



# Primary Treatment Renovation at Bird Island Wastewater Treatment Facility

Informational Session for Upcoming Request for Construction Bids

**BUFFALO**  
SEWER AUTHORITY

 **GREELEY AND HANSEN**  
A TYLin Company

January 11, 2024

# Housekeeping



Online  
Meeting



You are  
Muted



Chat  
Box



Live  
Q&A



Meeting  
Recorded

***The presentation and attendee list will be shared with all attendees.***



# Safety Minute - Ladders



## Portable ladders are one of the leading causes of occupational fatalities and injuries

Step, straight, combination, and extension | OSHA 1926.1053



- ✓ Avoid electrical hazards
- ✓ Inspect ladder for damage
- ✓ Maintain a 3-point contact
- ✓ Extend ladder at least 3 feet above the point of support
- ✓ Place base of ladder  $\frac{1}{4}$  of the working length of the ladder from the wall or vertical surface
- ✓ Engage all locks on the ladder



- ✗ Do not use the top step
- ✗ Do not stand on the top 3 steps
- ✗ Do not exceed the ladders maximum load

# Safety First!

***Safety is a high priority for us and we practice it daily throughout our organization.*** We have found that high safety standards translate into high efficiency results in the field. Buffalo Sewer Authority puts SAFETY FIRST, assuring a safe environment for our employees and customers.

**It is our mission to maintain a working environment where every employee, new and seasoned, takes responsibility to implement, enforce and model all safety guidelines in everything they do. Each new employee must attend an extensive orientation and safety training program.**



# Objectives of this Meeting

- ➔ Provide information on Buffalo Sewer Authority's upcoming Construction Services RFP: Primary Treatment Renovation at Bird Island WWTF
- ➔ Review expectations of contract requirements, including meaningful D/M/WBE engagement
- ➔ Provide networking opportunities and encourage teaming prior to bid advertisement. Center Disadvantaged Business Enterprise (DBE) firms.
- ➔ Provide brief overview of upcoming Buffalo Sewer Authority construction contracts
- ➔ Question & Answer

# Agenda

- ➔ Introductions & Welcome
- ➔ Contracting Equity
- ➔ About Buffalo Sewer Authority
- ➔ LTCP/NFA at Bird Island WWTF
- ➔ Project Background, Summary of Work, & Constraints
- ➔ Contract Administration & Requirements
- ➔ Project Schedule: Procurement & Construction
- ➔ Future Buffalo Sewer contracts to be advertised in 2024-2028
- ➔ Feedback and Q&A Session

# Presenters



(OWNER)

- **Tim Blake**  
WWTF Capital Projects Manager
- **Rosaleen Nogle, PE, BCEE**  
Principal Sanitary Engineer



**GREELEY AND HANSEN**

A TYLin Company

(DESIGN CONSULTANT)

- **Walt Walker, PE, ENV SP**  
Project Manager
- **Ryan Christopher, PE, ENV SP**  
Deputy Project Manager

# Networking and Follow-Up Site Visit

Presentation and attendee list will be share with attendees after this meeting.

Networking for teaming partners is encouraged!

**An optional site visit to Bird Island WWTF can be scheduled the Week of January 22-26 at 9:00am each day. Advance notice required, email: [walt.walker@greeley-hansen.com](mailto:walt.walker@greeley-hansen.com)**

Register to receive the presentation (if you haven't already):

[forms.office.com/r/Bv6xJVN5eD](https://forms.office.com/r/Bv6xJVN5eD)



- Name
- Company
- Email
- Prime/Subcontractor/Vendor/Undecided
- DBE (Y/N)
- Trade / Specialty



# Contracting Equity & Supplier Diversity: DBE/MBE/WBE inclusion at BSA

- Create economic opportunity for DBE/MBE/WBE firms, including firms who are new to working with BSA and/or the City of Buffalo
- Promote meaningful teaming arrangements, mentorship, and partnership between established, experienced firms and new and/or smaller firms
- For the Primary Treatment Renovation Construction Services contract:
  - **DBE utilization goal of 20%** of total value of the contract
  - DBE must be certified in New York State as a DBE
  - Utilization of Erie County certified M/WBE firms is encouraged

# Contracting Equity: DBE Inclusion Plans and Resources

- A DBE Utilization Plan **must** be submitted with your Bid Proposal Package:

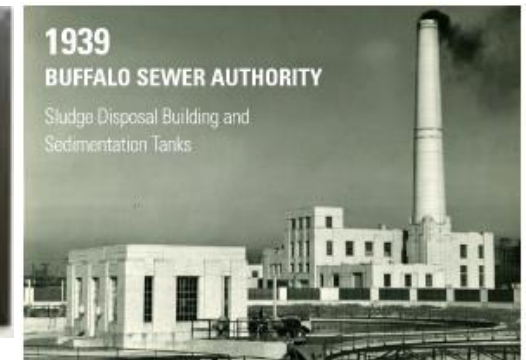
<https://efc.ny.gov/system/files/documents/2023/02/dbe-utilization-plan.docx>

- Prime contractor must utilize DBE suppliers/subcontractors that are certified on behalf of the New York State Unified Certification Program:

<https://nysucp.newnycontracts.com/>

- We are looking for Plans that are:
  - Reflecting a good-faith effort
  - Realistic and meaningful

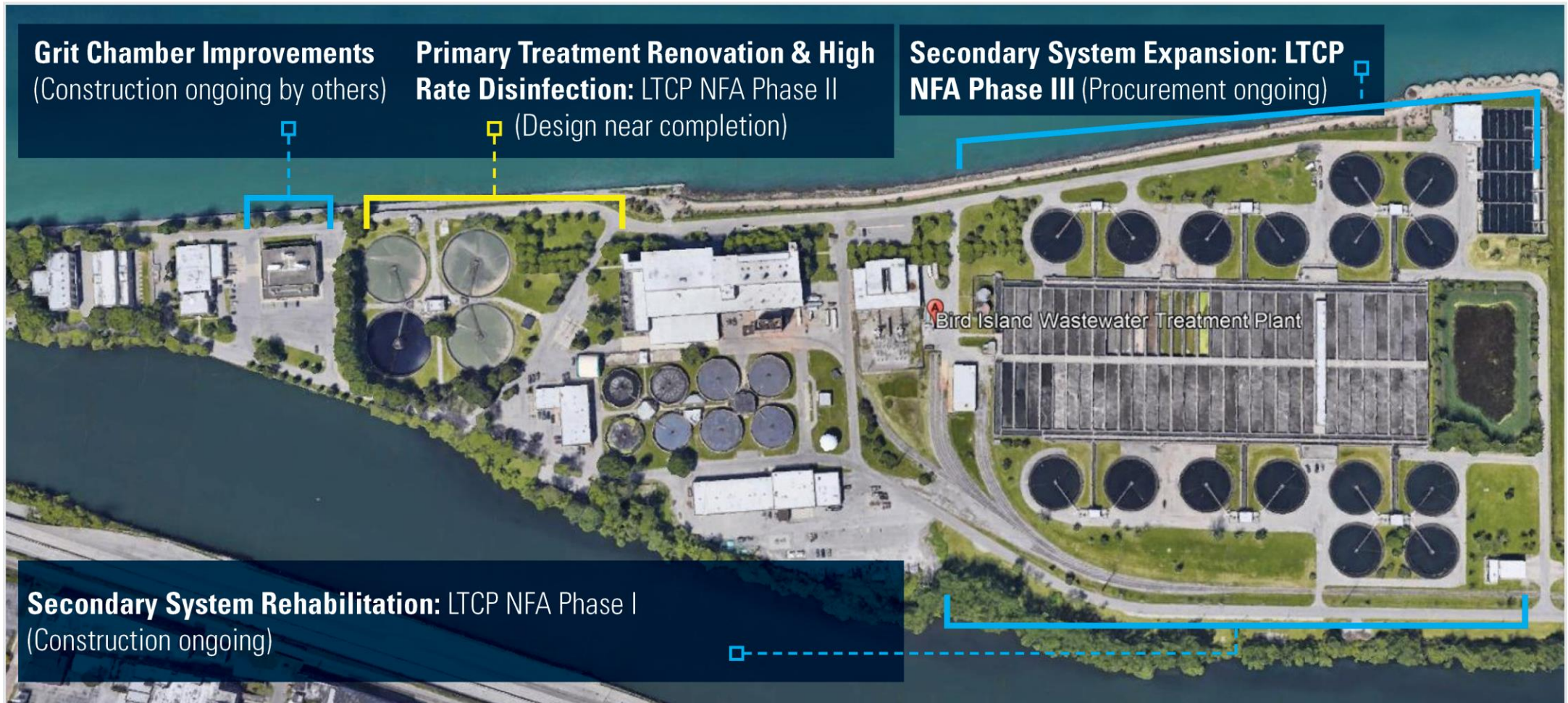
- The Buffalo Sewer Authority (BSA) provides wastewater service to approximately 550,000 people. The Authority owns and operates the Bird Island WWTF
- As part of the approved 2014 LTCP **No Feasible Alternative (NFA)**, the Authority committed to:
  - **Renovate the primary treatment system at 160 MGD, with capacity for increased disinfection of flows as needed**
  - Restore the full secondary treatment capacity up to 360 MGD, and in the future designing for peak capacity up to 400 MGD
- **Once-in-a generation upgrade and rehabilitation of the Bird Island WWTF primary treatment system**






# Buffalo Sewer Authority – Bird Island WWTF

## IMPROVING FACILITY PROCESSES AND MEETING LTCP TO ADDRESS THE AUTHORITY'S NFA ALTERNATIVE C2




# Buffalo Sewer Authority LTCP NFA Goals

- Advancement of NFA Schedule and Expediting Completion w/ Funding In Place

 Secondary System Rehabilitation (Phase I) – replacement of aeration system and restoration of capacity from 320 MGD to 360 MGD. Construction Start in September 2022. Ongoing.

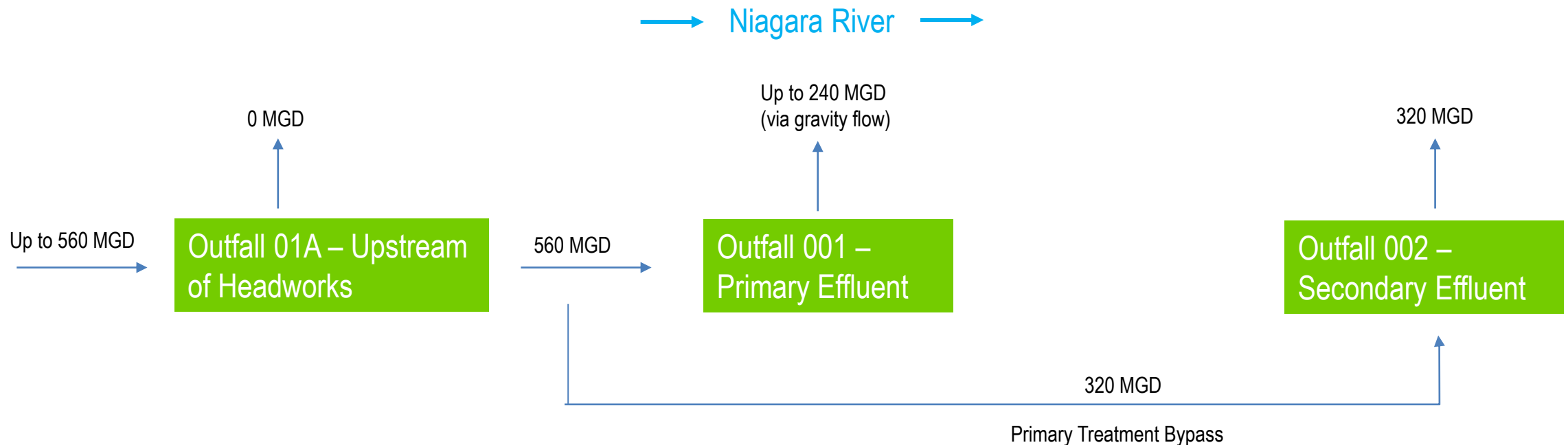
 **Primary Treatment Renovation (Phase II) – Engineering design ongoing. Construction Start scheduled for Summer/Fall 2024.**

 Secondary System Expansion (Phase III) – increase of secondary system treatment capacity from 360 MGD to 400 MGD. Engineering Design Start in Q1 2024. Construction Start in Q4 2026.

- Protect Public Health, Water Quality, and Environment
- Compliance with Regulatory Requirements to Achieve LTCP/NFA Goals
- Affordability to Ratepayers and the Authority – State and Federal Funding
- Modernize the Treatment Facility and Improve Efficiency
- Community Benefits
  - Improved Water Quality for Niagara River
  - Odor Control
  - Increased Community Engagement + Public Understanding of Water Infrastructure
  - Commitment to Economic Growth, Supplier Diversity, and Local Workforce

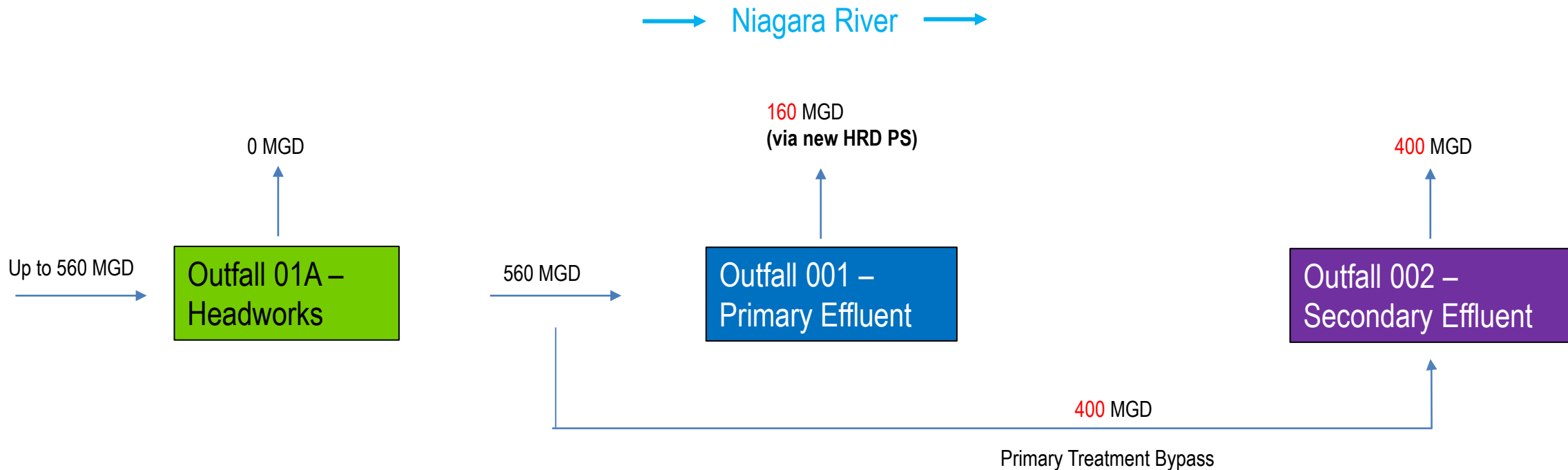
# Existing Conditions during Peak Wet Weather (Present)

- During normal operating conditions, Primary Treatment throughput is 160 MGD
- Secondary Treatment capacity currently limited to ~320 MGD
- During peak wet weather conditions (partial treatment mode), excess flows are discharged through partial treatment primary Outfall 001



# Ultimate System Buildout – Peak Wet Weather Conditions (2029)

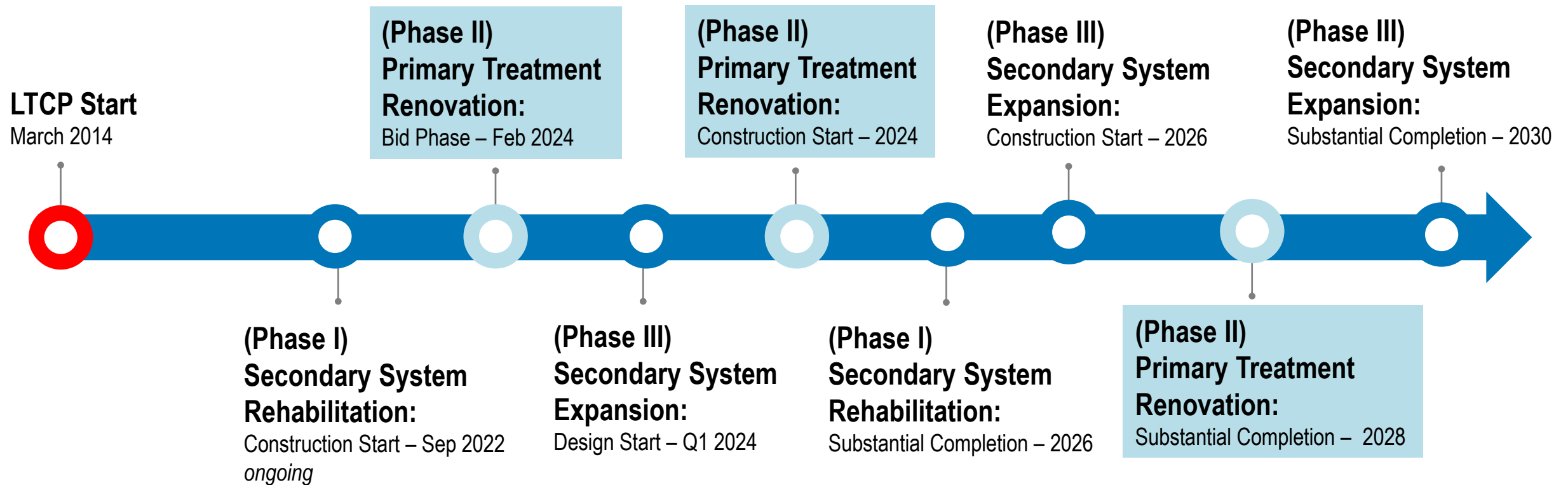
- Primary Treatment Renovation, and Secondary System Rehabilitation and Upgrades completed
- Primary Treatment Capacity maximum throughput of 160 MGD; Secondary Treatment Capacity increased to 400 MGD





# Bird Island WWTF

## NFA Capital Projects Timeline





## PRIMARY SYSTEM REHABILITATION AND UPGRADES PROJECT OVERVIEW



### 1 Primary Sedimentation Tanks

- » New sludge and scum collection equipment
- » Improved efficiency for sludge settling and removal
- » Concrete repair and coating for corrosion protection
- » Safety improvements with new handrail and toeboards

### 2 Sludge Pumping Station

- » New pumps, piping, and valves
- » New HVAC equipment to meet current ventilation codes and standards
- » New electrical and control equipment for improved automation and operations flexibility
- » Concrete and masonry repair and improvements while maintaining original building design
- » New personnel spaces and lighting

### 3 Odor Control

- » New effluent trough covers for the Primary Sedimentation Tanks
- » Odor capture at various chambers
- » New FRP piping to convey odorous air to odor control units for treatment prior to being released into the atmosphere

### 4 High-Rate Disinfection System

- » New Chlorine Contact Tank provides 5 minutes of contact time at 160 MGD
- » High-Rate Disinfection Building includes chemical storage and feed equipment
- » Five new 40 MGD submersible pumps to convey disinfected Primary Effluent through Outfall 001 to the Niagara River

### 5 Bypass Structure Gates

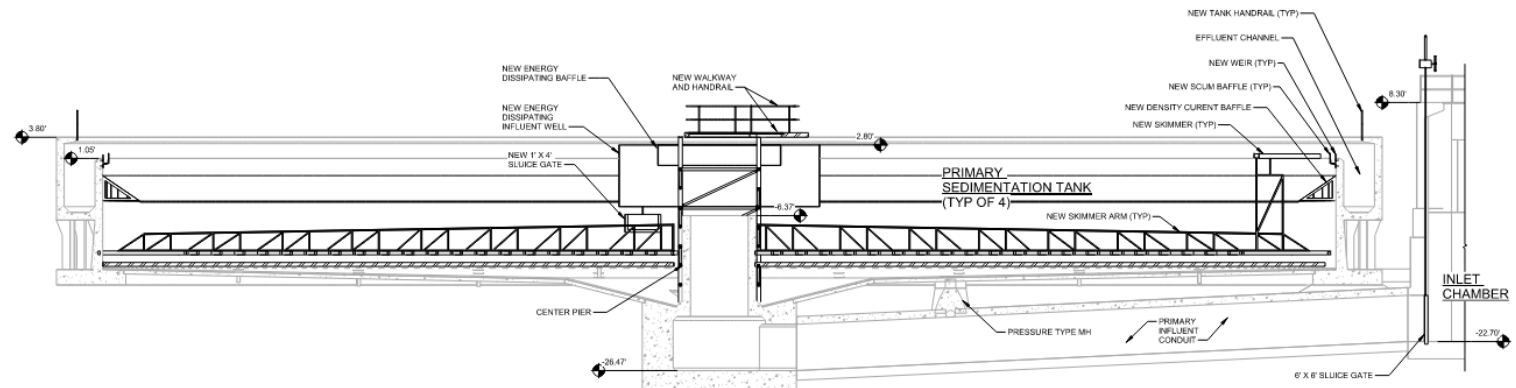
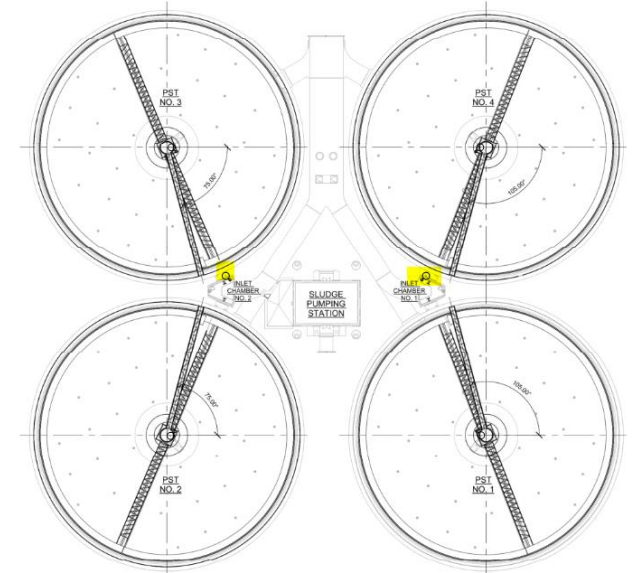
- » Gate 17 installed with new actuator
- » New gates and actuators to automate wet weather sequences and provide operational flexibility for Authority staff

### 6 Outfall 001 Repair

- » Restoration of multi-use riverwalk/trail
- » Installation of landscaping along public-facing utility bike/pedestrian path along Niagara River
- » Repairs to Outfall 001 overflow structure, and connection of HRD pump station pipe to the outfall structure

# Primary Sedimentation Tanks Upgrades

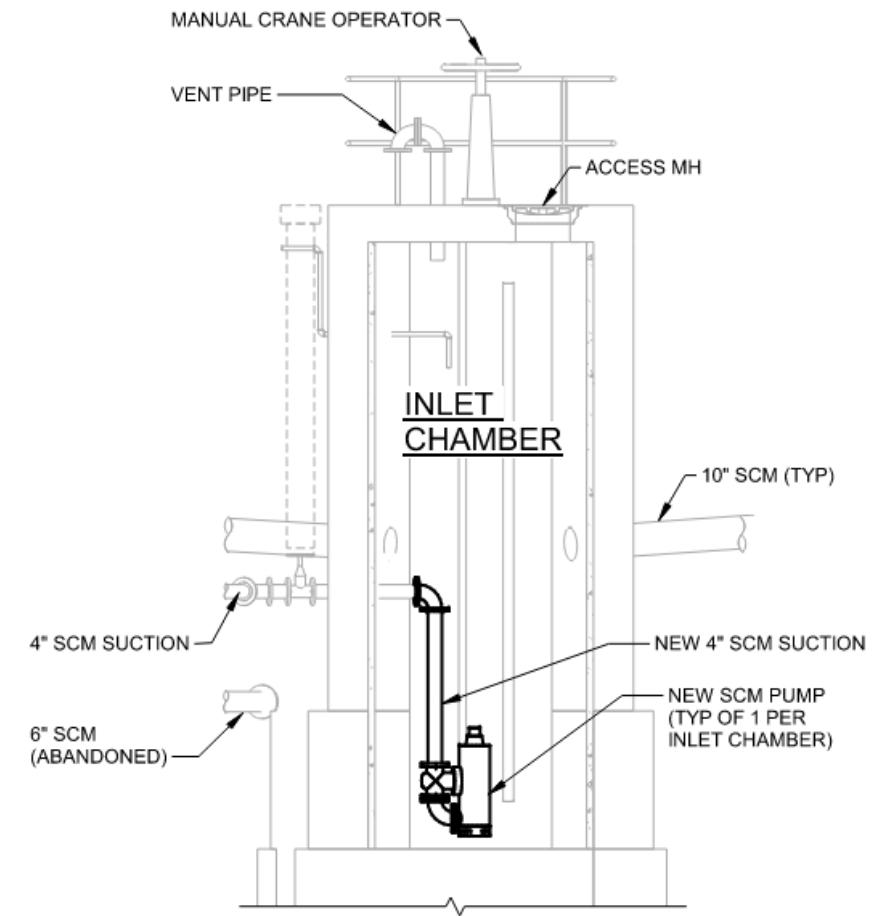
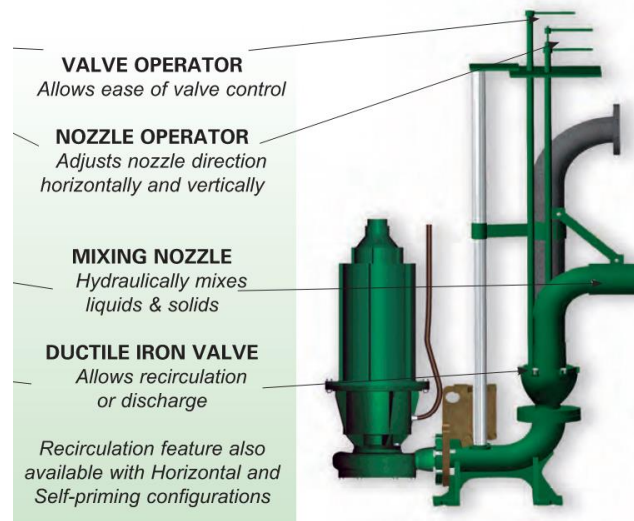
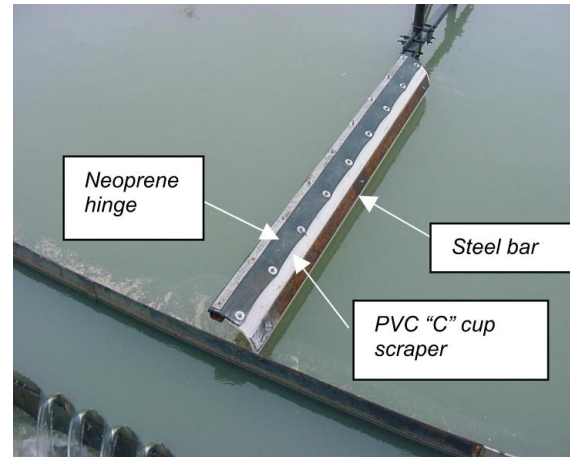
- New Clarifying Equipment
  - New Sludge and Scum Collection Equipment
  - Density Current Baffles
  - Energy Dissipating Inlets
  - Replace GW relief valves
  - New Scum Trough, Beach
  - Effluent Weir Covers – Odor Control
- Structural Repairs
  - GW Relief Valve Replacement
  - Concrete Crack / Spall repairs
  - Concrete Coating Inlet Chamber Repairs
  - Inlet Chamber & Scum Well Repairs
- Electrical
  - New Area Lighting
    - SwivelPole Type at PSTs and PST Walkway
- New Handrails around PSTs
- Davit Mounts
- Inlet Chamber / Scum Well Handrails Left in Place





# Scum Collection

- Operation
  - Automatic Based on Level
- Submersible Recirculation Pumps
- Scum Collection Equipment
  - Increase Scum Beach and Trough Length
- Scum Collection Equipment
  - Scum Beach to be Mostly Submerged
  - Hinged Scum Skimmer Arm



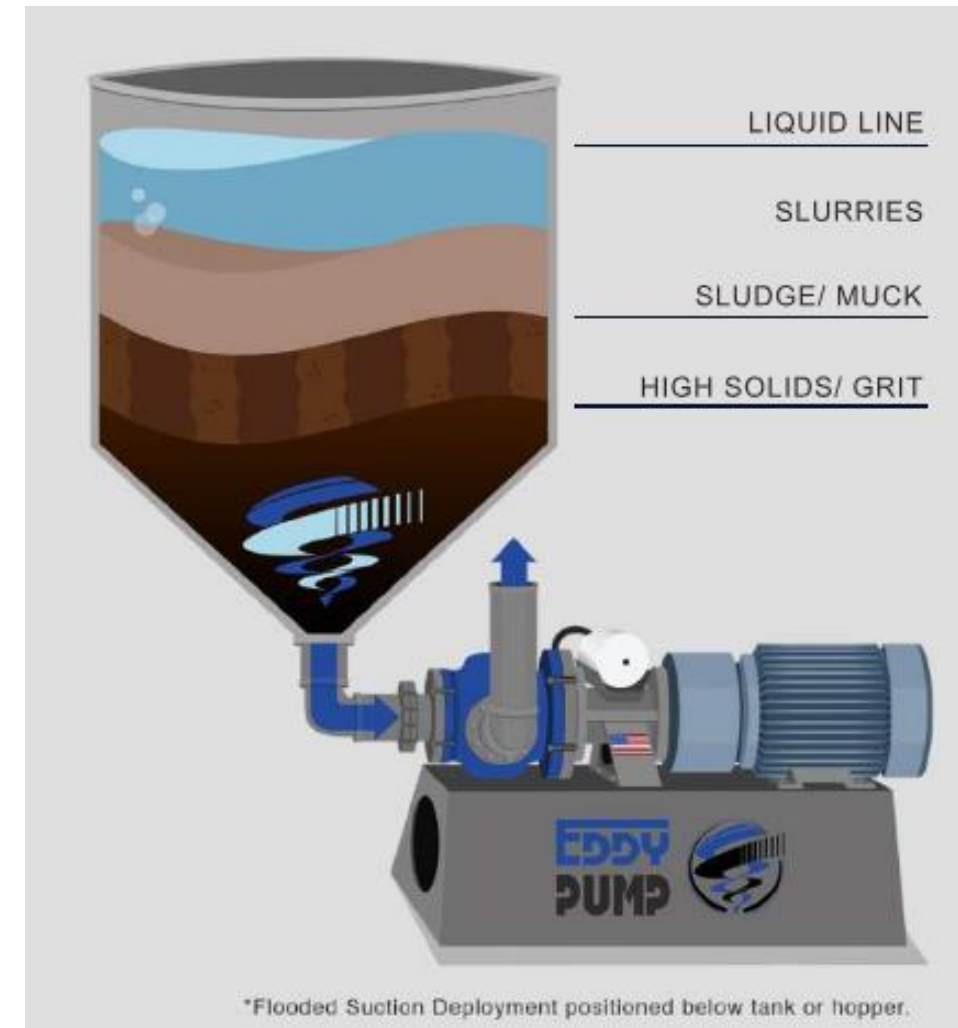
# Sludge Pumping Station

- Full Building Renovation – Masonry and Building Repairs
- New Sludge Pumps w/ Grinders
- New Drainage Pumps
- New Piping and Valves
- New Plumbing and HVAC
- New Bridge Crane
- Location of New MCC
- Renovated Electrical Control Room



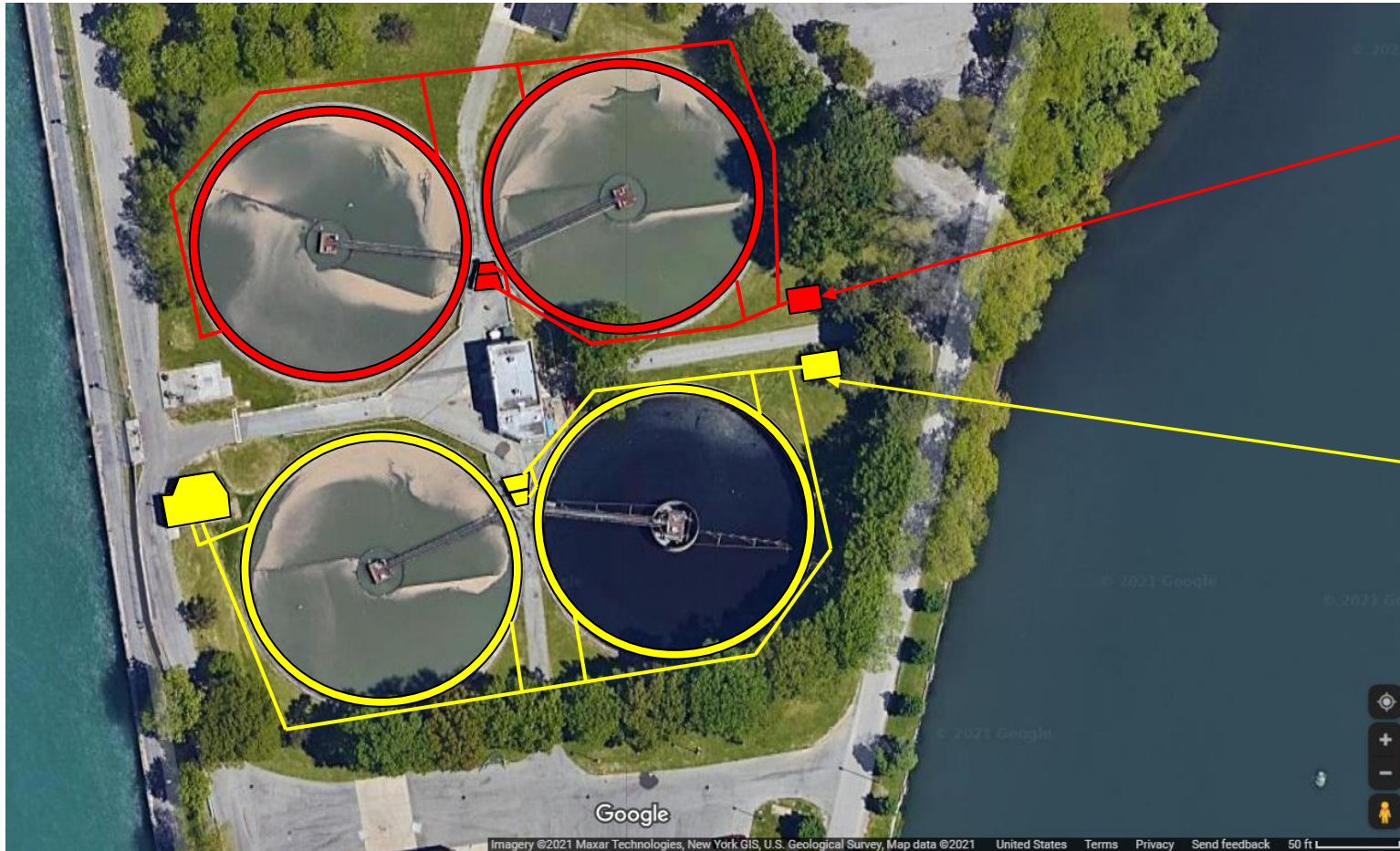
# Sludge Pumping Station

- Operation
  - Pumps to Operate Automatically Based on Timer and Sludge Density Meters
  - Manual Valve Actuation
- Primary Sludge Pumps
  - Eddy Pumps
- Sludge Monitoring
  - Sludge Density Meters
- Drainage Pumps
  - Dry Pit Submersible with Control Panel on Upper Level
  - Operated Based on Level





# Odor Control System Layout



Odor Control System to Treat North Inlet Chamber and Effluent Channels of Primary Sedimentation Tanks 1 and 4

Odor Control System to Treat Bypass and Control Chamber, South Inlet Chamber, and Effluent Channels of Primary Sedimentation Tanks 2 and 3

# Odor Control Approach

- **Hybrid system (carbon column + biotrickling filter).** Benefits:
  - Reduced frequency of carbon media replacement
  - Reduced carbon media replacement costs
  - More effective for treating large range of  $H_2S$  concentrations that BSA experiences
- Pulling air from Bypass and Control Chamber, PSTs, and Inlet Chambers
  - Two draw-offs on south side of chamber
- At PSTs
  - Launder covered along the perimeters
  - Two draw-off points per PST approximately  $180^\circ$  apart from each other
- At Inlet Chambers
  - Draw-offs from scum well and influent chamber





# High-Rate Disinfection (HRD) Pump Station and Chlorine Contact Tank

- 160 MGD max throughput
- To be operational only during Partial Treatment mode
- Once connected to Outfall 001, the existing Sodium Hypo Building would be decommissioned

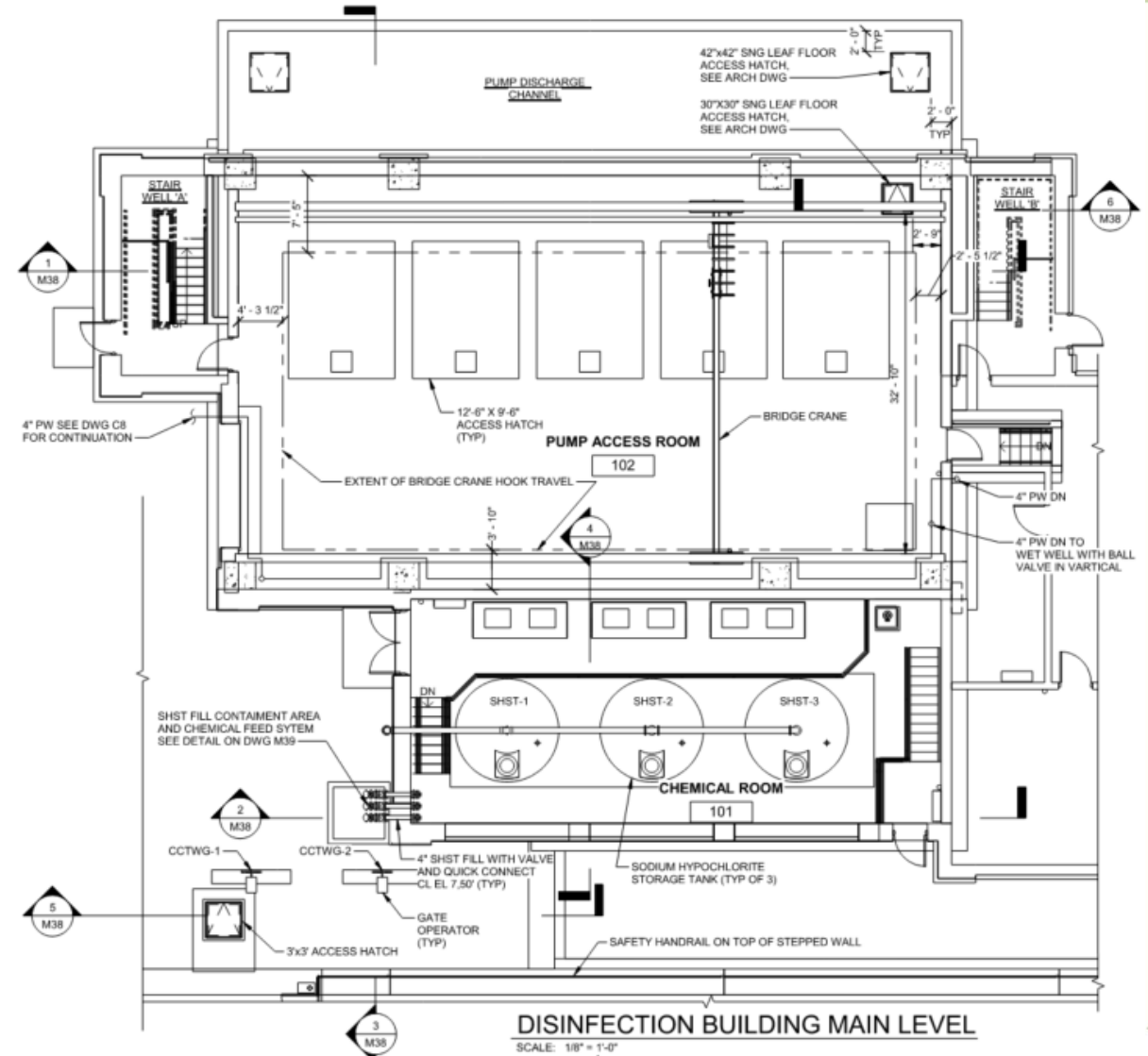


*Future Rendering of New HRD Facility*



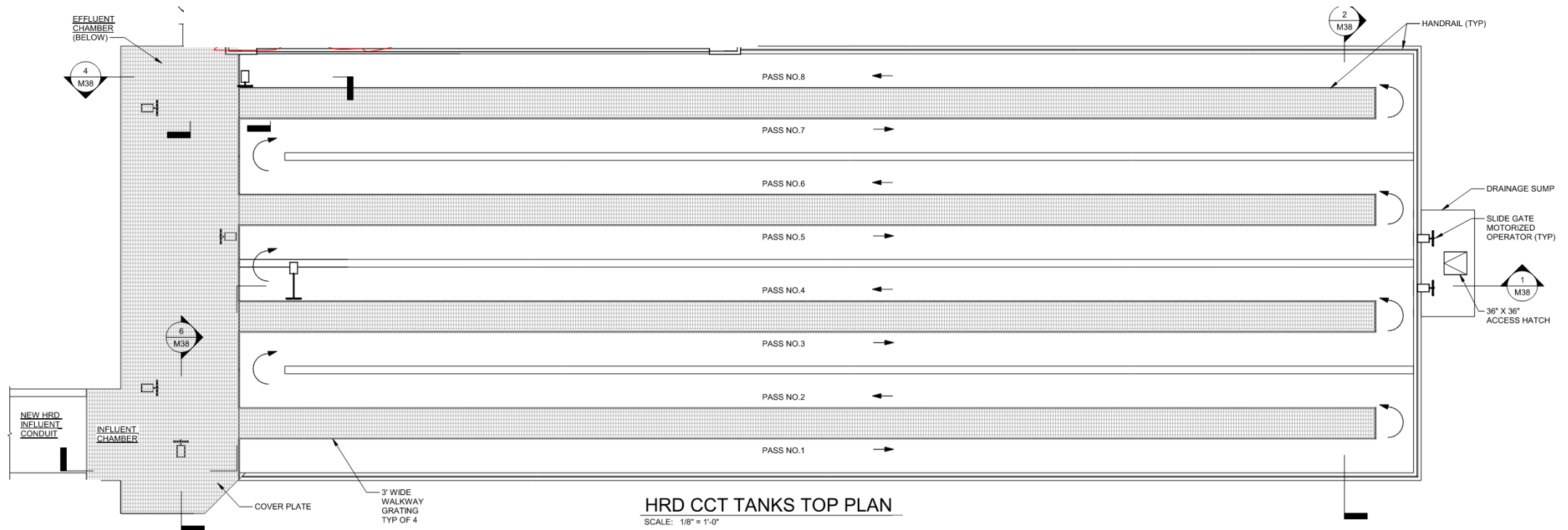
# HRD Pump Station

- Pumping Station
  - 160 MGD firm capacity
  - Five 40 MGD Submersible Pumps
  - 3 Pumps on VFD, 2 constant speed
- Chemical Feed and Storage
  - Three 11,200 gallon storage tanks
  - Chemical feed pumps

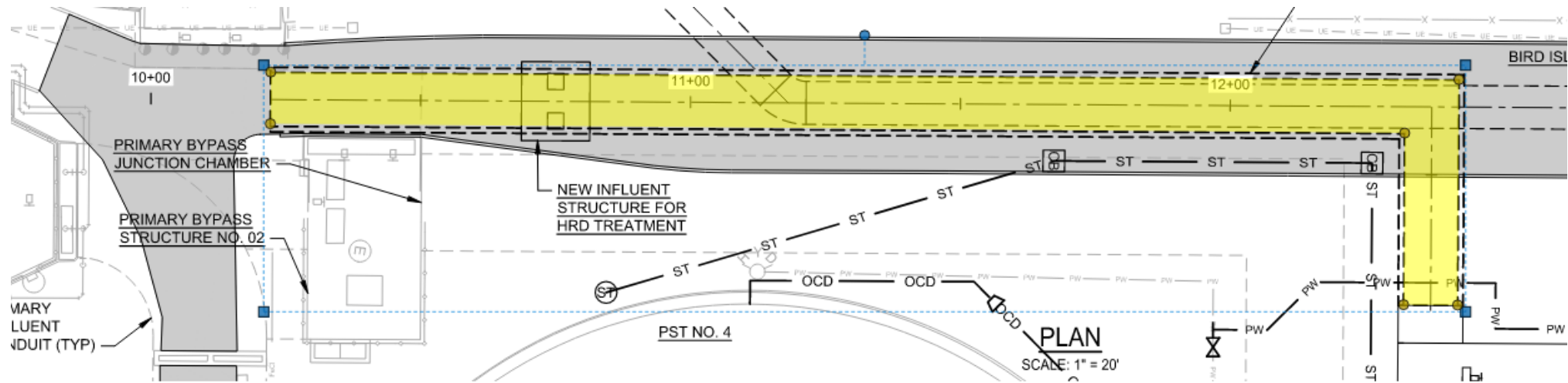


# HRD Chlorine Contact Tank

- 5-minute contact time:
  - Channel Width: 6 ft
  - Channels Length: 120 ft
  - Water Depth: ~13 ft



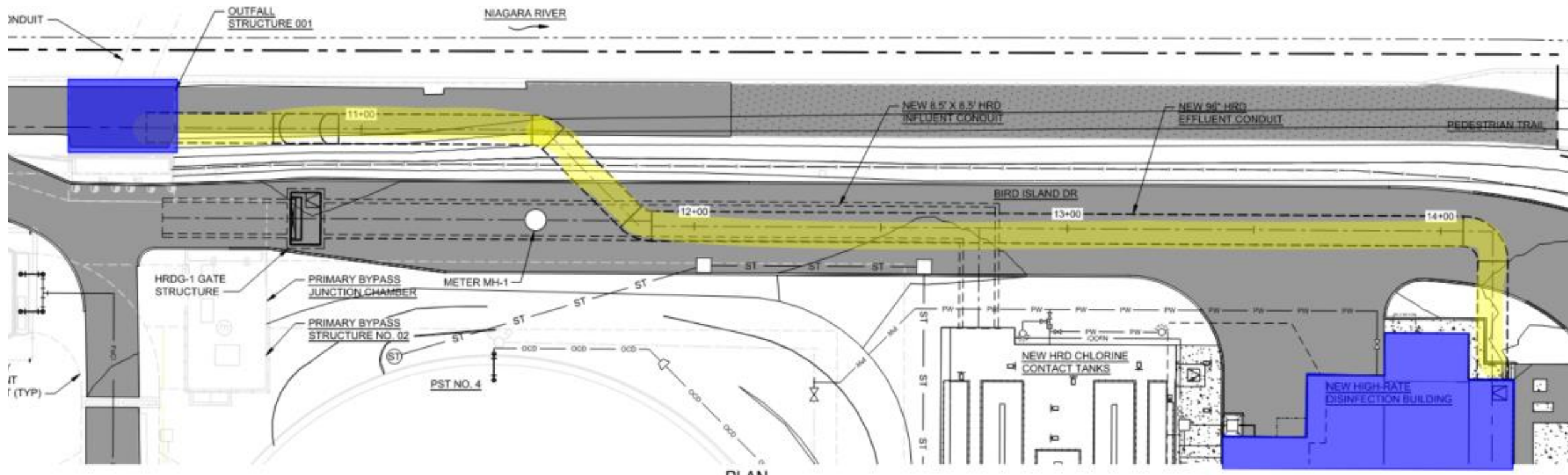
# Influent to HRD Conduit



- Flow
  - Gravity
  - Average Flow: 74 MGD
  - Max Flow: 160 MGD
- Size
  - 8.5'x8.5'
- Structural
  - Material: Cast in Place Concrete
  - Steel piles

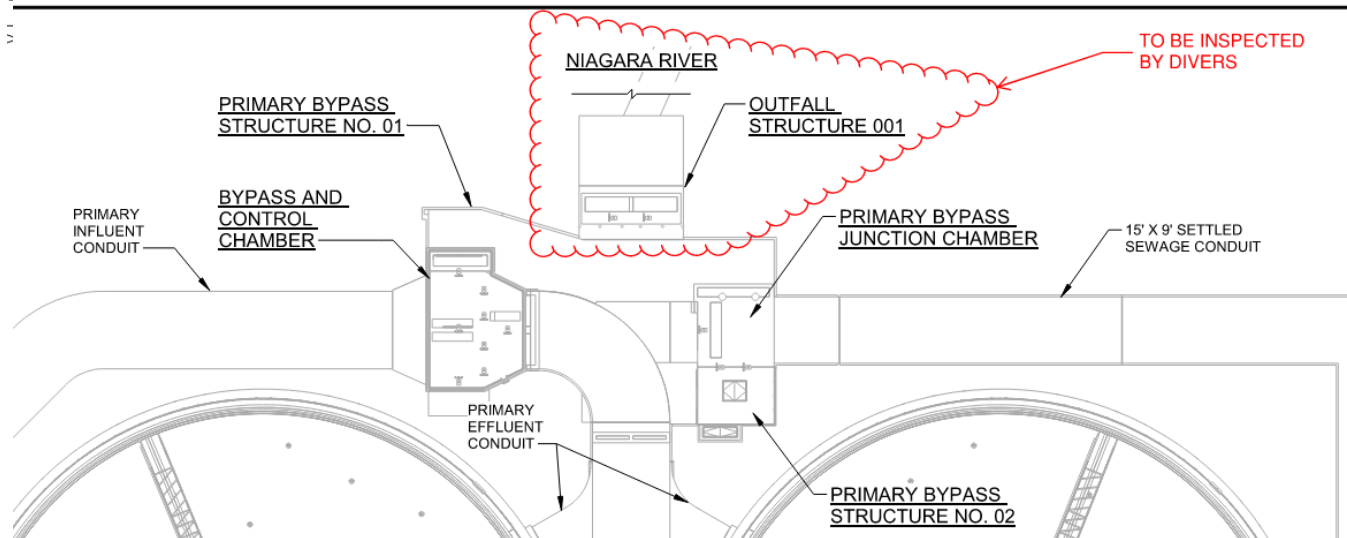
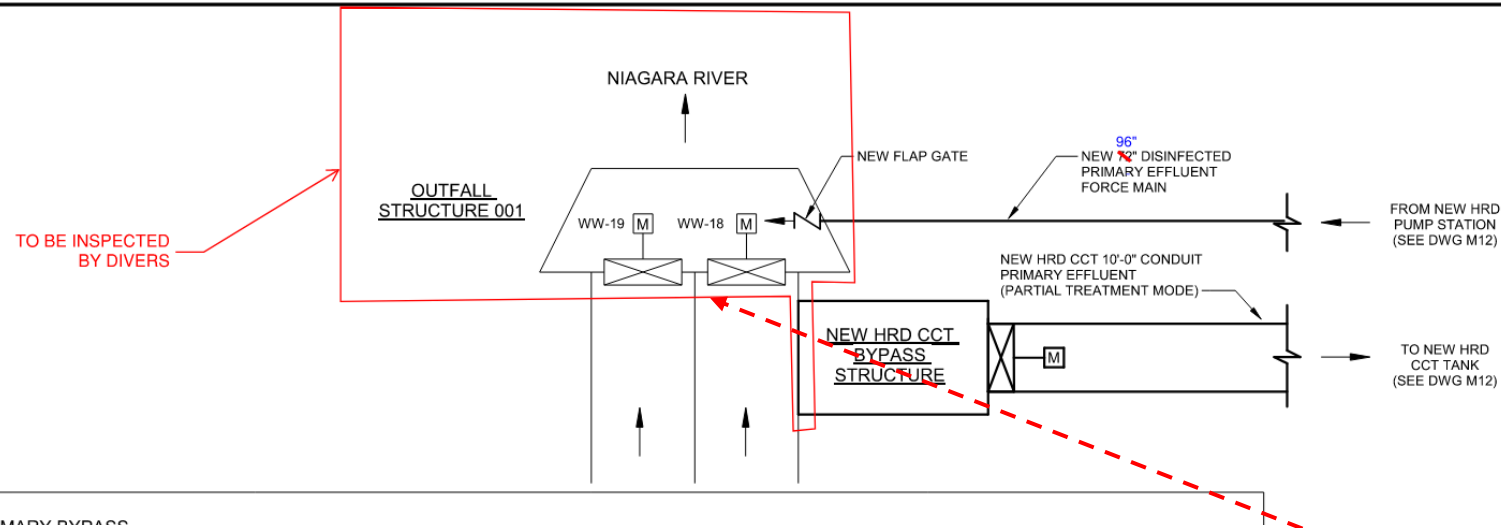
# Outfall 001 Repair and Connection to HRD

- The HRD Pumping Station force main will tie into the existing Outfall 001 structure.
- The existing Outfall 001 overflow structure and conduit was inspected to verify they are structurally competent to facilitate the proposed renovation.





# Outfall 001 Access



# What to Expect: Project Constraints and Site Coordination



**BUFFALO**  
SEWER AUTHORITY

 **GREELEY AND HANSEN**  
A TYLin Company

# Maintenance of Plant Operations

- Limitations in shutdown of the 4 Primary Tanks – typically one at a time
- Understanding Duration of Plant and Tank Shutdowns
- Flexibility of Wet Weather Capacity in either Primary or Secondary Treatment
- Contract B: Replacement of Gate WW-17 must occur first
- Limit Any Potential Discharge Permit Violations/Conflicts
- Riverwalk/Shoreline trail shutdown due to Outfall 001 repair: communication & coordination with City DPW and community
- Large deliveries shall occur at North Gate Entrance (via International Railroad Bridge)
- Coordination with other ongoing Contracts: Secondary Systems Rehab (Phase I), Secondary System Expansion (Phase III), and others







# Major Work and Coordination items

- HRD PS and CCT
  - Deep Excavation and Dewatering for Dewatering
  - Electrical power supply from MegaStructure/Substation
  - The new facility itself – Pump station, CCT, and influent and effluent conduit
  - Connection to Outfall 001
- Replacement of Gate WW-17
- Instrumentation & Controls Coordination w/ Ovation
- Primary Tank Structural Repair and Mechanical Replacement
- Gut renovation of the Sludge Pump Station – new pumps, relocated process lines and MCC
- Long lead items: Sludge and HRD pumps, MCCs, clarifier mechanisms, odor control equipment, WW gates





# Contract Administration & Requirements

Funding, Contract Packaging, and Contractor Requirements

**BUFFALO**  
SEWER AUTHORITY

 **GREELEY AND HANSEN**  
A TYLin Company

# Contract Packaging

The work is divided into two Contracts, A and B. Bidder may propose on either Contract A or Contract B.

- **Contract A – Primary Settling Tanks and Sludge Pumping Station**
  - Primary Sedimentation Tanks and Sludge Pumping Station Renovation; Installation of New Odor Control System; Demolition of equipment in the existing Bypass SH Facility.
- **Contract B – New Chlorine Contact Tanks and High-Rate Disinfection (HRD) System**
  - New High-Rate Disinfection Chlorine Contact Tank, High-Rate Disinfection Building, a new connection and renovations to the existing Outfall Structure 001, HRD Influent and Effluent Conduits, modifications to the existing Bypass and Control Chamber and Primary Bypass Junction Chamber, replacement of gates at the Bypass and Control Chamber, Primary Bypass Structure No. 1 and 2.
  - Replacement of gates WW-15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26
- **The Bidder may propose the bid alternate identified as Contract C (Combined Bid for Contracts A+B).** If a Bidder proposes on Contract C, they must also provide proposals for Contract A and B.
- The Bidder understands that after a Contract is awarded, the Authority may select the bid alternate. The proposed prices for the bid alternate may or may not be considered in determination of the lowest bid.

# Scope of Work – Measurement and Payment

- Lump Sum Items (Contract A)
  - Renovations to the Primary Sedimentation Tanks, Sludge Pumping Station, Odor Control system, demolition of equipment in the Bypass SH Facility, and associated equipment, material, and labor.
  - Negotiated Price: Emerson equipment and integration for the equipment associated with the Primary Sedimentation Tanks, Sludge Pumping Station, and Odor Control System.

# Scope of Work – Measurement and Payment

- Lump Sum Items (Contract B)
  - Construction of a new Chlorine Contact Tank and High-Rate Disinfection Building,
  - a new connection and renovations to the existing Outfall Structure 001, HRD Influent and Effluent Conduits,
  - modifications to the existing Bypass and Control Chamber and Primary Bypass Junction Chamber,
  - replacement of WW gates at the Bypass and Control Chamber and Primary Bypass Structure No. 1 and 2
  - Negotiated Price: Emerson equipment and integration for the equipment associated with the High-Rate Disinfection System.

# Scope of Work – Measurement and Payment

- Unit Price Items
  - Additional earth excavation (Per CY)
  - Additional select fill (Per CY)
  - Additional Class B Concrete (Per CY)
  - Additional Steel Reinforcing (Per LB)
  - Additional Pile Length (Per LF)
  - Additional re-pointing of existing masonry (Per SF)
  - Removal of damaged brick and installation of matching brick (Per SF)
  - Removal of damaged floor tile and installation of matching floor tile (Per SF)
- Allowance
  - Allowance for the handling, removal, and legal disposal of unanticipated hazardous and non-hazardous (regulated) waste.
  - Allowance for the handling, removal, and legal disposal of unanticipated impacted soil and groundwater.
  - Allowance for the repair of existing pipelines.

# Funding for Primary Treatment Renovation Project

- Overall Projected Construction Cost: \$70-80 Million
  - Contract A: \$20-25M
  - Contract B: \$50-55M
- Project funding secured from State and Federal dollars, interest-free state and federally-backed loans, low interest state-backed loans, and grants (CWSRF, BIL, WIIA, WQIP, NYSERDA)
- Administered through NYSDEC and NYSEFC
- NYSEFC Terms & Conditions will govern – **get familiar with EFC requirements**
- **Compliance for the entirety of the construction contract is critical**
- 20% Disadvantaged Business Enterprise (DBE) Utilization Goal





# State Revolving Loan Fund DBE Requirements

- Contractor agrees to make documented **Good Faith Efforts** to utilize at least 20% of total value of the contract to NYS-certified DBEs.
- Prime contractor must utilize DBE suppliers/subcontractors that are certified on behalf of the New York State Unified Certification Program. [NYSUCP \(newnycontracts.com\)](http://nysucp.newnycontracts.com)
- Prime contractors certified as DBE as per the above can use their self-performance towards fulfilling the DBE participation goal.
- Awarded contractor will be required to submit Quarterly DBE reports and proof of payments to DBEs throughout the term of the contract.
- Contractor should also continue **Good Faith Efforts** to seek opportunities for DBE participation during the life of the contract even if proposed fair share objectives have been achieved.
- **DBE utilization plan must be submitted with Bid Package to be considered**  
<https://efc.ny.gov/mwbe-forms> / [dbe-utilization-plan.docx \(live.com\)](http://dbe-utilization-plan.docx)



**NYS Environmental Facilities Corporation  
Disadvantaged Business Enterprise (DBE) Utilization Plan**

SECTION 1: MUNICIPAL INFORMATION			
Recipient/Municipality: <input style="width: 100%;" type="text"/>		County: <input style="width: 100%;" type="text"/>	
Project No.: <input style="width: 100%;" type="text"/>	Contract ID: <input style="width: 100%;" type="text"/>	Registration No. (NYC only): <input style="width: 100%;" type="text"/>	
Minority Business Officer: <input style="width: 100%;" type="text"/>	Email: <input style="width: 100%;" type="text"/>	Phone #: <input style="width: 100%;" type="text"/>	
Address of MBO: <input style="width: 100%;" type="text"/>			
Electronic Signature of MBO: <input style="width: 100%;" type="text"/>			Date: <input style="width: 100%;" type="text"/>
<input type="checkbox"/> I certify that the information submitted herein is true, accurate and complete to the best of my knowledge and belief.			

SECTION 2: PRIME CONTRACTOR / SERVICE PROVIDER INFORMATION				
Firm Name: <input style="width: 100%;" type="text"/>			Contract Type: <input type="checkbox"/> Construction <input type="checkbox"/> Other Services	
Is the Prime Firm certified as a DBE? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please include Prime information in Section 3.				
Address: <input style="width: 100%;" type="text"/>		Phone #: <input style="width: 100%;" type="text"/>	Fed. Employer ID #: <input style="width: 100%;" type="text"/>	
Description of Work: <input style="width: 100%;" type="text"/>			Email: <input style="width: 100%;" type="text"/>	
Award Date: <input style="width: 100%;" type="text"/>	Start Date: <input style="width: 100%;" type="text"/>	Completion Date: <input style="width: 100%;" type="text"/>	DBE Fair Share Objective	PROPOSED DBE Participation
Total Contract Amount: \$ <input style="width: 100%;" type="text"/>			Total: 20% \$ <input style="width: 100%;" type="text"/>	Total: <input style="width: 100%;" type="text"/> % \$ <input style="width: 100%;" type="text"/>
DBE Eligible Contract Amount: \$ <input style="width: 100%;" type="text"/> (DBE Fair Share Objectives are applied to this amount and includes all change orders, amendments, & specialty waivers)				
If fair share objectives are not met, documentation must be attached: <input type="checkbox"/> No Participation <input type="checkbox"/> Short of the DBE Fair Share Objective				
<input type="checkbox"/> Specialty Equipment/Services: must be of SIGNIFICANT cost – attach list of cost and type of equipment and good faith effort documentation				

SECTION 3: DBE SUBCONTRACTOR INFORMATION				
This Submittal is: <input type="checkbox"/> The First/Original Utilization Plan <input type="checkbox"/> Revised Utilization Plan #: <input style="width: 100%;" type="text"/>				
DBE Subcontractor Information		Contract Amount	For EFC Use:	
Business Name: <input style="width: 100%;" type="text"/>	Fed. Employer ID#: <input style="width: 100%;" type="text"/>	<input style="width: 100%; height: 100%;" type="text"/>	<input style="width: 100%; height: 100%;" type="text"/>	
Address: <input style="width: 100%;" type="text"/>	Phone #: <input style="width: 100%;" type="text"/>			
Scope of Work: <input style="width: 100%;" type="text"/>	Email: <input style="width: 100%;" type="text"/>			
Certifying Entity: <input type="checkbox"/> DOT in State of _____; or <input type="checkbox"/> SBA <input type="checkbox"/> Other (indicate entity): <input style="width: 100%;" type="text"/>				Start Date: <input style="width: 100%;" type="text"/>
Full Contract Amount \$ <input style="width: 100%;" type="text"/>				Completion Date: <input style="width: 100%;" type="text"/>

# Contract Administration

- BSA will follow up with attendees at this meeting when the bid advertisement goes live
- Bid Advertisement will also be posted on BSA's RFP/Procurement Opportunities page: <https://buffalosewer.org/category/vendor-opportunities/vendor-opportunities-vendor-opportunities/>
- Become a plan holder on [Avalon Planroom](#)
- **Notable documents with Bid Package**
  - Entire spec book required for the bid submission
  - [DBE Utilization Plan and documented Good Faith Efforts](#)
  - Requirements of funding terms & conditions
  - Owner's Protective Liability policy of insurance
  - Check the math! Make sure the total bid amount adds up correctly

# Contract Administration (Cont'd)

- Prevailing Wage Requirements
  - This contract is subject to prevailing wage requirements under Article 8 of the NYS Labor Law.
  - The prevailing wage and supplement rates that are in effect (for each trade) at the time the work is performed must be paid.
- Build America, Buy America (BABA) Act waived for this contract
- Must comply with American Iron & Steel (AIS)

# Communications

- Document Management Software
  - *Procore* will be used for submission of submittals, RFIs/RFCs.
  - Contractor will be provided Procore training and specific instructions for submittal procedures after the bid is awarded.
- Bi-Weekly Progress Meetings
- Daily Communications with Buffalo Sewer staff and Consultant Construction Manager prior to start of the day's work
- Coordination with BSA Security (North Gate) for delivery of construction equipment and products

# Project Schedule: Procurement and Construction



**BUFFALO**  
SEWER AUTHORITY

 **GREELEY AND HANSEN**  
A TYLin Company



# Current Bid & Procurement Schedule

- Bid Advertisement: February 12, 2024
- Three (3) Mandatory Pre-Bid Meetings
  - **Meeting #1** – Virtual Informational Meeting: February 20, 2024 @ 11:00am ET
  - **Meeting #2** – Virtual NYSEFC Funding Compliance Meeting: February 21, 2024 @ 2:00pm ET
  - **Meeting #3** – Site walkthrough of the project site: February 22-23, 2024
- Bid Packages Due: March 28, 2024 at 11:00am EST
- Recommendation of Bid Award: May 2024
- Notice to Proceed: Summer-Fall 2024
- Substantial Completion: December 2028



# Future Buffalo Sewer construction contracts to be advertised



**BUFFALO**  
SEWER AUTHORITY

 **GREELEY AND HANSEN**  
A TYLin Company

# Future BSA Construction Contracts

<u>Treatment Facility Projects</u>	<u>Construction Start Date</u>	<u>Opinion of Probable Construcion Cost</u>
WWTF Upgrades Phase III (Secondary System Expansion)	November 2026	\$ 80M – \$ 100M
<u>Collection System Projects</u>	<u>Construction Start Date</u>	<u>Opinion of Probable Construcion Cost</u>
CSO 010 - Breckenridge St CSO Sewer Project	March 2025	\$ 20,000,000
CSO 053 - Jefferson Ave Green Infrastructure	June 2025	\$ 2,178,000
CSO 053 - SPP & OLS Various Modifications	July 2025	\$ 330,000
CSO 053 - Canisius (Jefferson Delavan) OLS	June 2026	\$ 33,000,000
CSO 053 - SPP338 Modification	July 2026	\$ 4,400,000
System - Schiller Park OLS SPP339-340 Modifications	July 2026	\$ 132,000
CSO 014 - SPP206 A&B Real-Time Control Smart Sewers	May 2027	\$ 4,400,000
CSO 053 - SPP336B OLS (Sidney OLS)	July 2027	\$ 30,492,000
CSO 053 - Edison Martha OLS	June 2028	\$ 40,964,000
System - Schiller Park OLS	July 2028	\$ 94,556,000

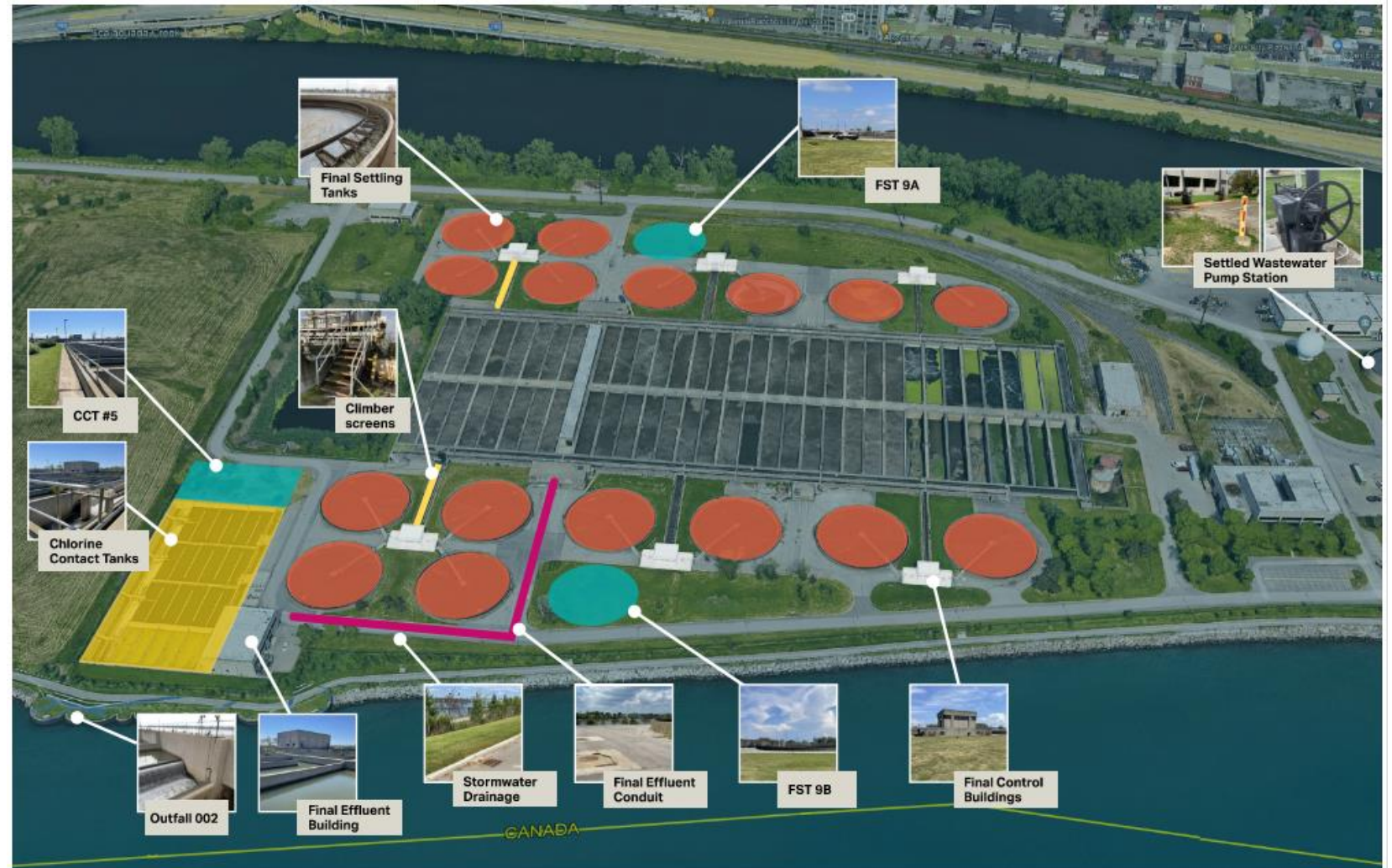
**\$500M+ Capital Plan through 2028**

CSO: Combined Sewer Overflow  
 OLS: Off-Line Storage  
 SPP: Sewer Patrol Point



# WWTF Upgrades Phase III: Secondary System Upgrades and Expansion

- Rehabilitation of secondary system and increase of secondary treatment capacity from 360 MGD to 400 MGD.
- Engineering Design Start: Q1 2024
- Construction Start: Q4 2026
- Opinion of Probable Construction Cost: \$80M-\$100M







# Feedback and Questions

**BUFFALO**  
SEWER AUTHORITY

 **GREELEY AND HANSEN**  
A TYLin Company

# Buffalo Sewer Authority Design Project Team

## Walt Walker, PE, ENV SP

*Design Project Manager*

[walt.walker@greeley-hansen.com](mailto:walt.walker@greeley-hansen.com)

**Project Point of Contact**

## Ryan Christopher, PE, ENV SP

*Design Deputy Project Manager*

## Tim Blake

*WWTF Capital Projects Manager*

## Rosaleen Nogle, PE

*Principal Sanitary Engineer*

## Alex Emmerson

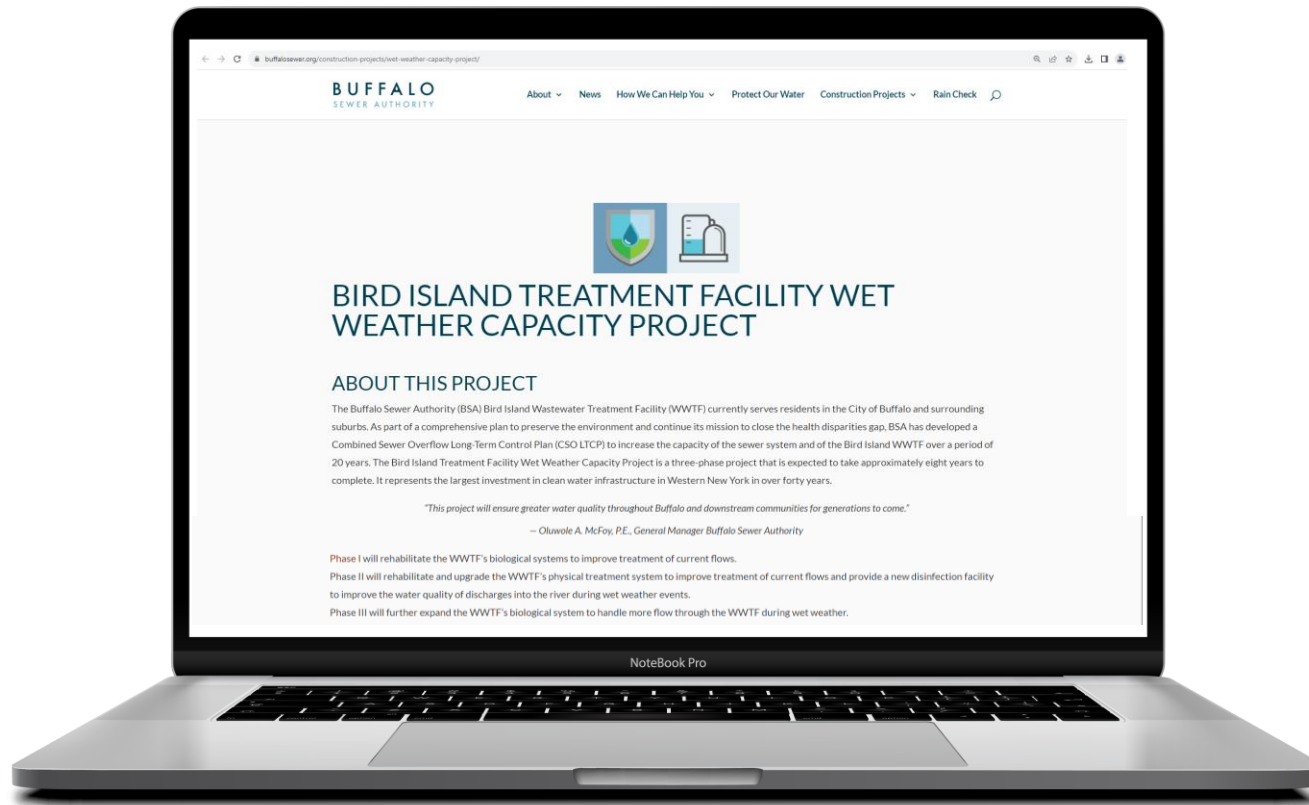
*Plant Superintendent*

## Paul Harris, PMP

*Superintendent of Mechanical Maintenance*



# Buffalo Sewer Authority Website



[buffalosewer.org](http://buffalosewer.org)

## Your BEST source of information!

- ✓ Consultant, Contractor, and Supplier Opportunities
- ✓ Construction Updates
- ✓ FAQs
- ✓ Board Meeting Minutes
- ✓ Public Participation Plans

# Thank You!

## GET IN TOUCH:



[buffalosewer.org](https://buffalosewer.org)



[@BufaloSewer](https://www.facebook.com/BufaloSewer)



[@BufaloSewer](https://twitter.com/BufaloSewer)



[BufaloSewerAuthority](https://www.linkedin.com/company/BufaloSewerAuthority)