



**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY
Board of Directors**

Meeting of the
Environmental Quality and Operations Committee

**Thursday, December 15, 2022
9:30 a.m.**

Microsoft Teams

Join on your computer or mobile app

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Or call in (audio only)

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Phone Conference ID: 142 812 080#

- | | | | |
|-------------------|-------------|--|--|
| 9:30 a.m. | I. | Call to Order | Sarah Motsch
Chair |
| | II. | Roll Call | Alfonzo Stukes
Acting Board Secretary |
| 9:35 a.m. | III. | BPAWTP Performance & PFAS Sampling Update | Aklile Tesfaye |
| 9:45 a.m. | IV. | PFAS Status Update | Salil Kharkar |
| 10:00 a.m. | V. | Action Items | Joel Grosser/David Parker |

Joint Use

1. Contract No.: 20-PR-WWT-45A – High Pressure/High Vacuum Cleaning Services, Jet Blast, Inc.
2. Contract No.: 14-PR-DMS-01 - Maintenance of KSM Pumps, KSB, Inc.
3. Contract No.: 10121 - Repair and Rehabilitation of Various Process Assets, Electric Motor & Contracting Co. (EMC)
4. Contract No. 190070 - DC Water Fleet Maintenance Facility, Hess Construction

Non-Joint Use

1. None.

- | | | | |
|-------------------|-------------|------------------------------------|-----------------|
| 10:15 a.m. | VI. | Lead-Free DC Program Update | William Elledge |
| 10:30 a.m. | VII. | DCCR Update | Moussa Wone |

10:50 a.m. VIII. Other Business / Emerging Issues

10:55 a.m. IX. Executive Session*

11:00 a.m. X. Adjournment

Sarah Motsch

Follow-up Items from Prior Meetings:

1. Kishia Powell (Chief Operating Officer and EVP): To give presentation at the November Committee meeting, to address questions previously raised by the Board related to PFAS and to provide an update on regulatory progress. **[On Current Agenda]**
2. Dave Parker (Acting, VP of Engineering) Matt Ries (Director, Sustainability and Watershed Management): In response to questions about infrastructure for electrification of fleet, the Committee requested a briefing at a future meeting about plans across the Authority to comply with District government initiatives to achieve carbon neutrality. **[Target: February 15, 2023, EQ&Ops Meeting]**
3. Joel Grosser (Director of Procurement, Goods & Services): DC Water to share information of how user share costs were allocated amongst the various users for the FY23 & FY24 Fleet Vehicles and Equipment Fact Sheet. **[Forwarded to Acting BOD Secretary on 12/06/2022]**

¹The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss certain matters, including but not limited to: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); terms for negotiating a contract, including an employment contract, under D.C. Official Code § 2-575(b)(2); obtain legal advice and preserve attorney-client privilege or settlement terms under D.C. Official Code § 2-575(b)(4)(A); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security matters under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); third-party proprietary matters under D.C. Official Code § 2-575(b)(11); train and develop Board members and staff under D.C. Official Codes § 2-575(b)(12); adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters or violations of laws or regulations where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14); and other matters provided under the Act.



BPAWTP UPDATE



Blue Plains Complete Treatment Performance
Environmental Quality & Operations Committee
December 15, 2022

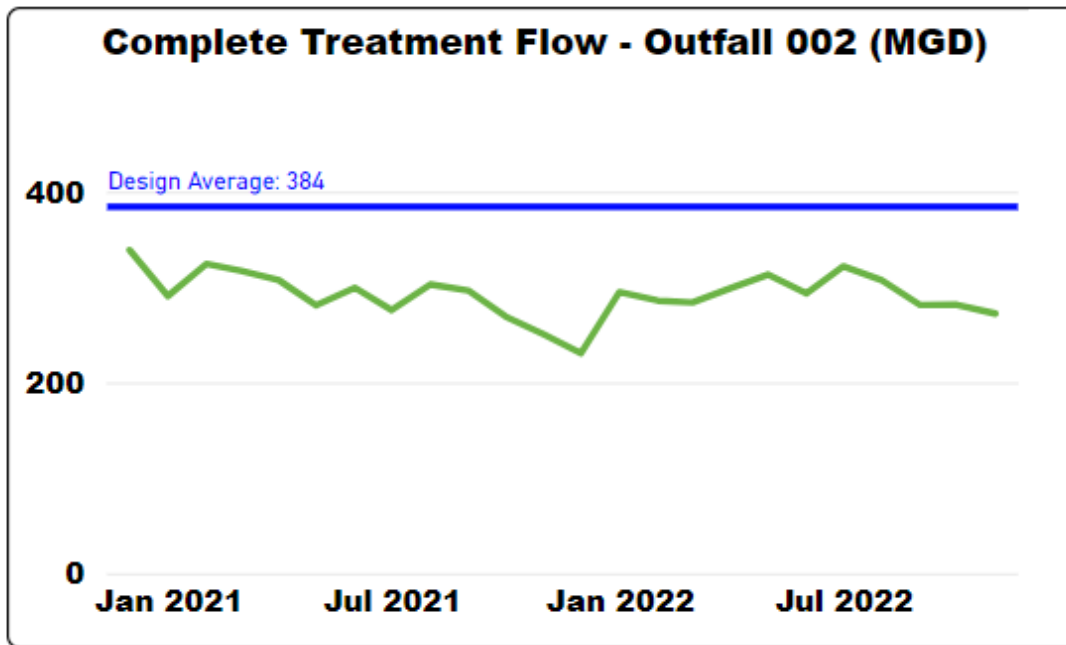


Aklile Tesfaye, Vice President, Wastewater Treatment Operations



Operational Performance Complete Treatment

Monthly Average Flow Trend to Complete Treatment (MGD)
November 2022



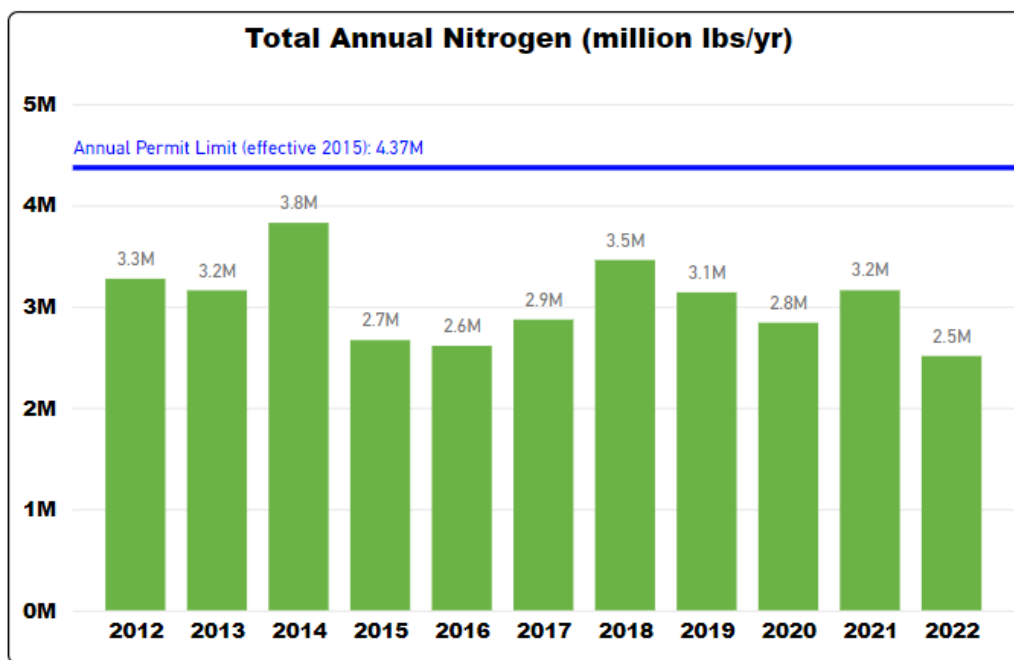
Summary

- Performance was excellent
- All effluent and biosolids qualities were within NPDES and Class A Biosolid Exceptional Quality requirements
- Average Outfall 002 flow was 272 MGD



Operational Performance Total Nitrogen Removal

Total Annual Nitrogen Discharge through Complete Treatment



Summary

- Through November 2022, the total nitrogen was 2.51 million pounds
- NPDES permit stipulates 4.37 million pounds of nitrogen per year
- Excellent removal performance and chemical optimization achieved through use of advanced controls



Operational Performance Wet Weather Treatment Facility

Wet Weather Treatment Facility Performance November 2022

	November 2022*	Calendar Year 2022 (Through November)
Total Precipitation, inches	2.3	38.5
Total Volume Captured in the Anacostia Tunnel, MG	103	2,056
Measured Overflow, MG	0	72
Percent Captured	100%	97%
Screenings and Grit Capture, tons	28	1,240

Summary

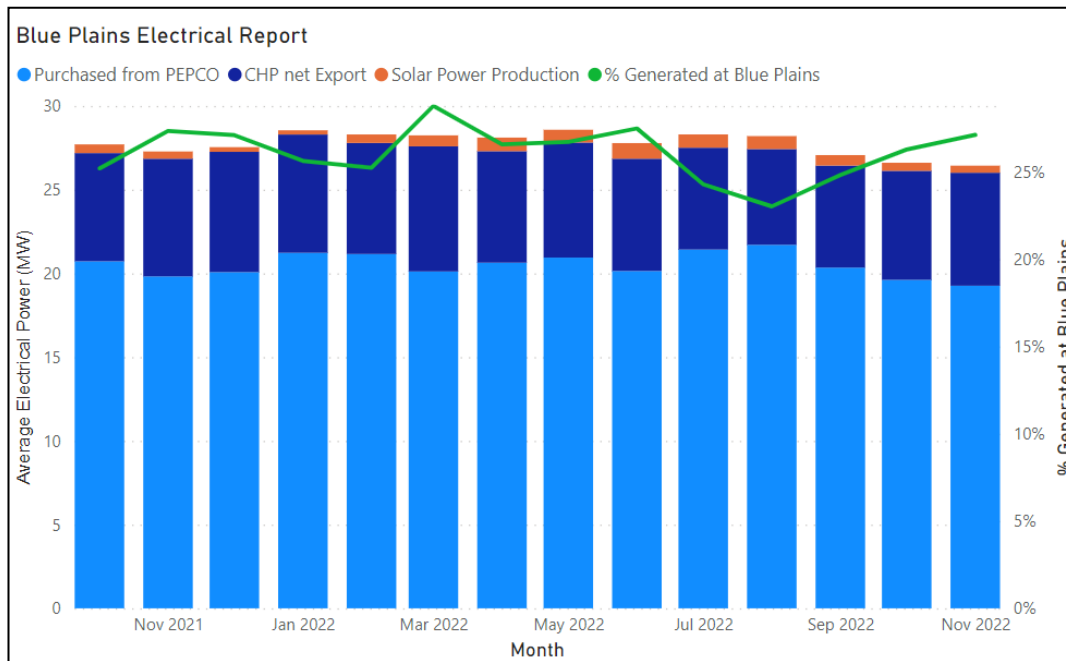
- Total of 103 MG of combined wet weather flow was captured in the tunnel and treated through the plant
- Preliminary data showed no overflows from CSOs associated with the existing Anacostia Tunnel System

*Based on preliminary data



Operational Performance Electrical Energy Use and Generation

Blue Plains Electrical Energy Use and Generation November 2022

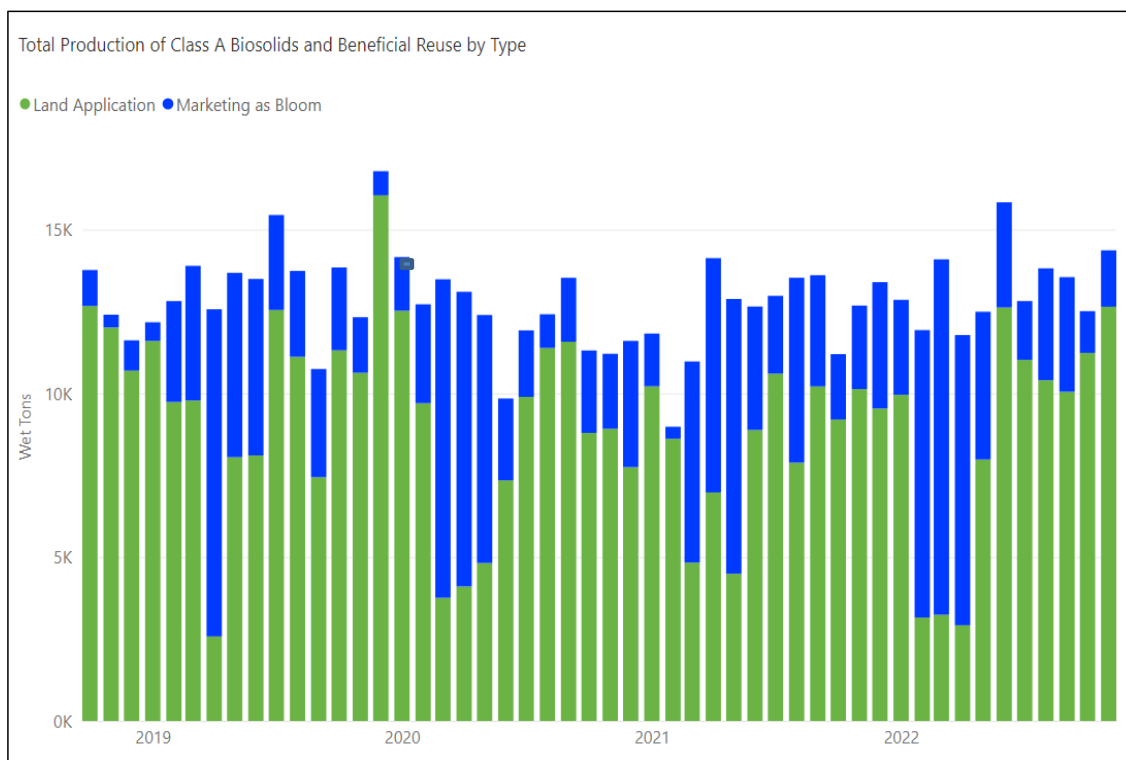


Summary

- 27% of electricity was generated onsite
- Combined Heat and Power (CHP) produced an average of 8.0 megawatts (MW), with 6.7 MW net to Blue Plains grid
- Solar System produced an average of 0.4 MW of power
- Total electricity consumption at Blue Plains averaged 26.4 MW
- DC Water purchased an average of 19.3 MW of electricity from PEPCO

Biosolids Reuse and Bloom Sales Update

Blue Plains Biosolids Production and Bloom Sales



Summary

- In November, Blue Plains produced 14,367 wet tons of digested biosolids, an average of 479 wet tons per day
- 1,723 tons of this were marketed as Bloom
- The remaining 12,644 tons were land applied through contracts



PFAS Source Identification Preliminary Sampling

- PFAS sampling initiated in September 2022 that included upstream PFAS sources from 7 permitted industrial users, 3 landfills, and 8 hauled waste loads as well as fate through the wastewater plant and Bloom curing process was completed on November 8.
- An overview summary including PFAS project background and goals, sampling plan, project timeline, and communication and data handling was prepared for internal informational purposes.
- As part of the communication strategy, a PFAS Stakeholder Engagement notice was sent out to front-line contacts and Pretreatment Program Coordinators of permitted industrial users, included in the study. The notice included background information for use in their respective communication with stakeholders.
- A similar notification was sent to WSSC's Industrial Discharge Control Division to communicate with all stakeholders pertaining to the three landfill locations included in the study.
- Project results anticipated to be available in early 2023 will be shared with stakeholders upon request.
- DC Water will be briefing the jurisdictions on project results, when available, through an MWCOG Pretreatment Workgroup meeting.



PFAS Update



PFAS Update

Environmental Quality & Operations Committee

December 15, 2022



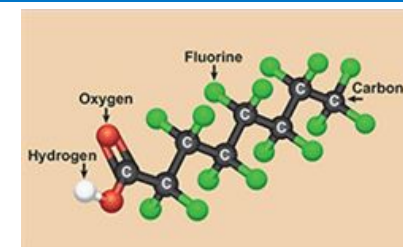
Salil Kharkar, Sr. Advisor to COO

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Per- and Polyfluoroalkyl Substances (PFAS)

Group of Manufactured Chemicals

- Thousands of different PFAS have been in use in industry and consumer products since the 1940s
- In recent years, *perfluorooctanoic acid* (**PFOA**) and *perfluorooctane sulfonic acid* (**PFOS**) were replaced in the United States with other PFAS
- PFAS break down very slowly over time and can build up in people, animals, and the environment
- PFAS can be present in our water, soil, air, and food as well as in materials found in our homes or workplaces





PFOA and PFOS – Two PFAS of Immediate Concern

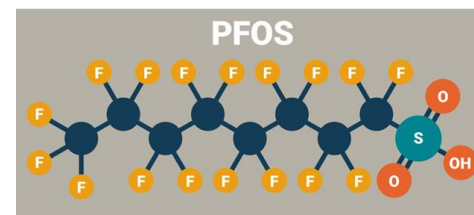
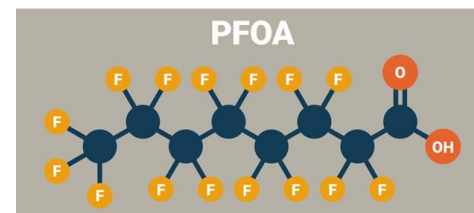
Perfluorooctanoic Acid (PFOS)

- ✓ 2002 US Manufacturer 3M stopped production
- ✓ 2009 Canada Added PFOS to list of Chemical to stop manufacturing
- ✓ 2006 European Union banned its use in finished and semi-finished products (with exceptions)
- ✓ 2009 Stockholm Convention restricted manufacture, export, and import
- ✓ China is currently the largest producer and exporter

Perfluorooctanoic Acid (PFOA)

- ✓ 2015 US and European Manufacturers agreed to Phase out production
- ✓ 2016 Canada banned it, unless it came in via manufactured goods
- ✓ China is currently the largest producer and exporter

PFAS can also be formed from degradation of other precursor compounds





PFAS Interfaces at DC Water

- Water – Drinking Water from Potomac River
- Wastewater – Regional Sanitary, Hauled Waste, Industrial, Groundwater
- Biosolids – Land Application, Bloom Sales
- Screenings, Catch basin debris, and Grit – Landfill ban concern
- Air – Air Permit Restrictions – function of biosolids treatment alternates



Key EPA Offices dealing with PFAS

- Office of Chemical Safety and Pollution Prevention
 - TSCA (Toxic Substances Control Act)
- Office of Water
 - UCMRs, HAS, MCL (Unregulated Contaminant Monitoring Rules, Health Advisories, Maximum Contaminant Level)
 - Fish Advisories, Water Quality Criteria, NPDES, IPP (National Pollutant Discharge Elimination System, Industrial Pretreatment Program)
- Office of Land and Emergency Management
 - CERCLA Designation (Comprehensive Environmental Response, Compensation and Liability Act)
- Office of Air and Radiation
 - Air Quality Standards
- Office of Research and Development
 - Analytical Methods, Risk Evaluation, PFAS Destruction Technologies



EPA PFAS Approach - Restrict

Regulations - USEPA's Strategic PFAS Roadmap (2021)

Restrict
Prevent PFAS from entering the environment to reduce exposure and potential future risks

	2022	2023	2024
Toxic Substances Control Act (TSCA)	Require toxicity testing by manufacturers	Enhance reporting under the Toxics Release Inventory Additional PFAS subject to TRI	
Discharge / Disposal	Draft disposal guidance: landfill, incineration deep well injection	Draft hazardous substance designation (CERCLA) Effluent Limitations Guidelines (EFGs) • Pulp/paper and airports	Propose additional EFGs • Organic chemicals, plastics and synthetic fibers (OCPSF) industries • Leather tanning and finishing, paint formulating industries • Metal finishing and electroplating industries
		National Pollution Discharge Elimination System (NPDES) permitting	
Biosolids	US EPA researching biosolids State restrictions in ME, NY, MA, MI, and others expected to follow; California Groundwater Reuse		Finalize risk assessment for PFOA and PFOS in biosolids

AECOM presentation to COG, Fall 2022



EPA PFAS Approach - Research

Regulations - USEPA's Strategic PFAS Roadmap (2021)

Research

Invest in research to identify which additional PFAS may pose human health and ecological risks and to develop methods to test, measure, remove, and destroy them

	2022			2023		2024
Research	Final toxicity assessments GenX PFBS	Develop toxicity assessments for PFBA, PFHxA, PFHxS, PFNA, and PFDA. Identify initial classes of PFAS categories (inform TSCA)	Finalize PFBA toxicity assessment	Build technical foundation to address PFAS in air emissions	Complete data collection on destruction and disposal	Draft PFHxS, PFHxA, PFNA, and PFDA toxicity assessments for review
Drinking water	UCMR 5 plan to monitor 29 PFAS		Propose a national primary drinking water regulation (Maximum Contaminant Level = MCL) for PFOA and PFOS ★	Identify effective treatment technologies	UCMR 5 sampling begins (reporting complete in 2026)	Publish new PFAS drinking water methods
Surface Water/ Ecosystems			Monitor fish tissue Nationwide in lakes and rivers Assess Tribal fishing impact	Recommend ambient water quality criteria Finalize fish advisory programs	Finalize ambient water quality criteria for PFAS	

★ May also be an Action Level and/or Treatment Technologies

AECOM presentation to COG, Fall 2022



EPA PFAS Approach - Remediate

Regulations - USEPA's Strategic PFAS Roadmap (2021)

Remediate

Hold responsible parties accountable for remediation

Ensure underserved communities have equitable access

	2022		2023			2024
Drinking water	Health Advisories for GenX and PFBS	Identify PFAS-specific removal technologies	Propose MCL for PFOA and PFOS		Finalize MCL for PFOA and PFOS	Publish new PFAS drinking water methods
Surface Water/Ecosystems			Recommend ambient water quality criteria			Finalize ambient water quality criteria
HazWaste designation under CERCLA	Designate some PFAS as hazardous substances		Notice for additional PFAS	Finalize hazardous substance designation	Update guidance on destroying and disposing	USEPA final guidance for disposal required

Bipartisan Infrastructure Law investment in infrastructure and drinking water programs

- \$11.7 billion to supplement the Drinking Water State Revolving Loan Fund
- \$4 billion to address emerging contaminants through the DWSRF
- \$5 billion funds to Small, Underserved, and Disadvantaged Communities Grants

AECOM presentation to COG, Fall 2022



Drinking Water Regulation Status

- EPA Estimates Publishing
 - Proposed regulation anticipated towards end of Dec 2022
 - Currently under review by Office of Management and Budget (OMB)
 - Required to be issued by March 31, 2023
 - Final regulation a year later. This could be Dec 2023
- Typically, compliance monitoring begins 2 years or more after final rule
- EPA Unregulated Contaminant Monitoring Rule 5 (UCMR5) requires 1 year of monitoring between 2023-2025
 - Results are not subject to any regulatory limits
 - UCMR5 compliance testing will be conducted in 2024
 - DC Water will conduct voluntary monitoring in 2023



Drinking Water Health Advisories

DRINKING WATER HEALTH ADVISORIES (HA) - LIFETIME EXPOSURE

YEAR	COMPOUND	HEALTH ADVISORY ppt	UCMR5 MRL ppt
2009	PFOA	< 400	
2009	PFOS	< 200	
2016	PFOA	70	
2016	PFOS	70	
2016	PFOA+PFOS	70	
2022	PFOA	0.004	4
2022	PFOS	0.02	4
2022	GenX	10	5
2022	PFBS	2,000	3

MRL – Minimum Reporting Level

Regional Drinking Water PFAS conc.

Chemical	Max Result	Minimum Reporting Limit	EPA's 2022 HA level
PFOS	3.8 ppt	2 ppt	0.02 ppt
PFOA	5.7 ppt	2 ppt	0.004 ppt
PFBS	6.7 ppt	2 ppt	2,000 ppt
GenX	Non-detect	2 ppt	10 ppt



PFAS and CERCLA

- ✓ EPA proposed adding PFOA and PFOA to list of CERCLA hazardous substances
- ✓ Have not established limits yet
- ✓ OMB has not completed their review
- ✓ Depending on the final form of the regulations, Utilities may be classified as Potential Responsible Parties (PRP)
- ✓ NACWA comments object to changing "polluter pays" to "community pays"

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

**GOODS AND SERVICES CONTRACT AWARD
High Pressure/High Vacuum Cleaning services
(Joint Use)**

Approval to add funding for continued High Pressure/ High Vacuum Cleaning Services in the amount of \$654,000.00.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Jet Blast, Inc. 6800 Fort Smallwood Rd Baltimore, MD 21226	SUBS: N/A	PARTICIPATION: N/A
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DESCRIPTION AND PURPOSE

Base Period Contract Value:	\$322,225.00
Base Period Contract Dates:	10-01-2020 - 09-30-2021
No. of Option Years in Contract:	2
Total Option Year 1-2 Value:	\$602,775.00
Prior Option Year 1-2 Dates:	10-01-2021 - 09-30-2023
Add funding to OY 2 (This request):	\$654,000.00
Option Year 2 Dates:	10-01-2022 – 9-30-2023

Purpose of Request:

Additional funds for Option Year 2 are being requested as funds were used for the unanticipated cleaning of anaerobic digestors and headworks influent screens. Additional funding will be required to adequately maintain these process systems.

Purpose of the Contract:

To provide high pressure/ high vacuum cleaning services to DC Water facilities. These services are required and help DC Water manage high pressure water blasting and high vacuum cleaning services for structures and equipment located at DC Water’s Blue Plains Advanced Wastewater Treatment Plant (BPAWWTP).

Scope of the Contract:

WWT has a continued need for these services to provide high pressure water blasting and high vacuum cleaning services for structures and equipment located at DC Water’s Blue Plains Advanced Wastewater Treatment Plant (BPAWWTP). This includes the use of commercial multi-pressure, water blast equipment, high vacuum wet/dry trucks, combination jet/vacuum trucks, and physical to clean various facilities equipment and structures at the plant.

Spending Previous Year:

Cumulative Contract Value:	10-01-2020 – 11-16-2022: \$925,000.00
Cumulative Contract Spending:	10-01-2020 – 11-16-2022: \$909,125.00

Contractor’s Past Performance:

According to the COTR, the Contractor’s quality of services; timeliness of responses; conformance to DC Water’s policies, procedures, and contract terms; and invoicing all meet expectations.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Best Value
Commodity:	High Pressure/ High Vacuum Cleaning Service	Contract Number:	20-PR-WWT-45A
Project Area:	Blue Plains		

BUDGET INFORMATION

Funding:	Operating	Department:	Wastewater Treatment
Project Area:	Blue Plains	Department Head:	Nicholas Passarelli

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	42.74%	\$279,519.60
Washington Suburban Sanitary Commission	42.85%	\$280,239.00
Fairfax County	9.16%	\$59,906.40
Loudoun Water	4.53%	\$29,626.20
Other (PI)	0.72%	\$4,708.80
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$654,000.00

Aklile Tesfaye / 12/06/22
 Aklile Tesfaye Date
 VP of Wastewater Operations

_____/_____
 Dan Bae Date
 VP of Procurement

_____/_____
 Matthew T. Brown Date
 CFO and EVP, Finance and Procurement

_____/_____
 David L. Gadis Date
 CEO and General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

GOODS AND SERVICES CONTRACT ADDITIONAL FUNDING

**MAINTENANCE OF KSB PUMPS
(Joint Use)**

Approval to add funding in the amount of \$1,560,000.00 for continued maintenance services of the Enhanced Nitrogen Removal Facilities KSB Pumps. Purchase Orders will be issued annually based on availability of funds.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: KSB, Inc. 4415 Sarellen Rd. Richmond, VA 23231-4428	SUBS: N/A	PARTICIPATION: N/A
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DESCRIPTION AND PURPOSE

Base Award Contract Value:	\$277,731.00
Base Award Contract Dates:	09-18-2015 - 09-17-2025
Number of Option Years:	0
Value of Previous Modifications:	\$610,000.00
Period of Previous Modifications:	09-18-2018 – 05-13-2022
Contract Modification Value:	\$1,560,000.00
Contract Modification Dates	01-15-2023 – 09-17-2025

Purpose of the Contract:

This contract is to supply inspection, maintenance and pump rebuild support services for seven KSB 450 HP 178 MGD pumps located in the Enhanced Nitrogen Removal Facilities.

Contract Scope:

This contract provides inspections, repairs, rebuild and maintenance services for seven KSB 178 MGD submersible pumps for the Enhanced Nitrogen Removal Facilities (ENRF), at Blue Plains’ Advanced Wastewater Treatment Plant (AWTP). The ten-year term maintenance contract with KSB, (the manufacturer of pumps), is to ensure safe operation of the Amacan pumps. This is a ten-year contract term, 2015-2025.

Spending Previous Year:

Cumulative Contract Value:	09/18/15 - 10/30/22: \$887,731.00
Cumulative Contract Spending:	09/18/15 - 10/30/22: \$867,542.00

Contractor’s Past Performance:

According to the COTR, the Contractor’s quality of product and services, timeliness of deliverables; conformance to DC Water’s policies and contract terms and invoicing met requirements.

PROCUREMENT INFORMATION

Contract Type:	Good and Services	Award Based On:	Best Value
Commodity:	Maintenance and Repairs	Contract Number:	14-PR-DMS-01
Contractor Market:	Sole Source		

BUDGET INFORMATION

Funding:	Operating and Capital	Department:	Maintenance Services
Project Area:	Blue Plains	Department Head:	Elkin Hernandez

ESTIMATED USER SHARE INFORMATION

User - Operating	Share %	Dollar Amount
District of Columbia	42.74%	\$ 153,864.00
Washington Suburban Sanitary Commission	42.85%	\$ 154,260.00
Fairfax County	9.16%	\$ 32,976.00
Loudoun Water	4.53%	\$ 16,308.00
Other (PI)	0.72%	\$ 2,592.00
TOTAL ESTIMATED DOLLAR AMOUNT	100%	\$ 360,000.00

ESTIMATED USER SHARE INFORMATION

User – Capital Equipment	Share %	Dollar Amount
District of Columbia	43.57%	\$ 494,640.00
Washington Suburban Sanitary Commission	42.12%	\$ 550,080.00
Fairfax County	9.02%	\$ 100,560.00
Loudoun Water	4.50%	\$ 44,760.00
Other (PI)	0.79%	\$ 9,960.00
TOTAL ESTIMATED DOLLAR AMOUNT	100%	\$ 1,200,000.00



 Aklile Tesfaye 1/12/22
 VP of Wastewater Operations Date

 Dan Bae /
 VP of Procurement Date

 Matthew T. Brown /
 CFO and EVP of Finance and Procurement Date

 David L. Gadis /
 CEO and General Manager Date

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

GOODS AND SERVICES CONTRACT ADDITIONAL FUNDING

REHABILITATION OF VARIOUS PROCESS ASSETS

(Joint Use)

Approval of additional funds for Rehabilitation of four (4) nitrification blowers (NBU) in the amount of \$3,004,424.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Electric Motor & Contracting Co. (EMC) 3703 Cook Blvd Chesapeake, VA 23323	SUBS: M & M Electric Motor Repair, Inc. (DBE) Day and Night Labor Services, L.L.C (WBE)	PARTICIPATION: 30% 5%
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DESCRIPTION AND PURPOSE

Contract Value:	\$8,000,000.00
Contract Dates:	11-01-2021 — 10-31-2026
Base Period Contract Value:	\$1,600,000.00
Option Year 1 Contract Value:	\$1,700,000.00
Total Option Year 2-4 Value:	\$4,700,000.00
Contract Modification No. 1 Value:	\$3,004,424.00

Purpose of the Contract:

Department of Maintenance Services (DMS) and Department of Pumping and Sewer Operations (DPSO) require the services of a qualified Contractor to provide inspections, rehabilitation, or replacement services for various process assets, including the mechanical and electrical elements of the equipment. Approximately 1500 critical assets exist that require support.

Contract Scope:

The contract scope covers major overhauls and preventative maintenance necessary to ensure the availability of identified equipment for reliable operation. To avoid interruption in operations, the Contractor will coordinate all work, including emergency after hour services

Contract Additional Funding:

The additional funding covers rehabbing 4 Nitrification Blower and Motors and PLC work. The motors are G.E., HP:4000, RPM:3570, FRAME:8512S, VOLTS:4000 installed in 1976. The standard scope per below:

- Inspect the motor for any anomalies and deficiencies
- Performs standard Rehabilitation of motor

The blowers OEM is Turblex and the machines are multi-stage centrifugal compressors capable of 55,000 SCFM at 14.6psig, maximum rpm 3,570 installed in 1976. The standard scope per below:

- Performs standard rehabilitation of blower.
- Inspect the blower for any anomalies and deficiencies, rehabilitate the known deficiencies such as the needle bearings.

Spending Previous Year:

Cumulative Contract Value:	11-01-2021 – 10-31-2023: \$ 3,300,000.00
Cumulative Contract Spending:	11-01-2021 - 10-21-2022: \$ 1,099,228.71

Contractor’s Past Performance:

According to the Contracting Officers Technical Representative (COTR), the Contractor’s quality of services; timeliness of responses; conformance to DC Water’s policies, procedures, and contract terms; and invoicing all meet expectations.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Best Value
Commodity:	Maintenance Services	Contract Number:	10121
Contractor Market:	Open Market with Goals for DBE and WBE Participation		

BUDGET INFORMATION

Funding:	Capital	Department:	Wastewater Engineering
Service Area:	Wastewater	Department Head:	David Parker
Project:	LF		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	41.22%	\$ 1,238,423.57
Federal Funds	0%	\$ 0.00
Washington Suburban Sanitary Commission	45.84%	\$ 1,377,227.96
Fairfax County	8.38%	\$ 251,770.73
Loudoun County & Potomac Interceptor	4.56%	\$ 137,001.74
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$ 3,004,424.00

**Kishia L.
Powell**

Digitally signed by
Kishia L. Powell
Date: 2022.12.01
10:34:10 -05'00'

_____/_____
Kishia L. Powell Date
COO and EVP



Dan Bae
C-LS, E-dan.bae@dowater.com,
O-District of Columbia Water and Sewer
Authority, OUs-VP of Procurement &
Compliance, CN-Dan Bae
2022.12.01 12:35:05'00'

_____/_____
Dan Bae Date
VP of Procurement

_____/_____
Matthew T. Brown Date
CFO and EVP
Finance and Procurement

_____/_____
David L. Gaddis Date
CEO and General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

CONSTRUCTION CONTRACT CHANGE ORDER:

**DC Water Fleet Maintenance Facility
(Joint Use)**

Approval to execute Change Order No. 09 for \$110,000.00 The modification exceeds the Chief Executive Officer's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: HESS Construction & Engineering Services, Inc. 804 West Diamond Ave. Suite 200 Gaithersburg, MD 20818	SUBS: Grounded Electrical Construction Glen Burnie, MD DBE	PARTICIPATION: 93.6%
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DESCRIPTION AND PURPOSE

Original Contract Value:	\$17,800,000.00
Value of this Change Order:	\$110,000.00
Cumulative CO Value, including this CO:	\$ 2,376,336.49
Current Contract Value, including this CO:	\$20,176,336.49
Original Contract Time:	330 Days (11 Months)
Time extension, this CO:	402 Days
Total CO contract time extension:	747 Days (23 Months)
Contract Start Date (NTP):	06-10-2020
Anticipated Contract Completion Date:	05-21-2023
Cumulative CO % of Original Contract:	13.4%
Contract completion %:	92.0%

Purpose of the Contract:

To construct a new fleet facility at Walker Mill Road, in Prince Georges County Maryland in accordance with agreement between DC Water and the District of Columbia to relocate Fleet operations from 125 O street.

Original Contract Scope:

- To construct a 26,200 sq ft fleet maintenance facility on 6.25 acres site on Walker Mill Road Prince Georges County Maryland. Of the 6.25 acres approximately 3.51 acres will be developed as part of the project for the building and site. Remaining area is partly wet-land and/or to be used for future needs.

Previous Change Order Scope:

- Due to the delay in obtaining required permits to begin construction post-Notice To Proceed (NTP), subcontractors incurred additional costs for material price escalations and storage fees. Subsequently, a new requirement was added to the project scope by local authorities to incorporate CBIR (Commercial Building Inspector of Record) services. Lastly, owner-requested modifications continue being implemented to accommodate end-users' needs.

Current Change Order Scope:

- The electrical subcontractor could not begin work by NTP due to the delay in obtaining the required permits to begin construction. Due to the Contractor's delayed start in April 2021, compensation was requested for material price escalation and labor costs for stored materials and associated fees.

- Anticipated non-compensable time extension through 21-May-2023, 402 calendar days from current completion date 15-Apr-2022. Main factors include design changes to the underground storage tank post-fabrication, elevator certification delays, and changes to the perimeter security fence for safety fall-protection.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder
Commodity:	Construction	Contract Number:	190070
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	Department:	Engineering and Technical Services	
Service Area:	Non-Process Facility	Department Head:	William Elledge	
Project:	HH			

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia*	87.69%	\$ 96,459.00
Washington Suburban Sanitary Commission	8.43%	\$ 9,273.00
Fairfax County	2.48%	\$ 2,728.00
Loudoun County & Potomac Interceptor	1.40%	\$ 1,540.00
Total Estimated Dollar Amount	100.00%	\$110,000.00

*\$13 million of the total contract will be paid to DC Water from District of Columbia.

_____/_____
 Kishia L. Powell Date
 COO and EVP

_____/_____
 Dan Bae Date
 VP of Procurement

_____/_____
 Matthew T. Brown Date
 CFO and EVP
 Finance and Procurement

_____/_____
 David L. Gadis Date
 CEO and General Manager



Lead-Free DC Program



Lead Free DC Program Environmental Quality & Operations Committee December 15, 2022



Imagine a city without lead.



William Elledge, PE, Director, Engineering and Technical Services(DETS)



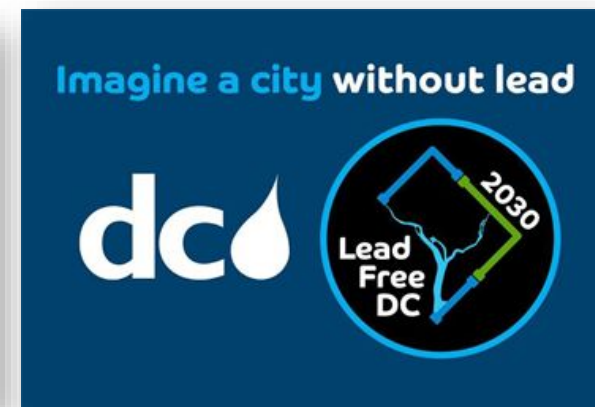
Agenda

FY22 Highlights

New PM Team & Transition

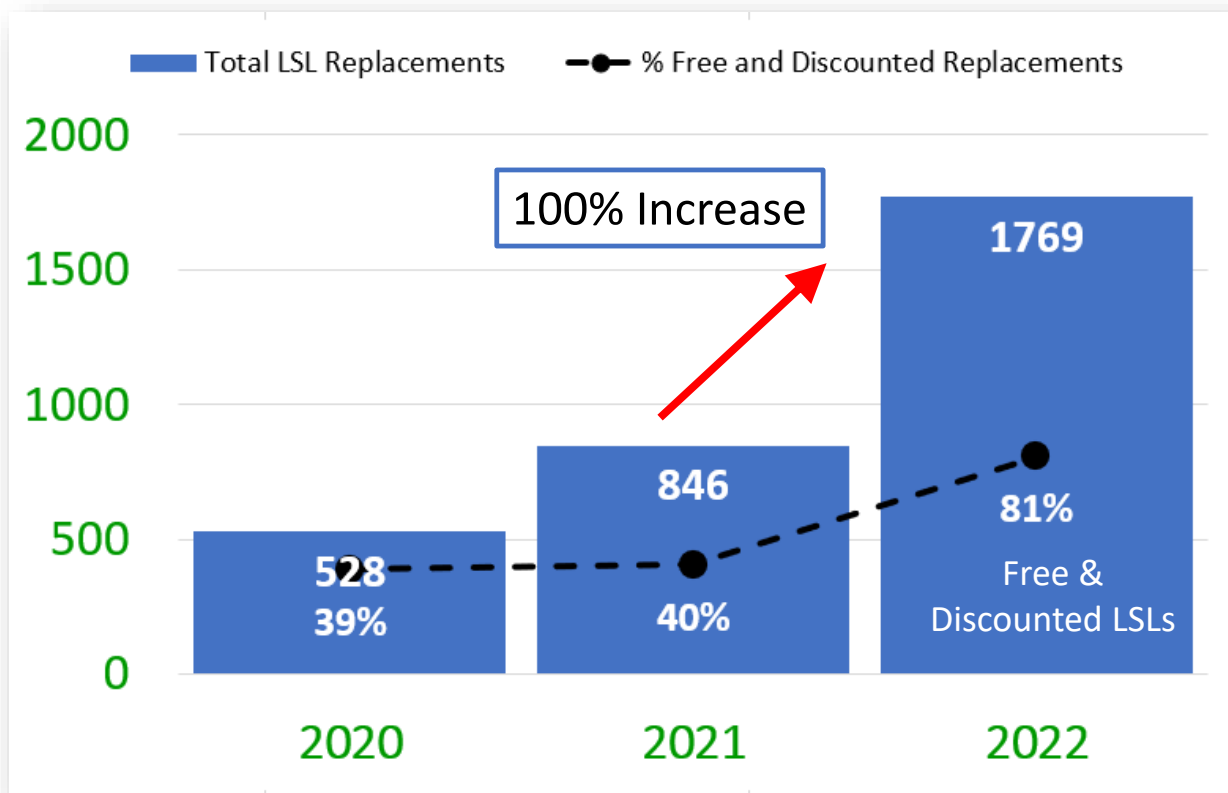
Program Status

FY23 – FY24 Construction





FY22 Replacement Progress



Overall Program

(FY20-FY22)

Total Replacements **3,100+ LSL**

Free and Discounted **1,900+ LSL**

Savings for Customers **\$5.4+ mil**



FY22 Accomplishments



Mayor Bowser at Ward 7 Block-By-Block replacement.



Mitch Landrieu, *White House Infrastructure Coordinator*



Radhika Fox, *EPA Assistant Administrator for Water*

Expanded Outreach and Promotional efforts appear to be working.
Achieved 75% Homeowner Participation for Block by Block Program



New Program Management Team



CDM Smith & Ramboll

NTP executed 10/1/2022

- Transition between WPM and LFG
- LFG takes over 1/2/23
- WPM Transition out of LFDC Program





LFG Activities/Meetings

Key Activities Completed FY23 Q1

- 10/1: Execute contract
- 10/14: LFDC Kickoff
- 10/18: Marketing Strategy Session
- 10/28: DDOT & Permitting Strategy Session
- 11/7: LFDC Visioning Session – Follow up from 10/18 Marketing Workshop
- 11/14: LFG Chartering Session (offsite)
- 11/30: Risk Management Workshop
- 12/15: EQ&Ops Quarterly Update



LFG Activities/Meetings

Key Activities Planned for Near Term

- 12/10/2022 Construction and Inspection Plan
- 12/15/2022 Permitting Plan
- 12/31/2022 Program Management Plan Submission
- 12/31/2022 Data Management Plan Submission
- 12/31/2022 LFDC Strategic Communications Plan Submission
- 2/7/2023 Follow Up Chartering Meeting
- 3/15/2023 Update Opinion of Probable Costs



Lead Free DC Charter

MISSION

The LFDC team commits to **collaboratively informing and engaging the community** of Washington DC to partner, participate, sign up, replace lead service lines, and promote the Lead-Free DC initiative.

We will support DC Water's Lead-Free DC initiative in the District of Columbia by 2030 **for the benefit of all**.

We will **minimize customer water service interruptions** and implement the initiative **equitably, safely,** and **efficiently** in accordance with applicable DC Water policies, District of Columbia and EPA regulations.

VISION

Lead Free DC will replace all lead service lines by 2030 to **benefit present and future generations**. This program will be known for superior service, ingenuity, and stewardship to advance the health and well-being of our diverse workforce and communities.



FY22 Construction Progress

Test Pit Completion*

Contractor A
99%

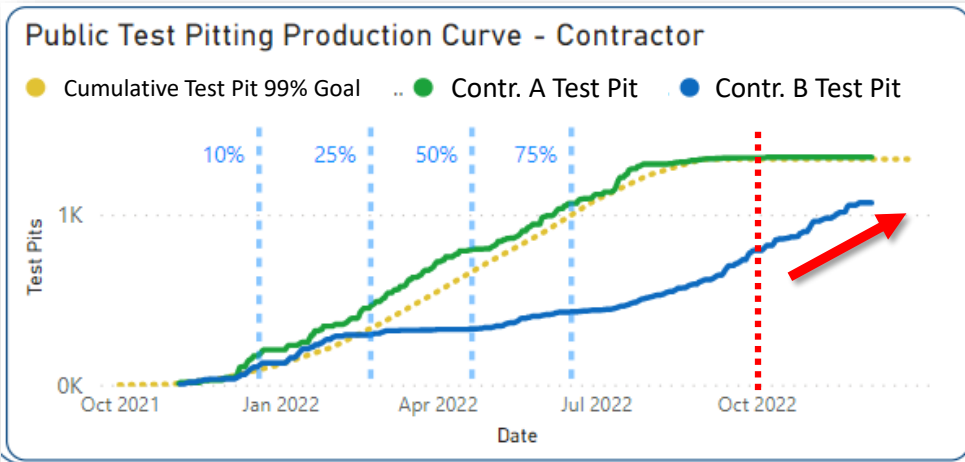
Contractor B
80%

LSR Completion

Contractor A
92%

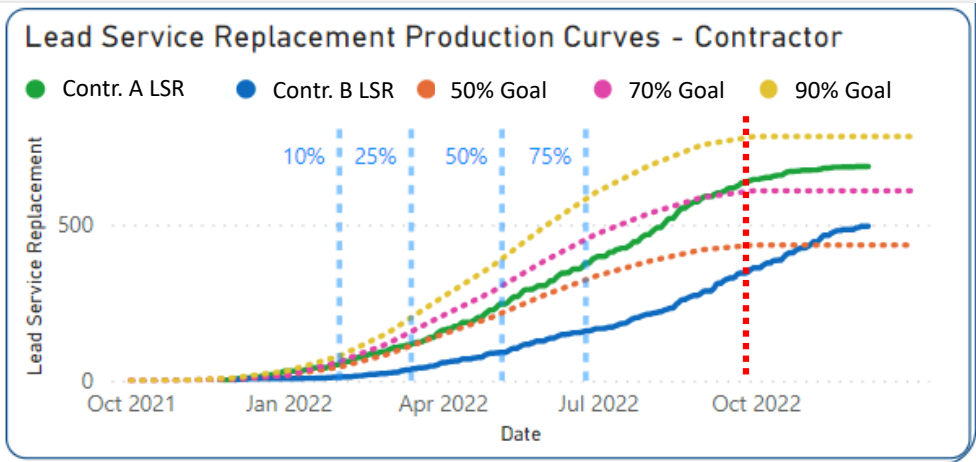
Contractor B
59%

*Test Pits are dug in order to verify pipe material on both the public and private side



est. Dec 2022

est. Jan 2023



est. Jan 2023

est. Feb 2023



FY22 Construction Progress

- Block restoration has begun
 - Paving continue as winter weather permits
- Warder Street (5 Blocks) has been fully restored
 - Prioritized: proximity Bruce-Monroe Elementary School
- 19 Daycares in District with possible partial LSL
 - Currently test pitting to verify material
 - Replacements complete by 12/31





FY23 Construction

By Block Change Order

- Board approved change order for packages 5-6
 - FY23 – FY24: 80 Blocks

Progress	Package 5	Package 6
Board Approval	X	X
Blocks Selected	X	X
Outreach Started	X	Planned Jan 2023
Permitting Started	X	Planned FY23 Q2

Voluntary Full Replacement Program (VFRP) Contract

- Old Contract through Nov 2022
- New Contract NTP Oct 1, 2022
- First replacements scheduled week of 12/12/2022

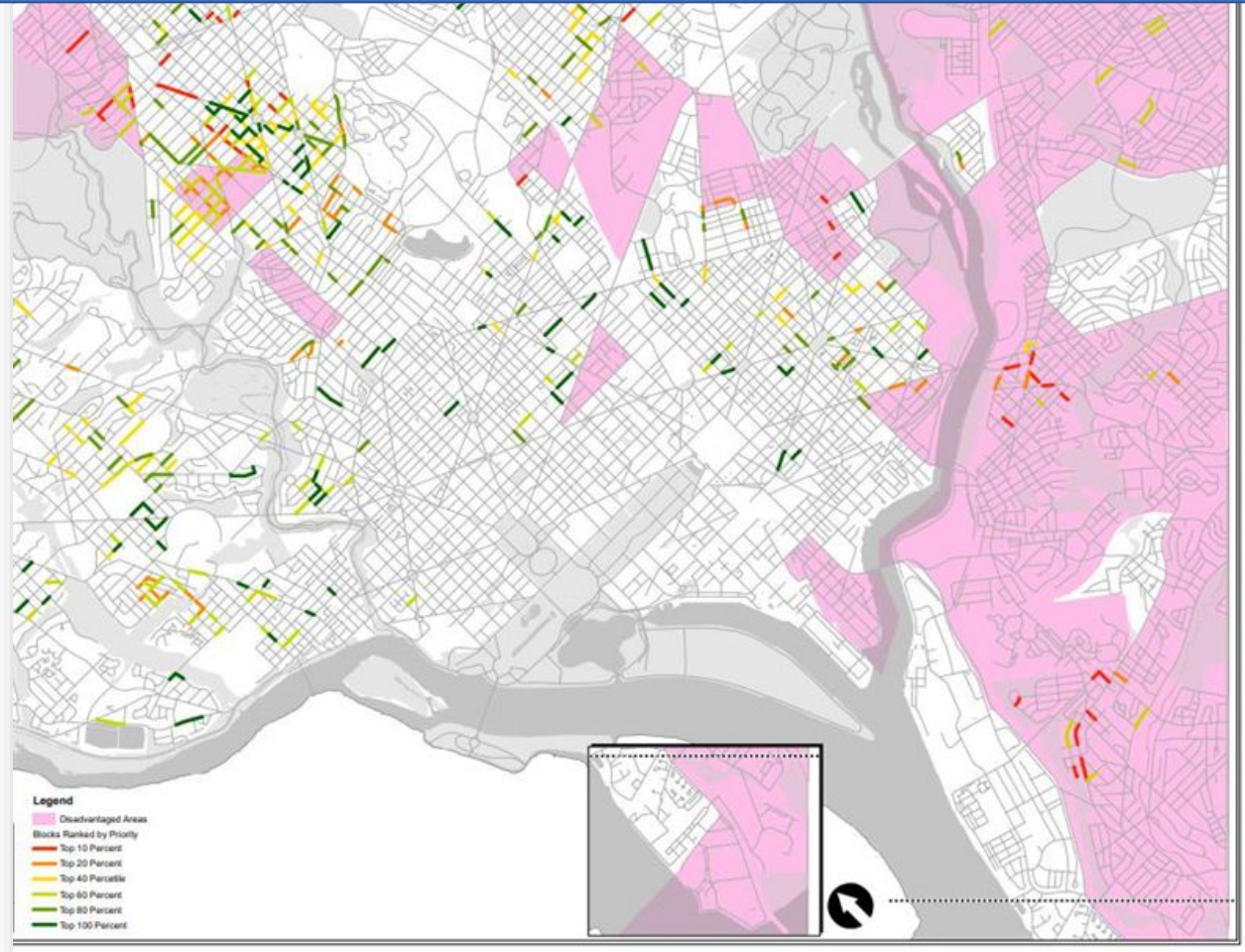




Federal Funding Opportunity

Bipartisan Infrastructure Law (BIL)

- Private-Side Replacement Costs
- Public and Private Side Replacement Cost in the Disadvantage communities as defined by CEJST
- \$26 mil/yr up to \$78 mil (3 yrs)





FY23 Construction & Prioritization Strategy

Bipartisan Infrastructure Law (BIL) Funding

- Must be competitively bid
- Limited amount of lead services in Disadvantaged Communities
- Mandate will push implementation
- **Recommendation:** to ensure Justice40 initiative is met, save blocks in Disadvantaged Communities for Task Orders (Pkgs 7+)



CM Janeese Lewis George  @CMLewisGeorgeW4 · Sep 29

“We know the removal of lead from our water supply is urgent, and with additional federal infrastructure dollars available, now is the time to take bold action.”

My [#GreenNewDeal](#) for a [#LeadFreeDC](#) bill includes the mandate that experts say is necessary.





FY23 – FY24 Strategy and PM Goals

- Continued **increase of annual LSL replacement** of by-block projects using combination of change orders and new LSLR contract task orders
- Expand **service line inventory** data collection and improve accuracy
- **Prioritize** replacements for **high priority** sites and blocks
- **Maximize investment of external funding sources** (including BIL funding) in Disadvantaged Communities per CEJST to meet Justice40 goal and **offset rate increases**
- Facilitate Council's **pursuit of legislative action** per Task Force Report to meet 2030 goal – **Mandate**





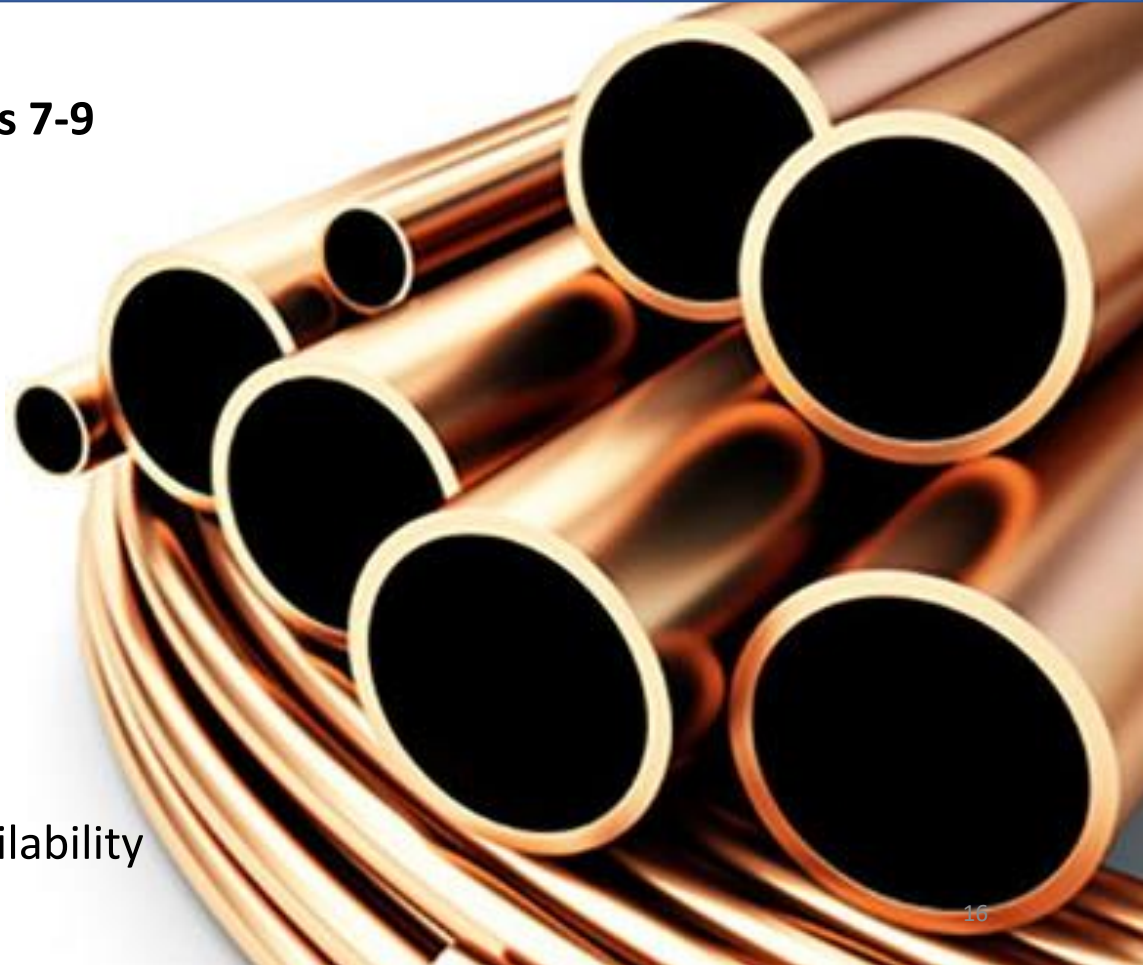
Procurement

LSLR Contract – Task Order Packages 7-9

- Nov 22: SOQ
- Dec 22: Short List Notification
- Jan 23: Qualified Firms Selected
- Feb 23: Task Order – EQ OPS
- Mar 23: Task Order – Board
- May 23: Shovel in Ground

Material Supply Contract

- Early 2023: EQ&OPs
- Early 2023: Board
- Spring 2023: NTP
- Spring 2023: Based on Supply Availability





Questions/Discussion





DCCR Update



DC Cleans Rivers Project Quarterly Update

Environmental Quality & Operations Committee

December 15, 2022



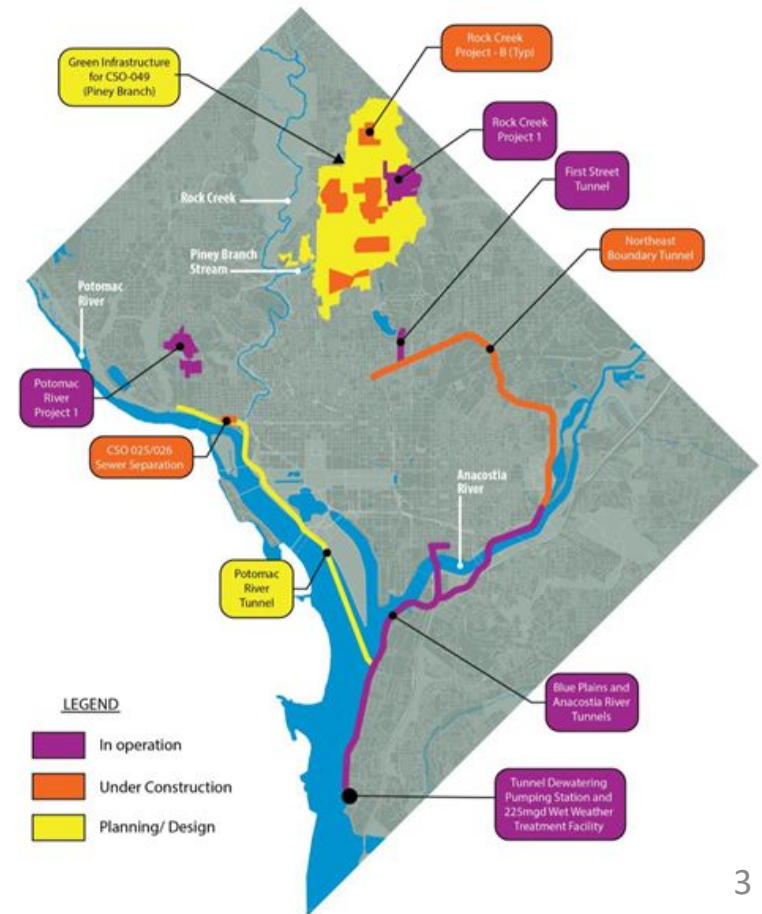
Moussa Wone, Director, DC Clean Rivers Project



DC Clean Rivers Project Snapshot

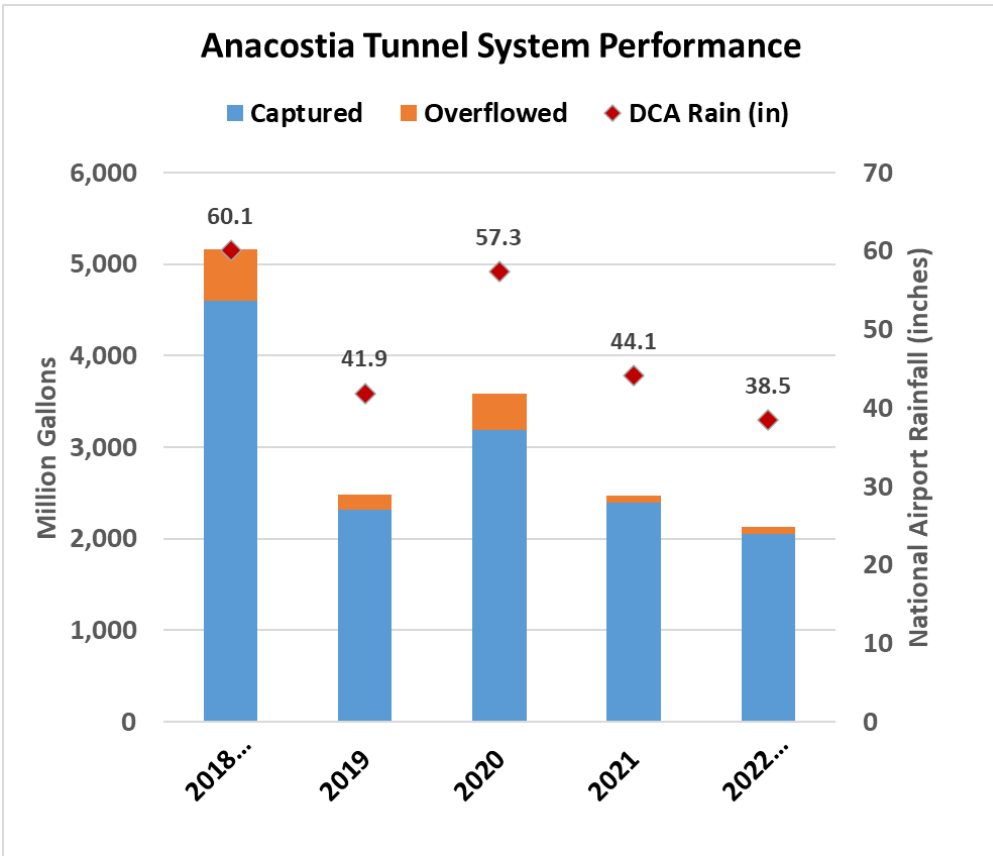


Area	Status
Anacostia	
Anacostia Tunnel System	<ul style="list-style-type: none"> • More than 14.5 billion gallons captured • More than 9,151 tons of trash/debris removed
Northeast Boundary Tunnel	<ul style="list-style-type: none"> • Construction at near surface sites continues • Construction of additional CIP liner in tunnel continues • First Street Tunnel isolation planned from December 2022 to February 2023
Potomac	
CSO 025/026 Separation	<ul style="list-style-type: none"> • Completed work at Wisconsin Ave. • Started work at Structure 44
Potomac Tunnel Advance Utility Construction	<ul style="list-style-type: none"> • Completed work at Independence Ave • Continued work at CSOs 020 and 024
Potomac Tunnel Construction	<ul style="list-style-type: none"> • Continued collaboration period with four shortlisted firms
Rock Creek	
Green Infrastructure (GI) Project B	<ul style="list-style-type: none"> • Fifteen Alley Permeable Pavement (APP) facilities and four bioretentions (PBR) facilities have been completed • Total contract has 37 APPs and 19 PBRs





Anacostia Tunnel System Performance



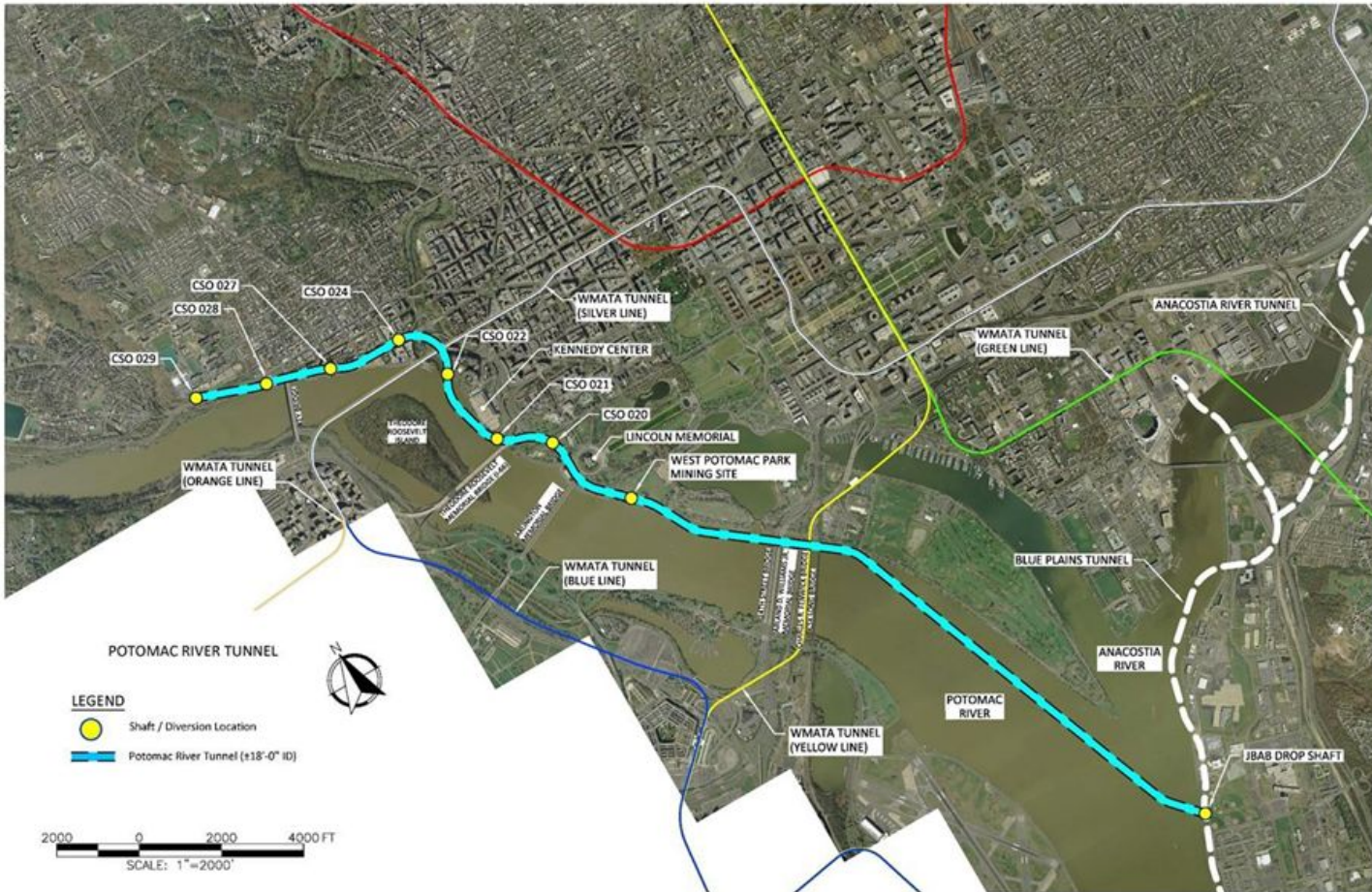
Over **14.5 billion gallons** captured March 2018 – November 2022
 Over **9,151 tons of trash, debris and other solids** captured
 Exceeding predicted capture rate (91%>80%)



Trash, Debris and Solids Removal from Screening Shaft at Tunnel Dewatering Pumping Station



Potomac River Tunnel



Tunnel Contract (Best Value Design Build):

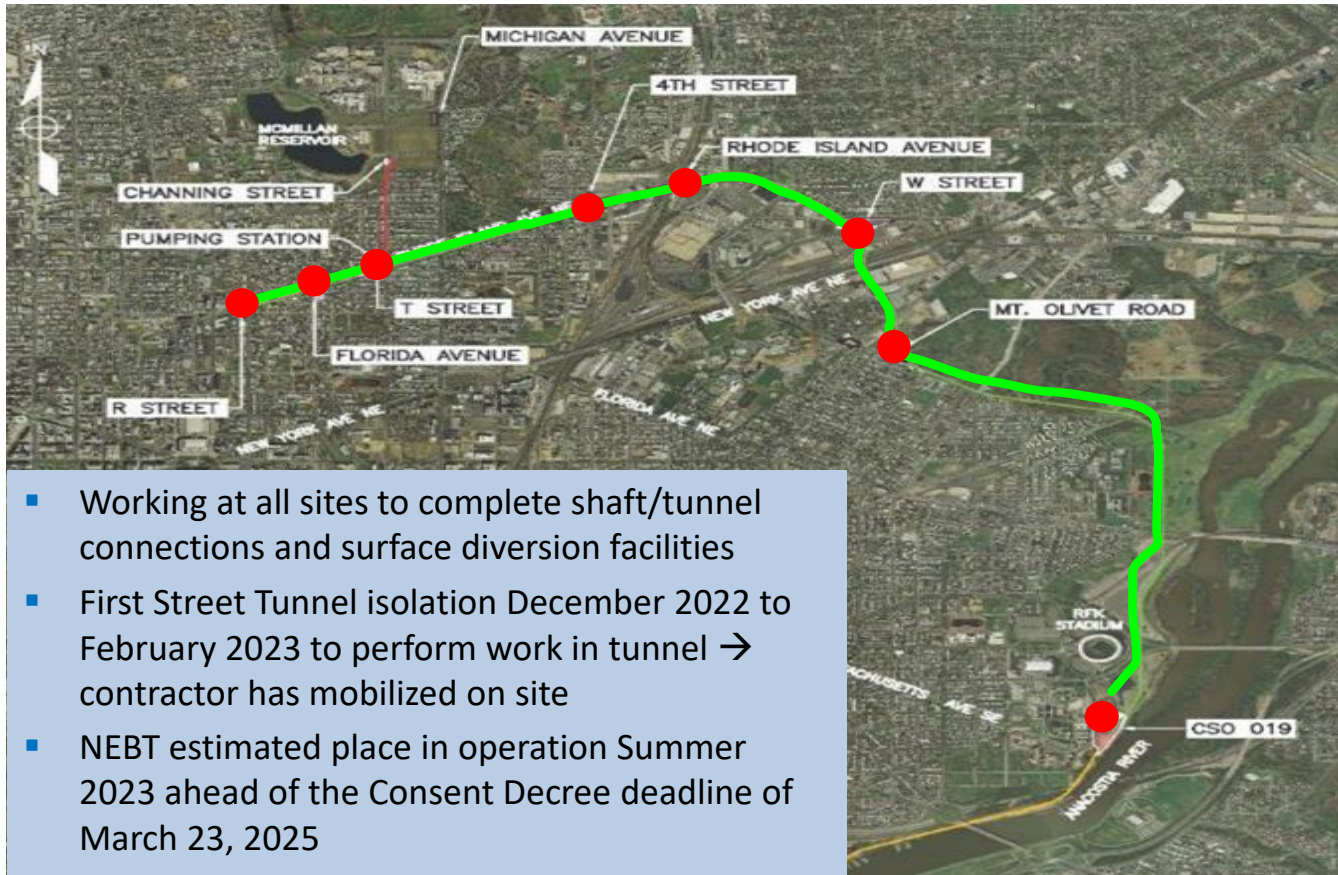
- ✓ Collaboration: Meetings are ongoing with four shortlisted DB teams. Expect to complete collaboration in January 2023.
- NTP: November 2023
- Place in Operation: February 2030

Construction Management Services:

- ✓ In solicitation phase for obtaining professional services
- NTP: August 2023



Division J – Northeast Boundary Tunnel Construction Progress





Potomac River Tunnel Contract A Advanced Utility Construction



Purpose: Construct high voltage electric duct bank to power Potomac River Tunnel Contract B (PRT-B) tunnel boring machine and West Potomac Park job site. Includes constructing power drops to shaft work sites for PRT-B.

Estimated place in operation date is July 2023.

Work along Independence Avenue is complete. Final acceptance will be in Spring 2023 after turf restoration is confirmed.

Electrical pads and conduits for power drops at CSO-020, CSO-024 and CSO-028 are complete. Pepco coordination for follow on cable installation continues.



Electrical Pad at CSO-020



Electrical Pad at CSO-024



CSO 025/026 Sewer Separation



- **Site 1: 31st Street**
Completed sewer separation work.
Final restoration work to be performed.
- **Site 2: Wisconsin Avenue**
Completed sewer separation work.
Final restoration work to be performed.
- **Site 3: Structure 44**
Started work to install support of excavation system.
Continue to coordinate with the community to minimize construction impacts.



Test Pitting Activities at Structure 44



DC Clean Rivers Public Outreach Efforts



Category	Activities
Community Partnerships	<ul style="list-style-type: none"> • Continue working with the three Main Street partners to address impacts to businesses near the NEBT construction sites. The final disbursement of grants will be distributed to over 40 impacted businesses. • Hosted six Staff Appreciation Lunches at NEBT construction sites since August 2022, purchasing meals from DCity Smokehouse, Boundary Stone, and DC Schwarma. • The PR-C and PRT-A projects provided event organizations with safety enhancements and mitigation for foot races, bike rides, and other pedestrian activities along construction routes.
Key Meetings & Approvals	<ul style="list-style-type: none"> • Held a NEBT Tunnel Forum for the First Street Pumping Station, T Street NW, Florida Avenue NW, and R Street NW construction sites on October 27, 2022. • Initiated the community outreach plan for taking First Street Tunnel out of service from December 2022 through February 2023. <ul style="list-style-type: none"> • Briefed ANC 5E, Bloomingdale Civic Association, LeDroit Park Civic Association, and Stronghold Civic Association to inform area residents. • EPA briefed on December 5, 2022. • Councilmember McDuffie staff briefed on December 7. • The PR-C and PRT-A projects established acknowledgement from local elected officials and directly notified stakeholders of over-night construction activities.
Community Outreach Program	<ul style="list-style-type: none"> • Coordinating with the DC Commission on the Arts and Humanities (CAH) on delivering the finished sculpture to CSO 019 for storage. The sculpture, designed by artist Chris Tousimis, will be installed in Cooper Gordon Park when the NEBT Project restores it in 2023. • Coordinated with the Georgetown Business Improvement District (BID) to facilitate parking and equipment area for Sunset Cinema Movie Nights.



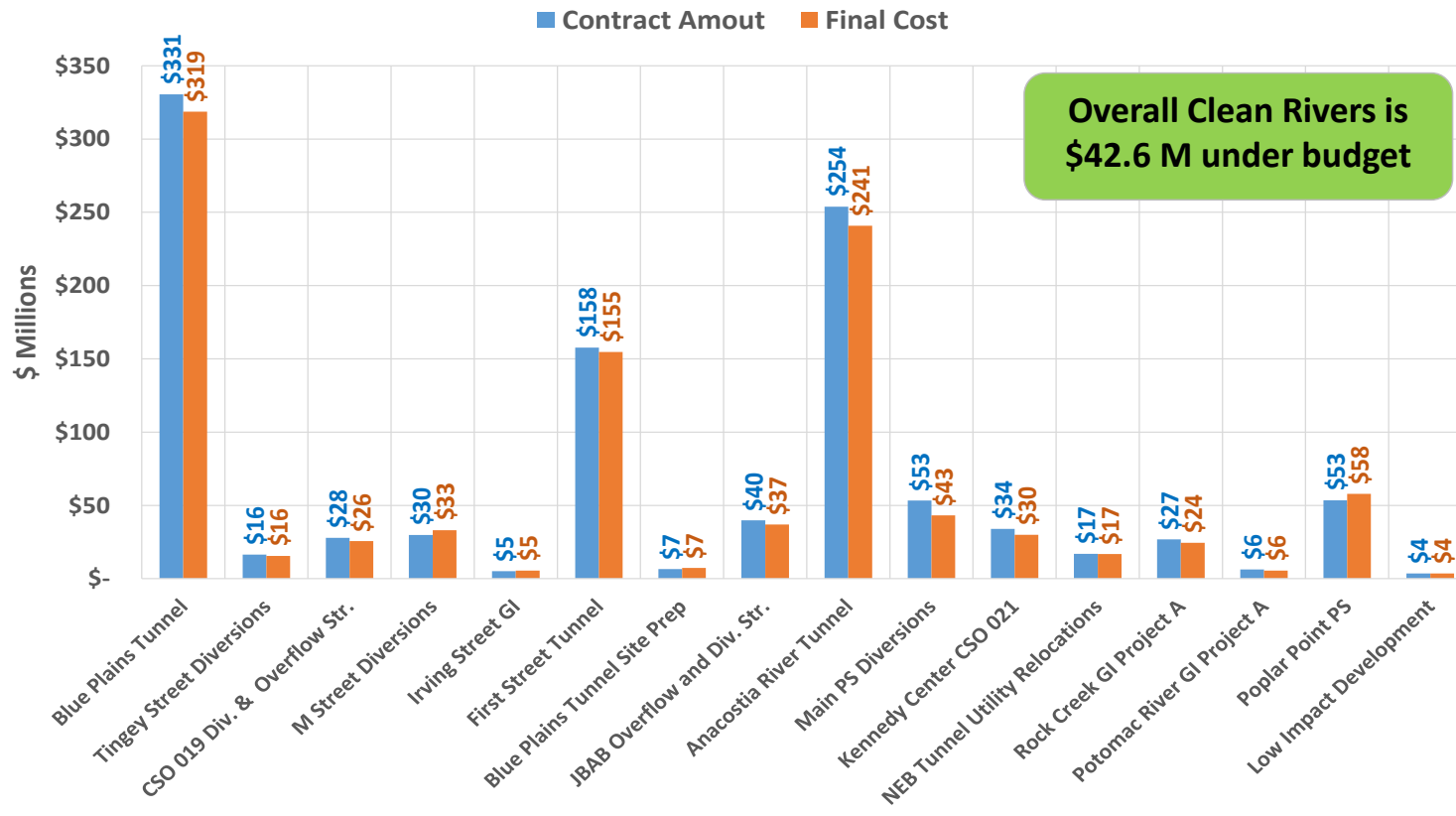
Serving staff lunch purchased from Boundary Stone restaurant, located near the T Street NW site.



Clean Rivers Budget



Construction Contract Amounts vs Final Cost



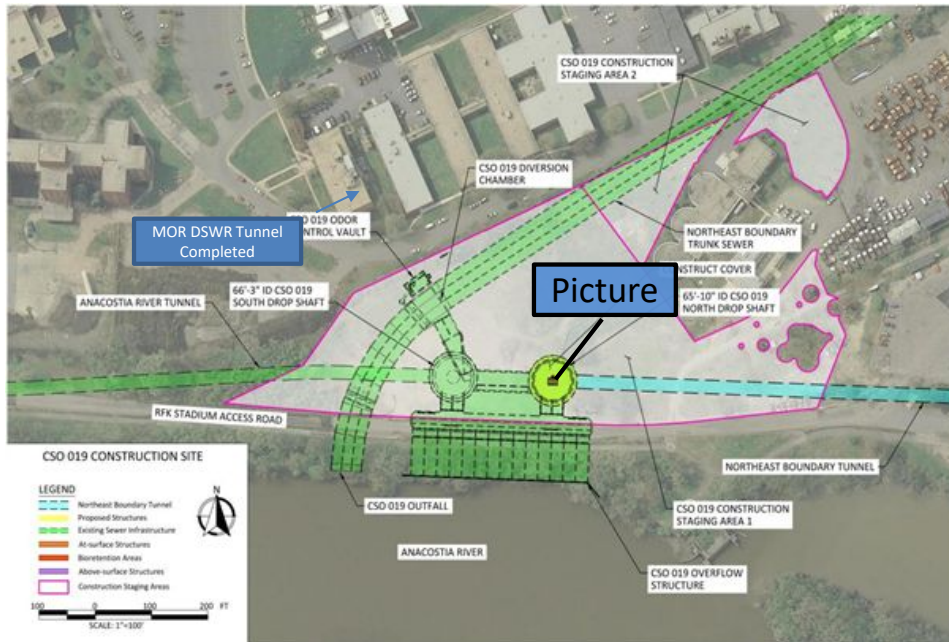
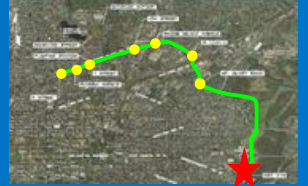
Clean Rivers expenditures on Northeast Boundary Tunnel are not expected to exceed the budget



Northeast Boundary Tunnel Surface Work Detailed Updates



Division J – Northeast Boundary Tunnel Construction Progress: CSO 019 (near RFK Stadium)



Site Plan

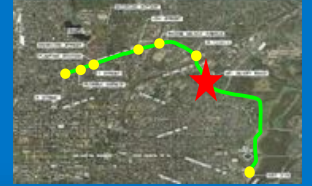


North Shaft Invert

- Completed concrete at base of North Shaft
- Began demolition of site temporary work slabs



Division J – Northeast Boundary Tunnel Construction Progress: Mount Olivet Rd



Drop Shaft Site

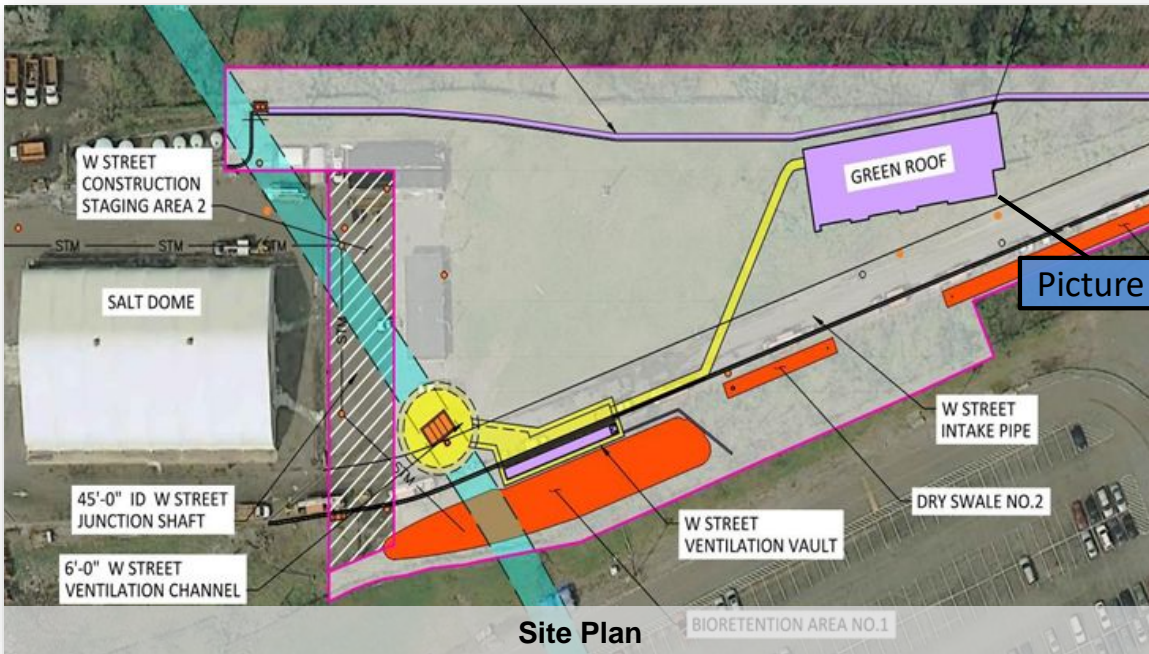
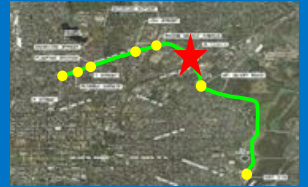
- Concrete structures for the Approach Channel, Ventilation Control Vault and Shaft Cover are complete.
- Ventilation Control Vault electrical work is ongoing.
- Beginning site restoration activities.

Diversion Site

- Diversion Chamber concrete structure is complete.
- Construction of two inlet structures and three storm diversion sewers are complete. Junction Manhole construction is nearly complete.



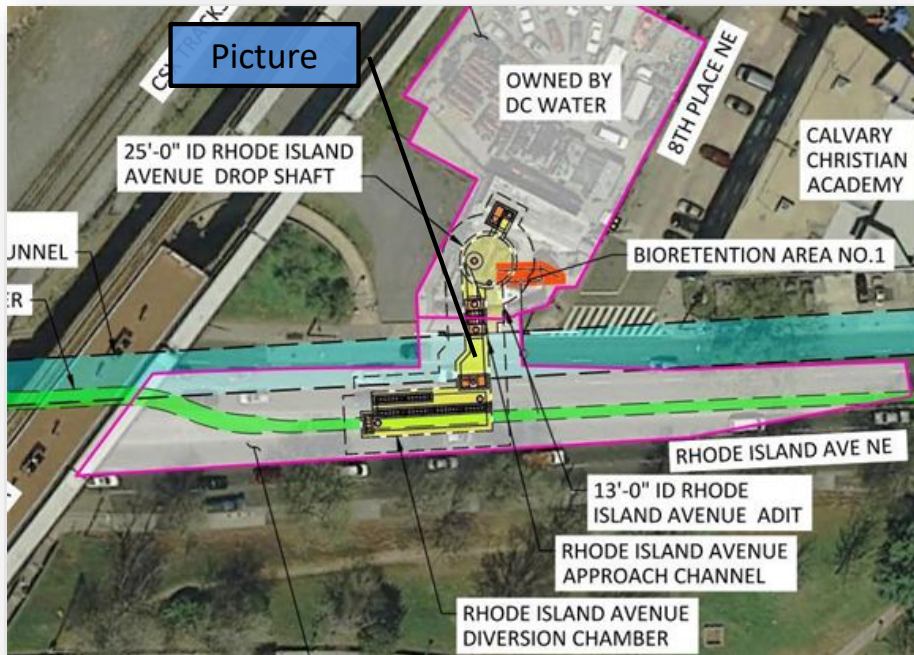
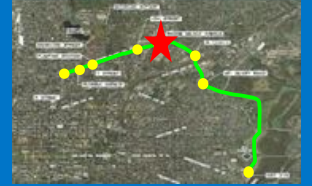
Division J – Northeast Boundary Tunnel Construction Progress: W Street



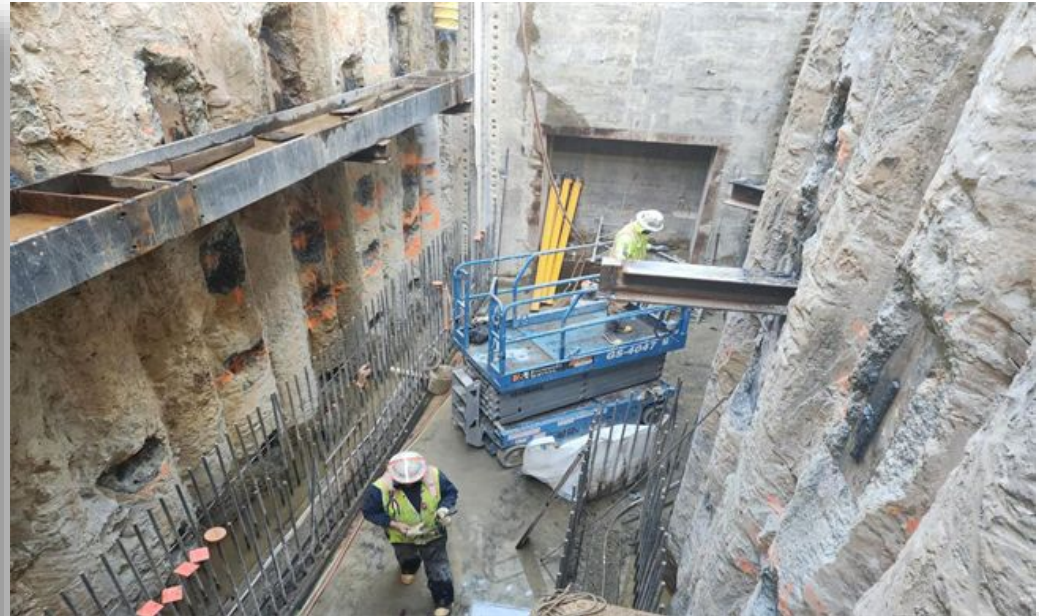
- Installing site utilities related to the Ventilation Control Facility (VCF)
- Set the Odor Control Units inside the VCF
- Continue VCF mechanical and electrical installation including conduits, lighting, heaters, duct work, etc.



Division J – Northeast Boundary Tunnel Construction Progress: Rhode Island Avenue



Site Plan

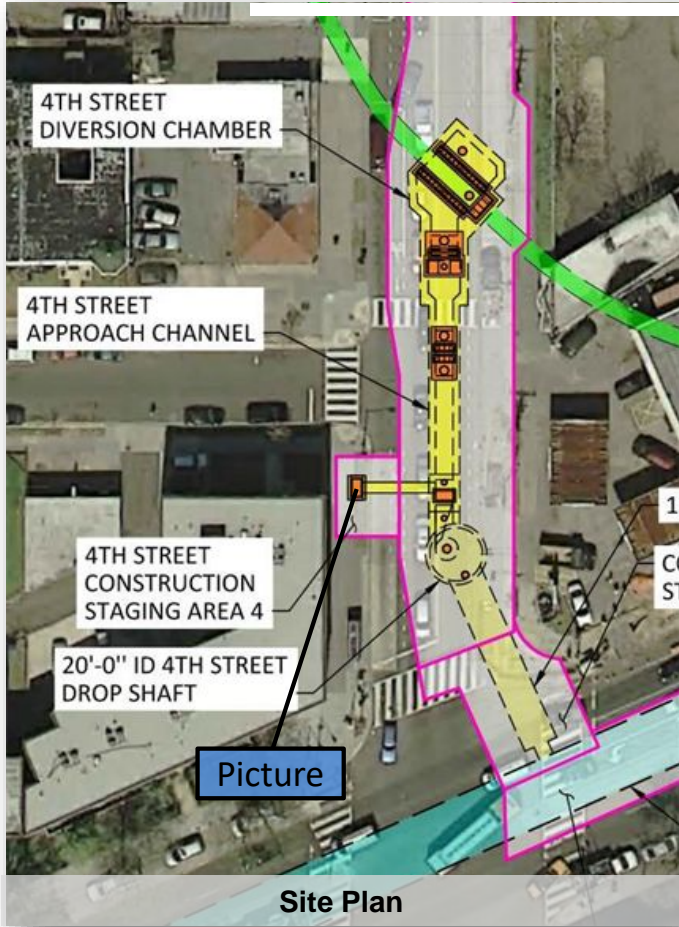
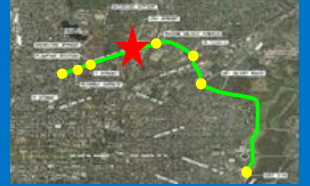


Approach Channel

- Completed Approach Channel excavation and installed concrete base slab.
- Installing storm drain and inlets along eastbound lane of Rhode Island Avenue.



Division J – Northeast Boundary Tunnel Construction Progress: 4th Street

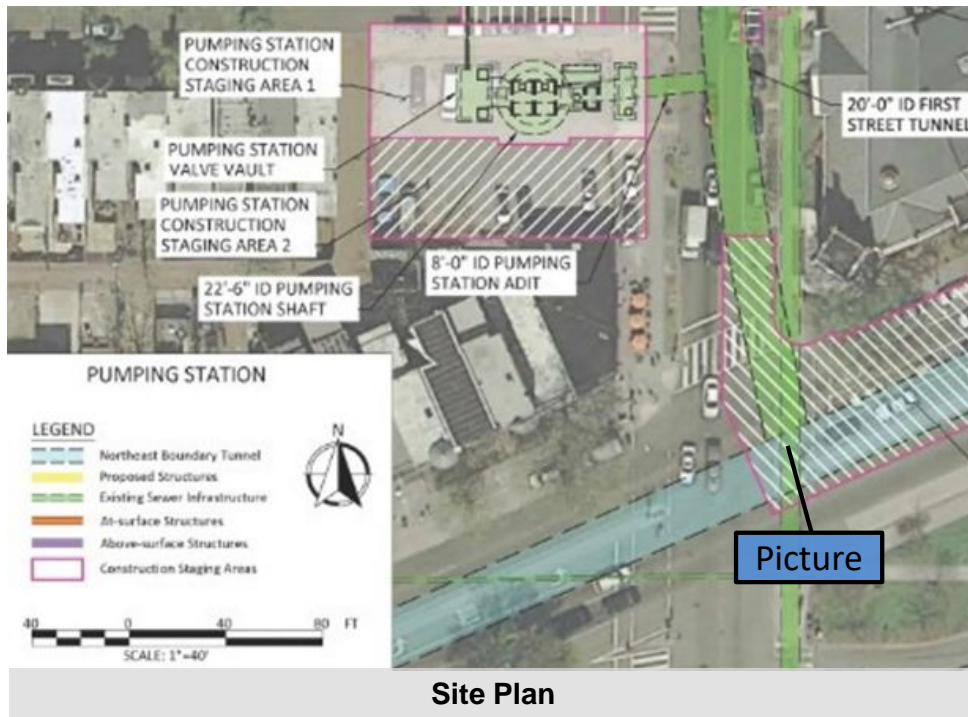
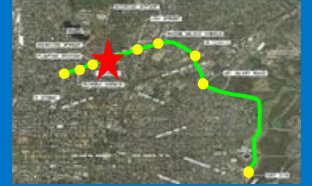


4th Street Restoration

- Ventilation Vault 2 structure complete.
- All permanent CSO facilities are complete.
- Performing site restoration activities.



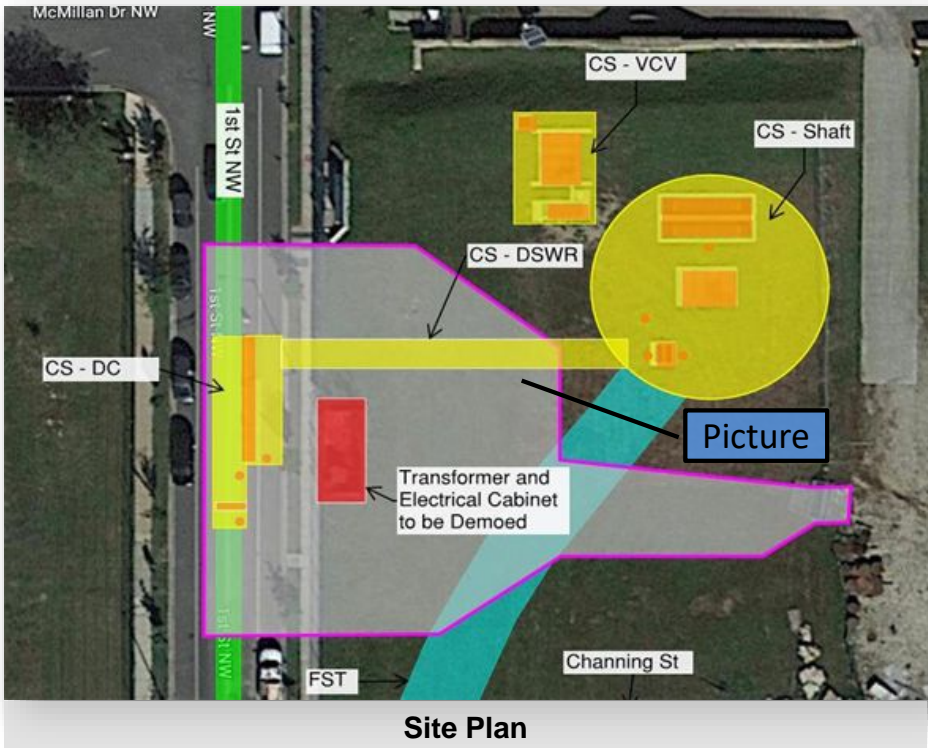
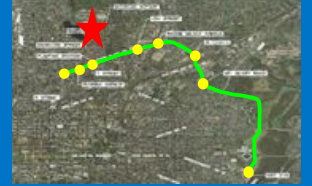
Division J – Northeast Boundary Tunnel Construction Progress: First Street Tunnel



- Completed first half of First Street Tunnel concrete final liner at NEBT connection.
- Majority of Tunnel Boring Machine “Lucy” has been removed.
- Work for remainder of concrete final liner ongoing.



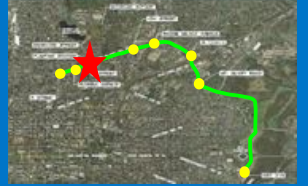
Division J – Northeast Boundary Tunnel Construction Progress: Channing St



- Mobilized to Channing Street shaft site to perform contract work in the First Street Tunnel that includes cleaning of sediment/debris and demolition of the pump station flow channel.



Division J – Northeast Boundary Tunnel Construction Progress: T Street



Site Plan

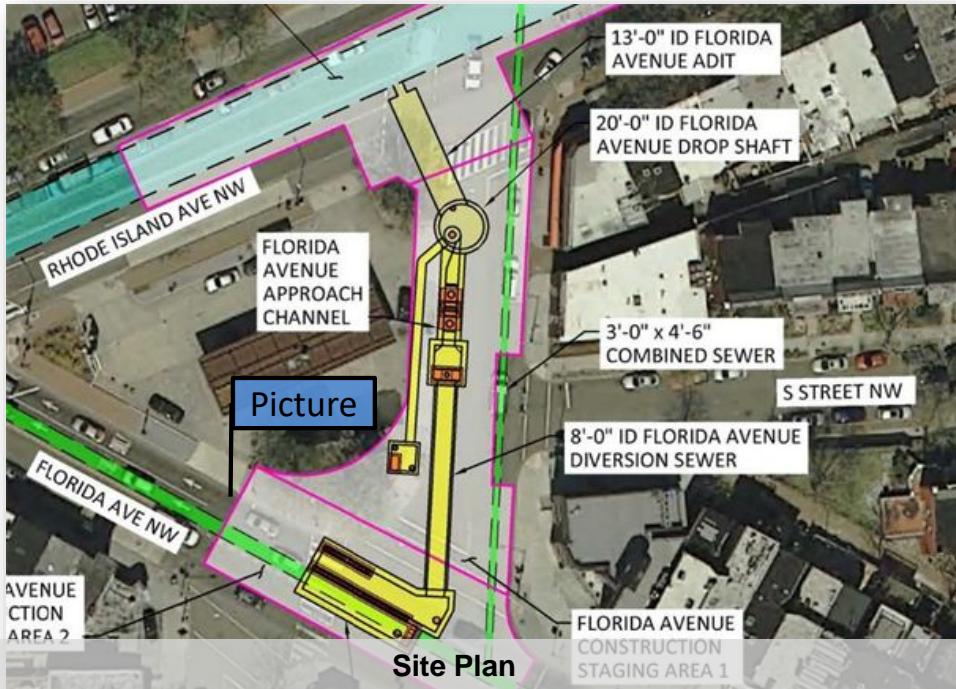
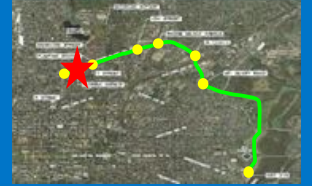


Construction Staging Area 3 Micro Pile Installation

- Mobilized and installing support of excavation system for Inlet No. 3 structure along the eastbound lane of Rhode Island Ave.
- Upcoming work includes excavation and construction of Inlet No. 3.



Division J – Northeast Boundary Tunnel Construction Progress: Florida Ave

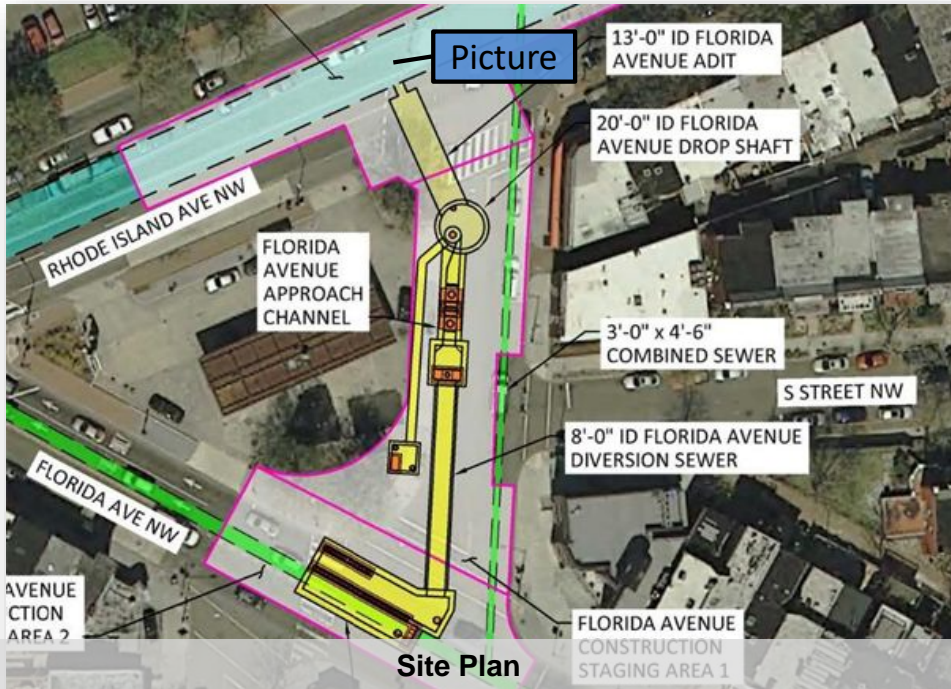
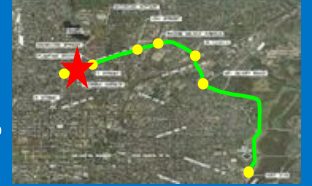


FLA Ave Restoration

- Completed shaft base slab collar and internal vent shelf.
- Started shaft internal concrete hydraulic structure.
- Completed restoration along Florida Avenue, all four lanes open to public travel.
- Started excavation for Ventilation Vault.



Division J – Northeast Boundary Tunnel Construction Progress: Florida Ave Adit/NEBT

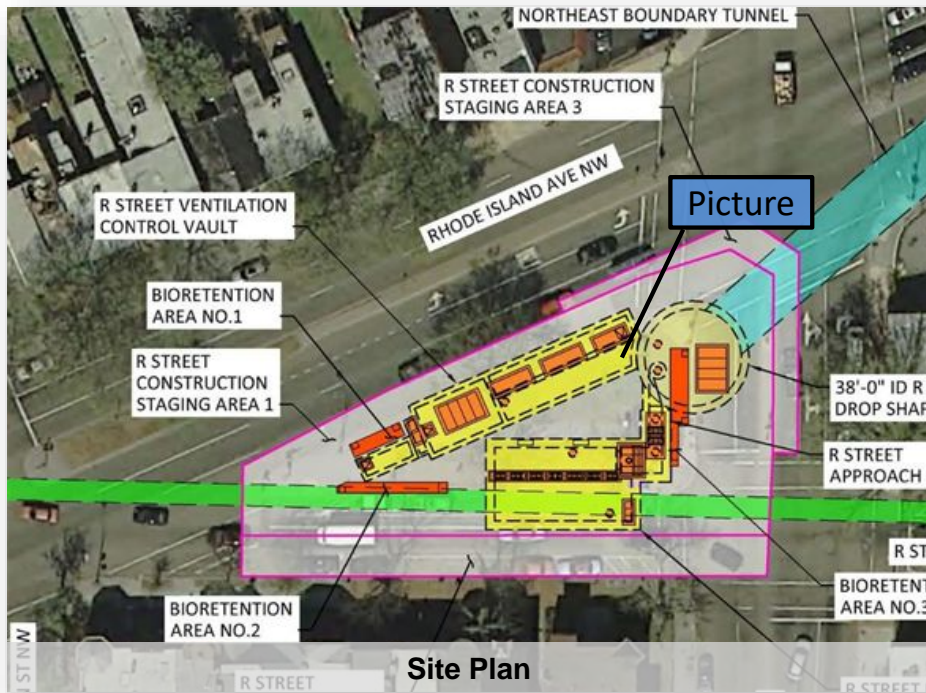
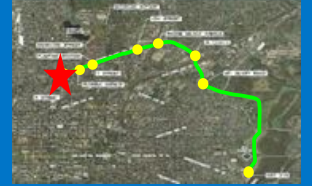


Adit / NEBT Connection – Removal of Temporary Support Beam

- Previous ground freezing performed for the Florida Avenue adit excavation and adit concrete liner installation resulted in NEBT precast liner movement, requiring installation of a temporary support system within the NEBT at the adit connection.
- Currently removing temporary support system and replacing with a final concrete liner.



Division J – Northeast Boundary Tunnel Construction Progress: R Street



- Completed concrete base slab for Ventilation Control Vault, wall construction ongoing.
- Completed base slab and 1st wall lift at ventilation control vault connection to the shaft.
- Completed drop shaft invert and NEBT collar construction.