



Freud Sanitary Pump Station
04/09/25

Agenda

◆ Freud Improvements

- ◆ System Background/Value to local Community
- ◆ Why is GLWA proposing a Sanitary Pump Station?
- ◆ Why was the location chosen?
- ◆ Why will Freud be rerouted?

◆ Design Review

- ◆ Alternative Designs
- ◆ Exterior Design
- ◆ Reduced Height
- ◆ Temporary Access

◆ Project Progress

- ◆ Where are we at?
- ◆ What's next?

◆ Conner Creek Improvements

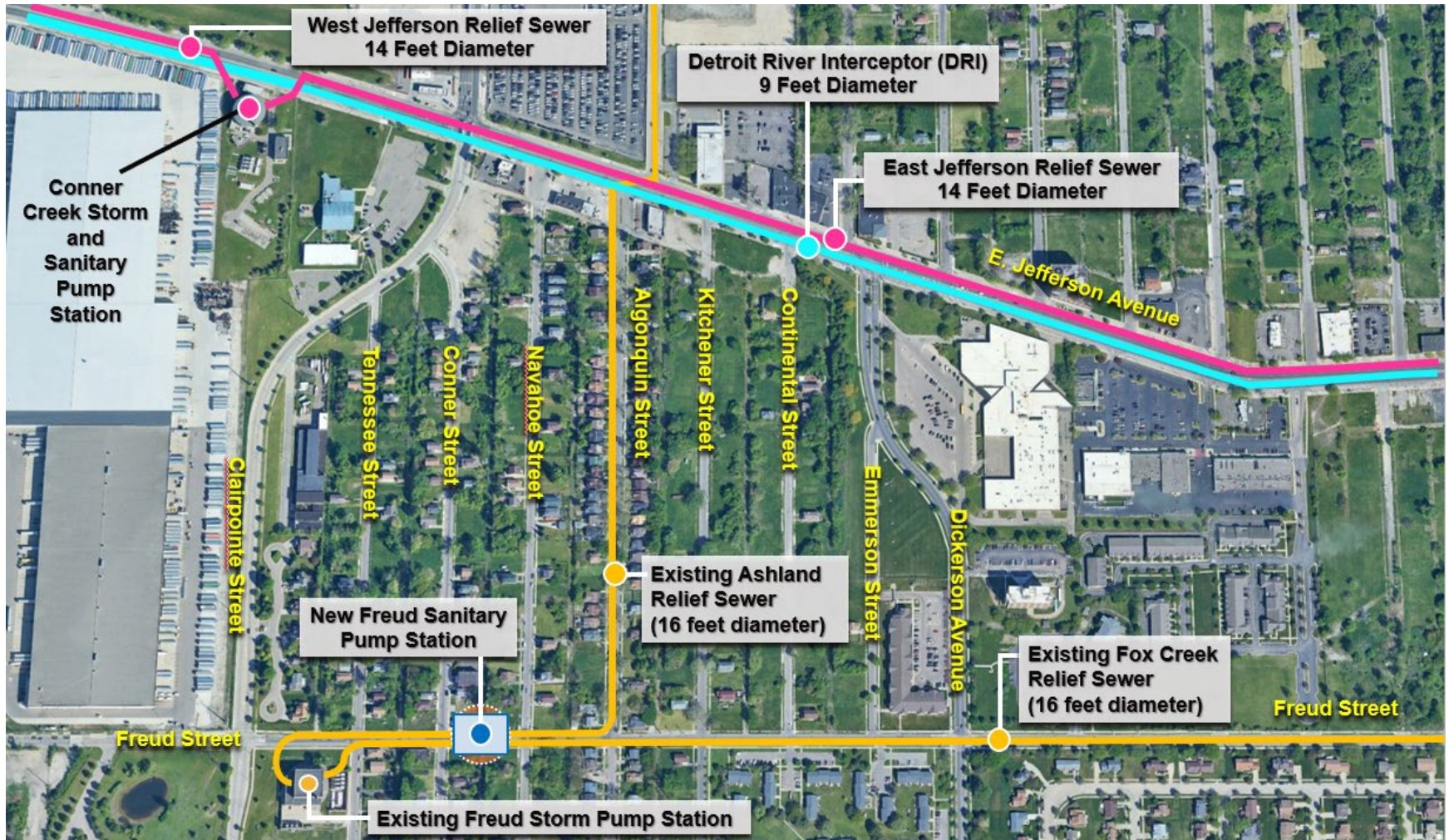
- ◆ System Background
- ◆ Storm Station Improvements
- ◆ Why is GLWA proposing a new Sanitary Pump Station?
- ◆ What's next?

◆ Questions

A dynamic background image featuring a horizontal splash of clear water with numerous bubbles and droplets, set against a light blue gradient. The water appears to be moving from left to right, creating a sense of motion and freshness.

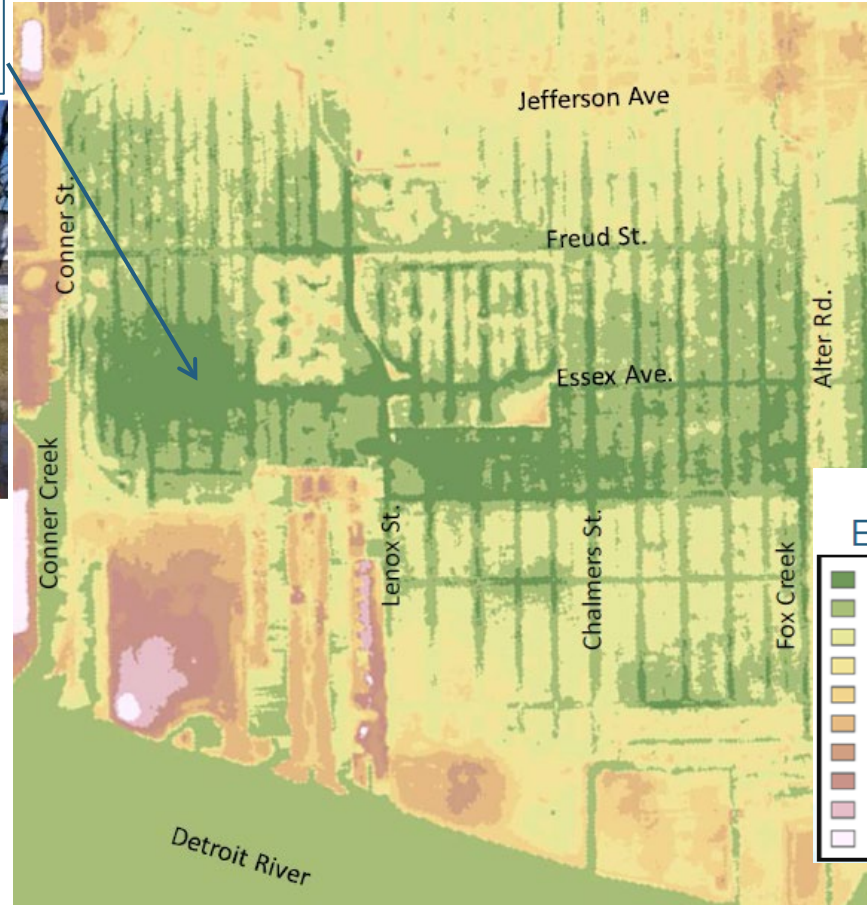
System Background

System Background



Jefferson Chalmers Topography Relative to Detroit River Levels

5 to 7 ft below Max
River Level of 578

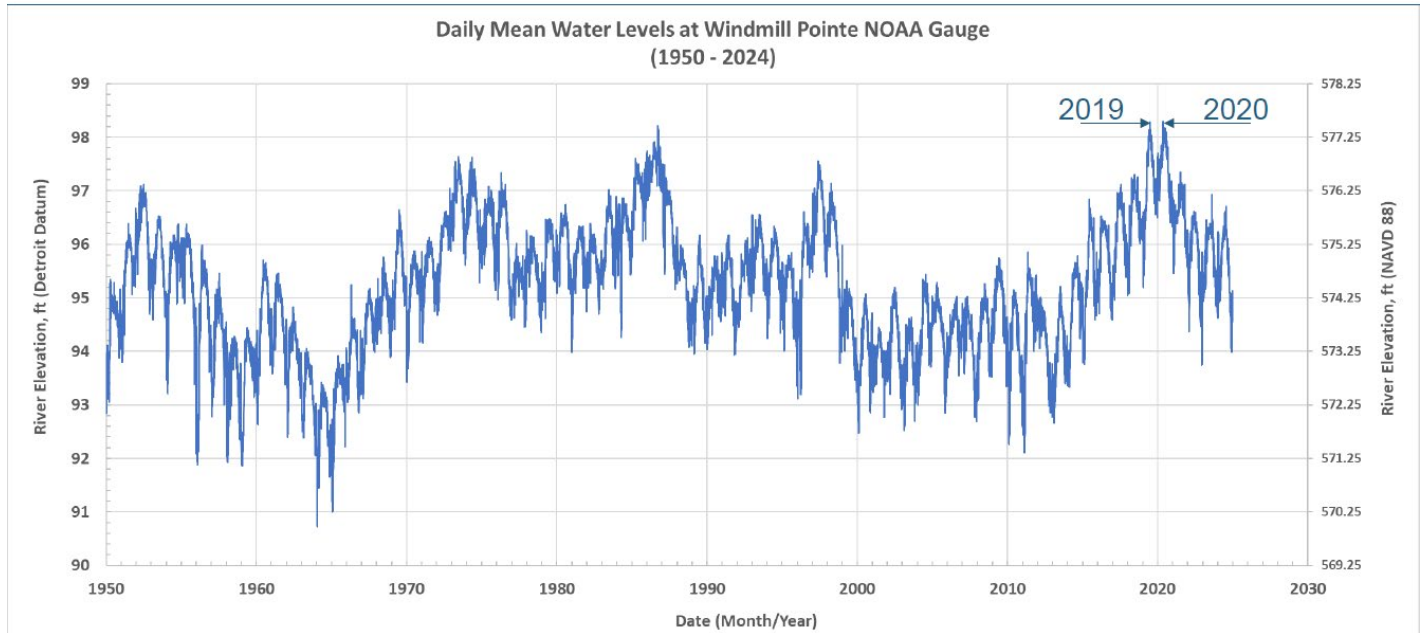


Grade Elevation

570.0 – 573.5
573.5 – 575.2
575.2 – 576.7
576.7 – 578.3
578.3 – 580.0
580.0 – 581.8
581.8 – 583.8
583.8 – 586.0
586.0 – 590.0
590.0 – 602.2

Jefferson Chalmers Topography Relative to Detroit River Levels

2019 & 2020
River Levels
reached 577.50



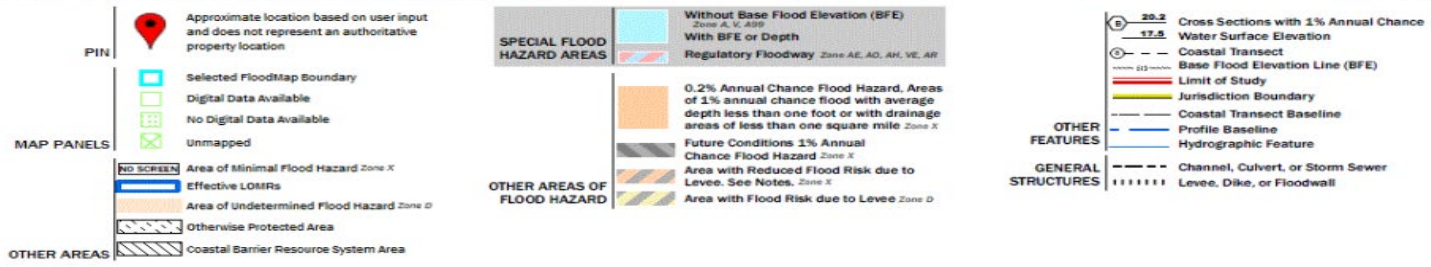
💧 GLWA system protected Jefferson Chalmers Community by removing over 1 Billion Gallons of water from River Inflow

💧 The Freud Pumpstation operated 50% more in run hours in 2019/2020 compared to the average of 2017-2024

East Side System FIRMs

Special Flood Hazard Areas

Area with reduced flood risk due to levees



Flood Plain Designation Jefferson Chalmers in 2021



FEMA : Federal Emergency Management Agency

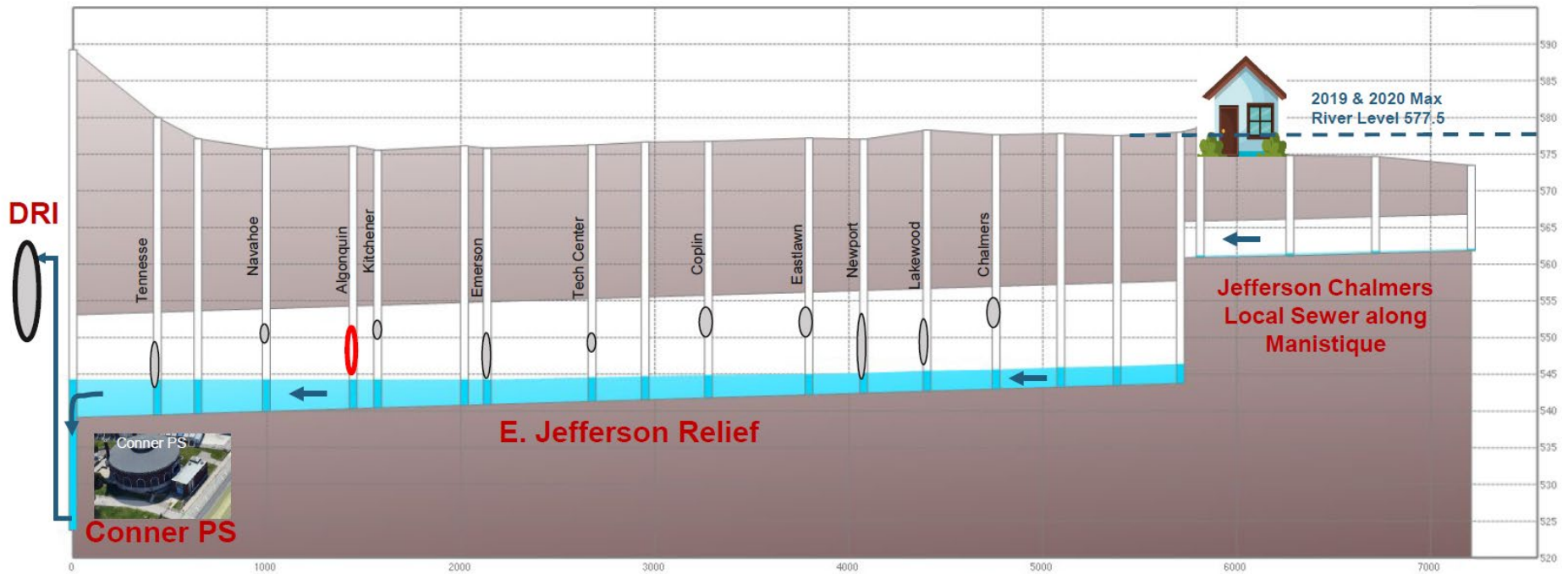
FIRMs: Flood Insurance Rate Maps

[FEMA Flood Map Service Center | Search By Address](#)

Dry Weather Flow



Dry Weather Flow

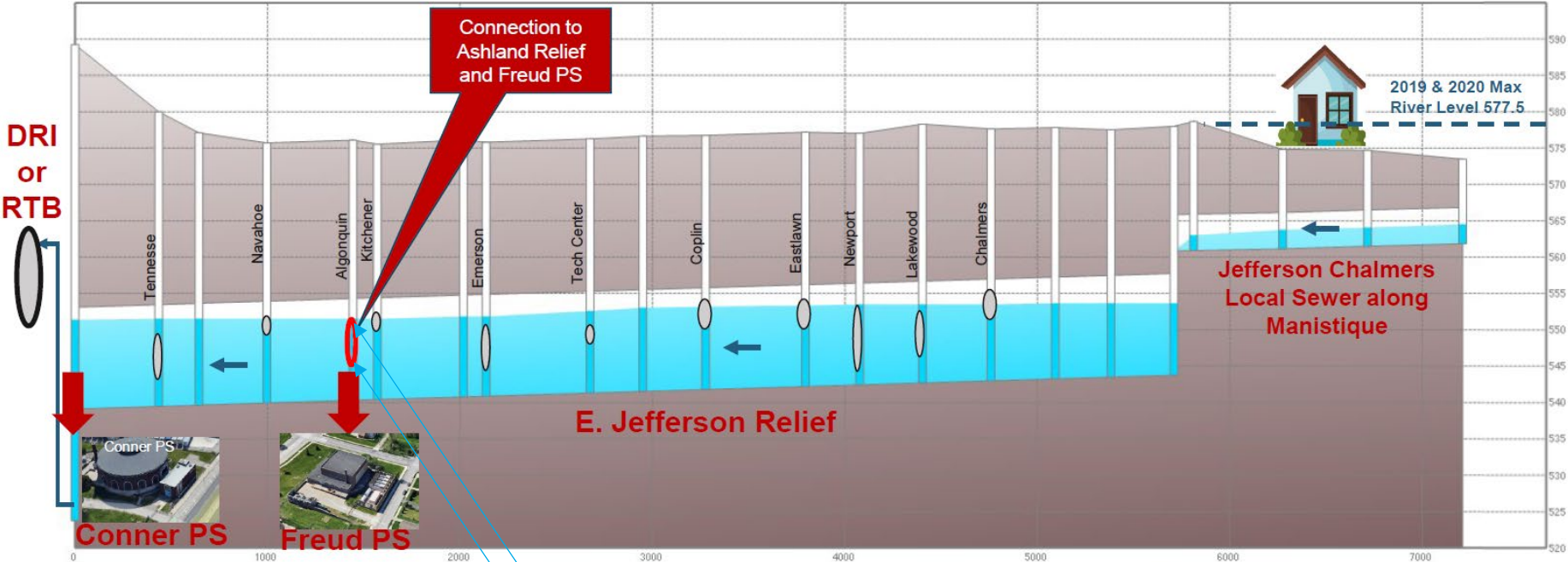


○ Jefferson Chalmers Sewer Connection

Wet Weather Flow



Wet Weather Flow



Recent Storm Water Reached 554 elev. (74.7 Detroit Datum)
Flow Divert to Freud @ 545 elev. (65.7 ft Detroit Datum)

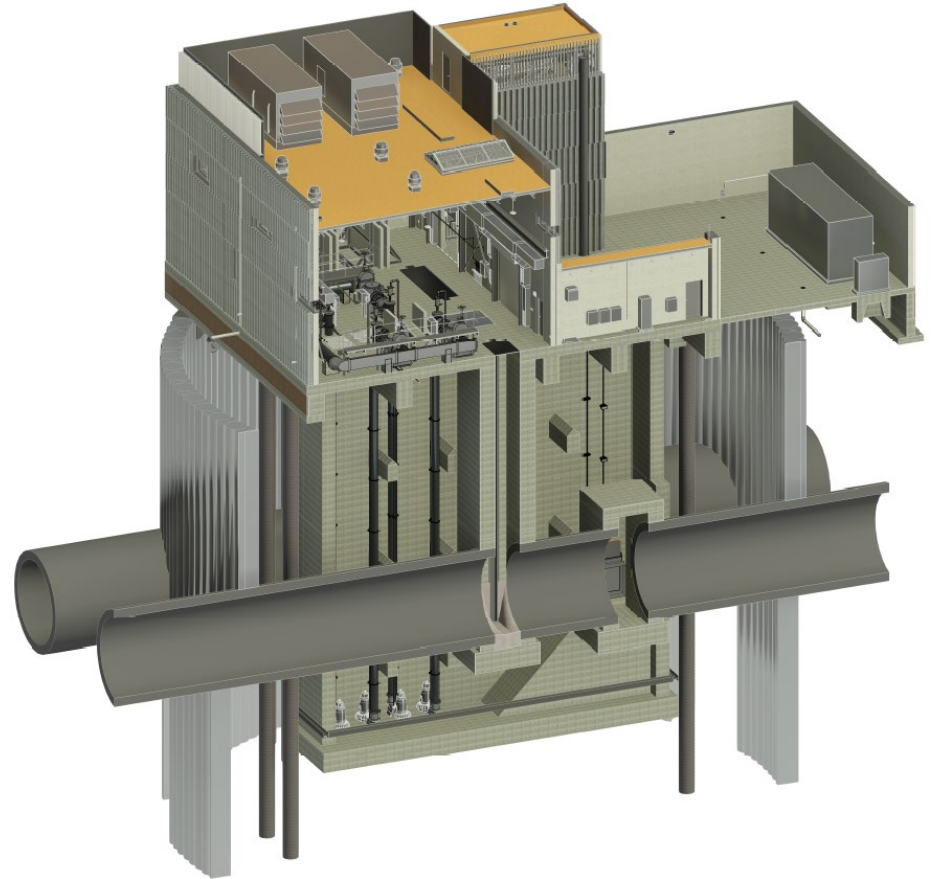
Jefferson Chalmers Sewer Connection

A dynamic splash of clear water against a light blue background, with a semi-transparent blue horizontal band across the middle.

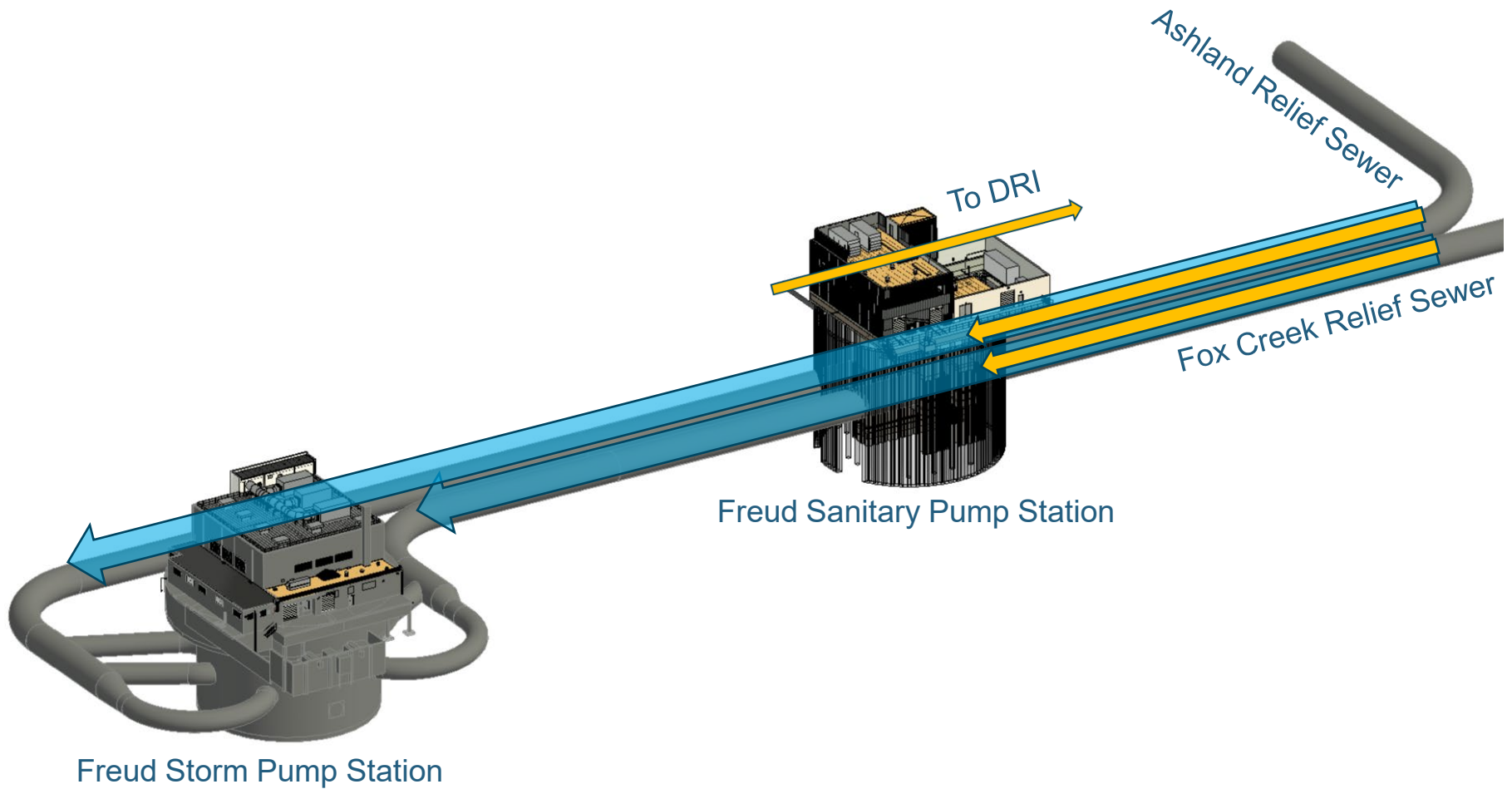
Freud Improvements

Why is GLWA Proposing a Sanitary Pump Station?

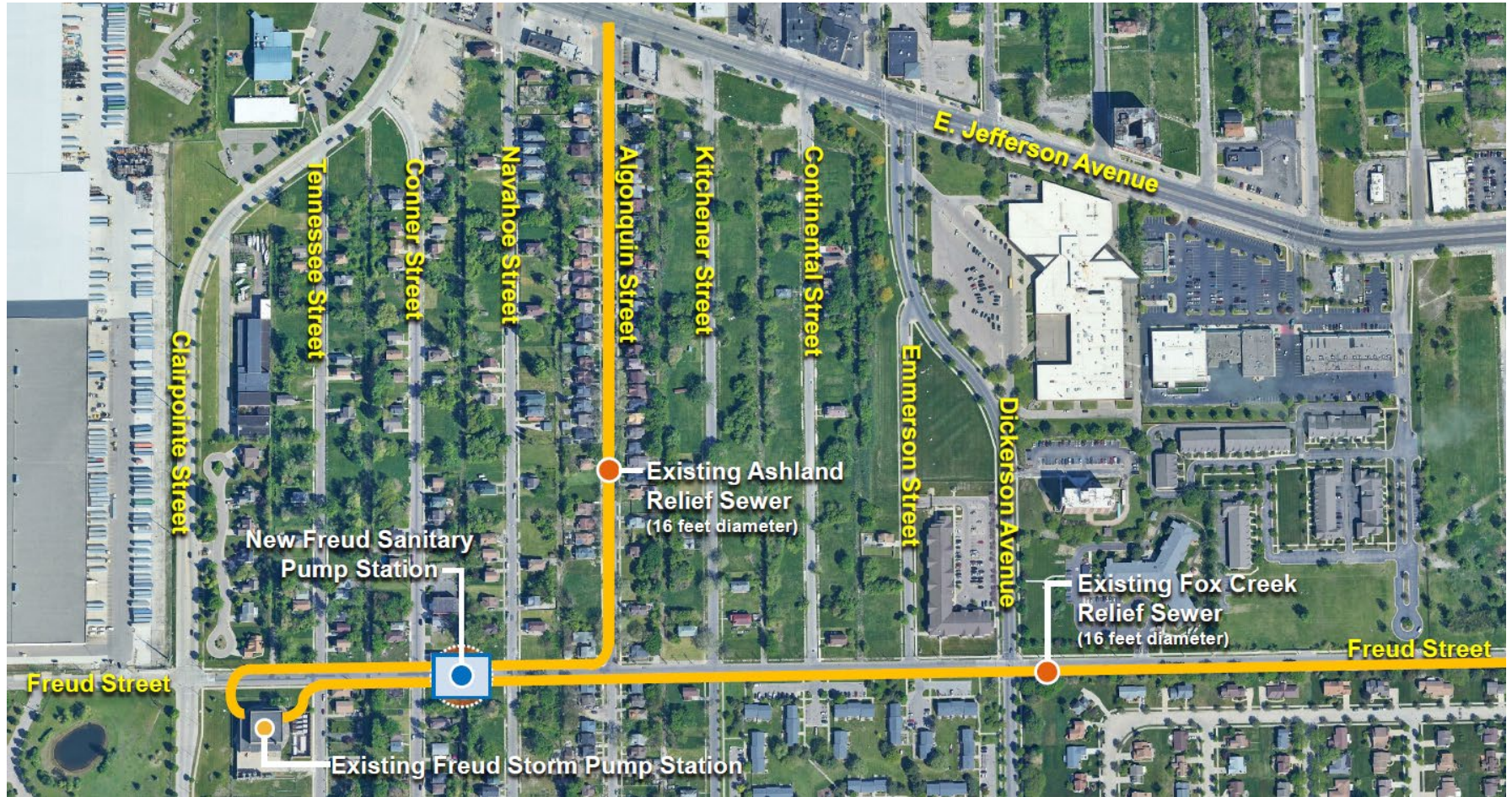
- 💧 Improve the Reliability of Freud Storm Pump Station
 - 💧 Cleaning
 - 💧 Inspection
 - 💧 Maintenance
 - 💧 Rehabilitation
- 💧 Maximize GLWA's ability to keep sewer water levels low during rain events
- 💧 Help prevent basement backups



Why is GLWA Proposing a Sanitary Pump Station?



Why Was The Location Chosen?



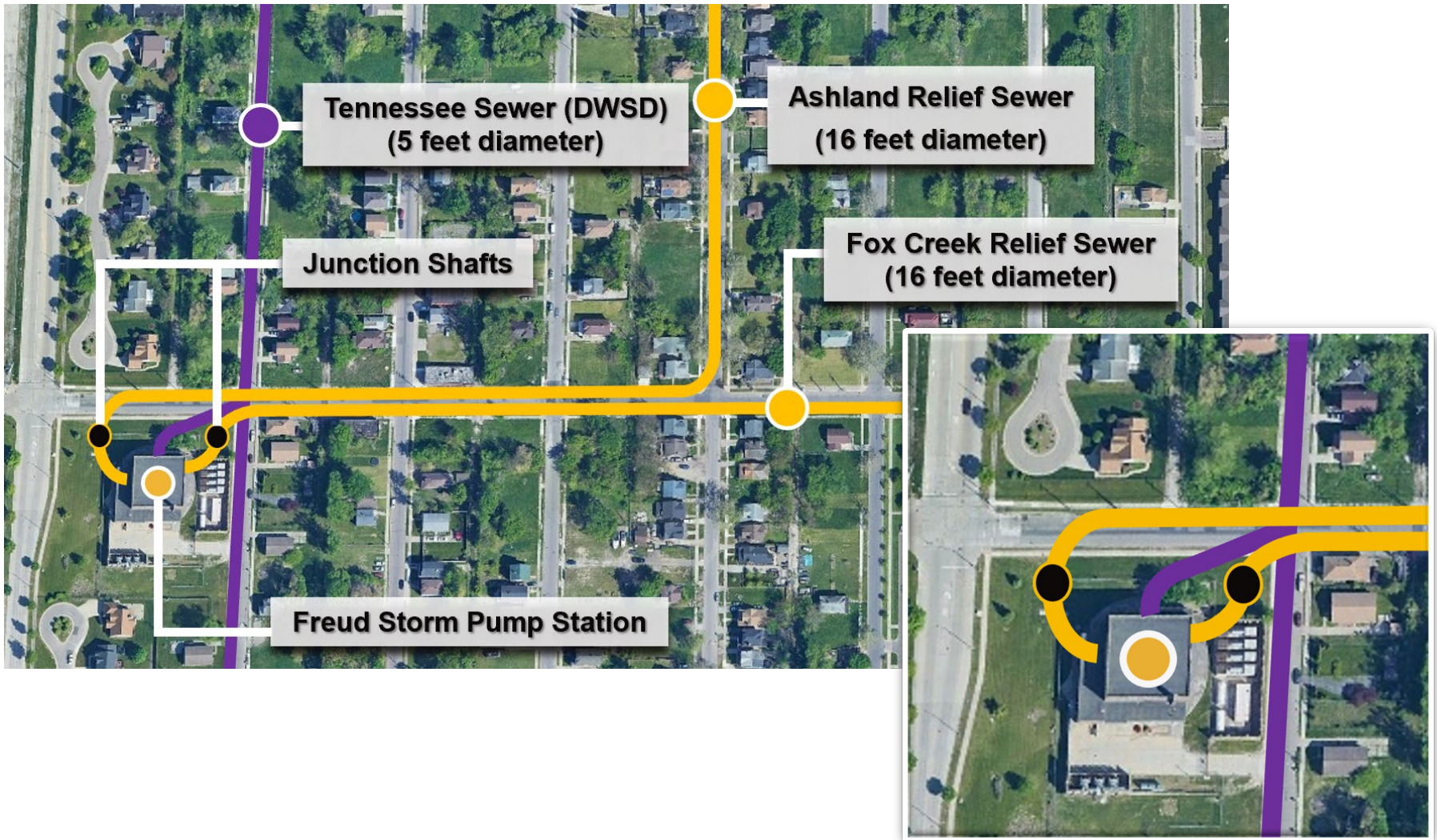
Why Will Freud Be Rerouted?



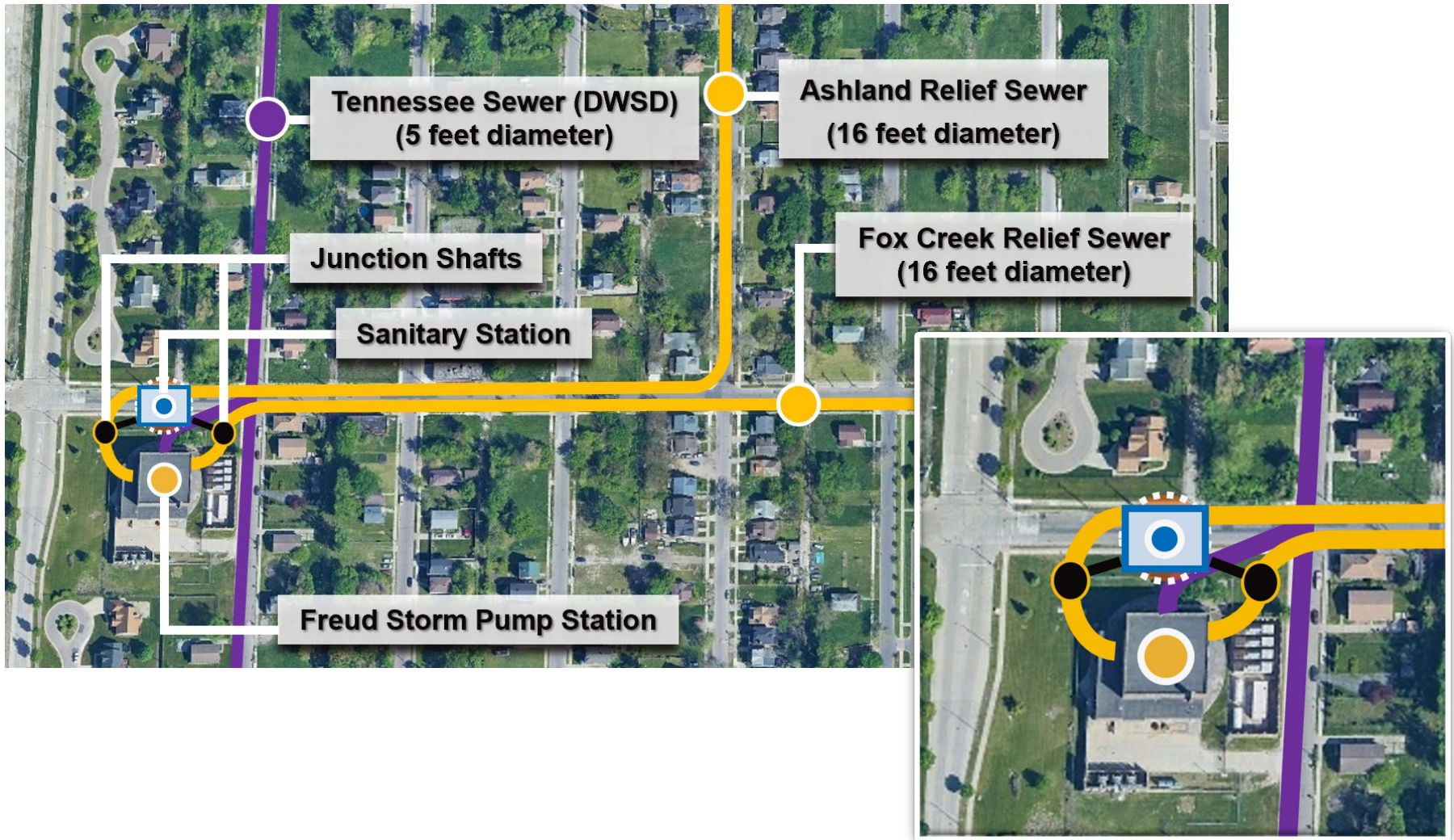
A dynamic splash of water in shades of blue, with bubbles and ripples, set against a light blue background. The water is captured in motion, creating a sense of freshness and movement.

Design Review

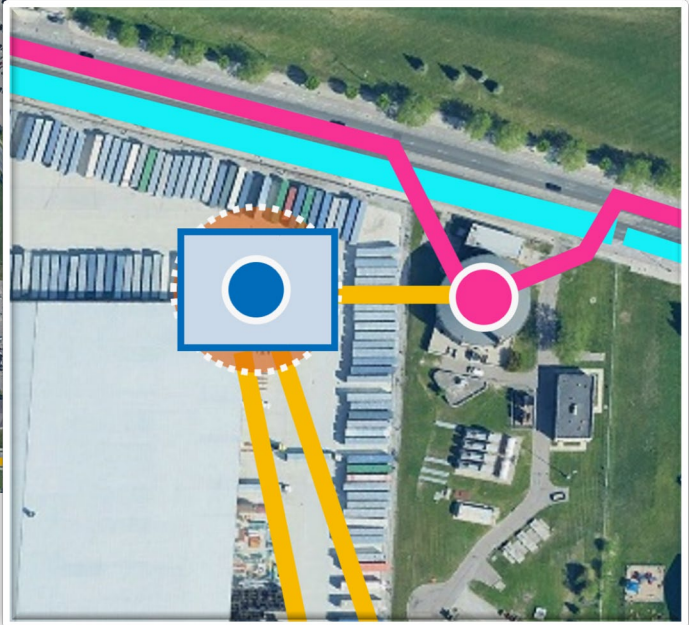
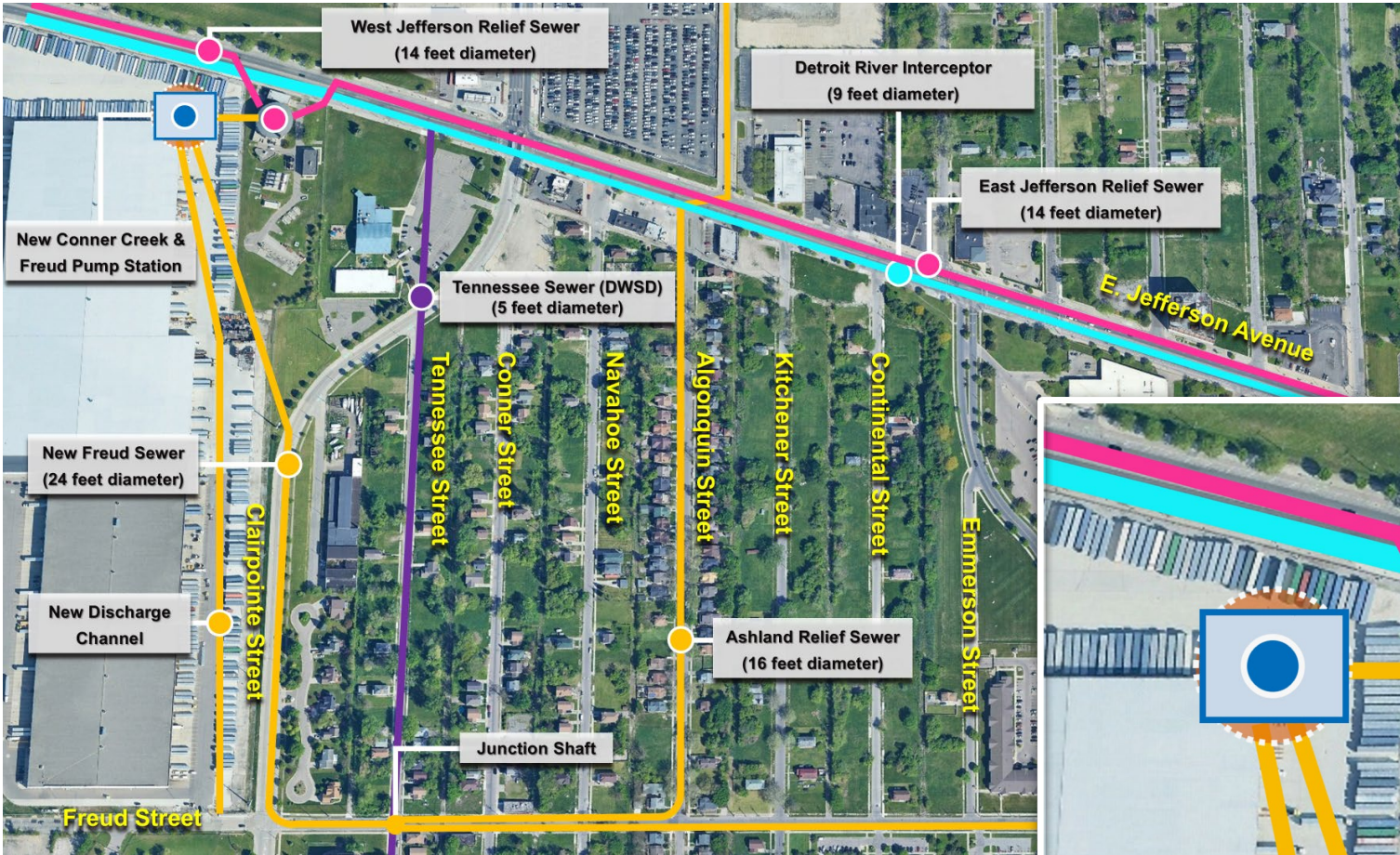
Design Alternative #1



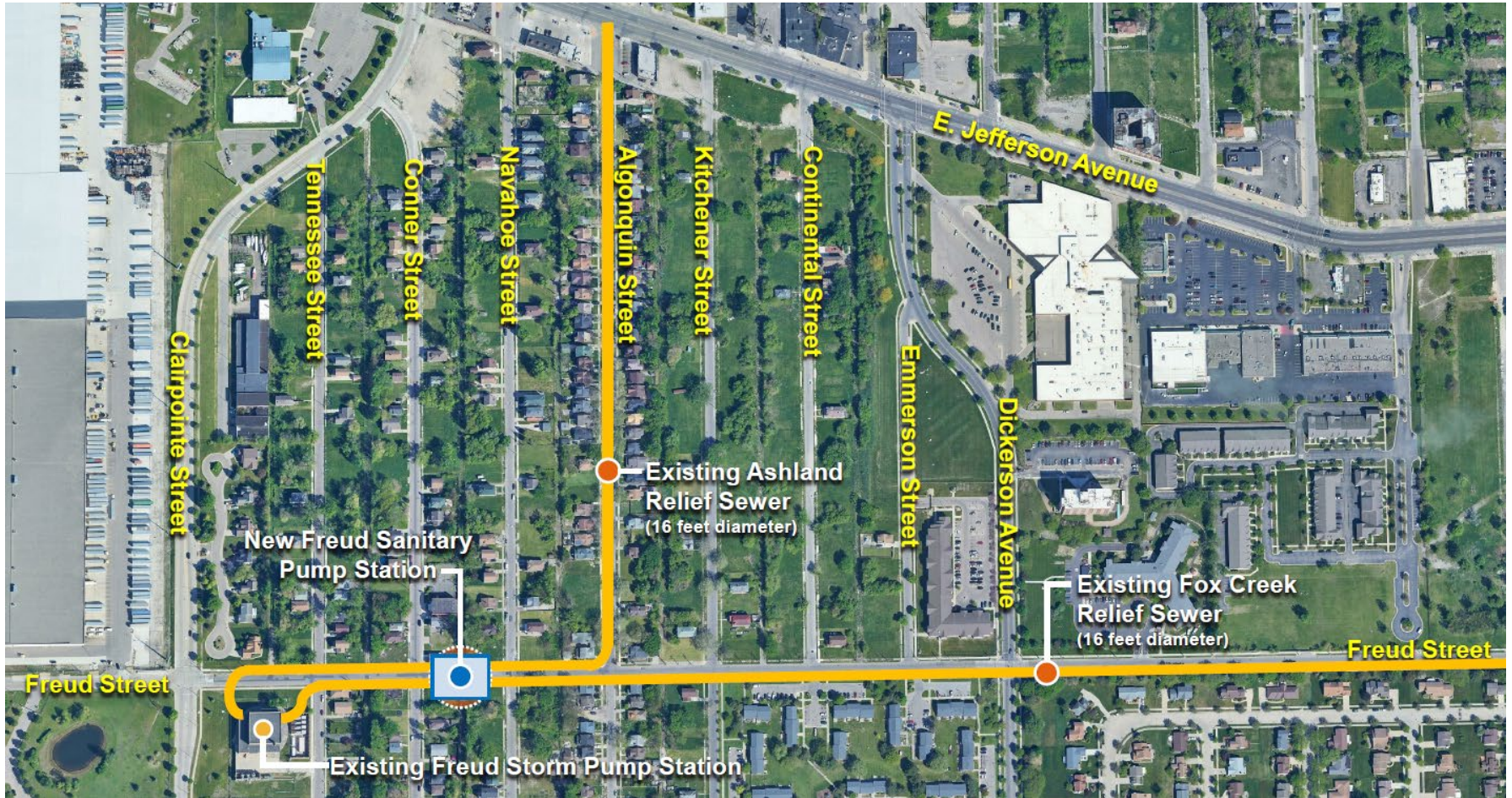
Design Alternative #2



Design Alternative #3



Why was a Variation of Alternative 2 Selected?



Exterior Design – Reduced Height



CURRENT NORTH ELEVATION



MODIFIED NORTH ELEVATION

Exterior Design – Scale



Exterior Design – Conner Street View



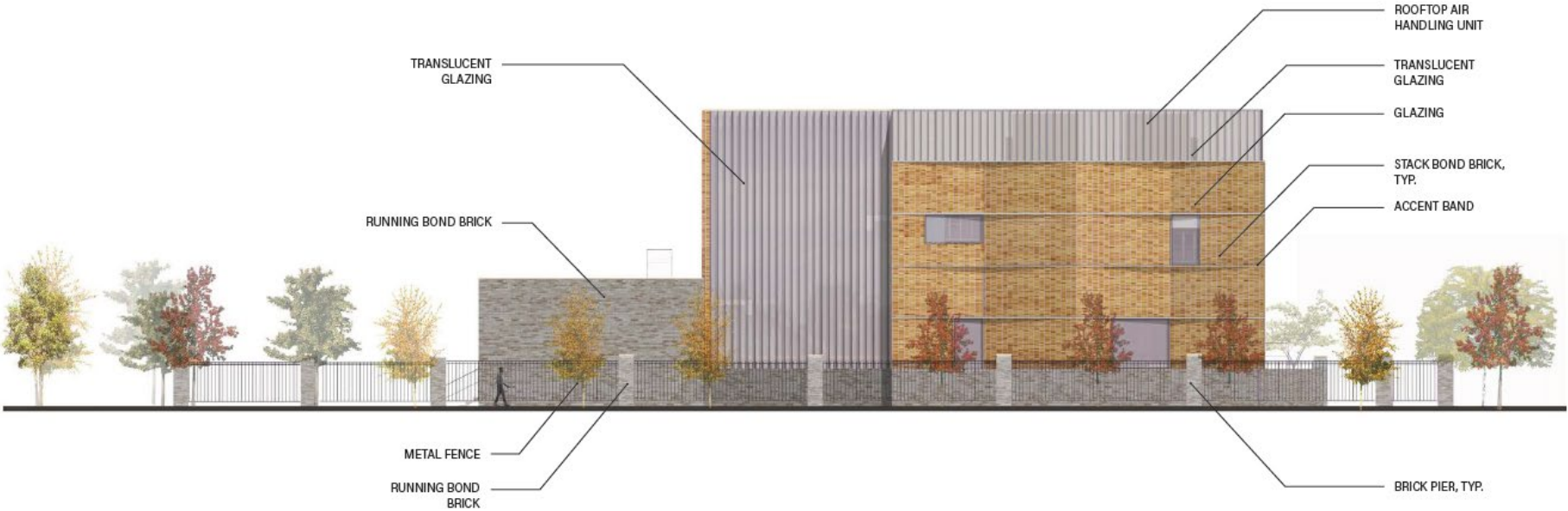
Exterior Design – Freud Street View



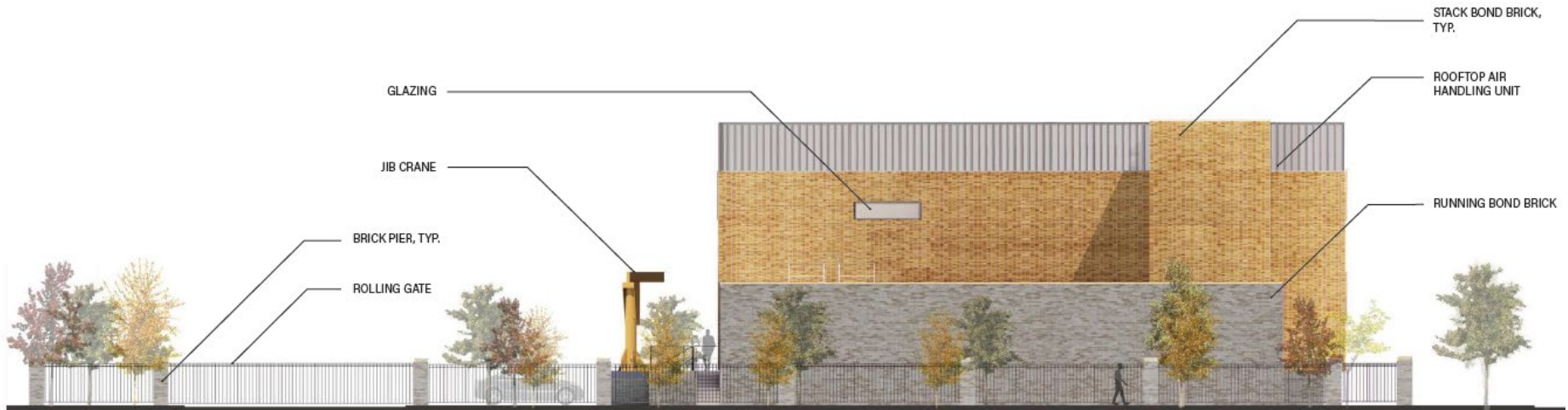
Exterior Design – Navahoe & Freud View



Exterior Design – North Elevation



Exterior Design – East Elevation



Exterior Design – South Elevation



Exterior Design – West Elevation



Temporary Access – Overhead View



Google Earth

Temporary Access - Heavy Equipment



Temporary Access - Bypass Piping



Wastewater Pumps



Temporary Access - Generator Power



A dynamic background image featuring a horizontal splash of clear water against a light blue sky. Below the splash, the water continues as a series of bubbles and ripples, creating a sense of movement and freshness. The overall color palette is various shades of blue, from light to deep navy.

Project Progress

Where are we at?

- 💧 Utility Relocation
 - 💧 Gas
 - 💧 Electric
 - 💧 Communication
- 💧 Rezoning
- 💧 Freud Street Closure
 - 💧 Detour
 - 💧 Fencing
 - 💧 Path



What's next? – Construction

💧 Utility Relocation

💧 Sewer – 24" & 48"

- 💧 Excavation – Mar-Apr
- 💧 Construction – Apr-May
- 💧 Installation – May

💧 Water – 16" & 24"

- 💧 Excavation – Apr-May
- 💧 Construction – May-Jun
- 💧 Installation – June



What's next? – Quarterly Meetings



The Great Lakes Water Authority (GLWA) will be hosting Quarterly Community Engagement Meetings for the new Freud Sanitary Pump Station Improvement Project.

Please join the GLWA Project Team to hear more about the construction of the new Freud Sanitary Pump Station located on Freud Street (between Conner & Navahoe) in the Jefferson Chalmers neighborhood as shown in the Overview Map in the below right corner.

For additional information, including FAQs, presentations, and project contact information, GLWA has established a project website that can be found by using this QR code.



glwater.org/freud-sanitary-pump-station

Meeting Dates & Time:

5:30 – 7:30 pm

12/11/24 ✓

03/19/25 ✓

05/21/25

09/17/25

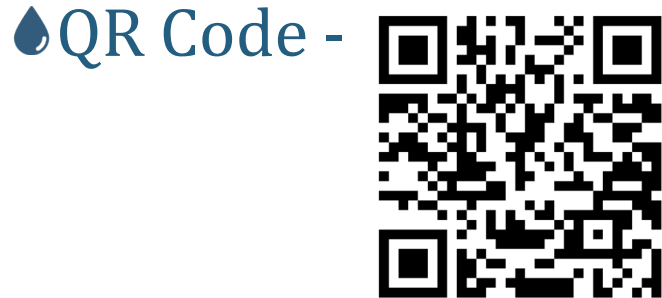
Meeting Location:

Eastlake Baptist Church
12400 E. Jefferson Ave.
Detroit, MI 48215



What's next? - Communication

💧 Website - www.glwater.org/freud-sanitary-pump-station



💧 Email - freudsanitarypumpstation@glwater.org

💧 Phone

💧 GLWA - (313) 822-7007

💧 Kokosing - (313) 960-7687

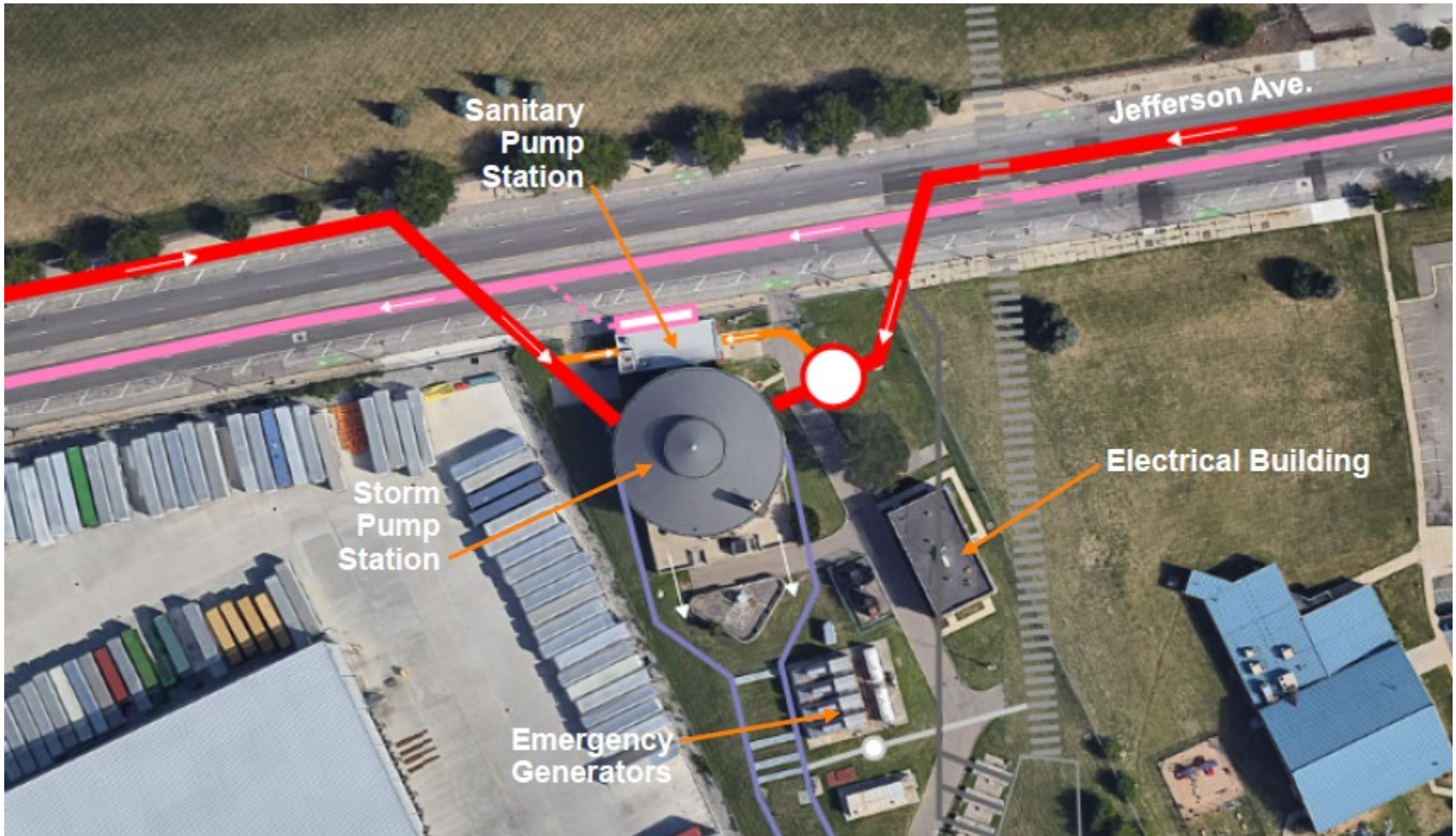
💧 Mailers

💧 Social Media

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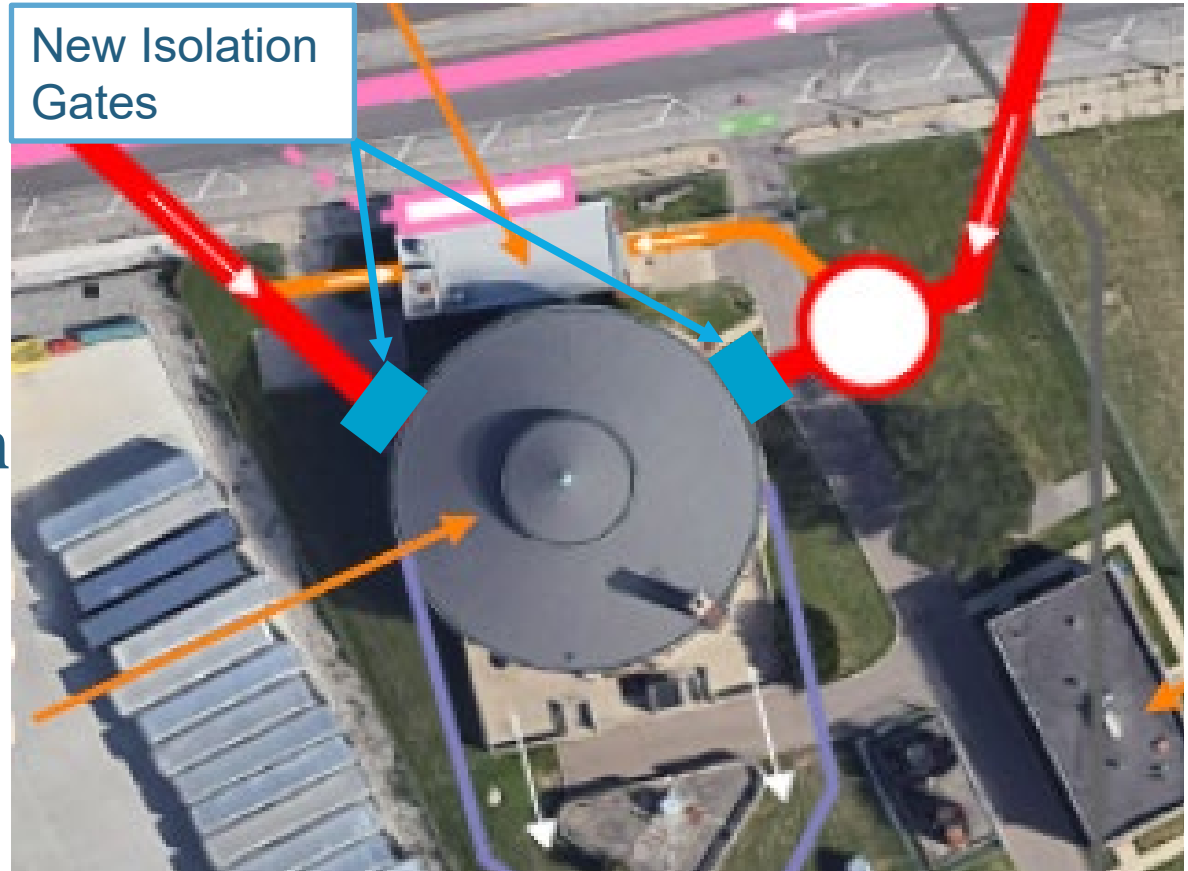
Conner Creek Improvements

System Background



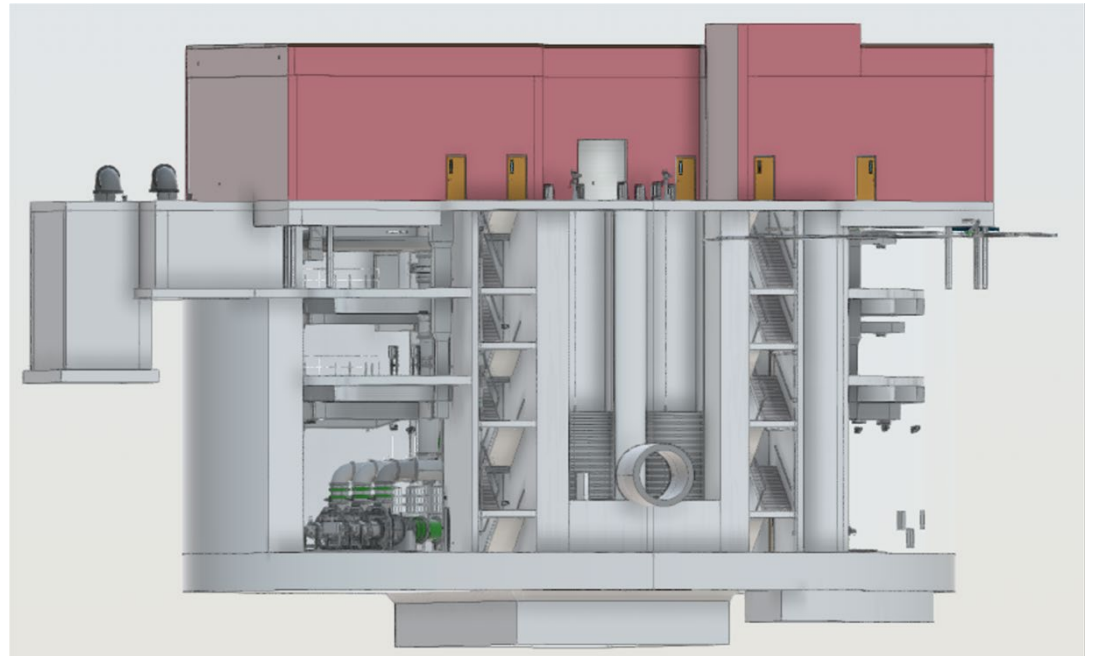
Improvements to the Storm Station

- Isolation Gate Installation
 - East Jefferson Relief Sewer
 - West Jefferson Relief Sewer
- Storm Pump Replacements



Why is GLWA proposing a new Sanitary Pump Station?

- 💧 Improve Reliability
 - 💧 Cleaning
 - 💧 Inspection
 - 💧 Maintenance
- 💧 Existing Limitations
- 💧 160 MGD Firm Capacity
 - 💧 53 MGD Average Flow
 - 💧 148 MGD Peak Flow
- 💧 N+2 Configuration



Why is GLWA proposing a new Sanitary Pump Station?



Why is GLWA proposing a new Sanitary Pump Station?



What's next?

- 💧 Quarterly Meetings
 - 💧 Combined?
 - 💧 Separate?
- 💧 Additional Meetings
 - 💧 District 4
 - 💧 Councilmember Johnson
 - 💧 Community Advisory Council
 - 💧 Department of Neighborhoods
- 💧 Preliminary Plan Review
- 💧 Exterior Design



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Questions