



Capital Improvement Program (CIP) Project Updates Wastewater Engineering

September 9, 2025 | Vince Genco, PE

Agenda

- CIP #: 211006 – WRRF Pump Station No.1 Improvements
- CIP #: 232005 – Freud Pump Station Improvements
- CIP #: 222001 – Northwest Interceptor to Oakwood CSO – NOCSOS

Wastewater CIP Project STATUS



CIP #: 211006 Pump Station No. 1 Improvements

Project Manager: [Kashmira Patel, PE, PMP](#)

Project Delivery Method: [Design-Bid-Build](#)

Project Status: [Construction Phase](#)

CIP Score: [78.6](#)

We Are Here

Master Plan & BCE		RFP	Study	Design	RFB	Construction	
BCE: Business Case Evaluation		Request for proposal		Request for bid			
Contract	Contractor	Contract Amount	Earned Value	% Complete	Start	End	% Elapsed Time
<ul style="list-style-type: none">• CS-102• 2103350• 2200373• 2200368	<ul style="list-style-type: none">• Wade-Trim• Weiss ThermalNetics J&S Valve, Inc	<ul style="list-style-type: none">• \$12,551,576• \$91,453,079• \$1,109,000• \$3,377,123	<ul style="list-style-type: none">• \$9,157,572• \$30,675,523• \$1,077,000• \$3,039,411	<ul style="list-style-type: none">• 72%• 32%• 97%• 90%	<ul style="list-style-type: none">• 05/07/2019• 02/07/2023• 06/30/2022• 07/13/2022	<ul style="list-style-type: none">• 07/04/2027• 05/08/2030• 06/30/2027• 07/13/2027	<ul style="list-style-type: none">• 77%• 35%• 62%• 62%

Wastewater CIP Project INFO



CIP #: 211006 Pump Station No. 1 Improvements

💧 Scope of Work & Goals

- 💧 **Pumping System Upgrades:** Rehabilitate main lift pumps; install new gates, actuators, process piping, valves, baffle walls, and associated components.
- 💧 **System Enhancements:** Upgrade electrical systems, instrumentation and controls, and HVAC systems to improve efficiency and reliability.
- 💧 **Facility Improvements:** Renovate facility structure, including a new roof, hatches, windows, a monitoring room, an additional electrical building, and rehabilitation of venturi vaults.

💧 Significance/Need/Background

- 💧 Extend the service life of critical equipment, systems, and facilities by at least 20 years.
- 💧 Simplify operations while improving the reliability and resilience of all major systems and components.

Wastewater CIP Project PHOTOS

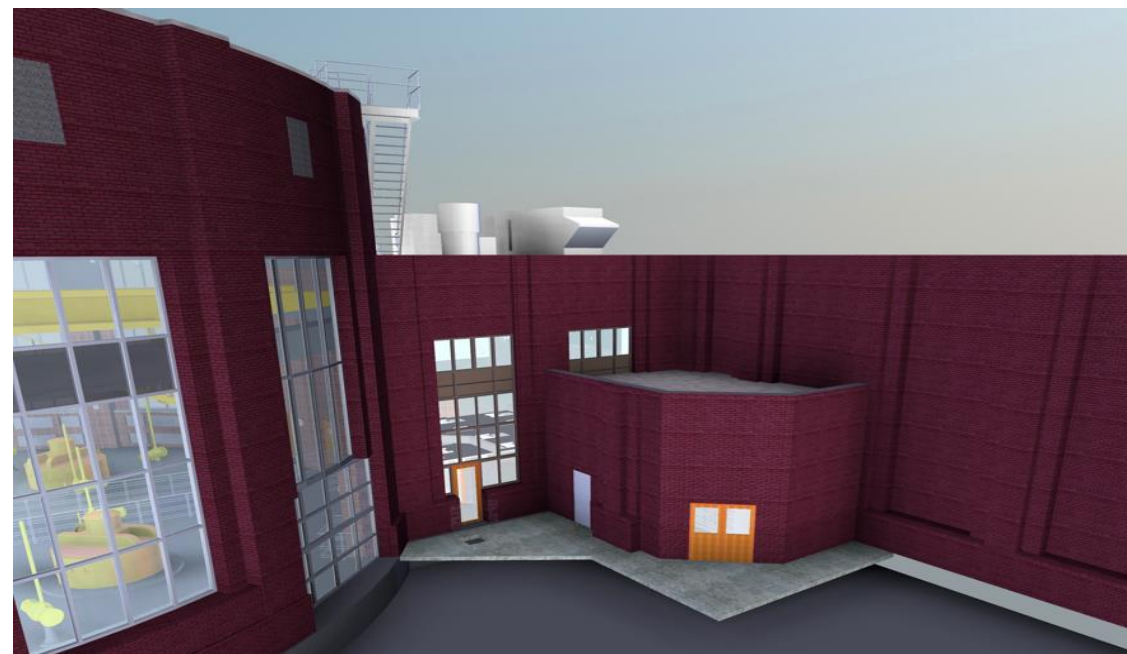


CIP #: 211006 Pump Station No. 1 Improvements

Existing Entrance to PS-1



Proposed Entrance to PS-1 with an Addition of a New Electrical Building

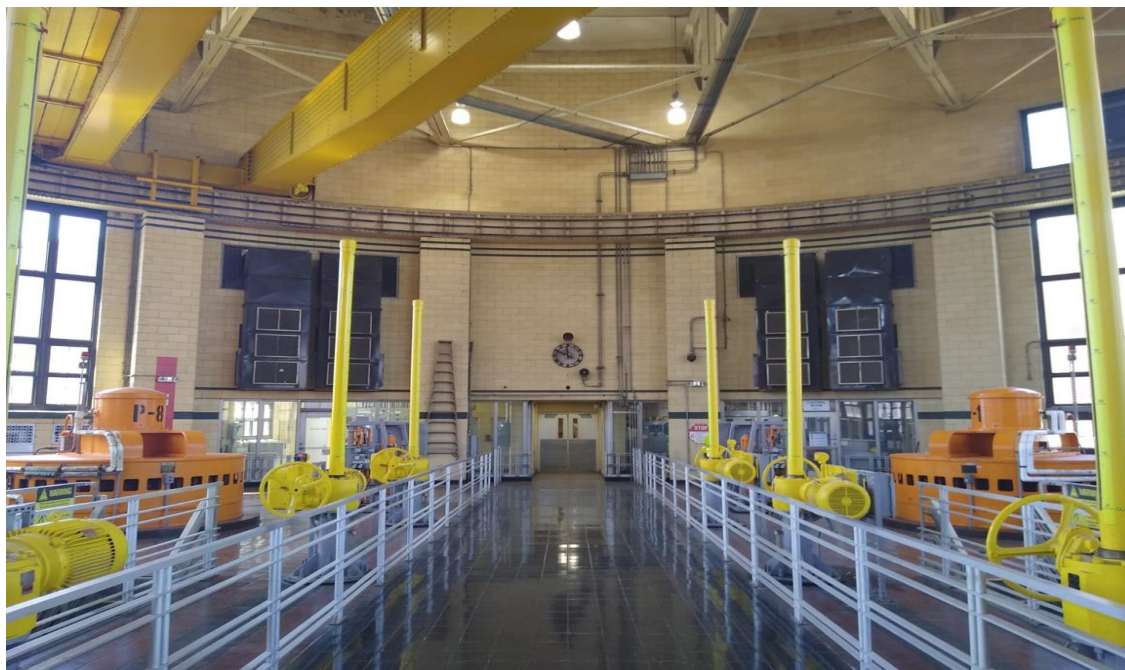


Wastewater CIP Project PHOTOS

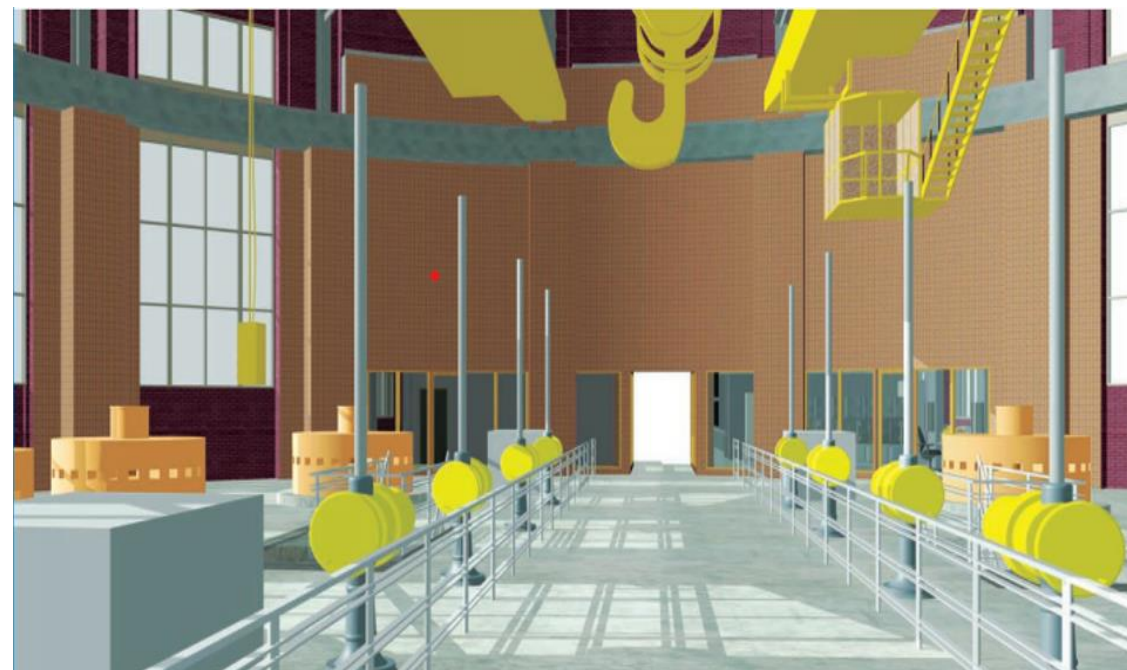


CIP #: 211006 Pump Station No. 1 Improvements

Existing Motor Room Floor



Proposed Motor Room Floor



Wastewater CIP Project PHOTOS



CIP #: 211006 Pump Station No. 1 Improvements

Existing Venturi Vault Nos. 1&2



Improved Venturi Vault Nos. 1&2

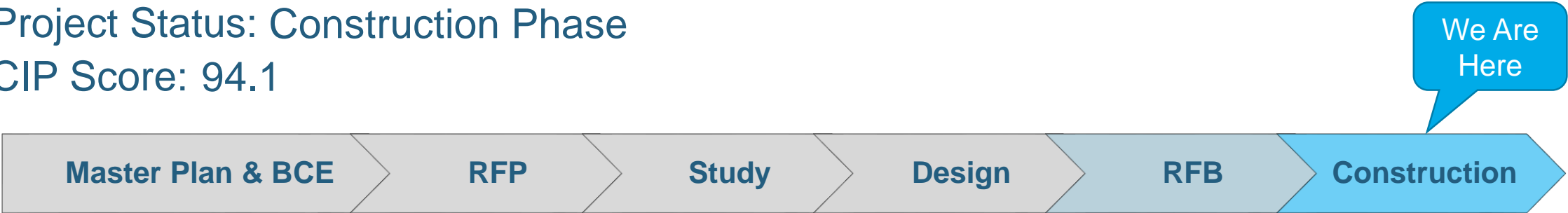


Wastewater CIP Project STATUS



CIP #: 232005 – Freud Pump Station Improvements

Project Manager: Paul Ransom
Project Delivery Method: Design-Bid-Build
Project Status: Construction Phase
CIP Score: 94.1



Contract	Contractor	Contract Amount	Earned Value	% Complete	Start	End	% Elapsed Time
<ul style="list-style-type: none">• CS-120 (PO-1001519)• 2204605	<ul style="list-style-type: none">• Arcadis• Kokosing Industrial, Inc	<ul style="list-style-type: none">• \$8,318,038• \$138,780,000	<ul style="list-style-type: none">• \$5,817,503• \$14,967,888	<ul style="list-style-type: none">• 70%• 11%	<ul style="list-style-type: none">• 06/07/17• 07/15/24	<ul style="list-style-type: none">• 07/31/28• 11/12/28	<ul style="list-style-type: none">• 73%• 24%



BCE=Business Case Evaluation
RFP=Request for Proposal
RFB=Request for Bid

Wastewater CIP Project INFO



CIP #: 232005 – Freud Pump Station Improvements

💧 Project Scope of Work/Goals

- 💧 Construction of a new structure with the ability to redirect dry weather flows within the Ashland & Fox Creek Relief Sewers and isolate the Freud Storm Pump Station.
- 💧 Rehabilitation of 8 storm water pumps
- 💧 Rehabilitation and modernization of systems; extending the useful life for 50+ years.

💧 Significance/Need/Background

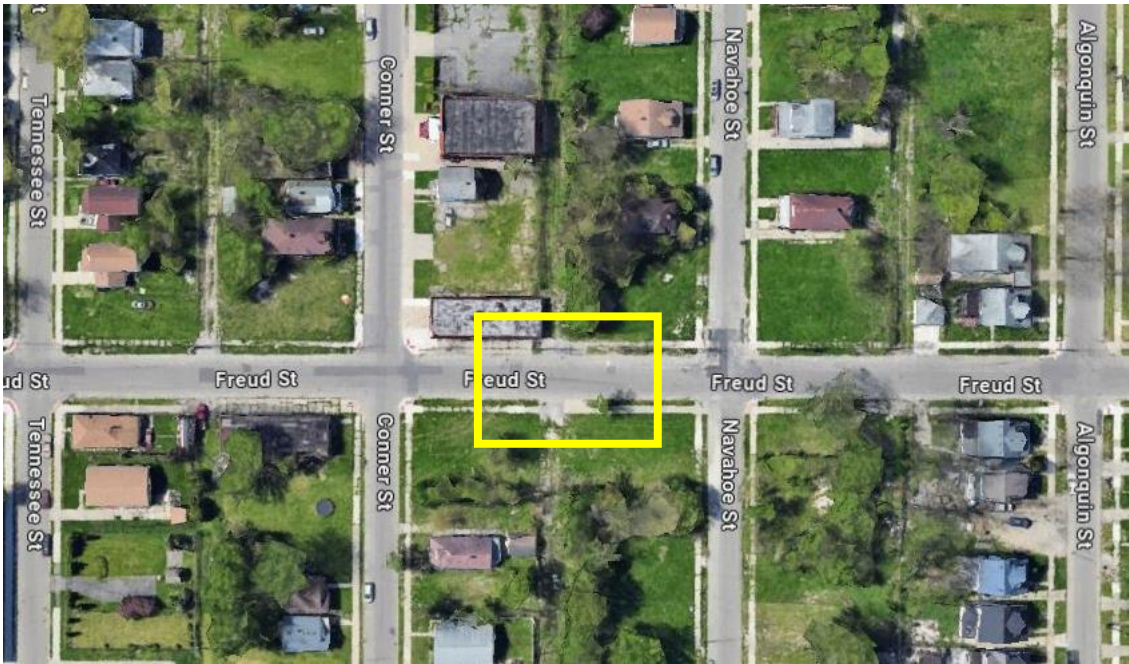
- 💧 Allow for the safe completion of inspection, maintenance, and repairs within the wet well of the Freud Storm Pump Station to ensure continued functionality.
- 💧 The Freud Storm Pump Station is a key component in providing reliable wastewater conveyance for southeast Michigan
- 💧 Protect the health, safety, and welfare of residents.

Wastewater CIP Project PHOTOS

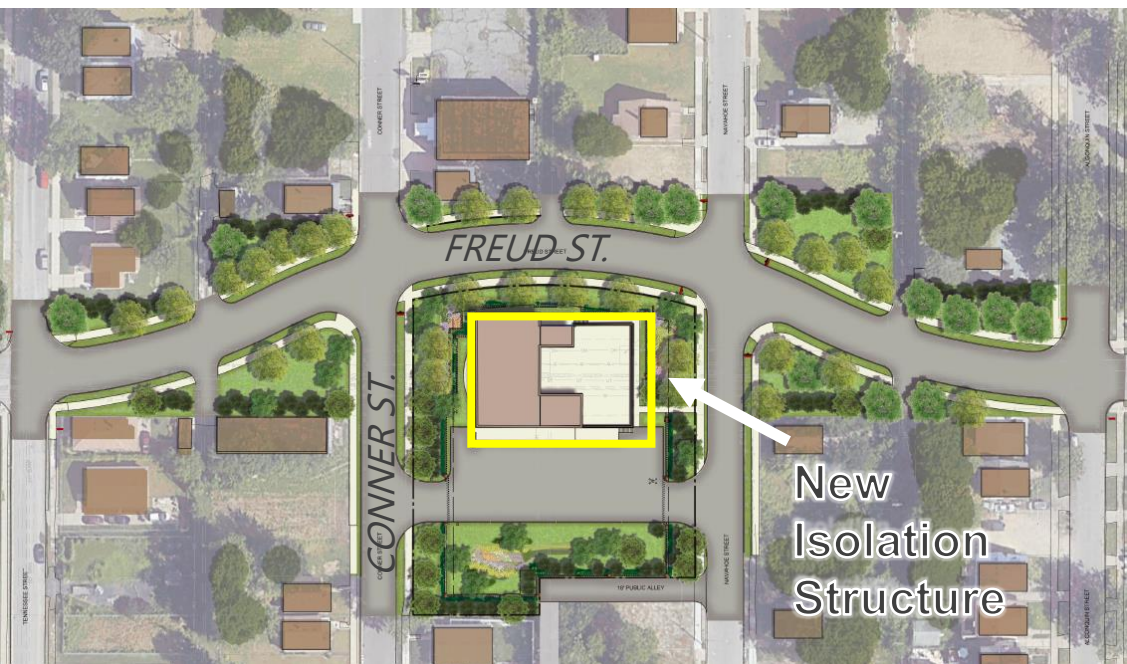


CIP #: 232005 – Freud Pump Station Improvements

Project Area (Existing)



Project Area (Planned)

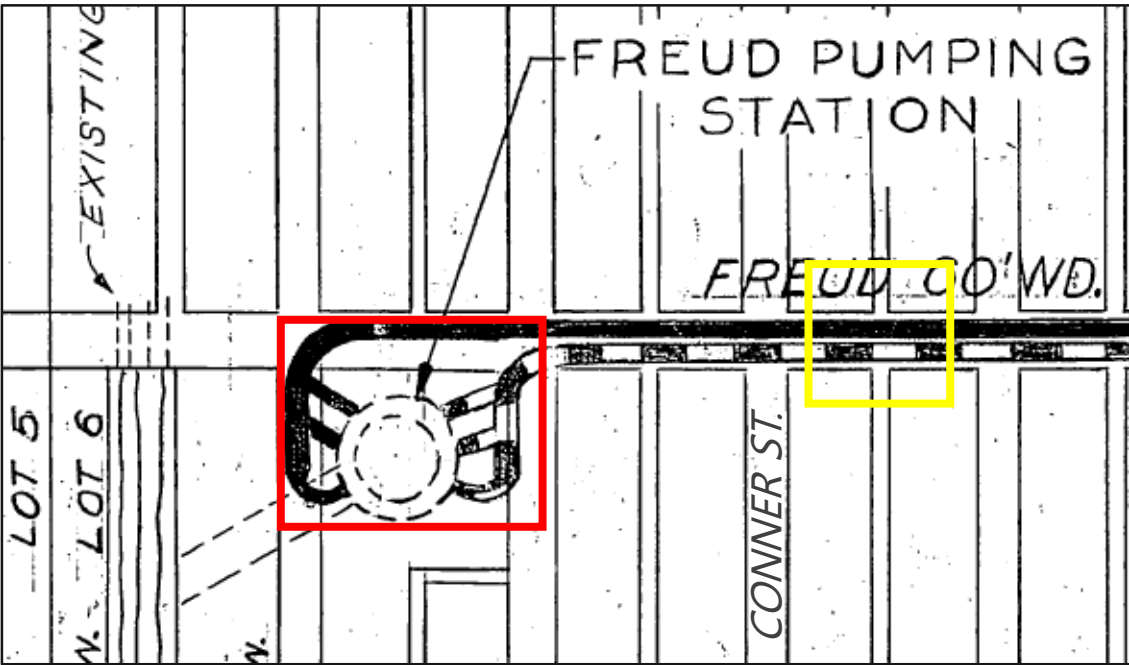


Wastewater CIP Project PHOTOS

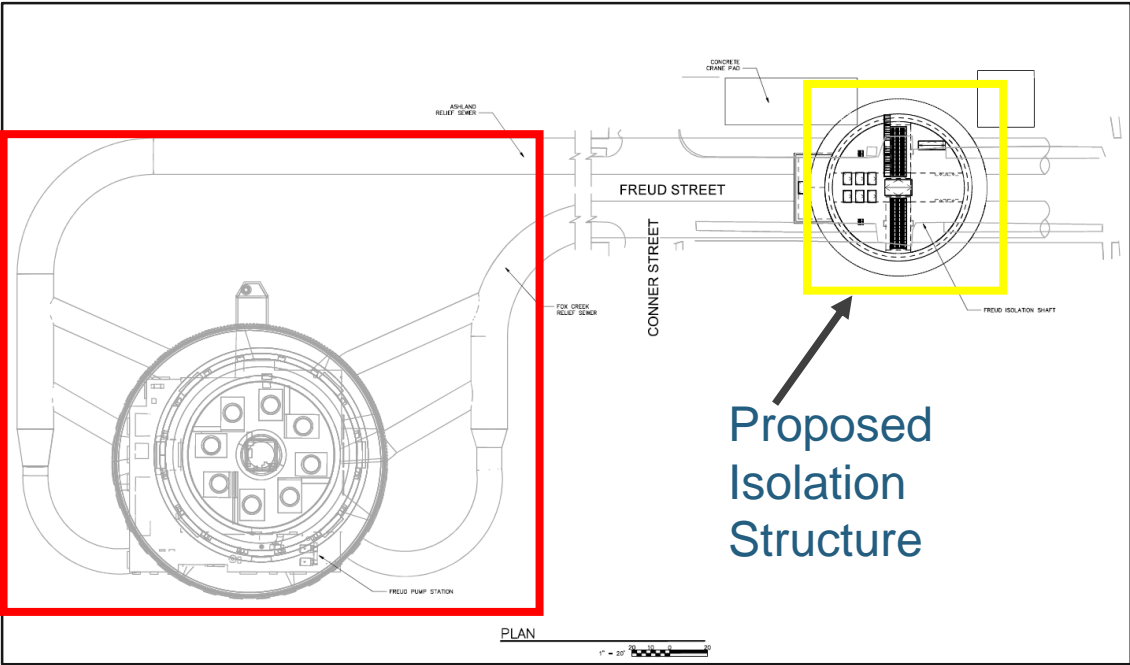


CIP #: 232005 – Freud Pump Station Improvements

Original Drawing



Proposed Structure Location



Wastewater CIP Project PHOTOS



CIP #: 232005 – Freud Pump Station Improvements

Streetview



Rendering



Wastewater CIP Project STATUS



CIP #: 222001 Northwest Interceptor to Oakwood CSO Sewer

Project Manager: Greg Marker
Project Delivery Method: Design-Bid-Build
Project Status: Construction Phase
CIP Score: 78.3



Contract	Contractor	Contract Amount	Earned Value	% Complete	Start	End	% Elapsed Time
• 2304897	• Jay Dee Contractors	• \$73.5 million	• \$14.2 Million	• 19.3%	• 10/14/2024	• 10/13/2028	• 20.7%



BCE=Business Case Evaluation
RFP=Request for Proposal

Wastewater CIP Project INFO



CIP #: 222001 Northwest Interceptor to Oakwood CSO Sewer

💧 Project Scope of Work/Goals

- 💧 Construct a diversion structure and relief sewer tunnel to divert excess wet weather flow from the Northwest Interceptor (NWI) to the underutilized Oakwood Retention Treatment Basin.
- 💧 Replace the existing pinch valves in the Oakwood Junction Chamber No.1 to allow for wet well isolation for maintenance.

💧 Significance/Need/Background

- 💧 NWI hydraulic grade line increases dramatically during wet weather, exceeding the pipes capacity, resulting in combined sewer overflows (CSOs) and sanitary sewer overflows (SSOs).
- 💧 Reduces number of untreated CSOs and flow input to WRRF during wet weather events.

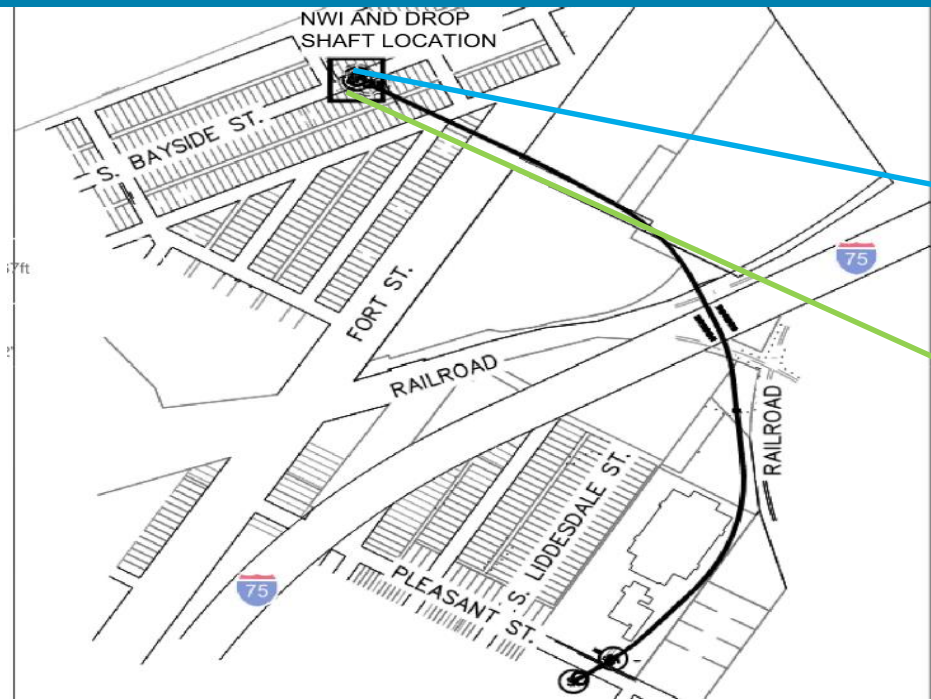
Wastewater CIP Project PHOTOS



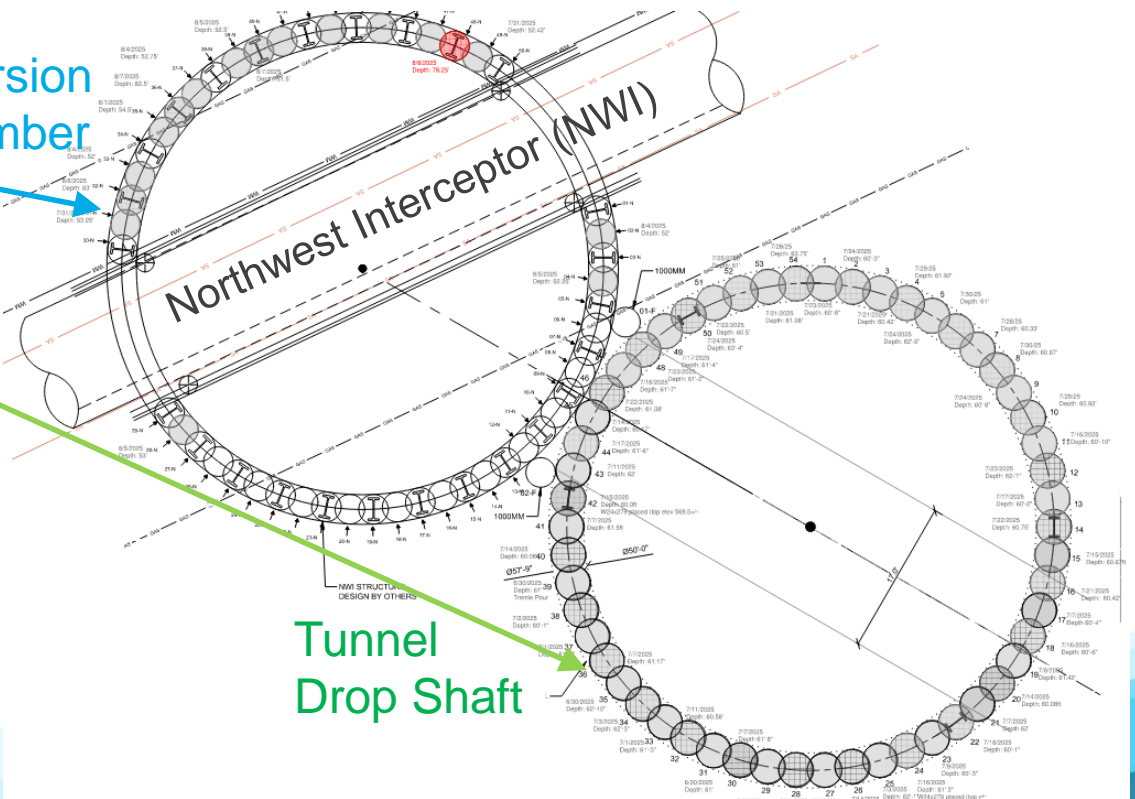
CIP #: 222001 Northwest Interceptor to Oakwood CSO Sewer

Tunnel Route

Currently – Secant Pile install



NWI
Diversion
Chamber



Wastewater CIP Project PHOTOS



CIP #: 222001 Northwest Interceptor to Oakwood CSO Sewer

Pre-Contract - Bayside Site



Bayside St. looking northeast toward Gale St.

Currently – Bayside Site



Wastewater CIP Project PHOTOS



CIP #: 222001 Northwest Interceptor to Oakwood CSO Sewer

Currently – Tunnel Boring Machine



Currently – Tunnel Boring Machine



Questions and Contact



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