th Street ramps could be completed by open-cut excavation or jack and bore installation. After the contract award, VDOT stated open-cut excavation for these crossings would no longer be allowed. SAK Construction LLC

planned to install these casings via open cut excavation in their bid. This change order includes the cost to change the installation method of the bypass across 25th Street and 26th Street ramps to jack and bore installation.

Schedule: Project Completion April 2021

AGENDA ITEM 7. – September 22, 2020

Subject: Mathews Main Vacuum Pump Station Replacement
Additional Appropriation

Recommended Action: Appropriate additional funding in the amount of \$80,000.

CIP Project: MP012500

Budget	\$3,729,080
Previous Expenditures and Encumbrances	(\$3,714,936)
Available Balance	\$14,144
Proposed Contract to Contractor	(\$60,000)
Proposed Contingency	(\$34,144)
Project Shortage/Requested Additional Funding	\$80,000
Revised Total Project Authorized Funding	\$3,809,080

Project Description: This project will build a new main vacuum/pumping station in Mathews County on a new parcel that has been purchased. The new station will include a new building, new vacuum pumps, new sewage holding tank, trailer-mounted vacuum pump, emergency bypass pump connections, abandonment of the existing Court House pump station, and evaluation of the potential to abandon the existing booster pump station on Buckley Hall Road.

Funding Description: Additional funding is needed due to unanticipated work added to resolve field changes and unforeseen conditions. The estimated cost of this work is \$60,000 and exceeds the balance available for the CIP by \$45,856. The original CIP project estimate did not include work associated with internal electrical components, restroom partition walls adjustment, and changes to the odor control system. This request includes a \$34,144 contingency to cover any additional expenses during the close out and warranty phase for this project.

Analysis of Cost: The contract change amount of \$60,000 compares well to the Engineer's estimate and the effort needed to complete the work. Change order negotiations will be finalized following the approval of additional funding.

Schedule: Project Completion October 2020

AGENDA ITEM 8. – September 22, 2020

Subject: Suffolk Interceptor Force Main Section I Main Line Valving Replacement
Additional Appropriation and Contract Award (>\$200,000)

Recommended Actions:

- a. Appropriate additional funding in the amount of \$1,138,783.
- b. Award a contract to Bridgeman Civil, Inc in the amount of \$1,862,500.

CIP Project: NP011300

Budget	\$ 1,060,000
Previous Expenditures and Encumbrances	(\$77,283)
Available Balance	\$982,717
Proposed Contract Award to Contractor	(\$1,862,500)
Proposed Task Order to RKK	(\$154,000)
Proposed Contingency	(\$105,000)
Project Shortage/Requested Additional Funding	(\$1,138,783)
Revised Total Project Authorized Funding	\$2,198,783

Type of Procurement: Competitive Bid

Bidder	Bid Amount
Bridgeman Civil, Inc.	\$1,862,500
Garney Companies, Inc.	\$1,876,400
Tidewater Utility Construction, Inc.	\$4,193,890

Engineer Estimate: \$1,513,750

Contract Description: 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 June 14, 2020 and three bids were received on September 9, 2020. The design engineer, RK&K, evaluated the bids and recommends award to the lowest responsive and responsible bidder, Bridgeman Civil, Inc., in the amount of \$1,862,500.

Project Description: The Project consists of replacement of approximately 170 linear feet of 48-inch HDPE force main including bag stops, air vents and surface restoration. Work also includes removal of several old valves and sections of pipe located at the proposed Bellville Pressure Reducing Station site. The integrity of the valves and pipe is unknown and present a risk to the system.

Funding Description: The original CIP (2009) estimate did not anticipate the project being delayed on multiple occasions or the need to change the method of bypass pumping. This request includes a \$105,000 contingency to accommodate any additional unforeseen conditions.

Analysis of Cost: This project has been active since 2009, with bidding delayed twice and placed on hold until August 2018. The original construction estimate from November 2009 was \$822,710. Funding in the amount of \$1,060,000 was secured in 2015. The project has been updated annually in the CIP with the estimated project cost adjusted to \$1.5 million in FY2020.

Resulting from conflicts with overhead power lines (Dominion), the means for bypass pumping was changed during final design causing a considerable and unforeseen cost increase. The additional funding request also considers a task order for \$154,000 to RK&K under the Interceptor System Projects annual services contract to provide contract administration and inspection services during construction.

<u>Schedule:</u>	PER	November 2009
	Design	August 2018
	Bid	September 2020
	Construction	October 2020
	Project Completion	March 2021

AGENDA ITEM 9. – September 22, 2020

Subject: Treatment Plant Grease Handling Facilities
Additional Appropriation, Contract Award (>\$200,000), Task Order (>\$200,000)

Recommended Actions:

- a. Appropriate additional funding in the amount of \$1,882,632.
- b. Award a contract to MEB General Contractors Inc in the amount of \$7,997,000.
- c. Approve a task order with Hazen and Sawyer (Hazen) in the amount of \$890,748.

CIP Project: GN013300

Budget	\$9,499,818
Previous Expenditures and Encumbrances	(\$2,094,852)
Available Balance	\$7,404,966
Proposed Contract Award to MEB	(\$7,997,000)
Requested Task Order to Hazen	(\$890,748)
Proposed Contingency	(\$399,850)
Project Shortage/Requested Additional Funding	(\$1,882,632)
Revised Total Project Authorized Funding	\$11,382,450

Type of Procurement: Competitive Bid

Bidder	Bid Amount
MEB General Contractors Inc	\$7,997,000
Crowder Construction Company	\$8,008,083
Clark Construction LLC	\$8,707,058
Shaw Construction Corp	\$10,656,450

Engineer Estimate: \$9,633,434.00

Contract Status:	Amount
Original Contract with Jacobs	\$99,879
Total Value of Previous Task Orders	\$1,209,184
Requested Task Order (Hazen)	\$890,748
Total Value of All Task Orders	\$2,099,932
Revised Contract Amounts for Engineering	2,199,811
Engineering Services as % of Construction	28%

Project Description: This project involves installation of a facility at the Nansemond Treatment Plant to receive FOG (Fats, Oils, and Grease) from indirect haulers. The facility will screen, decant, and process the FOG in a manner that will convert a portion to bio-fuel using the Greasezilla system. The portion of FOG converted to bio-fuel will be sold to Greasezilla per a separate byproduct (off-take) agreement. The decanted FOG water will be sent to headworks for normal wastewater treatment and the remaining processed FOG will be sent to the digesters.

Task Order Description: This task order will provide construction phase engineering services for the project. A fee of \$890,748 was negotiated with Hazen and is comparable to other projects of similar size and complexity.

Funding Description: Early project estimates did not anticipate the complexities required to design and construct the facility. As design progressed, the team acknowledged that the facility would cost more than originally anticipated, which was reflected in the FY-2021 estimated CIP budget in the amount of \$11,373,672. This request includes a \$399,850 contingency to accommodate any additional unforeseen conditions during construction. This project requires additional funding due to a refined project scope and an increased construction cost. The amount for this work is \$1,882,632 and exceeds the balance available for this CIP project.

Analysis of Cost: In accordance with HRSD's competitive sealed bidding procedures, the Engineering Department advertised and solicited bids directly from potential bidders. Four bids were received and evaluated based upon the requirements of the Invitation for Bid. Jacobs is recommending awarding the construction contract to MEB General Contractors Inc with a bid amount of \$7,997,000.

<u>Schedule:</u>	Bid	July 2020
	Construction	October 2020
	Project Completion	November 2022

AGENDA ITEM 10. – September 22, 2020

Subject: COVID-19 Wastewater Surveillance Study Update

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

AGENDA ITEM 11. – September 22, 2020

Subject: Tabb Pressure Reducing Station and Offline Storage
Acquisition of Real Property located at 900 Yorktown Road, Yorktown, Virginia
(GPIN T04D-3932-0449)

Recommended Actions:

- a. Approve purchase of a 26.19 acre parcel located at 900 Yorktown Road in Yorktown, Virginia (GPIN T04D-3932-0449) for \$850,000 in accordance with the terms and conditions of the Purchase and Sale Agreement with Mr. Harry Richard Ashe, owner of subject property, and authorize the General Manager to execute same, substantially as presented, together with such changes, modifications and deletions as the General Manager may deem necessary and further authorize the General Manager to execute the forthcoming deed of bargain and sale upon approval of legal counsel.
- b. Rescind previous Purchase and Sale Agreement to acquire a 5-acre portion of the same property previously approved on January 28, 2020 for \$300,000.

CIP Project: YR010900

Project Description: This project will construct a new Pressure Reducing Station (PRS) and Offline Storage Tank in the vicinity of Tabb High School in York County, Virginia. The precise capacity of the station and volume of the tank will be determined during the preliminary design. The location has been finalized and is tied to valves installed during the 2009 Kiln Creek / Route 171 42-inch Interceptor Force Main project in anticipation of future expansion of the system. Construction of this PRS and Offline Storage Tank provides projected construction cost reductions and enhanced treatment benefits at the James River Treatment Plant (JRTP), as well as improvements in the interceptor system and operational improvements and cost savings at the York River Treatment Plant.

HRSD will be working with York County for optimal placement and design of the project; in addition, HRSD may convey a portion of the property to the County in connection with a trail and transportation project. A conservation easement over any remaining residual property will be considered as well.

The [Purchase and Sale Agreement](#) is attached and was reviewed by HRSD staff and legal counsel. The deed of bargain and sale is forthcoming and will also be reviewed by HRSD staff and legal counsel before execution. A [Facilities orientation map](#) is provided for clarification purposes.

Analysis of Cost: HRSD will purchase the 26.19 acres of land which comprises 900 Yorktown Road for the negotiated sales price of \$850,000. This amount is reflective of land sales in the area and negotiations with the landowner. Development potential of the property was also considered.

PURCHASE AND SALE AGREEMENT

THIS PURCHASE AND SALE AGREEMENT (this "Agreement") made this ____ day of _____, 20____, by and between **HARRY RICHARD ASHE**, hereinafter referred to as Seller, and **HAMPTON ROADS SANITATION DISTRICT**, a political subdivision of the Commonwealth of Virginia ("HRSD"), Purchaser.

RECITALS

- A. Seller is the owner in fee simple absolute of a certain parcel of property approximately 26.199 acres in area, known as 900 Yorktown Road, Yorktown, Virginia, GPIN T04D-3932-0449, such property being more particularly described in Exhibit A which is attached to and made a part of this Agreement (the "Property").
- B. HRSD desires to purchase the Property from the Seller for the purpose of expanding and improving HRSD wastewater infrastructure for the region.
- C. Seller is willing to sell the Property to HRSD subject to the terms and conditions set forth in this Agreement.
- D. These recitals are incorporated by this reference into this Agreement.

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

- 1. SALE. Seller agrees to sell and HRSD agrees to purchase the Property, together with all rights and appurtenances thereto, including all right, title and interest of Seller in and to any land lying in the bed of any highway, street, road, or avenue, open or proposed, in front of or abutting, or adjoining such tract or piece of land and any riparian rights, if any, and any rights, easements, and appurtenances pertaining thereto, and any building and other property situated thereon, including all personal property, attached or appurtenant to, located in or on, or used in connection with the real property, if any. The real property and the personal property are called "the Property".
- 2. PURCHASE PRICE. The purchase price (the Purchase Price) for the Property is **Eight Hundred Fifty Thousand Dollars and 00/100 cents (\$850,000.00)**, and the Purchase Price shall be paid to the Seller by certified check or wired funds at closing.

3. CONVEYANCE.

- a. At the Closing, Seller shall convey title to the Property in fee simple, by general warranty deed, free and clear of any and all liens, mortgages, deeds of trust, security interests, leases, covenants, conditions, restrictions, easements, rights-of-way, licenses, encroachments, judgments or encumbrances of any kind, except for the following permitted exceptions: (a) the lien of real estate taxes not yet due and payable; (b) zoning and building restrictions and other laws, ordinances, and regulations of governmental bodies having jurisdiction over the Property; and (c) matters of record affecting title to the property, as reviewed and approved (or deemed approved) by HRSD in accordance with this Agreement. Except as expressly stated in this Agreement, the Property shall be conveyed in "AS IS" condition.

- b. Title to the Property shall be good and marketable and, if HRSD chooses to obtain title insurance, insurable by a nationally recognized ALTA title insurance company of HRSD's choice at or below normal rates. In the event that a title examination discloses defects of title or other matters unsatisfactory to HRSD at HRSD's sole determination, HRSD shall notify Seller in writing (an "Objection Notice"), within 90 days of the Effective Date, of such title defects or other matters to which HRSD objects. Seller covenants that it shall cure all monetary encumbrances and all title objections which may be cured by execution of a document requiring the signature of no party other than Seller (including any affidavits which may reasonably be required by the title insurer). Seller may notify HRSD in writing (an "Objection Response"), within ten (10) business days after receiving an Objection Notice if it believes that the Objection Notice makes reference to any title defect or other matter that Seller cannot or elects not to cure. Upon receipt of an Objection Response from Seller, HRSD shall have the option either to (i) terminate this Agreement by notice to Seller given within ten (10) business days of the Objection Response or (ii) accept the defects, exceptions or other matters referenced in such Objection Response and proceed to Closing hereunder with no reduction of the Purchase Price. Seller shall have the period until the Closing date within which to correct all defects, exceptions or other matters that it is required or elects to cure. Seller shall provide such documents (including evidence of authority),

affidavits, and other instruments that may be reasonably required for the issuance of a title insurance policy to HRSD.

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

5. CONDITIONS AND CONTINGENCIES.

- a. HRSD's obligations are expressly conditioned upon the waiver or satisfaction of each of the following conditions in the sole determination of HRSD. If any one of the following conditions cannot be met within 90 days after the Effective Date (the Effective Date being defined as the date the contract is endorsed by both HRSD and Seller), HRSD may unilaterally terminate this Agreement:

- i. Receipt of a satisfactory title commitment with all unacceptable title exceptions, encumbrances, and conditions as deemed by HRSD removed or cured at Seller's cost; however, if Seller chooses not to remove or cure any such title exception, HRSD's sole remedy shall be to terminate this Agreement;
 - ii. Receipt of a Phase I Environmental Assessment and Report (Phase I Report) conducted and prepared by an environmental engineering and inspection company selected by HRSD at HRSD's expense and such other testing and reports as may be reasonably required by HRSD or recommended in the Phase I Report;
 - iii. Seller's compliance of all its obligations under this Agreement.
- b. This Agreement is expressly conditioned upon the completion of all title and environmental "due diligence" by HRSD and notification to the Seller in writing of any conditions that are unsatisfactory to HRSD within the 90-day period. In the event HRSD fails to notify the Seller in writing within such 90 day period, any objection to such conditions shall be deemed waived by HRSD and the parties shall proceed to closing; provided, however, in no event shall any mortgage, deed of trust, security agreement or monetary lien against the Property be deemed waived objections and the Seller agrees that the same shall be removed and released as liens on the Property on or before Closing.
- c. This Agreement is contingent upon HRSD's review of all necessary permits and approvals from all applicable government bodies to construct a pressure reducing station on the property with all necessary attendant facilities.
- d. This Agreement is contingent on the review and approval of the purchase by the Hampton Roads Sanitation District Commission and upon such Commission granting authorization to the General Manager to proceed under the terms of this Agreement.

6. ENVIRONMENTAL AND RELATED MATTERS.

- a. As a condition precedent to HRSD's obligation to purchase, HRSD, at HRSD's expense, may have a Phase I Environmental Assessment of the Property performed by a qualified environmental consultant (the Consultant) selected by HRSD and reasonably acceptable to Seller, conducted in accordance with standard commercial practice at the time of the assessment. A copy of the Phase I Environmental Assessment will be made available to Seller, together with copies of any supplemental reports or assessments.
- b. If the Consultant recommends soil, water, or structural remediation or further assessment activity after or as a result of performing a Phase I Environmental Assessment or if HRSD otherwise determines, in its reasonable judgment, that further assessment activity (including, but not limited to, a Phase II Environmental Assessment) is desirable, HRSD may at its option:
- (i) Terminate this Agreement; or
 - (ii) Extend the time for closing for an additional period of sixty (60) days in order to perform any such additional assessment at HRSD's expense; or
 - (iii) Waive the environmental defect and proceed to Closing.

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

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

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

Seller further represents and warrants and shall deliver to HRSD at or prior to the Settlement, an Affidavit prepared by HRSD evidencing the following facts:

- (i) Other than this Agreement, there are no other contracts for sale or options involving the Property now in effect;

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

were in any way dealt with on or under the Property; and (iii) no owner or occupant to the best of Seller's knowledge, has received any notice from any governmental agency with regard to such Hazardous Materials contained on the Property.

8. NOTICES. All notices to the parties hereto will be delivered by hand, via certified mail return receipt requested, or via facsimile and all be deemed effective upon delivery if by hand and upon confirmation of receipt if by other means, to the following address until the address is changed by notice in writing to the other party:

HRSD: Edward G. Henifin, P.E.
General Manager
P.O. Box 5911
Virginia Beach, Virginia 23471-0911
Fax: (757) 363-7917

Copy to: Conway H. Sheild, III
Jones, Blechman, Woltz & Kelly, P.C.
701 Town Center Drive, Suite 800
Newport News, Virginia 23606
Fax: (757) 873-8055

Seller: Harry Richard Ashe
632 Hampton Highway
Yorktown, Virginia 23693

9. CLOSING. Unless this Agreement is terminated pursuant to its terms or by mutual agreement of the parties, Closing will be made at the offices of the Settlement Agent within 120 days of the Effective Date, unless extended by terms of these agreements or by mutual agreement of the parties.
10. SURVIVAL. The provisions contained in this Agreement will be true as of the date of this Agreement and as of the date of Closing.
11. RISK OF LOSS. All risk of loss or damage to the Property by fire, windstorm, casualty, or other cause is assumed by Seller until Closing. In the event of substantial loss or damage to the Property before Closing, HRSD will have the option of either:

- a. Terminating this Agreement, or
 - b. Affirming this Agreement and proceeding to Closing.
12. FUTURE SALE BY HRSD. In the event that HRSD shall determine to sell all or a portion of the property for private development within two (2) years of the Settlement Date, it agrees to notify Seller and give Seller first opportunity to purchase the property on such terms as the parties shall mutually agree. Such notice shall be writing addressed in accordance with the provisions of Section 8 herein or such other address provided to HRSD by the Seller and shall provide Seller with at least thirty (30) calendar days to present HRSD with an offer to purchase at the same price as stated in this Purchase Agreement.
13. BROKERS. Seller and HRSD both represent and warrant to the other that it has not hired, engaged, or consulted with any broker or agent in regard to this transaction. Each party agrees to indemnify and hold harmless the other from any and all costs, expenses, or damages resulting from any claim for brokerage fees or other similar forms of compensation made by any real estate broker or other person or entity with whom a party has dealt, and who is not expressly named herein.
14. CONDEMNATION. Seller covenants and warrants that Seller has not heretofore received any notice of any condemnation proceeding or other proceeding in the nature of eminent domain in connection with the Property. If prior to Settlement any such proceeding is commenced or any change is made, or proposed to be made, to the current means of ingress and egress to the Property or to the roads or driveways adjoining the Property, or to change such ingress or egress or to change the grade thereof, Seller agrees immediately to notify HRSD thereof. HRSD then shall have the right, at HRSD's option, to terminate this Agreement by giving written notice to Seller within thirty (30) days after receipt of such notice. HRSD has not issued any notice of condemnation proceedings to seller prior to this document.
15. DEFAULT AND REMEDIES.
- a. If the sale and purchase contemplated by this Agreement is not consummated because of Seller's or HRSD's default, the non-defaulting party may elect to:
 - i. Terminate this Agreement;
 - ii. Seek and obtain specific performance of this Agreement; or

- iii Pursue all other rights or remedies available at law or in equity, including an action for damages.
 - b. If either Seller or HRSD defaults under this Agreement, the defaulting party will be liable for any expenses incurred by the non-defaulting party in connection with the enforcement of its rights under this Agreement.
 - c. These remedies are cumulative and non-exclusive and may be pursued at the option of the non-defaulting party without a requirement of election of remedies.
- 16. ENTIRE AGREEMENT. This Agreement contains the entire agreement of the parties and will supersede the terms and conditions of all prior written and oral agreements, if any, concerning the matters it covers. The parties acknowledge there are no oral agreements, understandings, representations, or warranties that supplement or explain the terms and conditions contained in this Agreement. This Agreement may not be modified except by an agreement in writing signed by the parties.
- 17. WAIVER. Failure to insist upon strict compliance with any of the terms, covenants, or conditions hereof will not be deemed a waiver of the term, covenant, or condition, nor will any waiver or relinquishment of any right or power at any one time or more times be deemed a waiver or relinquishment of the right or power at any other time or times.
- 18. SEVERABILITY. This Agreement will be construed in its entirety and will not be divisible, except that the invalidity or unenforceability of any provision hereof will in no way affect the validity or enforceability of any other provision.
- 19. CAPTIONS. Captions are used in this Agreement for convenience only and will not be used to interpret this Agreement or any part of it.
- 20. GOVERNING LAW. This Agreement is to be construed in accordance with the laws of the Commonwealth of Virginia.
- 21. CHOICE OF FORUM/JURISDICTION. The parties hereby consent to the jurisdiction and venue of the courts of the Commonwealth of Virginia, specifically to the courts of York County, Virginia, and to the jurisdiction and venue of the United States District Court for the Eastern District of Virginia in connection with any action, suit, or proceeding arising out of or

relating to this Agreement and further waive and agree not to assert in any action, suit, or proceeding brought in York County, Virginia, or the Eastern District of Virginia that the parties are not personally subject to the jurisdiction of these courts, that the action, suit, or proceeding is brought in an inconvenient forum or that venue is improper.

23. WAIVER OF TRIAL BY JURY. THE PARTIES WAIVE TRIAL BY JURY IN ANY ACTION, PROCEEDING, OR COUNTERCLAIM BROUGHT BY EITHER PARTY AGAINST THE OTHER ON ANY MATTER WHATSOEVER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ANY RELATED AGREEMENTS OR INSTRUMENTS AND THE ENFORCEMENT THEREOF, INCLUDING ANY CLAIM OF INJURY OR DAMAGE TO ANY PARTY OR THE PROPERTY OF ANY PARTY.
24. SUCCESSOR/ASSIGNMENT. This Agreement will be binding upon and the obligations and benefits hereof will accrue to the parties hereto, their heirs, personal representatives, successors, and assigns. This Agreement is assignable by HRSD only upon written consent of the Seller, which consent will not be unreasonably withheld. If this Agreement is assigned by HRSD with Seller's consent, HRSD will nevertheless remain fully liable for its performance.
25. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each will be considered an original, and together they will constitute one Agreement.
26. FACSIMILE SIGNATURES. Facsimile signatures will be considered original signatures for the purpose of execution and enforcement of the rights delineated in this Agreement.
27. ETHICS IN PUBLIC CONTRACTING. By executing this Agreement, the undersigned Seller or its representative, and the representative of HRSD, certify that the prices agreed to in this Agreement were arrived at without collusion or fraud and that they have not offered or received any payment, kickbacks or other inducement from any other party to this Agreement or its agent or employee in connection with this Agreement, and that they have not conferred on any public employee having responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services (or anything of more than nominal value, present or promised) unless disclosed in this Agreement.

SELLER:

By: _____
Harry Richard Ashe (*signature*)

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 September 22, 2020. [This Agreement is expressly subject to approval by the HRSD Commission]

HAMPTON ROADS SANITATION DISTRICT

By: _____
Edward G. Henifin, P.E.
General Manager

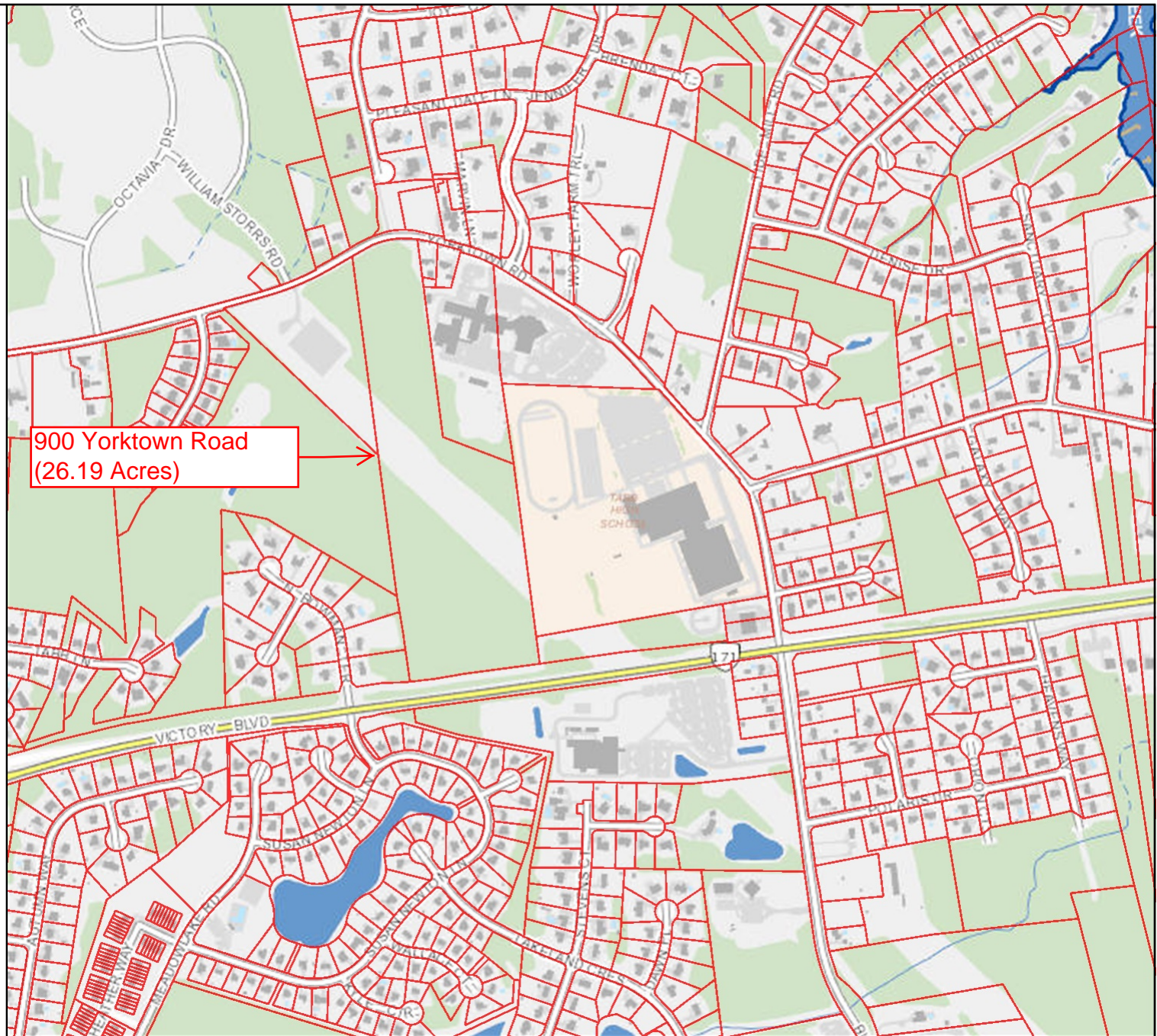
EXHIBIT A

All that certain lot, piece or parcel of property, situate lying and being in the County of York, Virginia, containing 26.1975 acres more or less and set forth and shown on that certain plat entitled, "PLAT SHOWING PART OF THE T.D. TAYLOR ESTATE 26.1975 ACRES +/- , LOCATED ON YORKTOWN ROAD, COUNTY OF YORK, VIRGINIA," dated May 3, 1988, made by Johnson-Baird & Associates, Civil Engineer and Land Surveyors, and recorded in the Clerk's Office of the Circuit Court for the County of York, Virginia, in the Plat Book 10, page 530, to which reference is here made.

York County, Virginia

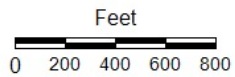
Legend

- Parcel Boundary
- Plat Link



Title: 900 Yorktown Road - Ashe

Date: 12/6/2019



DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and York County is not responsible for its accuracy or how current it may be.

AGENDA ITEM 11. – September 22, 2020

Subject: Unfinished Business

AGENDA ITEM 12. – September 22, 2020

Subject: New Business

AGENDA ITEM 13. – September 22, 2020

Subject: Commissioner Comments

AGENDA ITEM 14. – September 22, 2020

Subject: Public Comments Not Related to Agenda

AGENDA ITEM 15. – September 22, 2020

Subject: Informational Items

Recommended Action: No action is required.

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

- a. Management Reports
 - (1) [General Manager](#)
 - (2) [Communications](#)
 - (3) [Engineering](#)
 - (4) [Finance](#)
 - (5) [Information Technology](#)
 - (6) [Operations](#)
 - (7) [Talent Management](#)
 - (8) [Water Quality](#)
 - (9) [Report of Internal Audit Activities](#)
- b. [Strategic Planning Metrics Summary](#)
- c. [Effluent Summary](#)
- d. [Air Summary](#)
- f. [Emergency Declarations – Cedar Lane Interceptor Force Main](#)



September 14, 2020

Re: General Manager's Report

Dear Commissioners:

Weather was the story in August. The month started out with Hurricane Isaias tracking directly over Hampton Roads. Fortunately, it was a fast-moving wind event and HRSD facilities experienced only minor impact, primarily power outages. Isaias provided a great opportunity to test our preparedness planning. With each event, we identify actions and activities that could be done more effectively or efficiently and make modifications to the plan after each exercise. A great application of continuous improvement practices.

A focus of planning for Isaias was the impact of COVID preventative measures on hurricane ride-out plans. Each work center worked through the challenges of maintaining required physical distancing should employees be required to ride out. Meal planning was modified as well. One fortuitous part of our existing plan is the virtual emergency operations center (EOC) concept. As a large regional organization with facilities spread across 3,100 square miles, the EOC has been virtual for more than 10 years. Primarily using conference call technology in the past, recent experience with video conferencing tools, like Skype, allowed the virtual EOC operation to be enhanced through video connections.

One impact of climate change has been the intensity of rain events and the localization of rainfall during the events. The monthly [Effluent Summary Report](#) tracks rainfall from three regional National Weather Service stations; Newport News Airport (PHF),

	Rainfall (inch)		
	<u>North Shore</u> (PHF)	<u>South Shore</u> (ORF)	<u>Small Communities</u> (FYJ)
Month	16.05"	7.99"	8.49"
Normal for Month	6.32"	6.20"	5.10"
Year to Date Total	47.68"	34.09"	37.01"
Normal for YTD	35.15"	33.92"	33.75"

Norfolk Airport (ORF) and the Middle Peninsula Regional Airport in West Point (FYJ). The August rainfall totals clearly demonstrate the wide variation of rainfall we are experiencing across the region (see inset). While South Shore and Small Communities have seen slightly more rainfall than an average year, the North Shore is 12.5 inches above normal, only 25 miles away from the South Shore gauge.

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

- A. **Treatment Compliance and System Operations:** Significant rain and the associated high flows created an operating challenge at the Surry County Treatment Plant in August. As a result, three permit exceedances were reported. The inflow and infiltration issues in Surry are an issue and we continue to work on tightening up all the small community systems. The Surry Transmission Force Main will resolve the treatment issues associated with high flow, but reduction of inflow and infiltration (I/I) is a long-term goal to reduce costs associated with pumping and treating rainwater. All other plants met permit with only four spills in the interceptor system (amazing considering the amount of localized rainfall during the month). The Surry systems were inundated during the August 15 rainstorm that recorded nearly 7.5 inches of rain at the Surry Treatment Plant, resulting in many overflows that were inaccessible due to flooded roads. Other highlights for the month are included in the attached monthly reports.
- B. **Internal Communications:** I participated in the following meetings/activities (all virtual unless otherwise noted) with HRSD personnel:
1. The quarterly meeting with the HRSD Leadership Facilitator team to review internal organizational development activities
 2. Several meetings to discuss and review hurricane preparations
 3. A meeting to discuss a proposed new employee benefit to be offered through a financial institution for student loan refinancing
 4. An in-person new employee orientation
 5. Several meetings to explore alternatives to the DEQ approach for Watershed Implementation Plan Phase III (WIP 3)
 6. A meeting to discuss a partnership with Hampton University to address I/I on their campus with a focus on saltwater
 7. Weekly meetings of all HRSD leaders (everyone with direct reports) via Zoom to provide information and guidance on HRSD COVID-19 response
 8. A meeting to prepare for rating agency presentations related to the Water Infrastructure Finance and Innovation Act (WIFIA) closing scheduled for September
 9. A meeting to discuss plans for enhanced focus on diversity, equity and inclusion
 10. A meeting to review various issues around industrial dischargers
 11. A meeting to review impact of HRSD pipe replacement on a Hampton property off Westminster Drive

C. **External Communications:** I participated in the following meetings/activities (all virtual unless otherwise noted):

1. A regulatory Advisory Panel meeting with DEQ regarding the proposed change to the nutrient regulations
2. Two meetings of the small group tasked with reviewing assumptions and alternatives for Virginia to meet the Chesapeake Bay Total Maximum Daily Load (TMDL) WIP 3 obligations
3. The monthly meeting of the Hampton Roads Planning District Commission (HRPDC) Director of Utilities Committee (DUC)
4. Participated on a webinar panel for the American Society of Civil Engineers program focused on designing and building with a future focus
5. Judged the 2020 nominations for the joint association recognition program – Utility of the Future Today
6. The initial meeting of the US EPA Environmental Financial Advisory Board (EFAB). (I was reappointed to serve a second 2-year term)
7. A meeting to plan a presentation for the ESRI Water Conference
8. Participated in the presentations to the three rating agencies in advance of the WIFIA loan closing
9. Several calls related to legislation and budget amendment language focused on requiring utilities to provide payment plans to customers impacted by COVID
10. Congresswoman Luria's Chesapeake Bay Advisory Board
11. Reviewed SWIFT with a team from the National Alliance for Water Innovation
12. A meeting with a representative from The Nature Conservancy (TNC) to explore nutrient trading options

D. **Consent Decree Update:**

HRSD received a demand letter from the Department of Justice (DOJ) for payment of stipulated penalties associated with sanitary sewer overflows from January 1, 2018 through December 31, 2019. The penalty amount was \$68,350 for 21 overflows during this period that in the opinion of EPA and DEQ, could have been prevented. Going forward, HRSD will submit stipulated penalty payments without demand, based on our internal review of cause and the ability to prevent.

The meeting next week will be another fully electronic meeting using Skype as we have done for the past three meetings. The Governor has extended the declared state of

emergency indefinitely and as such we will continue to meet in this fashion until that executive order is lifted.

The leadership and support you provide are the keys to our success as an organization. Thanks for your continued dedicated service to HRSD, the Hampton Roads region, the Commonwealth and the environment. **I look forward to seeing you (virtually) on Tuesday, September 22, 2020.**

Respectfully submitted,

Ted Henifin, P.E.
General Manager

TO: General Manager
 FROM: Director of Communications
 SUBJECT: Monthly Report for August 2020
 DATE: September 4, 2020





A. Publicity and Promotion

HRSD and/or SWIFT were mentioned or featured in six news stories and editorials on topics that included:

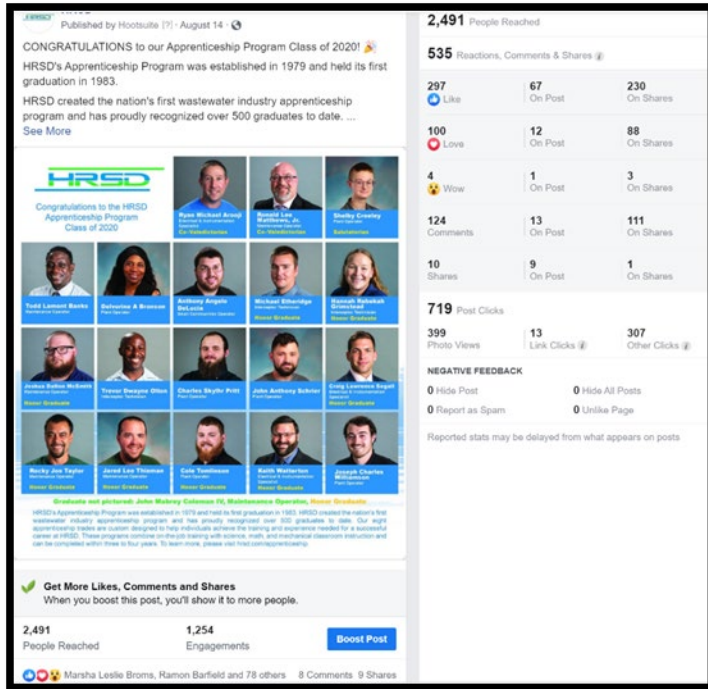
1. PFAS study in partnership with Purdue University
2. Wastewater testing for COVID-19 markers
3. Recently awarded EPA Clean Water State Revolving Fund
4. Water Environment Foundation Project Excellence Award recognizing Virginia Initiative Plant (VIP)

B. Social Media and Online Engagement

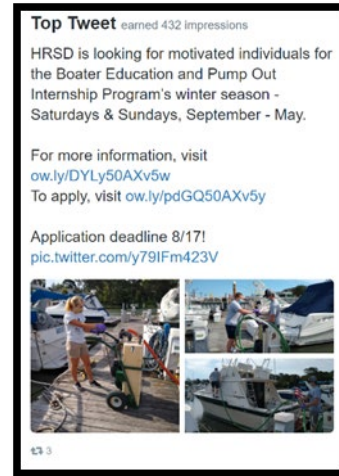
1. Metrics

Social Media Metrics August 2020				
METRIC	 FACEBOOK	 LINKEDIN	 TWITTER	 YOUTUBE
Number of Posts *number of published posts	22 -5	5 +2	22 -1	1:47 average view duration
Number of Followers/Likes *total number of fans	1,350 +16	5,009 +26	471 +8	188 +2
Engagement *sum of reactions comments and shares	1,143 +640	238 +138	25 -5	418 unique viewers -7
Traffic *total clicks on links posted	262 +257	358 +201	66 +49	4.4% click through No change











2. Top posts on Facebook, Twitter and YouTube



Top Facebook post



Top Tweet

Video	duration	Views
 The Wastewater Treatment Process Oct 22, 2015	1:39 (51.9%)	319
 HRSD Employee Testimonials - Robert Jan 9, 2017	0:17 (50.7%)	44
 Amazing Aquifers: How To Make an Aquafer at Home Apr 1, 2020	0:32 (78.2%)	26
 SWFT Research Center: What is the Potomac Aquafer? Jan 8, 2019	2:15 (68.6%)	23
 Virtual Tour of HRSD's Virginia Initiative Plant Nutrient Reduction Improvement Pr... May 13, 2016	1:21 (31.7%)	16
 HRSD's Woodstock Park Wet Weather Storage Tank Oct 25, 2017	0:47 (75.8%)	16
 SWFT Research Center Ribbon Cutting Ceremony, May 2018 Jul 3, 2018	2:24 (84.2%)	13
 HRSD Thank You Video Apr 29, 2020	0:58 (40.6%)	10
 Overview of HRSD's Sustainable Water Initiative for Tomorrow's Blue Project Nov 28, 2019	3:28 (96.2%)	7
 Celebrating SWFT's Multiple Regional Benefits May 6, 2017	1:58 (69.2%)	6

Top videos

3. Impressions and Visits

- a. Facebook: 22,243 page impressions, 19,214 post impressions reaching 17,175 users and Facebook engagement of 1,143 (900 reactions, 91shares and 152 comments).
- b. Twitter: 8,018 tweet impressions; 180 profile visits and 11 mentions
- c. HRSD.com/SWIFTVA.com: 824 page visits
- d. LinkedIn Impressions: 8,094 page impressions and 6,960 post impressions

- e. YouTube: 558 views
- f. Next Door unique impressions: 120 post impressions
- g. Blog Posts: 1
 - (1) [Want to Work For Water? Become a TSD Specialist \(Hydrologist\)](#)
- h. Construction Project Page Visits – 1,133 total visits (not including direct visits from home page, broken down as follows:
 - (1) 766 visits to individual pages
 - (2) 378 to the status page

B. News Releases, Advisories, Advertisements, Project Notices, Community Meetings and Project Websites

- 1. News Releases/Traffic Advisories/Construction Notices: five (three construction notices, one Commission meeting notice, one news release)
- 2. Advertisements: 0
- 3. Project Notices: 6 (via door hanging reaching approximately 234 residents)
- 4. Project/Community Meetings: 0
- 5. New Project Web Pages /Videos: 0

C. Special Projects and Highlights

- 1. Director participated in biweekly Hampton Roads Planning District Commission (HRPDC) Regional Public Information subcommittee calls, providing HRSD updates to participating localities and regional partners and collaborating with locality Public Information Officers on COVID-19 communication efforts to region.
- 2. Director and staff continue to work with SWIFT program management to develop a SWIFT Research Center virtual tour platform.
- 3. Director coordinated media interviews and photo shoots for two media outlets interested in HRSD's COVID-19 tracing using wastewater epidemiology
- 4. Director coordinated with videographers to develop a technical tour of the CAMBI Thermal Hydrolysis Process (THP) process at the Atlantic Treatment Plant.
- 5. Director participated in the National Association of Clean Water Agencies (NACWA) Strategic Communications Task Force planning meeting.

6. Director met with a media training agency to develop and adapt a formalized media training for staff under current COVID-19-related restrictions
7. Staff attended the HRPDC askHRGreen Fats, Oils & Grease (FOG) meeting.
8. Staff participated in the Virginia Water Environment Association (VWEA) Communications Committee Conference Call and the Value of Water (VOW) Imagine a Day without Water event planning meeting.

D. Internal Communications

1. Director participated in the following internal meetings and events:
 - a. Weekly Leadership and COVID-19 meetings
 - b. Meetings to finalize HRSD's plans for 2020 United for Infrastructure Week (September 14 -21)
 - c. Annual review meeting for staff
 - d. James River Land Improvements selection team meetings, including pre-proposal conference and proposal reviews
 - e. Preliminary outreach planning meeting for Larchmont Sewer Area Improvements Program
 - f. Phase 3 website redesign meeting with IT staff
 - g. Assist Pretreatment & Pollution Prevention (P3) staff with virtual P3 awards events coordination and video production
 - h. Project outreach strategy and plan development meetings for North Shore projects
 - i. Discharge Monitoring Report (DMR), SWIFT Quality Steering Team (QST) and QST meetings
2. Director conducted biweekly communications department status meetings and weekly one-on-one staff check-in meetings.

E. Metrics

1. Educational and Outreach Activities: two activities developed and shared on social media:
 - a. "Green Learning Guide" reaching 2,093 people; 31 clicks, and 21 reactions, comments, and shares
 - b. "Density Columns" reaching 291 people; 2 clicks; 10 reactions, comments, and shares
2. Number of Community Partners: 2
 - a. askHRGreen.org
 - b. Virginia Beach Parks and Recreation

3. Additional Activities Coordinated by Communications Department: 0
4. Monthly Metrics Summary

Item #	Strategic Planning Measure	Unit	August 2020
M-1.4a	Total Training Hours per Full Time Employee (3) - Current Month	Hours / #FTE	3
M-1.4b	Total Training Hours per Full Time Employee (3) - Cumulative Fiscal Year-to-Date	Hours / #FTE	6.67
M-5.2	Educational and Outreach Events	Number	2
M-5.3	Number of Community Partners	Number	2

5. Annual Metrics Summary

Item #	Strategic Planning Measure	Unit	FY-2020
M-5.1	Name Recognition (Survey Results)	Percentage	*

*Will be reported upon completion of survey (October)

Respectfully,

Leila Rice, APR
 Director of Communications

TO: General Manager
FROM: Director of Engineering
SUBJECT: Engineering Monthly Report for August 2020
DATE: September 10, 2020

A. General

1. Capital Improvement Program (CIP) spending for the first month of Fiscal Year (FY) 2021 was below planned spending target. The first month of the fiscal year is typically lower than planned due to accounting adjustments for projects associated with the previous fiscal year.

CIP Spending (\$M):

	Current Period	FYTD
Actual	11.85	11.85
Plan	19.50	19.50

Note: This final CIP spending total for FY 2020 was \$161.14 million.

2. The Engineering Department held its annual Consultant Coordination Meeting. This year's meeting was held virtually with 50 individuals in attendance. We use this meeting to review issues of common concern and updates to HRSD's standards and procedures. Issues discussed at the meeting included updates to HRSD's Design & Construction Standards, concerns with construction cost estimates, quality of inspection work, COVID-19 concerns, and other internal programs of interest to consultants doing work with HRSD. This meeting is a good way to share information, and the use of a virtual meeting platform allowed more individuals to attend. The meeting format was well received, and the virtual meeting platform will likely be used in the future.

B. Asset Management Division

1. The Hurricane Readiness and Damage Assessment Plans were updated in August. Lessons learned from Hurricane Isaias were included in the Damage Assessment Plan. One lesson was to determine the level of assessment needed when a relatively minor storm impacts HRSD infrastructure. A full assessment is not necessarily needed after all storm events, and managers will need to decide how far to take the initial assessment. Since HRSD's service area is so large, a storm might have great impacts in one area and leave other areas untouched. The Hurricane

Readiness Plan must closely link with the assessment and staff resources must be prioritized after each storm event.

2. Staff met with the Operations Department and consultants assisting with the Condition Assessment Program. The most recent focus has been on assessing the pump station assets. Numerous meetings have been recently held to identify pump station data reports to enhance the information management process for alignment with needed Maintenance, Operations and Management (MOM) Program requirements.

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

1. The Nansemond Treatment Plant Land Stabilization and Structure Demolition project is underway. The contractor has mobilized onsite and has begun land clearing. Building demolition has also begun and will continue over the next few months.
2. The Providence Road Off-Line Storage Facility construction continues. The final structural concrete work was completed in August. Leak testing of the tank is underway and a few small leaks have been observed and will be addressed using an injection epoxy system. The site piping work is underway and will continue for the next six weeks. The subcontractor installing the skate park will begin work in September. The project is on track for completion in February 2021.
3. The SWIFT Program Management Team continues assisting with many of the critical program related tasks including funding support for the Water Infrastructure Finance and Innovation Act (WIFIA) loan, design and construction standards and program scheduling and cost estimating. The team is also assisting with many of the early project related matters which are critical for program compliance. Efforts at James River, Boat Harbor and Nansemond are underway.

D. Planning & Analysis Division

1. The Planning & Analysis Division is coordinating with the City of Chesapeake to update the service areas within the City limits. Due to continued growth within the City, regular coordination is needed to be sure that areas are clearly defined and that the City and HRSD have the same understanding of the areas to be served.
2. Staff continues coordination with the City of Norfolk to consider the possibility of assuming ownership of Pump Station No. 27. This pump station located along Granby Street, is proposed to be replaced and turned

over to HRSD when construction is complete. HRSD is working with the City to ensure the upgraded pump station meets HRSD’s standards and is constructed to our expectations. A Cost Sharing and Transfer Agreement is under review. The current plan is for HRSD to administer the construction of the new pump station and assume ownership when the work is complete. Once the agreement is finalized, the project will be presented to the Commission for review and formal approval.

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 1
 - a. 08/11/2020 – Participated in a survey of collaborative project delivery methods with the Water Design-Build Council.
2. Number of Community Partners: 1
 - a. Water Design-Build Council
3. Number of Research Partners: 1
 - a. Water Research Foundation – One Water Cities: Development of Guidance Documents and Assessment Metrics project.
4. Monthly Metrics Summary:

Item #	Strategic Planning Measure	Unit	August 2020
M-1.4a	Total Training Hours per Full Time Employee (44) - Current Month	Hours / #FTE	0.52
M-1.4b	Total Training Hours per Full Time Employee (44) - Cumulative Fiscal Year-to-Date	Hours / #FTE	1.28
M-5.2	Educational and Outreach Events	Number	1
M-5.3	Number of Community Partners	Number	1
M-5.4	Number of Research Partners	Number	1

Bruce W. Husselbee, P.E.
 Bruce W. Husselbee, P.E.

TO: General Manager
FROM: Director of Finance
SUBJECT: Monthly Report for August 2020
DATE: September 9, 2020

A. General

1. Staff presented to three Ratings Agencies in early August: Standard and Poor's, Moody's and Fitch. Two presentations were for the Water Infrastructure Finance and Innovation Act (WIFIA) loan closing and one was an annual surveillance. We do not anticipate any ratings adjustments.
2. The Hampton Roads Planning District Commission (HRPDC) reports that initial and continued unemployment claims are trending downward. Interestingly, there was a steep decline that coincided with the expiration of the extra \$600 per week from the CARES Act, which means that more people are going back to work. Although the region is trending in the right direction, the stark reality from the HRPDC is that "53,000 people in Hampton Roads are currently receiving some form of unemployment benefit, which is more than 12 times the number of people receiving benefits in March."
3. The Internal Auditor's five-year contract is up for renewal and two firms were interviewed in August. The proposed firm will be presented to the Commission for approval in September.
4. An analysis was performed to understand changing water consumption trends using data from March through June and comparing it to the same period last year. It appears that non-residential consumption (44 - 48 percent of overall consumption) is lower while residential water consumption is slightly higher. The lower consumption is likely due to COVID-19 restrictions on restaurants, more people working from home and lower hotel occupancies. When comparing to the budgeted revenues, note that the budgeted revenues assumes a linear water consumption month-over-month whereas the water consumption tables include historical seasonality. As an example, the total water consumption projection for Fiscal Year 2021 is 52,221,883 ccf, which is 4,351,824 ccf per month. Both July and August actuals were approximately 4,700,000 ccf each month which is lower than previous years but higher than the linear budget number, which is why the budgeted Wastewater Revenue is slightly higher than the budgeted revenue amount, even though water consumption is less than previous years.

5. Revenues continue to be in line with budget. Facility Charges remain strong as the housing market continues to flourish with historically low mortgage rates. Fees remain low with the water shut-off moratorium. Interest Income will continue to be weak as the Federal Reserve is committed to keeping short-term rates low for several years. In contrast, low rates benefit our \$50 million in variable rate debt where the interest rate has plunged to 0.07 percent at the end of August. Please note that in this monthly report, the budgeted Transfers from Reserves now includes approximately \$14.2 million that represents a carry-forward amount from the previous year and is offset by an equivalent increase in Total Operating Expenses. In our budgeting procedures, the carry-forward process, which is performed in August, represents contractual obligations that span fiscal years.
6. Personal services are slightly above budget, at 19 percent, and fringe benefit expenses are at budget, at 17 percent, consistent with last year. Since HRSD has 26 biweekly pay periods, Personal services costs are higher during months like July, which had three pay periods. We anticipate cumulative expense percentages will be in line with budget in months with two pay periods. Fringe benefits aren't impacted as heavily since the Virginia Retirement System (VRS) and some other benefits are only paid twice a month regardless of the number of pay periods. Most other expenses are below budget, typical for August and generally consistent with the prior year since some purchases are using funds encumbered in FY 2020. Major repairs and capital assets expenses are significantly lower than budget at this time, since many purchases in July and August are related to prior year encumbrances.
7. At the end of August, the Internal Revenue Service (IRS) issued guidance related to the Executive Order on deferring payroll taxes. HRSD has decided not to implement this option order for several reasons:
 - (a) The money will still need to be paid back - taking out almost twice as much next year could create hardships.
 - (b) This deferral does not apply to all employees due to salary thresholds.
 - (c) Receiving IRS guidance three days before the implementation date makes it impossible to implement in our Enterprise Resource Planning (ERP) software. This would take significant people and dollars to modify the software for four months to reduce the withholding for eligible employees, then revised again in four months to withhold the money, then revised again to return to normal. In

addition, there may be employees that may get merit increases during this time period which may make them ineligible and the software would have to be programmed to address these instances.

- (d) If an employee leaves, ratepayers will be responsible to pay the taxes owed because employers (ratepayers), not the employee, would be responsible for collecting the tax deferred.
8. In August, account balances greater than 90 days increased more than \$675,000 month-over-month. Currently, there is proposed legislation that will provide specific guidelines on how utilities will be able to work with customers in collecting outstanding balances. The State Corporation Commission (SCC) extended the moratorium on active collections to September 16 in anticipation of proposed legislation. Staff continues to monitor the legislation and will work diligently to establish new guidelines if it is passed. Customer Care expects balances will remain on the rise while no active collections are being performed and continues to provide flexible payment options to assist customers during these financially challenging times.

B. Interim Financial Report

1. Operating Budget for the Period Ended August 31, 2020

	Amended Budget	Current YTD	Current YTD as % of Budget (17% of Budget to Date)	Prior YTD as % of Prior Year Budget
Operating Revenues				
Wastewater	\$ 312,218,000	\$ 56,192,619	18%	18%
Surcharge	1,522,000	302,011	20%	20%
Indirect Discharge	3,200,000	521,790	16%	20%
Fees	3,020,000	320,647	11%	17%
Municipal Assistance	700,000	135,300	19%	17%
Miscellaneous	1,165,000	60,252	5%	7%
Total Operating Revenue	321,825,000	57,532,619	18%	18%
Non Operating Revenues				
Facility Charge	6,160,000	1,519,135	25%	18%
Interest Income	1,510,000	166,144	11%	41%
Build America Bond Subsidy	2,292,000	-	0%	0%
Other	610,000	71,356	12%	22%
Total Non Operating Revenue	10,572,000	1,756,635	17%	22%
Total Revenues	332,397,000	59,289,254	18%	18%
Transfers from Reserves	28,765,873	19,179,756	67%	17%
Total Revenues and Transfers	\$ 361,162,873	\$ 78,469,010	22%	18%
Operating Expenses				
Personal Services	\$ 60,952,502	\$ 11,498,359	19%	19%
Fringe Benefits	24,945,953	4,245,516	17%	17%
Materials & Supplies	9,663,402	1,000,582	10%	10%
Transportation	1,579,254	122,699	8%	11%
Utilities	13,019,361	1,337,471	10%	11%
Chemical Purchases	10,500,337	1,332,418	13%	12%
Contractual Services	51,831,008	5,419,331	10%	11%
Major Repairs	13,076,208	773,980	6%	6%
Capital Assets	867,079	141,887	16%	0%
Miscellaneous Expense	3,721,391	469,068	13%	16%
Total Operating Expenses	190,156,495	26,341,311	14%	14%
Debt Service and Transfers				
Debt Service	61,407,822	16,957,426	28%	27%
Transfer to CIP	109,338,556	30,210,962	28%	17%
Transfer to Risk management	260,000	43,334	17%	17%
Total Debt Service and Transfers	171,006,378	47,211,722	28%	20%
Total Expenses and Transfers	\$ 361,162,873	\$ 73,553,033	20%	17%

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; 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 Capital Improvement Program (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 August 31, 2020

HRSD - RESERVE AND CAPITAL ACTIVITY

August 31, 2020

	General Reserve			Capital			
	General	Debt Service	Risk Mgmt Reserve	Reserve	Paygo	Debt Proceeds	
	Unrestricted	Restricted	Unrestricted	Unrestricted	Unrestricted	Restricted	
Beginning - July 1, 2020	\$ 198,874,822	\$ 28,154,541	\$ 3,759,535	\$ 15,266,324	\$ 22,209,680	\$ -	
Current Year Sources of Funds							
Current Receipts	56,212,026						
Capital Grants					-		
VRA Draws					6,330,612		
Bond Proceeds (includes interest)							
Days Cash on Hand Transfer In					14,385,444		
Transfers In			43,334		15,825,518		
Sources of Funds	56,212,026	-	43,334	-	36,541,574	-	
Total Funds Available	\$ 255,086,848	\$ 28,154,541	\$ 3,802,869	\$ 15,266,324	\$ 58,751,254	\$ -	
Current Year Uses of Funds							
Cash Disbursements	49,328,615				35,479,913		
Days Cash on Hand Transfer Out	14,385,444						
Transfers Out	15,868,852						
Uses of Funds	79,582,911	-	-	-	35,479,913	-	
End of Period - July 31, 2020	\$ 175,503,937	\$ 28,154,541	\$ 3,802,869	\$ 15,266,324	\$ 23,271,342	\$ -	
Unrestricted Funds	\$ 217,844,472						

4. Capital Improvements Budget and Activity Summary for Active Projects for the Period Ended August 31, 2020

HRSD - PROJECT ANALYSIS

August 31, 2020

Classification/ Treatment Service Area	Appropriated Funds	Expenditures prior to 7/1/2020	Expenditures Year to Date FY2021	Total Project Expenditures	Encumbrances	Available Funds
Army Base	154,434,000	123,095,232	-	123,095,232	2,368,191	28,970,577
Atlantic	111,997,296	76,313,442	341,565	76,655,008	2,689,378	32,652,910
Boat Harbor	103,062,848	35,475,115	100,039	35,575,153	17,891,574	49,596,120
Ches-Eliz	164,257,309	67,934,500	3,569,372	71,503,872	51,952,951	40,800,487
James River	262,016,867	38,635,314	138,146	38,773,460	4,760,944	218,482,463
Middle Peninsula	59,235,026	10,952,762	(322,500)	10,630,261	5,813,523	42,791,242
Nansemond	72,099,196	23,462,815	1,403,019	24,865,834	14,222,884	33,010,478
Surry	45,747,598	10,882,699	519,924	11,402,623	27,917,525	6,427,450
VIP	287,822,592	178,704,207	278,654	178,982,861	3,705,728	105,134,003
Williamsburg	34,145,622	17,684,308	3,535,985	21,220,293	10,679,921	2,245,408
York River	54,884,843	25,905,814	137,976	26,043,790	1,484,315	27,356,738
General	639,254,418	156,607,991	1,021,145	157,629,136	37,796,117	443,829,165
	2,020,644,855	780,955,631	11,852,408	792,808,038	191,346,796	1,036,490,021

5. Debt Management Overview

HRSD - Debt Outstanding (\$000's)

August 31, 2020

	Principal Jul 2020	Principal Payments	Principal Draws	Principal Aug 2020	Interest Payments
Fixed Rate					
Senior	\$ 208,132	\$ -	\$ -	\$ 208,132	\$ -
Subordinate	551,277	(4,513)	2,755	549,519	(4,614)
Variable Rate					
Subordinate	50,000	-	-	50,000	(7)
Line of Credit					
Total	\$ 809,409	\$ (4,513)	\$ 2,755	\$ 807,651	\$ (4,621)

HRSD- Series 2016VR Bond Analysis

August 28, 2020

	SIFMA Index	HRSD	Spread to SIFMA
Maximum	4.71%	4.95%	0.24%
Average	0.54%	0.56%	0.02%
Minimum	0.01%	0.01%	0.00%
As of 08/28/20	0.09%	0.07%	-0.02%

* Since October 20, 2011 HRSD has averaged 56 basis points on Variable Rate Debt

6. Financial Performance Metrics for the Period Ended August 31, 2020

HRSD - UNRESTRICTED CASH

August 31, 2020

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

		Days Cash on	
		Hand	Days Cash on Hand
Total Unrestricted Cash	\$ 217,844,472		418
Risk Management Reserve	\$ (3,802,869)	(7)	411
Reserve	\$ (15,266,324)	(29)	382
Capital (PAYGO only)	\$ (23,271,342)	(45)	337
Adjusted Days on Cash	\$ 175,503,937		337

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

August 31, 2020

Primary Source	Beginning	YTD	YTD	YTD	Ending	Allocation of	Credit Quality	Current
	Market Value				Market Value			
	July 1, 2020				August 31, 2020			
BAML Corp Disbursement Account	7,339,242	91,843,687	84,886,396	4,364	14,300,898	8.3%	N/A	0.55%
VIP Stable NAV Liquidity Pool	178,660,390	10,000,000	30,000,000	83,709	158,744,099	91.7%	AAAm	0.27%
Total Primary Source	\$ 185,999,632	\$ 101,843,687	\$ 114,886,396	\$ 88,073	\$ 173,044,997	100.0%		

Secondary Source	Beginning	YTD	YTD	YTD	Ending	Ending Cost	LTD	Yield to
	Market Value				Market Value			
	July 1, 2020				August 31, 2020			
VIP 1-3 Year High Quality Bond Fund	64,899,667	-	2,162	170,633	64,973,528	62,905,010	2,068,518	
Total Secondary Source	\$ 64,899,667	\$ -	\$ 2,162	\$ 170,633	\$ 64,973,528	\$ 62,905,010	\$ 2,068,518	

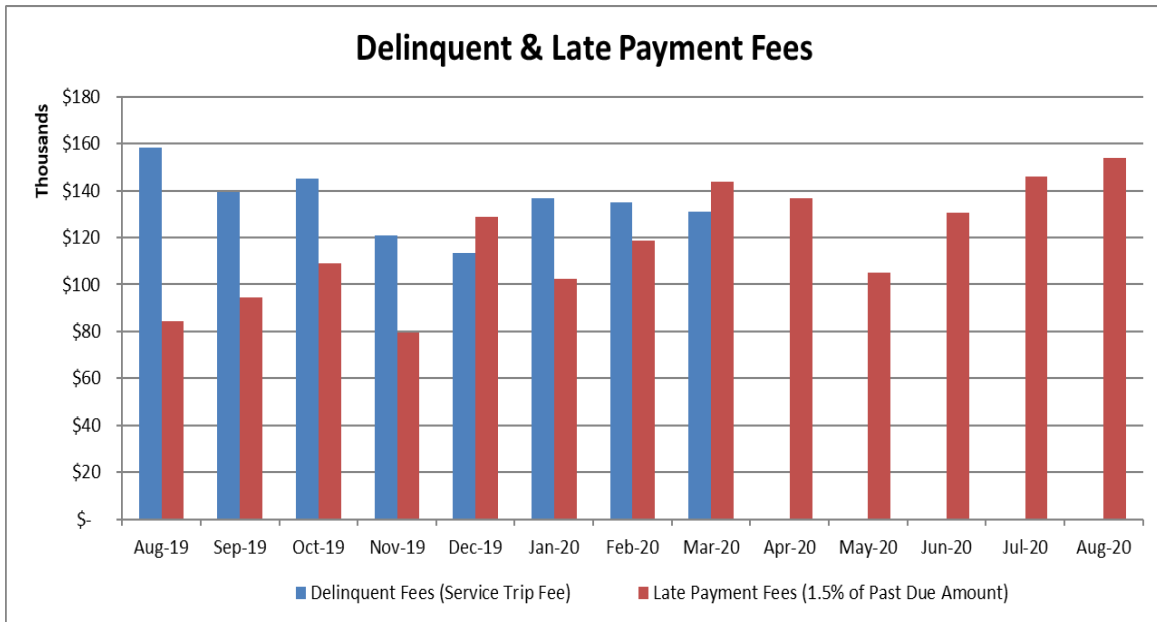
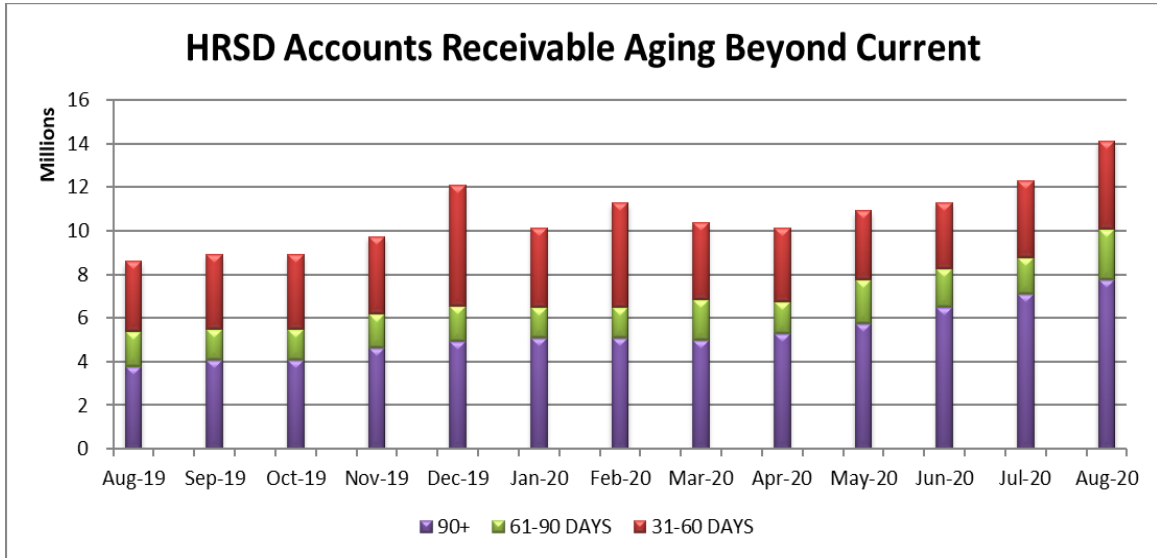
	Total	Fund Alloc
Total Primary Source	\$ 173,044,997	72.7%
Total Secondary Source	\$ 64,973,528	27.3%
TOTAL SOURCES	\$ 238,018,525	100.0%

7. Summary of Billed Consumption

Summary of Billed Consumption (,000s ccf)							
Month	FY2021 Cumulative Budget Estimate	FY2021 Cumulative Actual	% Difference		% Difference		% Difference
			From Budget	Cumulative FY2020 Actual	From FY2020	Cumulative 3 Year Average	From 3 Year Average
July	5,086	4,751	-6.6%	5,114	-7.1%	5,045	-5.8%
Aug	10,047	9,459	-5.8%	9,944	-4.9%	10,026	-5.7%
Sept	14,477	-	N/A	14,354	N/A	14,389	N/A
Oct	18,951	-	N/A	18,952	N/A	18,966	N/A
Nov	22,937	-	N/A	23,092	N/A	23,160	N/A
Dec	27,268	-	N/A	27,518	N/A	27,383	N/A
Jan	31,818	-	N/A	32,101	N/A	31,920	N/A
Feb	36,287	-	N/A	36,005	N/A	36,236	N/A
March	39,495	-	N/A	40,108	N/A	40,223	N/A
Apr	43,441	-	N/A	44,246	N/A	44,387	N/A
May	47,762	-	N/A	48,397	N/A	48,604	N/A
June	52,222	-	N/A	52,535	N/A	52,869	N/A

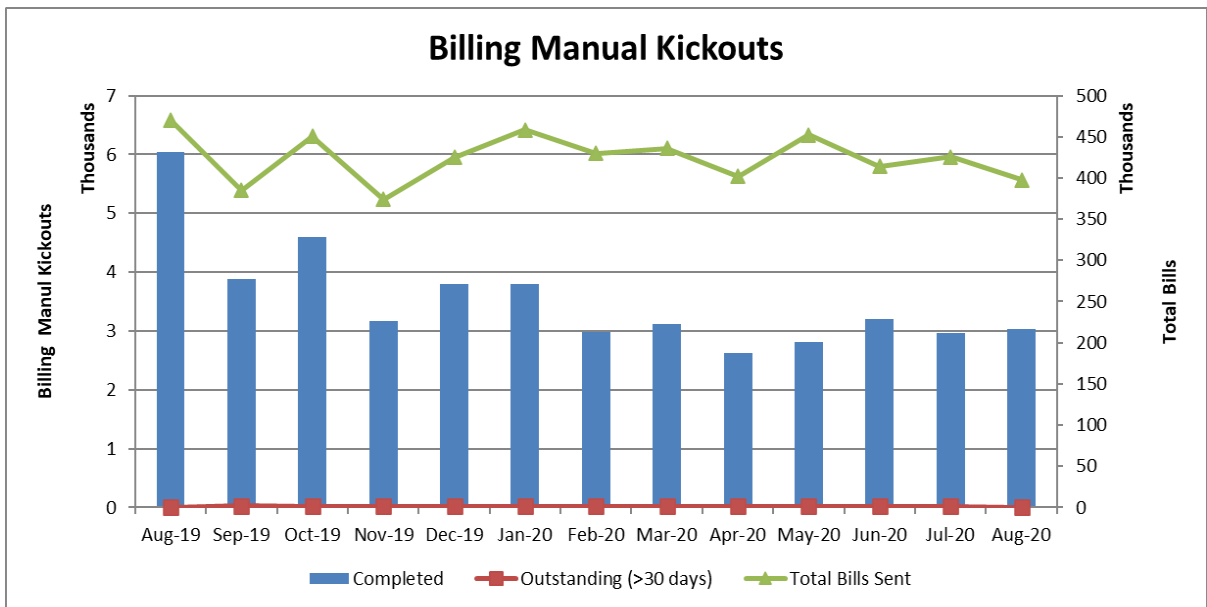
C. Customer Care Center

1. Accounts Receivable Overview

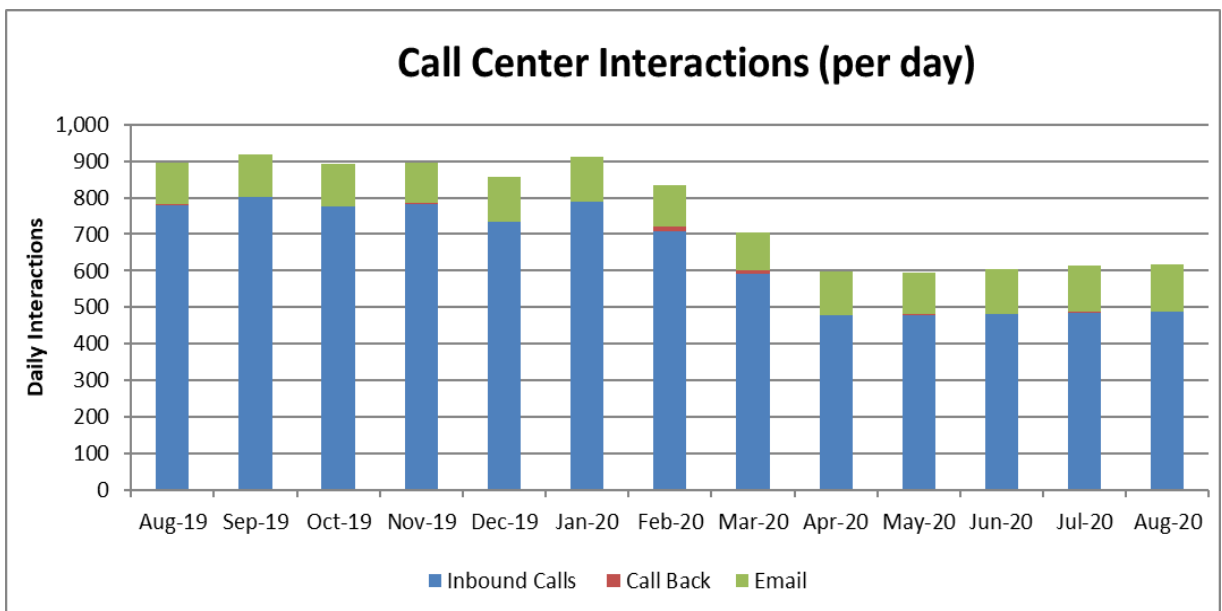


Apr-Aug 20 Field Activity was suspended late March in response to COVID-19

2. Customer Care Center Statistics



Jul-19 A formatting change caused an increase in manual kickouts. Levels normalized over the next few months.



Customer Interaction Statistics	Mar	Apr	May	Jun	Jul	Aug
Calls Answered within 3 minutes	90%	97%	95%	97%	97%	98%
Average Wait Time (seconds)	0:51	0:22	0:28	0:18	0:26	0:17
Calls Abandoned	5%	3%	4%	3%	3%	3%

D. Procurement Statistics

ProCard Fraud	External Fraud Transactions *	Comments
July	0	
August	3	One transaction was caught by the card holder and two transactions were caught by the bank immediately.
Total	3	

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

E. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 1

8/24/2020-8/28/2020 - The Institute for Public Procurement (NIGP)
Virtual Forum 2020

2. Community Partners: 0

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	August 2020
M-1.4a	Training During Work Hours Per Full Time Employee (102) – Current Month	Hours / #FTE	1.77
M-1.4b	Total Training During Work Hours Per Full Time Employee (102) – Cumulative Fiscal Year-to-Date	Hours / #FTE	2.03
M-5.2	Educational and Outreach Events	Number	1
M-5.3	Number of Community Partners	Number	0
	Wastewater Revenue	Percentage of budgeted	106%
	General Reserves	Percentage of Operating Budget less Depreciation	107%
	Liquidity	Days Cash on Hand	418 Days
	Accounts Receivable (HRSD)	Dollars	\$31,279,646
	Aging Accounts Receivable	Percentage of receivables greater than 90 days	25%

4. Annual Metrics

Item #	Strategic Planning Measure	Unit	FY-2020
M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	*
M-4.3	Labor Cost/MGD	Personal Services + Fringe Benefits/365/5-Year Average Daily Flow	*
M-4.4	Affordability	6.5 CCF Monthly Charge/Median Household Income ¹	*
M-4.5	Operating Cost/MGD	Total Operating Expense /365/5-Year Average Daily Flow	*
	Billed Flow	Percentage of Total Treated	*
	Senior Debt Coverage	Cash Reserves/Senior Annual Debt Service	*
	Total Debt Coverage		*

* These metrics will be reported upon completion of the annual financial statements.

Respectfully,

Jay A. Bernas

Jay A. Bernas, P.E.

Director of Finance

¹ Median Household Income is based on the American Community Survey (US Census) for Hampton Roads

TO: General Manager
FROM: Director of Information Technology
SUBJECT: Information Technology Department Report for August 2020
DATE: September 9, 2020

A. General

1. The HRSD.com online meetings and events functionality went live, as scheduled, in August. This provides the ability to conduct online open house and informational meetings, in a user-friendly and legally compliant fashion.
2. Staff continues working with the SharePoint governance team to perform recommended data preparations for the upgrade to SharePoint Online. Expected go-live date is planned for December 2020.
3. Several security enhancements to the internal and externally-facing components of the HRSD network were tested and implemented as part of HRSD's ongoing technology refresh and cybersecurity initiatives.
4. The Senior Systems Engineers completed a four-day online training course covering the administration and management of the latest backup and recovery hardware and software.
5. At the request of the Operations Department, staff prepared 46 SurfacePros for use by the Maintenance Operator Assistants (MOAs) at each of the treatment plants. Use of these tools will better equip the MOAs in familiarizing themselves with job-related applications they will encounter as they move up within the organization.
6. In support of the Asset Management Division, staff has completed the first set of dashboards and key performance indicator reports, utilizing Microsoft's Power BI application and business partner network. An additional set of dashboards and reports is currently in development, with both sets due to go live in October.

B. Strategic Planning Metrics Summary

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

Item #	Strategic Planning Measure	Unit	August 2020
M-1.4a	Training During Work Hours Per Full-Time Employee (50) – Current Month	Total Training Hours / # FTE	0.31
M-1.4b	Total Training During Work Hours Per Full-Time Employee (50) – Cumulative Fiscal Year-to-Date	Total Training Hours / # FTE	0.69
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	0

Respectfully,
Don Corrado

TO: General Manager
FROM: Director of Operations
SUBJECT: Operations Report for August 2020
DATE: September 7, 2020

A. Interceptor Systems

1. North Shore (NS) Interceptor Systems

- a. A significant rainfall event on August 15 caused four Sanitary Sewer Overflows (SSOs). Portions of the NS Interceptor System received over five inches of rain in a 12-hour period. Approximately 142,000 gallons of sewage were spilled.
- b. Much time and attention were provided to the response to Tropical Storm Isaias at the beginning of the month. Fortunately, the storm did not cause any spills or damage; however, there were several power outages that required generators to run for days several days.

2. South Shore (SS) Interceptor Systems

- a. On August 4, high winds associated with Tropical Storm Isaias caused a power outage at the Suffolk Pump Station. The emergency bypass pump failed resulting in an SSO at an upstream siphon chamber. Staff manually started the pump. On August 5, staff noticed a water vortex near the siphon chamber. Staff discovered multiple holes on the 16-inch cast iron siphon pipeline. Staff temporarily repaired the failure. A contractor will make more permanent repairs.
- b. On August 20, staff received an odor complaint at the Naval Support Activity (NSA) Hampton Roads in Norfolk. Staff inspected and found a Pretreatment & Pollution Prevention sampling barrel which was removed after the sampling period.

B. Major Treatment Plant Operations

1. Atlantic Treatment Plant (ATP)

- a. On August 6, more than 6-inches of rain fell within 90 minutes, followed by and a second round of rain a few hours later. The resulting rapid increase in flow (greater than 70 million gallons per day) resulted in increased turbidity levels depleting the chlorine (Cl₂) residual in the contact tank.
- b. On August 11, three hours of high exhaust levels from odor station C resulted in an odor exception. These high levels were from the transfer of material from the Thermal Hydrolysis Process (THP) digesters to the digested solids storage tank. Extra carbon was ordered to help handle the higher hydrogen sulfide (H₂S) loading.
- c. Generators operated during Tropical Storm Isaias; however, once the storm passed and utility power was available, generator #1 failed. The plant operated on two generators for about two weeks before the unit could be repaired.

2. Chesapeake-Elizabeth Treatment Plant (CETP)

Biological phosphorus removal (BioP) continues with minimal chemical addition. As a result, HRSD has saved over \$49,000 in chemical cost when compared to July and August 2019.

3. James River Treatment Plant (JRTP)

There were two reportable wastewater events and two odor scrubber deviations. One wastewater event was low final effluent chlorine residuals caused by an increase in demand for chemical disinfectant and solids in the effluent during a high flow event. The second wastewater event was the loss of approximately 1,900 gallons of centrate down a storm drain after the pipe conveying centrate became blocked with struvite. Both odor scrubber deviations required an increase in chemical feed to reduce hydrogen sulfide on the scrubber effluent.

4. Nansemond Treatment Plant (NTP)

- a. On August 25, a truck unloading grease at the Regional Residuals Facility caught fire. The fire department extinguished the fire without injury or damage to HRSD property.

b. SWIFT Research Center (SWIFT RC)

1. The total volume of SWIFT recharge into the Potomac aquifer for the month of August was 13.5 MG.
2. Recharge operations were interrupted due to loss of power during and after Hurricane Isaias.
3. Staff removed exhausted media from the granular activated carbon (GAC) vessel on August 19. A contractor inspected the vessel to look for any corrosion issues. Staff will repair some minor coating issues that were discovered at the bottom of the tank.

5. Williamsburg Treatment Plant (WBTP)

There were two reportable wastewater events. One was a use of the short outfall due to failure of an outfall flow control valve during Tropical Storm Isaias. The second occurred when there were three separate low chlorine residuals levels caused by failure of an analyzer used to control the supply of sodium hypochlorite for disinfection.

6. York River Treatment Plant (YRTP)

There was a spill of 620 gallons of centrifuge centrate after a hose ruptured. 120 gallons were recovered.

7. Incinerator Operations Events Summary

Total Hydrocarbon (THC) monthly averages (not to exceed 100 parts per million) were met by all five multiple hearth incinerator (MHI) plants. Certified THC valid data capture (percent) for the month exceeded 96 percent for all five MHI facilities.

There were four deviations from the required minimum operating parameters and 10 minor (<60 minute) non-reportable bypass events. Eight of the bypasses occurred at the Army Base Treatment Plant. The venturi settings were the primary driver for the loss of the ID fan and resulting bypasses. No further bypasses have occurred with changes to the venturi settings.

C. Small Communities (SC)

1. Middle Peninsula Small Communities Treatment and Collections – West Point System

The final effluent pumps failed at approximately 6:00 a.m. on August 26. A spare pump was installed and subsequently failed as well. Additional electrical checks determined a previously unseen electrical issue which is now being repaired. Two mobile, trailer-mounted bypass pumps were set up as an emergency bypass.

2. Small Communities – Surry Systems

There were six SSOs this month. All were related to the significant rainfall event on August 15 where in a span of only 12 hours, Surry County received over 10-inches of rainfall. Four of the overflows occurred at pumping stations where access to the stations was restricted due to flooding conditions. Estimated volumes could not be provided. The other two overflows occurred at the county and the town treatment plants. The town plant spill was approximately 1,000 gallons. The county plant was estimated at approximately 12,600 gallons.

D. Electrical & Instrumentation (E&I)

1. Staff identified Generator #1 at ATP failed during Tropical Storm Isaias. Staff discovered a damaged Permanent Magnet Generator (PMG) contributed to the failure, likely due to overheating. A contractor repaired the unit.
2. Staff added a power fail recovery program for the Moving Bed Biofilm Reactor (MBBR) pilot at JRTP. This will assist operators with process recovery after a plant power failure.
3. Staff re-wrote the Hypochlorite Tank Rotation program within the Distributive Control System (DCS) to correct an operational error that inhibited the program from skipping over an Out of Service (OOS) Hypochlorite Tank at NTP.
4. Staff is working on a Continuous Phosphate (PO₄) Analyzer on the force main at the Pughsville Pressure Reducing Station. NTP has occasionally experienced high PO₄ loading late at night. The intent of this project is to identify which collection system section is the source.
5. Staff modified the SWIFT Research Center biofilter logic within the DCS to inhibit any biofilters from being entered into the que when any other filter is being backwashed.

E. Water Technology and Research

The construction of the new biological nutrient removal (BNR) pilot facility is progressing within a dedicated space in the Virginia Initiative Plant (VIP) incinerator building. This facility will replace the existing BNR pilot facility located at the CETP. It was necessary to move and rebuild the pilot facility because CETP will be shutting down over the course of 2021 and raw wastewater will no longer be available. A plan is in place to initiate work at the new BNR pilot facility on topics including low dissolved oxygen acclimation, advanced process control, combining step feed with intermittent aeration, control of warm weather glycogen accumulating organism, and further work on mainstream partial denitrification-anammox.

G. Strategic Measurement Data

1. Education and Outreach Events: 0

a. None

2. Community Partners: 3

a. Chesapeake Bay Foundation – oyster cage maintenance at BHTP for oyster gardening program

b. United Way

c. DOE Jefferson Lab

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	August 2020
M-1.4a	Training During Work Hours per Full Time Employee (FTE) (526) – Current Month	Hours / FTE	2.02
M-1.4b	Total Training During Work Hours per FTE (526) – Cumulative Year-to-Date	Hours / FTE	4.82
M-2.3a	Planned Maintenance Total Maintenance Hours	Total Recorded Maintenance Labor Hours	28,974
M-2.3b	Planned Maintenance – Preventive and Condition Based	% of Total Maintenance Hours	61.18%
M-2.3c	Planned Maintenance - Corrective Maintenance	% of Total Maintenance Hours	15.03%
M-2.3d	Planned Maintenance - Projects	% of Total Maintenance Hours	23.78%
M- 4.1a	Energy Use: Treatment *reported for July 2020	kWh/MG	2,538

Item #	Strategic Planning Measure	Unit	August 2020
M-4.1b	Energy Use: Pump Stations *reported for July 2020	kWh/MG	167
M-4.1c	Energy Use: Office Building *reported for July 2020	kWh/MG	113
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Number of Community Partners	Number	3

Respectfully submitted,
Steve de Mik
Director of Operations

TO: General Manager
FROM: Director of Talent Management (TM)
SUBJECT: Monthly Report for July 2020
DATE: August 12, 2020

A. Talent Management Executive Summary

1. Recruitment

a. Summary

New Recruitment Campaigns	19
Job Offers Accepted – Internal Selections	1
Job Offers Accepted – External Selections	1
Average Days to Fill Position	249

b. Staff continued working with the Organization Development consultant, conducted a pilot session, and scheduled and finalized *Interview Training for Hiring Managers* to be delivered virtually.

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

a. Continued addressing suspect employee COVID-19 cases and potential close contact exposures based on Virginia Department of Health (VDH) guidelines. In August, 16 employees were quarantined due to direct exposures (external), household exposures or due to COVID-19 symptoms; five employees had confirmed positive tests and seven employees quarantined following personal travel. Two contractors reported positive tests of employees working on HRSD sites. There was no direct exposure to HRSD employees and there have been no work-related cases.

b. Human Resources (HR) and Safety staff worked with the Chief of Asset Management to finalize *HRSD's Infectious Disease Preparedness and Response Plan* based on Virginia Occupation Safety and Health Administration's (VOSHA's) Emergency Standard: *Infectious Disease Prevention: SARS-CoV-2 Virus That Causes COVID-19*. The Operations Project Manager assisted with development of a virtual training program based on the plan.

- d. HR and Electrical and Energy Management staff identified additional Computer Coordinated Universal Retrieval Entry (CCURE) system badge reader locations to be used for employee acknowledgement of COVID-19 Daily Health assessments.
- e. The HR Business Analyst created Enterprise Resource Planning (ERP) Acknowledgements for Employee Daily Health Assessments and completion of training.
- f. Safety conducted COVID-19 Risk Assessments for nine work centers to identify risk levels for positions and tasks to evaluate risk control measures and to establish maximum occupancy limits of common areas to meet physical distancing requirements.
- g. Safety worked with Pretreatment and Pollution Prevention (P3) on on-site COVID-19 safety requirements for septic haulers based on the Virginia Occupational Safety & Health Administration (VOSHA) standard, and with Procurement and Engineering to update Contractor and Vendor requirements.
- h. The Safety Manager participated in weekly online COVID-19 briefings provided by Virginia Department of Health Region 5.

3. HR Policies

- a. A HR Business Partner continued developing training based on changes to Equal Employment Opportunity policy changes.
 - b. The Remote Work and Hours of Work policies were finalized. HR and Accounting staff worked to evaluate and develop an ERP process for Remote Work policy allowances.
 - c. Staff began updating several HR policies including Hours of Work, Family Medical Leave, Operations During Severe Weather, Paid Time Off, Professional Development, and Safety Apparel based on current practices or to provide clarifications.
4. Staff worked with the benefit consultant on Retiree Supplemental Medical plan renewal.
5. Accounting and HR staff, HRSD's insurance broker and the Workers Compensation carrier met to review workers' compensation claims.

6. Wellness Program

a. Participation

Participation Activities	Unit	August 2020	Year to Date (March 2020–February 2021)
Biometric Screenings	Number	0	69
Preventive Health Exams	Number	0	100
Preventive Health Assessments	Number	6	86
Online Health Improvement Programs	Number	17	64
Online Health Tracking	Number	209	746
Challenges	Number	66	256
Fit-Bit Promotion	Number	7	47

- b. The Wellness Specialist began coordinating work center flu and tetanus clinic appointments.
- c. The Wellness Specialist worked with the HRSD Sustainability and Environmental Advocacy (SEA) team to create a bingo card for the SEA Bingo Clean-up Challenge that will count as a wellness credit.

- 7. HR and Organizational Development & Training (OD&T) staff participated in the Succession Planning Audit and met with internal auditors to develop survey questions for HRSD leadership.
- 8. Work continued on HRSD’s Leadership and Management Academy (LAMA) program. The facilitators created training objectives and training manual profiles for all courses.
- 9. OD&T staff worked with the Administrative planning team to conduct a Virtual Planning Day. The event and format received positive feedback.
- 10. An Apprenticeship Handbook and Instructor Manual was developed and posted on SharePoint.
- 11. Progress was made in developing and migrating Apprenticeship Program courses to the Canvas Learning Management environment. Currently, 70% of courses have an online component.

12. An announcement for Fall Safety Innovation Award submissions was distributed to work centers as part of the Safety Recognition Program.
13. Mishaps and Work-Related Injuries Status to Date (OSHA Recordable)

	<u>2019</u>	<u>2020</u>
Mishaps	37	21
Lost Time Mishaps	6	1
<i>Numbers subject to change pending HR review of each case.</i>		

14. Safety Division Monthly Activities

Safety Training Classes	6
Work Center Safety Inspections	7
Reported Accident Investigations	3
Construction Site Safety Evaluations	36
Contractor Safety Briefings	6
Hot Work Permits Issued	16
Confined Space Permits Issued/Reviewed	245
Industrial Hygiene Monitoring Events	2

B. Monthly Strategic Planning Metrics Summary

1. Education and Outreach Events: (0)
2. Community Partners: (0)

3. Monthly Metrics

Item #	Strategic Planning Measure	Unit	August 2020
M-1.1a	Employee Turnover Rate (Total)	Percentage	3.36%*
M-1.1b	Employee Turnover - Service Retirements	Percentage	1.12%
M-1.4a	Total Training Hours Per Full Time Employee (17) – August	Total Training Hours/ FTE	2.79
M-1.4b	Total Training During Work Hours Per Full Time Employee (17) – Cumulative Fiscal Year-to-Date	Hours / FTE	4.26
M-5.2	Educational and Outreach Events	Number	0
M-5.3	Community Partners	Number	0

*Includes PT Seasonal Interns

Respectfully submitted,
Paula A. Hogg
Director of Talent Management

TO: General Manager
FROM: Director of Water Quality (WQ)
SUBJECT: Monthly Report for August 2020
DATE: September 10, 2020

A. General

1. Pretreatment and Pollution Prevention (P3) division staff assessed one civil penalty this month.

Chesapeake Bay Bridge Tunnel - Thimble Shoal Tunnel Project, Virginia Beach

An Enforcement Order was issued to Chesapeake Bay Bridge Tunnel - Parallel Thimble Shoal Tunnel Project in July 2020 for a technical violation associated with the Portal Island 1 sample point. The Order contained an invoice for a \$3,000 Civil Penalty. The permittee exceeded the monthly average permit limit for chromium for May 2020. A Show Cause meeting was previously held on March 19, 2020 in which ion exchange resin technologies were discussed as a measure to prevent recurrence of chromium permit limit exceedances.

The ion exchange resins that were purchased to target chromium more effectively were delayed in receipt and installation due to COVID-19 but have finally been installed and are operational. The Enforcement Order was accepted, and the Civil Penalty was paid in full on August 5, 2020.

B. Quality Improvement and Strategic Activities

1. The Sustainability Environment Advocacy (SEA) Group reported the following activities for the month of August:
 - a. Sustainable Spotlight: Sent to all employees highlighting glove recycling efforts at HRSD, recycling guidance for teleworkers, and information on HRSD-sponsored oyster gardening.
 - b. Community Clean Ups: Developed and implemented a Bingo Challenge. The community cleanup event is sponsored by Wellness and the HRSD Quality Steering Team. It allows employees to earn wellness credits and administrative leave for completing cleanup-themed tasks specified on a bingo style card.

2. The WQ Communication Team continues monitoring and measuring inter-divisional communication issues within the WQ Department.

C. Municipal Assistance

HRSD provided sampling and analytical services to Rivanna Water and Sewer Authority, Hanover County, Northumberland County, and Westmoreland County to support monitoring required for their respective Virginia Pollution Discharge Elimination System (VPDES) permits, and to the City of Chesapeake and the City of Roanoke to support water quality monitoring in their service areas.

D. Strategic Planning Metrics Summary

1. Educational and Outreach Events: 0
2. Community Partners: 5
 - a. City of Newport News
 - b. Hampton Roads Planning District Commission
 - c. Hampton Roads Wastewater Surveillance Work Group
 - d. Old Dominion University
 - e. Virginia Department of Health
3. Odor Complaints: 3
 - a. August 14 - An odor complaint was received by the Operations Department. The Technical Services Division (TSD) investigated on August 15. The general complaint was of odors and smells around pump stations and waterways in Norfolk and Hampton. Further discussion led to an investigation of a specific location on Kecoughtan Road in Hampton. Although HRSD has no wastewater assets in this area, TSD investigated and found three sources of odor that could have been the sources of the original complaint. These included a vast expanse of exposed mud flats nearby, the city wastewater pump station, and a construction site next to a creek. At the time of observation, the most prevalent odor source was the mud flats at low tide. The customer logging the initial complaint was satisfied with HRSD's response and findings.
 - b. August 20 - South Shore Operations received a complaint regarding odors at NSA Hampton Terminals. TSD and P3 followed up and no odors were observed at the time of this investigation. The suspected source of odors was the manhole where a P3 sampling barrel was set up for the annual wastewater survey sampling that was being performed that day at that location. No further complaints near this site have been received.

- c. August 28 - A neighbor of HRSD's Claremont pump station in Hampton contacted Customer Care with an odor complaint. North Shore Operations and TSD worked together to identify the sources of hydrogen sulfide and odors at the station. The station's fan, gooseneck, and wet well hatch were closed off and properly sealed to mitigate odorous emissions. The customer who lives across the street from the station was pleased with HRSD's immediate response and the corrective actions taken.

4. Monthly Metrics

Item #	Strategic Planning Measure	Unit	August 2020
M-1.4a	Training During Work Hours Per Full Time Employee (118) (Current Month)	Total Hours / # FTE	4.72
M-1.4b	Total Training During Work Hours Per Full Time Employee (118) (Cumulative Fiscal Year-to-Date)	Total Hours / # FTE	8.67
M-2.5	North Shore/South Shore Capacity Related Overflows	# within Level of Service	4
M-3.1	Permit Compliance	# of Exceedances: # of Permitted Parameters	3:10,147
M-3.2	Odor Complaints	#	3
M-3.4	Pollutant Removal	Total Pounds Removed	31,577,760
M-3.5	Pollutant Discharge	% Pounds Discharged/ Pounds Permitted	15%
M-5.2	Educational and Outreach Events	#	0
M-5.3	Community Partners	#	5
	Average Daily Flow	Total MGD for all Treatment Plants	153.88
	Pretreatment Related System Issues	#	0

5. Annual Metrics

Item #	Strategic Planning Measure	Unit	FY-2020
M-3.3	Carbon Footprint	Tons per MG	*
M-4.2	R & D Budget	Percentage of Total Revenue	1.3%
M-5.4	Value of Research	Number	143%
M-5.5	Number of Research Partners	Number	32
	Rolling 5 Year Average Daily Flow	MGD	149.84
	Rainfall reported at Norfolk International Airport	Inches	48.49"

*These metrics will be reported upon closeout of fiscal year financials.

Respectfully submitted,

James Plett, PhD

Director of Water Quality



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 (MAP) monitoring.

I. Projects in Process

SWIFT Program Management Plan

- **Tasks Completed (August 2020)**
 - Met with SWIFT leadership to discuss summary of work performed, risks, and preliminary considerations
 - Began drafting the audit report

- **Upcoming Tasks (September 2020)**
 - Finalize draft audit report
 - Communicate draft report to Management for review

Fleet Services

- **Tasks Completed (August 2020)**
 - Received initial fieldwork documentation and began testing/fieldwork procedures
 - Began drafting the audit report

- **Upcoming Tasks (September 2020)**
 - Complete fieldwork procedures
 - Discuss and validate preliminary observations
 - Continue drafting audit report

Succession Planning

- **Tasks Completed (August 2020)**
 - Finalized approach (through coordination with Talent Management) to conduct department level interviews related to succession planning efforts

- **Upcoming Tasks (September 2020)**
 - Schedule and conduct department level interviews
 - Review department level documentation if available
 - Complete fieldwork procedures
 - Draft Report

Business Continuity and Disaster Recovery (Audit Fieldwork Complete/ Management Response in Process)

- HRSD management has communicated its continued progress to develop a plan to address the recommendations included in the BC/DR report. SC&H will continue to work with HRSD process owners and management to finalize the audit report, incorporating management action plans. A specific completion date has not been identified at this time.



II. Upcoming Projects (FY2020)

All planned upcoming projects have been initiated and are now in progress.

III. Management Action Plan (MAP) Monitoring

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

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

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

Audit	Report Date	Next Follow-up	Recommendations		
			Closed	Open	Total
D&C: CIP Project Management	5/11/16	September 2020	11	2	13
Biosolids Recycling	10/8/16	Pending Permit	7	1	8
HR Benefits	11/22/16	Closed	15	0	15
Inventory	4/20/17	Closed	5	0	5
Procurement/ ProCard	8/23/17	August 2020**	8	3	11
Engineering Procurement	4/20/18	In process	4	4	8
Corporate Governance: Ethics Function	3/21/18	August 2020**	3	2	5
Treatment Plant Operations	10/15/18	July 2021	5	4	9
Customer Care Division*	7/26/19	August 2020**	0	4	4
Safety Division*	9/12/19	September 2020	0	3	3
Permitting*	2/4/20	August 2020**	0	2	2
Payroll*	3/27/20	November 2020	0	3	3
Pollution Source Control*	6/2/20	February 2021	0	8	8
Totals			58	36	94

*SC&H has not yet performed formal follow-up procedures for the implementation status of these MAPs. Actual status may vary within the associated process areas and will be updated upon follow-up.

**SC&H is preparing follow-up procedure documentation to be sent.

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
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%
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%
M-1.2	Internal Employee Promotion Eligible	Percentage	100%		59%	80%	70%	71%	64%	69%	68%	85%	85%	63%
M-1.3	Average Time to Fill a Position	Calendar Days	< 30		70	60	52	43.76	51	56	67	67	66	60
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
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
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
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
M-2.1	CIP Delivery - Budget	Percentage			113%	96%	124%	149%	160%	151%	156%	160%	170%	170%
M-2.2	CIP Delivery - Schedule	Percentage			169%	169%	161%	150%	190%	172%	173%	167%	159%	159%
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
M-2.3b	Planned Maintenance	Percentage of Total Mtc Hours Monthly Avg			20%	27%	70%	73%	48%	41%	43%	44%	59%	59%
M-2.3c	Corrective Maintenance	Percentage of Total Mtc Hours Monthly Avg			63%	51%	12%	10%	18%	25%	25%	24%	18%	19%
M-2.3d	Projects	Percentage of Total Mtc Hours Monthly Avg			18%	22%	20%	18%	32%	34%	32%	32%	27%	25%
M-2.4	Infrastructure Investment	Percentage of Total Cost of Infrastructure	2%		8.18%	6%	6%	4%	7%	7%	5%	5%	4	*
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	*
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	*
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	2408
M-4.1b	Energy Use: Pump Stations	kWh/MG Monthly Avg			197	173	152	159	168	163	173	170	181	174
M-4.1c	Energy Use: Office Buildings	kWh/MG Monthly Avg			84	77	102	96	104	97	104	104	95	102
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%
M-4.3	Total Labor Cost/MGD	Personal Services + Fringe Benefits/365/5-Year Average Daily Flow		\$1,028	\$1,095	\$1,174	\$1,232	\$1,249	\$1,279	\$1,246	\$1,285	\$1,423	\$1,348	*
M-4.4	Affordability	8 CCF Monthly Charge/ Median Household Income	< 0.5%		0.48%	0.48%	0.41%	0.43%	0.53%	0.55%	0.59%	0.60%	0.64%	*
M-4.5	Total Operating Cost/MGD	Total Operating Expense/ 365/5-Year Average Daily Flow		\$2,741	\$2,970	\$3,262	\$3,316	\$3,305	\$3,526	\$3,434	\$3,592	\$3,959	\$3,823	*
M-5.1	Name Recognition	Percentage (Survey Result)	100%	67%	71%	N/A	62%	N/A	60%	N/A	N/A	53%	N/A	*
M-5.4	Value of Research	Percentage - Total Value/HRSD Investment			129%	235%	177%	149%	181%	178%	143%	114%	117%	143%
M-5.5	Number of Research Partners	Annual Total Number			42	36	31	33	28	35	15	20	26	32
	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
	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
	Billed Flow	Annual Percentage of Total Treated		71.9%	82.6%	78%	71%	73%	74%	72%	73%	76%	72%	*
	Senior Debt Coverage	Net Revenue/Senior Annual Debt Service	> 1.5	2.51%	2.30%	2.07%	1.88%	1.72%	1.90%	2.56%	3.10%	3.59%	4.84%	*
	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%	*

*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 Jul-20	FY-21 Aug-20
	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	129.2	153.9
	Industrial Waste Related System Issues	Number	0		3	6	6	6	2	4	7	4	7	1	0	0
	Wastewater Revenue	Percentage of budgeted	100%		97%	96%	98%	107%	102%	104%	103%	103%	104%	104%	113%	106%
	General Reserves	Percentage of Operating and Improvement Budget	75% - 100%		72%	82%	84%	92%	94%	95%	104%	112%	117%	119%	116%	107%
	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	\$27,018,175	\$31,279,646
	Aging Accounts Receivable	Percentage of receivables greater than 90 days			21%	20%	18%	19%	21%	20%	18%	18%	17%	18%	24%	25%
M-2.5	Capacity Related Overflows	Number within Level of Service	0		25	1	30	5	11	16	6	10	5	2	0	4
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	0:5073	3:10147
M-3.2	Odor Complaints	Number	0		6	2	7	11	5	9	7	6	9	15	2	3
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	15,493,122	31,577,760
M-3.5	Pollutant Discharge (% of permitted)	Pounds Discharged/Pounds Removed	< 40%		25%	22%	25%	22%	22%	20%	22%	17%	17%	17%	14%	15%
M-5.2	Educational and Outreach Events	Number			302	184	238	322	334	443	502	432	367	256	7	4
M-5.3	Number of Community Partners	Number			280	289	286	297	321	354	345	381	293	230	13	11

EFFLUENT SUMMARY FOR AUGUST 2020

PLANT	FLOW mgd	% of Design	BOD mg/l	TSS mg/l	FC #/UBI	ENTERO #/UBI	TP mg/l	TP CY Avg	TN mg/l	TN CY Avg	TKN mg/l	NH3 mg/l	CONTACT TANK EX
ARMY BASE	11.49	64%	1	1.8	1	1	0.35	0.77	3.6	3.6	NA	NA	4
ATLANTIC	27.96	52%	9	9.1	7	1	NA	NA	NA	NA	NA	NA	8
BOAT HARBOR	15.06	60%	7	4.7	3	1	0.48	0.45	13	18	NA	NA	9
CENT. MIDDLESEX	0.013	53%	<2	1.3	1	<1	NA	NA	NA	NA	NA	NA	NA
CHES-ELIZ	18.44	77%	13	10	12	3	1.0	1.2	30	32	NA	NA	12
JAMES RIVER	14.09	70%	5	3.6	1	<1	0.32	0.37	7.2	8.7	NA	NA	8
KING WILLIAM	0.069	69%	<2	<1.0	NA	<1	<0.05	0.035	0.53	1.3	0.58	NA	NA
NANSEMOND	17.20	57%	4	5.3	3	1	0.71	0.77	3.5	3.7	NA	NA	4
SURRY, COUNTY	0.079	122%	8	<1.0	NA	1	NA	NA	NA	NA	NA	0.37	0
SURRY, TOWN	0.075	125%	4	11	NA	91	NA	NA	NA	NA	1.2	0.20	NA
URBANNA	0.067	67%	3	9.8	3	2	6.0	4.9	14	18	NA	0.08	NA
VIP	25.83	65%	0	1.5	1	5	0.92	0.58	4.3	3.2	NA	NA	1
WEST POINT	0.506	84%	15	16	4	8	2.3	2.6	14	16	NA	NA	0
WILLIAMSBURG	10.06	45%	2	3.1	11	9	0.94	0.63	2.9	2.7	NA	NA	11
YORK RIVER	12.93	86%	1	1.4	2	26	0.22	0.28	5.2	4.7	NA	NA	4
	153.88												

Tributary Summary

	%
	of
	Capacity
North Shore	63%
South Shore	61%
Small Communities	81%

Tributaries	Annual Total Nitrogen			Annual Total Phosphorus		
	Discharged	Operational		Discharged	Operational	
	YTD	Projection CY20		YTD	Projection CY20	
	%	Lbs	%	%	Lbs	%
James River	53%	3,758,285	83%	50%	265,254	83%
York River	50%	230,779	80%	50%	15,259	79%
Rappahannock	155%	NA	NA	605%	NA	NA

Rainfall (inch)

<u>North</u>	<u>South</u>	<u>Small</u>
<u>Shore</u>	<u>Shore</u>	<u>Communities</u>
<u>(PHF)</u>	<u>(ORF)</u>	<u>(FYJ)</u>

Permit Exceedances: Total Possible Exceedances, FY20 to Date: 3:10,147
Pounds of Pollutants Removed in FY20 to Date: 31,577,760
Pollutant Lbs Discharged/Permitted Discharge FY20 to Date: 15%

Month	16.05"	7.99"	8.49"
Normal for Month	6.32"	6.20"	5.10"
Year to Date Total	47.68"	34.09"	37.01"
Normal for YTD	35.15"	33.92"	33.75"

AIR EMISSIONS SUMMARY FOR AUGUST 2020

	No. of Permit Deviations below 129 SSI Rule Minimum Operating Parameters								Part 503e Limits		
	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
MHI PLANT											
ARMY BASE	0	0	0	0	0	0	0	8	30	96	0
BOAT HARBOR	0	1	0	n/a	1	0	0	0	20	96	0
CHES-ELIZ	0	0	0	0	0	0	0	1	22	99	0
VIP	0	0	0	n/a	0	0	2	1	20	97	0
WILLIAMSBURG	0	0	0	n/a	0	0	0	0	24	98	0

ALL OPERATIONS

DEQ Reportable Air Incidents:	0
DEQ Request for Corrective Action:	0
DEQ Warning Letter:	0
DEQ Notice of Violation:	0
Other Air Permit Deviations:	0
Odor Complaints Received:	3
HRSD Odor Scrubber H2S Exceptions:	5

AGENDA ITEM 15.e. – September 22, 2020

Subject: Cedar Lane Interceptor Force Main Repair
Emergency Declaration

CIP Project: N/A

Recommended Action: No action is required. Information Only

Brief: On April 20, 2020, the City of Portsmouth reported a sink hole on Cedar Lane near the Cedar Lane Pump Station. The 12-inch cast iron force main failed near the discharge manhole due to internal corrosion. The failure leaked approximately 4,000 gallons into a storm drain leading to Lilly Creek.

Staff isolated the leak by operating mainline valves and pumping and hauling at City of Portsmouth pump stations. The contractor, Tidewater Utilities Construction, Inc. (TUCI), was called due to depth of the pipeline, the amount of linear footage that needed to be replaced, and the complexity of construction with two large water transmission mains crossing the force main. TUCI installed a temporary bypass line to relieve the pump and haul and installed approximately 100 feet of new force main.

An emergency declaration was authorized on August 21, 2020. Complications with construction increased the repair costs which delayed the emergency declaration.

Staff used the Prompt Repair On-Call Services contract with TUCI to establish traffic control, construction services, and roadway repairs. Staff also utilized the On-Call Engineering contract with Hazen and Sawyer to provide construction administration and inspections. Finally, staff used the On-Call Pump and Haul contract with Atlantic Heating and Cooling for pump and haul services.

The cost of the work is \$300,000 and will be funded from the Operating budget.

AGENDA ITEM 16. – September 22, 2020

Subject: Closed Meeting

Recommended Action: In accordance with Section 2.2-3712A of the Code of Virginia, a motion is needed that we go into a closed meeting to consider the following items as provided for in Section 2.2-3711A:

Item	:	Award of a public contract
Purpose	:	Discussion of award of a public contract involving expenditure of public funds
Specific Exemptions	:	(Va. Code §2.2-3711.A29)

Brief: Discussion of the award of a public contract involving the expenditure of public funds, including interviews of bidders or offerors, and discussion of the terms or scope of such contract, where discussion in an open session would adversely affect the bargaining position or negotiating strategy of the public body.

AGENDA ITEM 17. – September 22, 2020

Subject: Reconvened Meeting

Recommended Action: Pursuant to Section 2.2-3712.D of the Code of Virginia, we will now have a roll call vote 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.

THE CHAIRMAN SHOULD CALL ON EACH MEMBER FOR THEIR VOTE.

1. Mike Glenn
2. Willie Levenston
3. Vishnu Lakdawala
4. Stephen Rodriguez
5. Elizabeth Taraski
6. Molly Ward
7. Mo Lynch
8. Rick Elofson