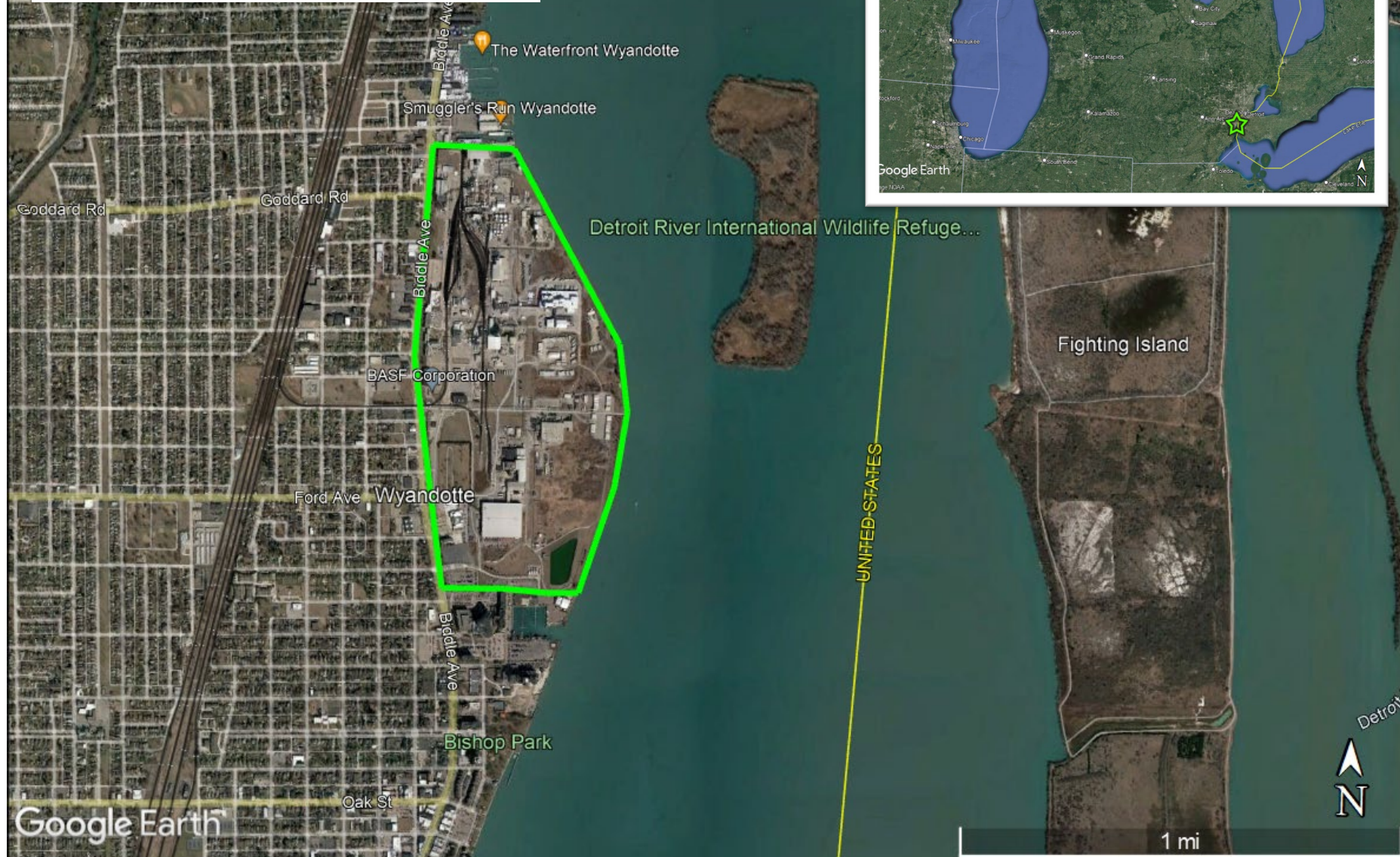




BASF North Works Site Townhall Update 95% Design

May 7, 2026

BASF North Works Facility



Site Background

- ▶ Industrial use since late 1800s
- ▶ Original marshland of the Detroit River drained and filled in the early 1900s
- ▶ Active industrial property that manufactures chemicals and other products
- ▶ Under a Federal Cleanup Order

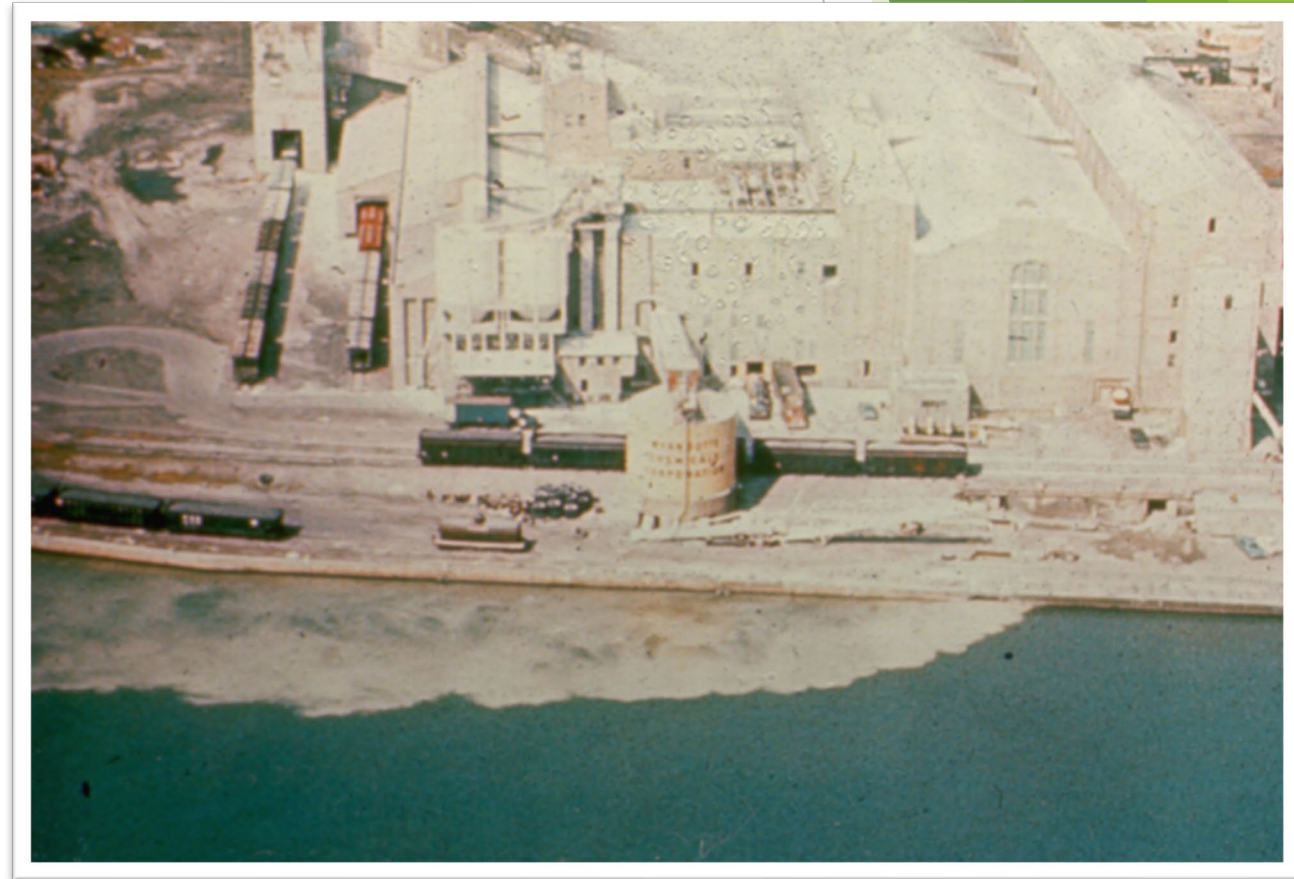
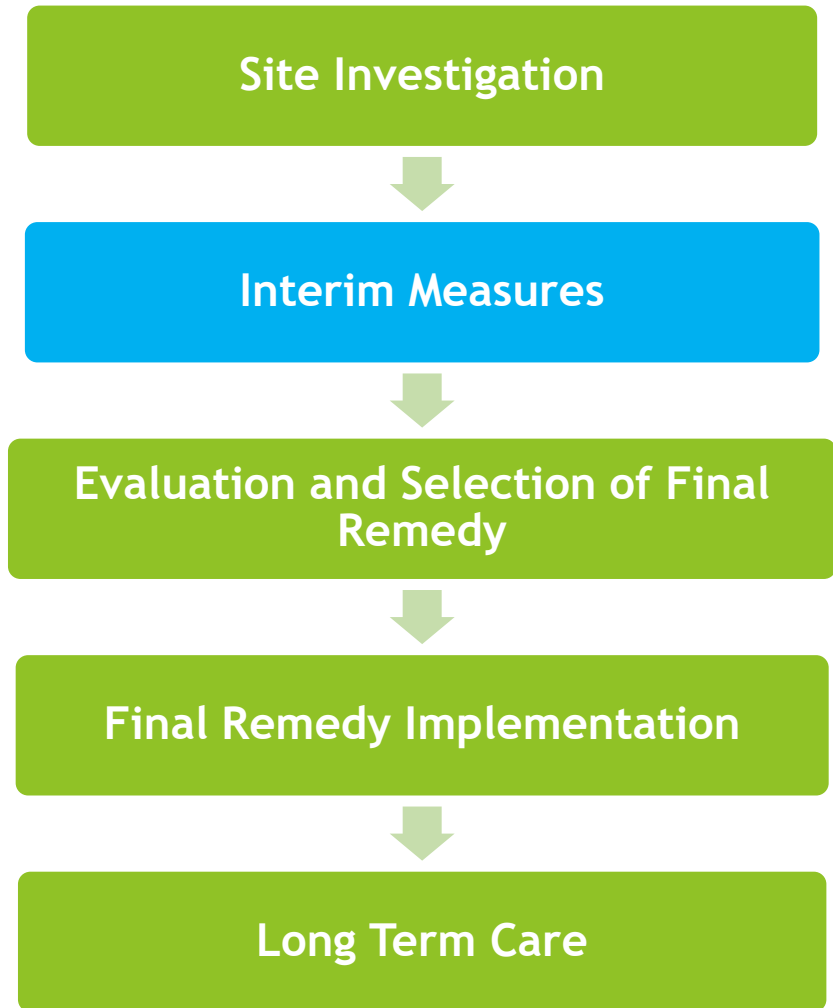


How our understanding has evolved

- ▶ Contaminants on site:
 - ▶ Mercury, PFAS, Volatile Organic Compounds (VOCs), Semi Volatile Organic Compounds (SVOCs), Metals, Available Cyanide, DDT (1 location)
- ▶ Initial focus on potential source areas
 - ▶ BASF investigated Solid Waste Management Units and Areas of Concern (AOC)
 - ▶ Remedy proposal focused on these distinct areas
- ▶ Investigations showed that contamination was potentially more widespread
 - ▶ Fill used in historic property development a continuous source of contamination to groundwater
- ▶ Groundwater management needed on a site-wide basis

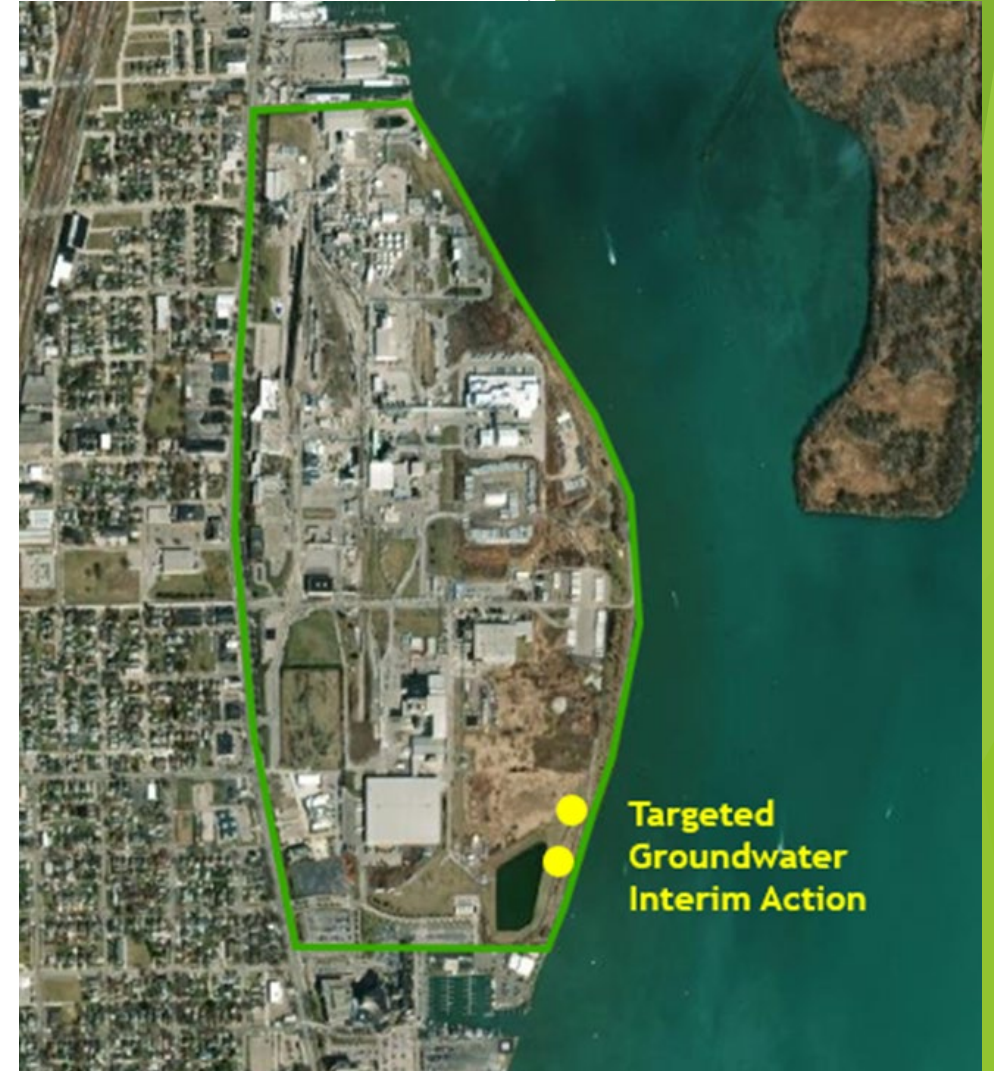


Clean Up Process under Hazardous Waste Cleanup Program

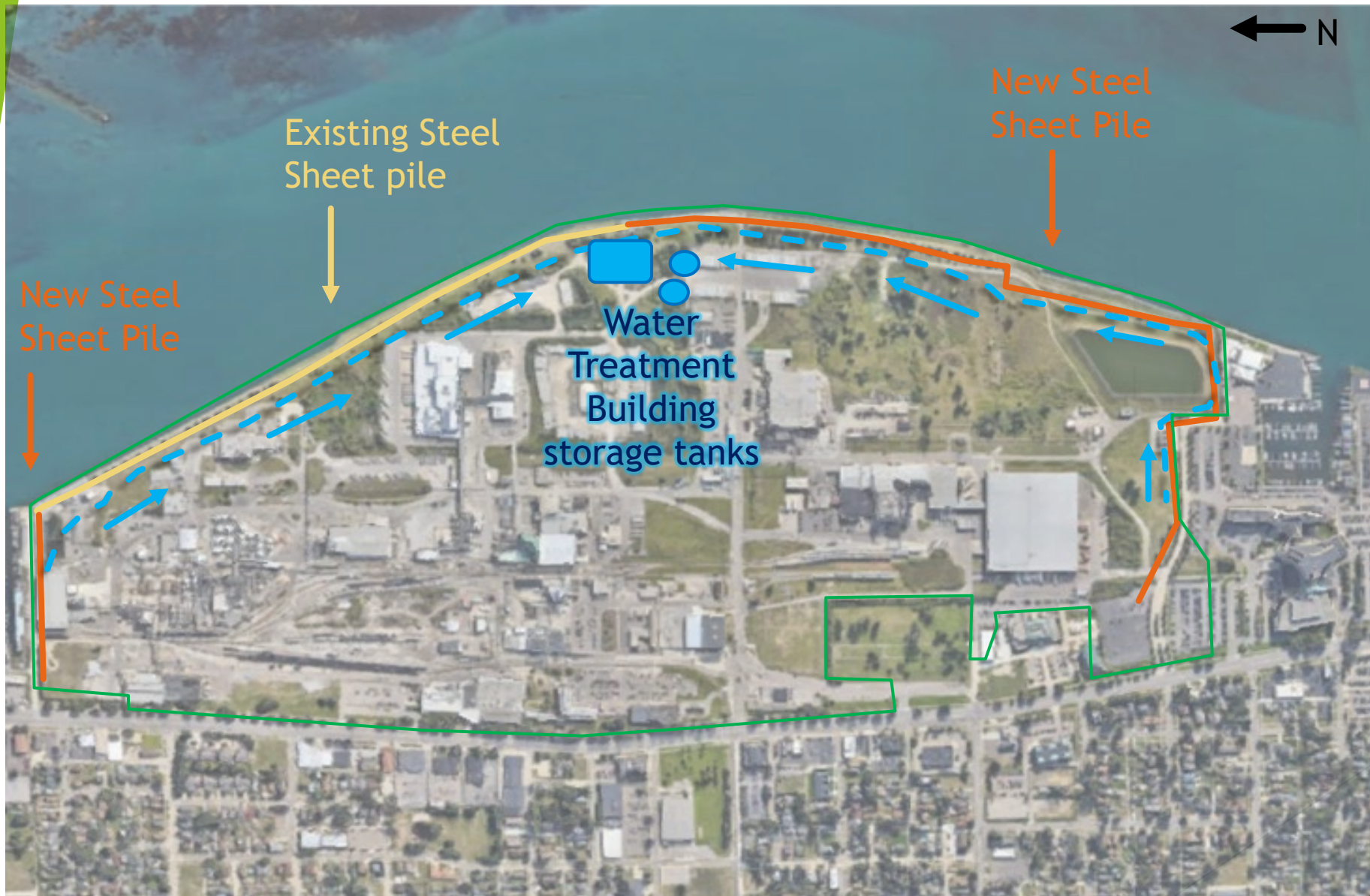


Current Interim Measures

- ▶ Operation of the Targeted Groundwater Interim Measure
 - ▶ Operating since July 2023
 - ▶ Two pumping wells extract groundwater from the southern section of the property
 - ▶ Extracted groundwater is treated for PFAS and PFOS removal
 - ▶ Treated groundwater is discharged to Downriver Utility Wastewater Authority (DUWA)
 - ▶ Removed 3-12 gallons per minute depending on conditions
 - ▶ Over 7.9 million gallons removed to date, operating since July 2023
 - ▶ Ideal area high groundwater flow and elevated levels of PFAS/PFOS
- ▶ Development of the Comprehensive Groundwater Interim Measure

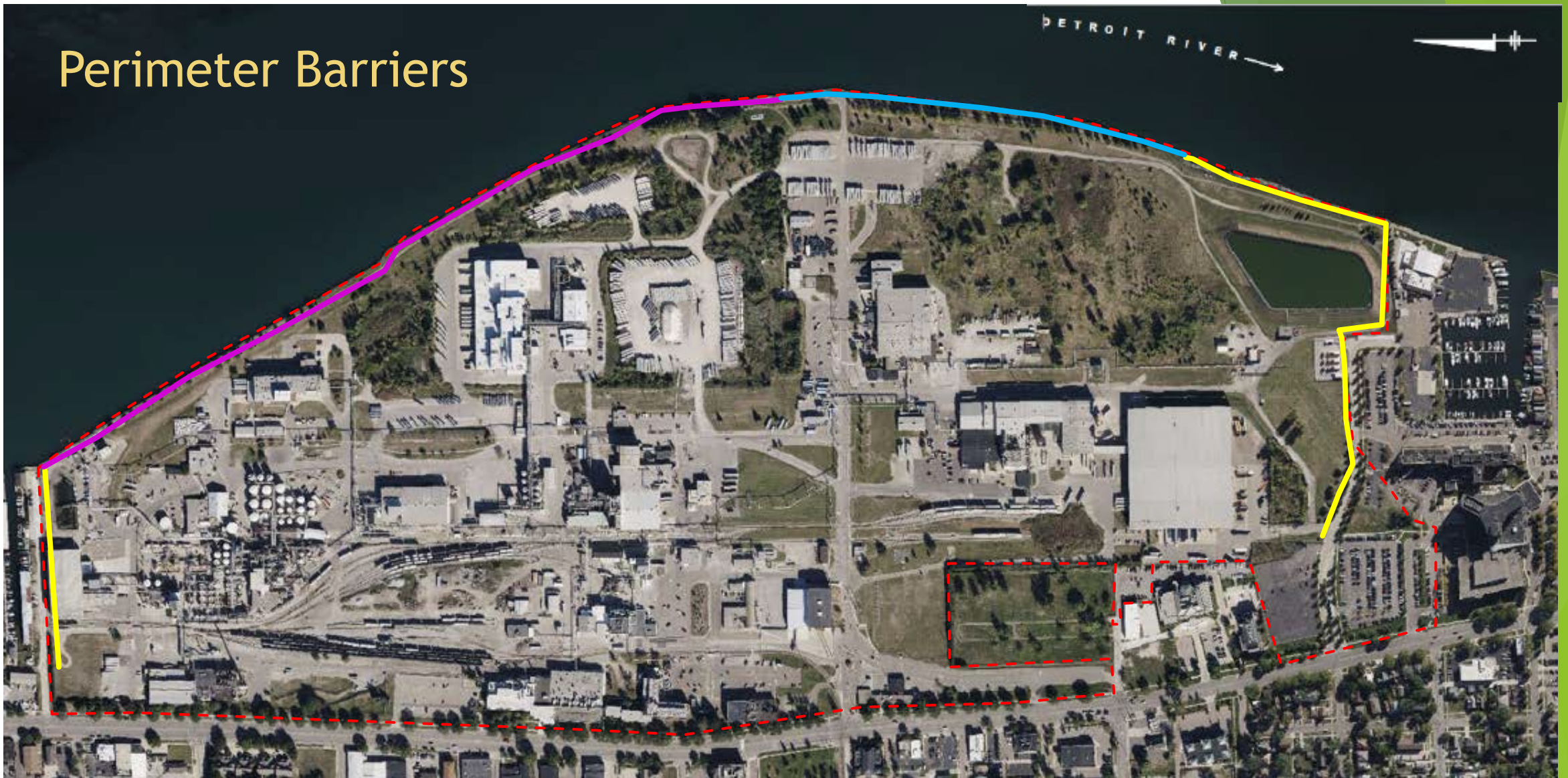


Comprehensive Groundwater Interim Measure


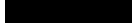
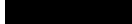






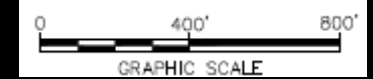
- ▶ **Priority:** Mitigate contaminated groundwater from entering the Detroit River
- ▶ Physical barrier
- ▶ Groundwater collection
- ▶ 30,60, and 95% Designs

Perimeter Barriers



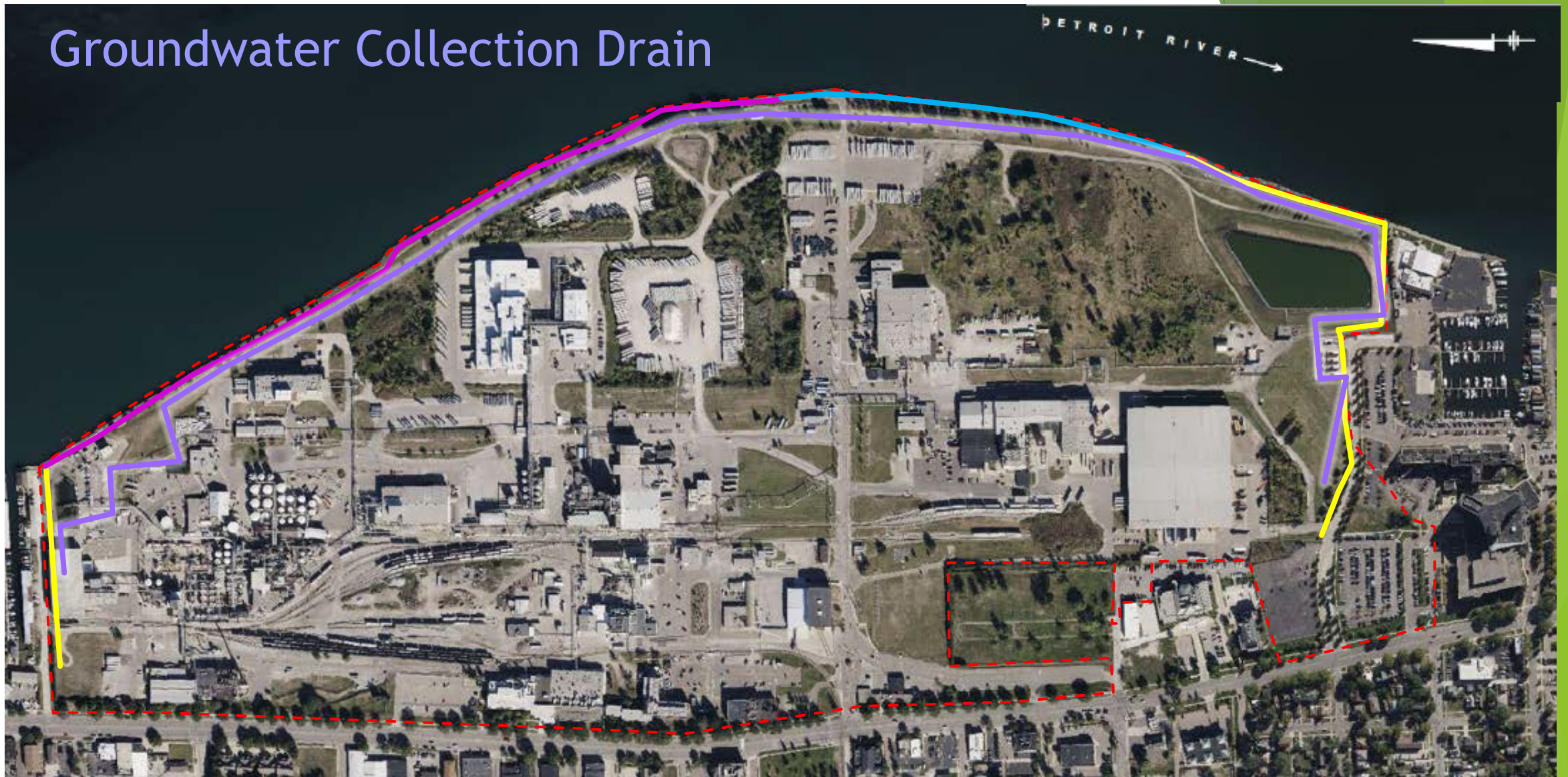
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-  New Sheet Pile Wall
-  Existing Sheet Pile Wall
-  Southern Pile Wall
-  Collection Drain
-  Collection Drain Piezometers
-  Upland Piezometers
-  Sump Locations


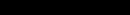







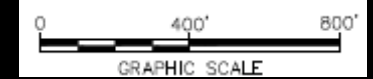
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Groundwater Collection Drain



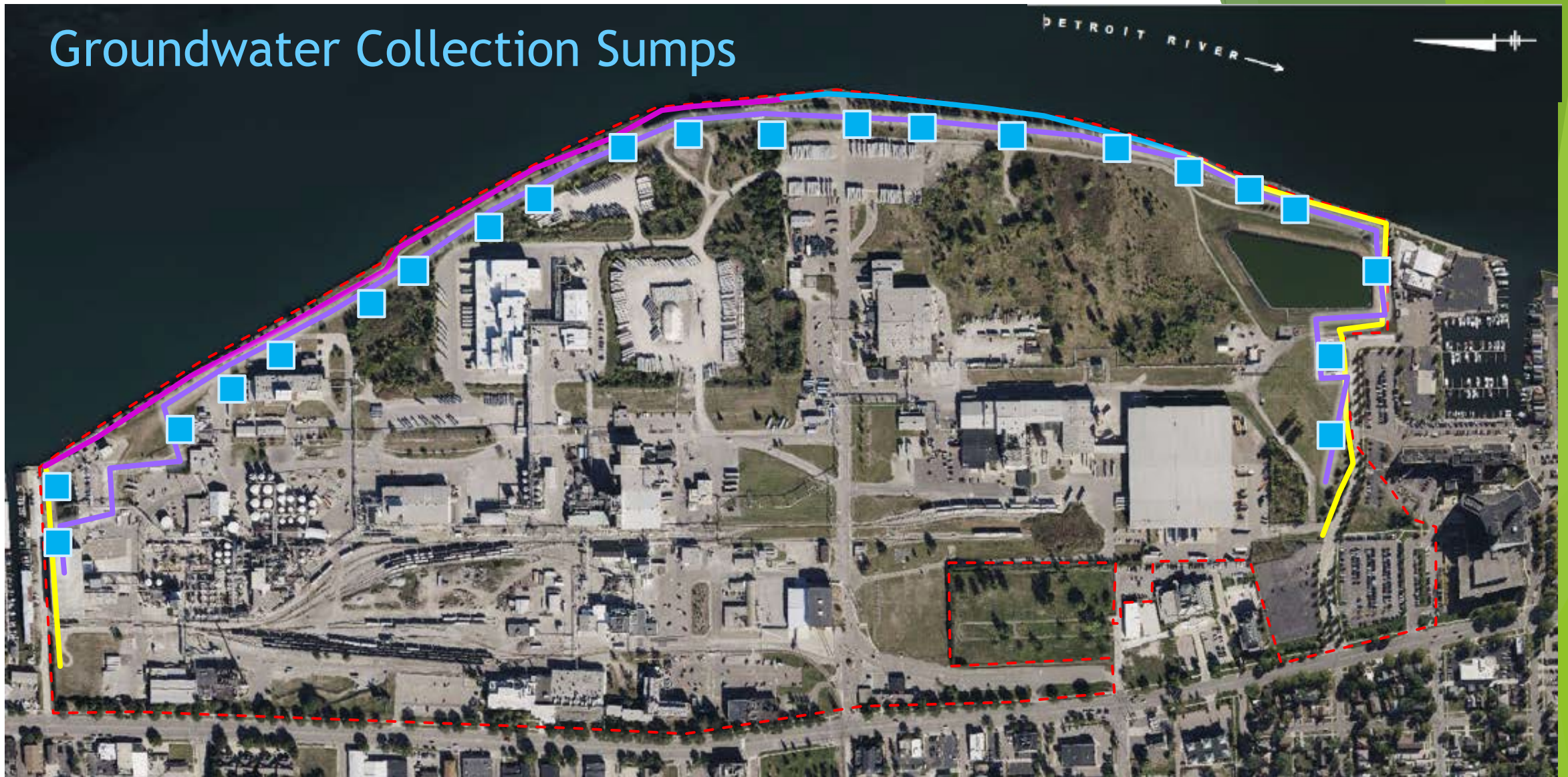
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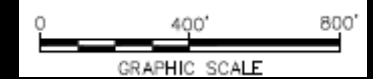
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Groundwater Collection Sumps



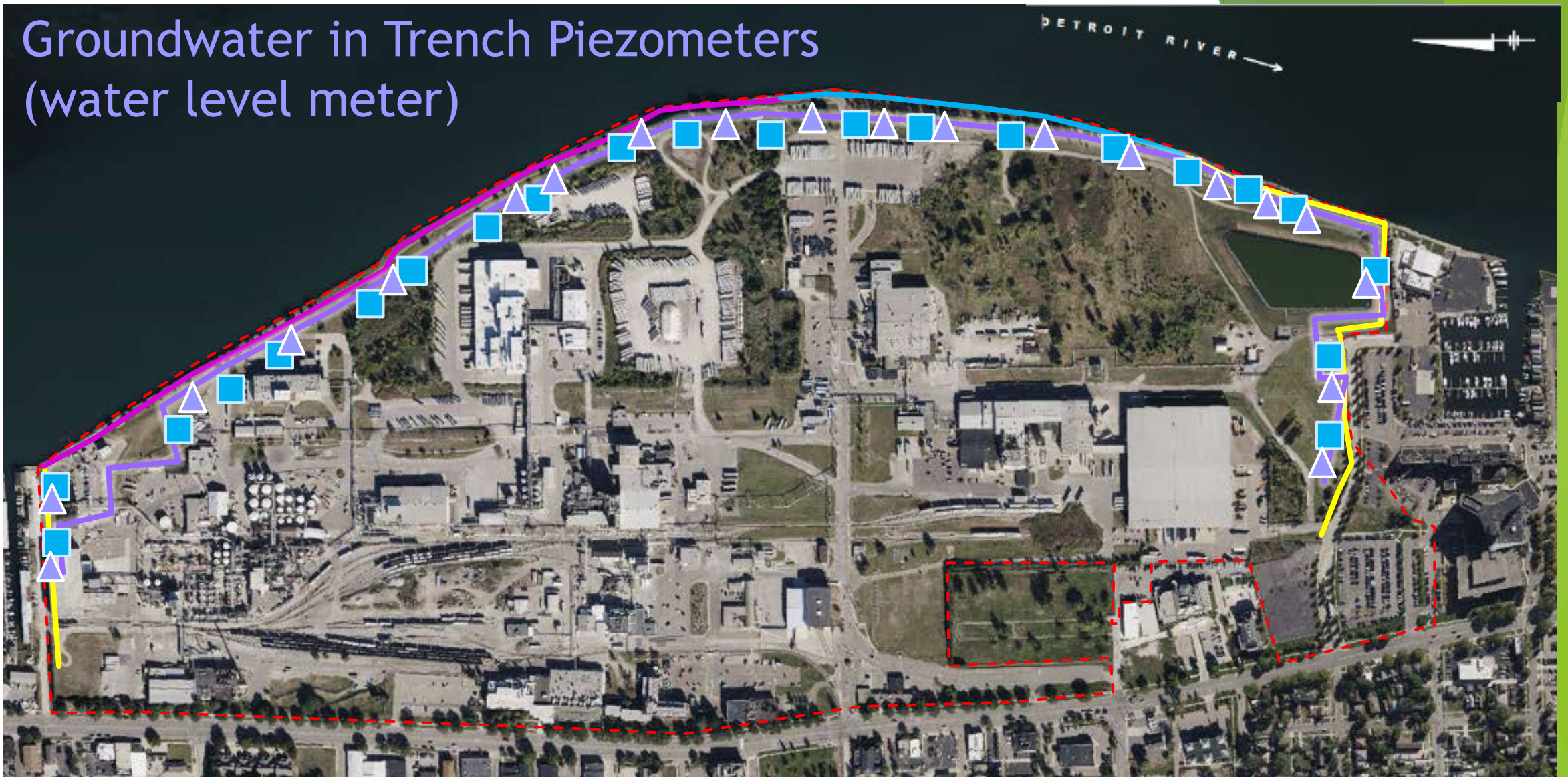
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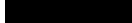
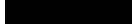






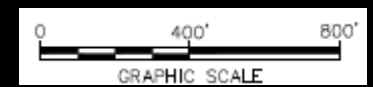
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Groundwater in Trench Piezometers (water level meter)



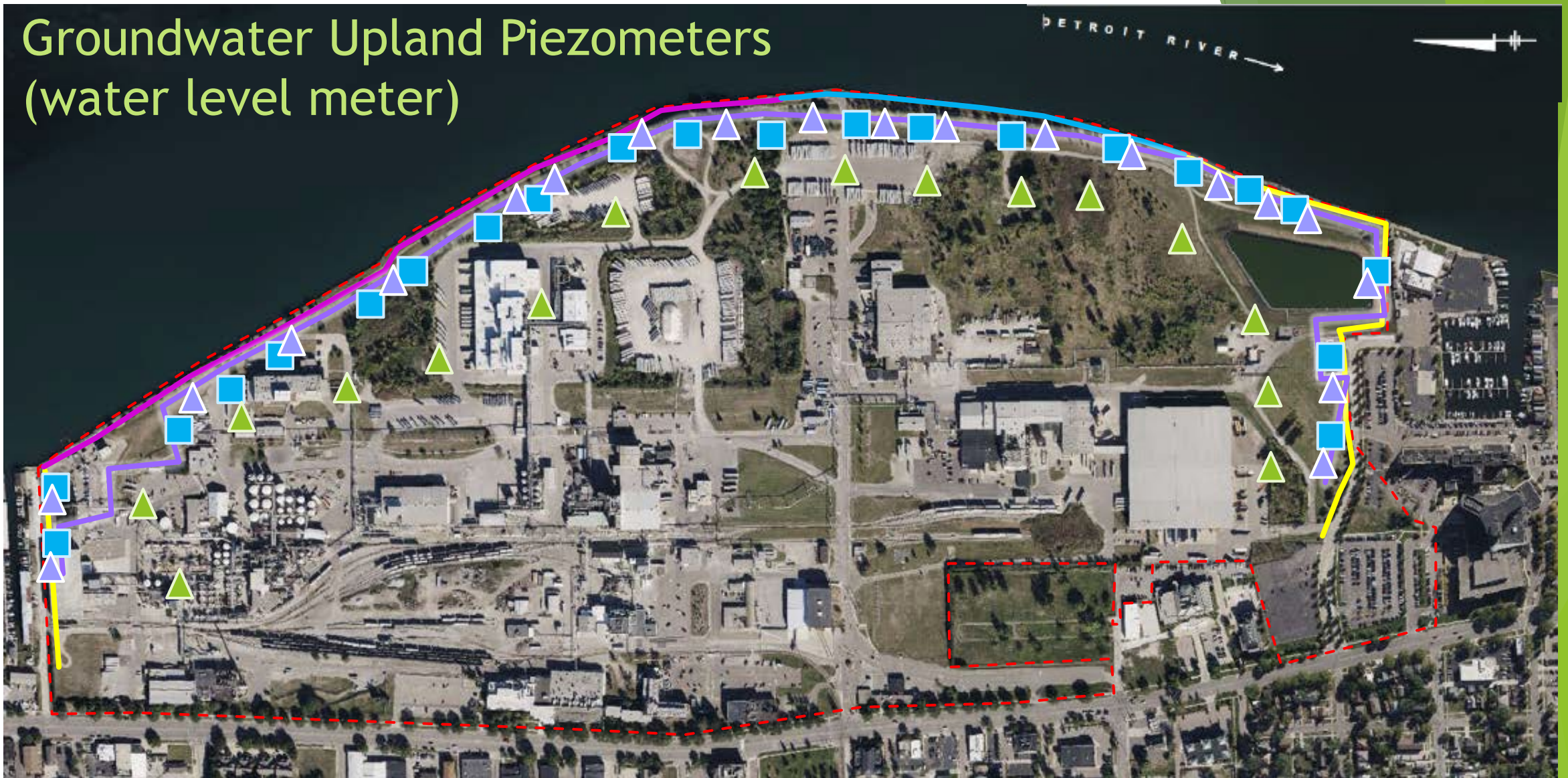
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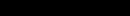
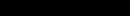






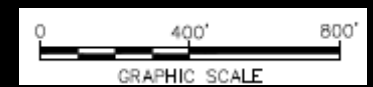
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Groundwater Upland Piezometers (water level meter)



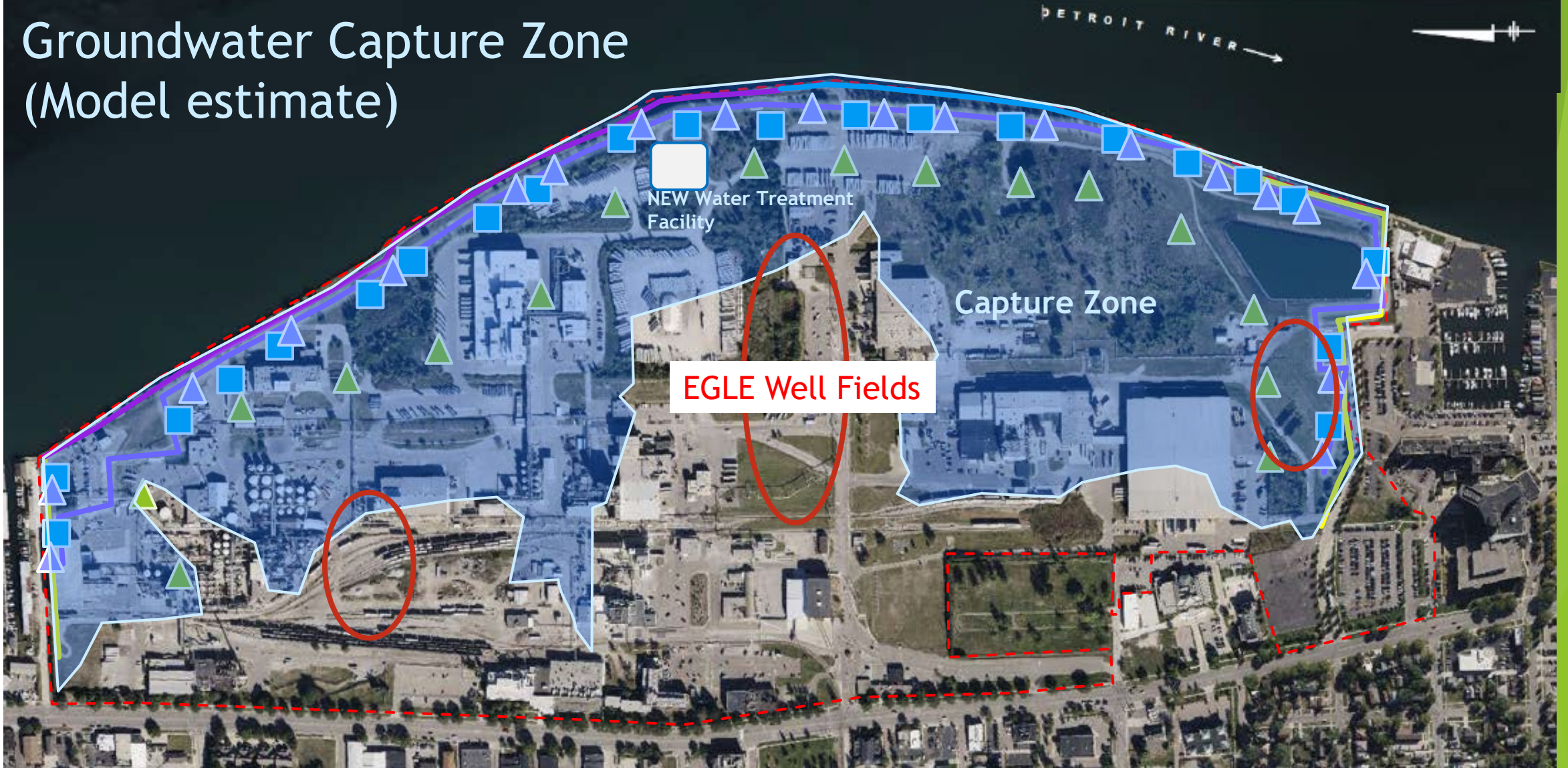
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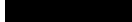
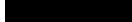





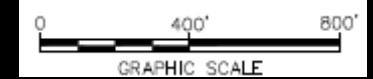
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Groundwater Capture Zone (Model estimate)



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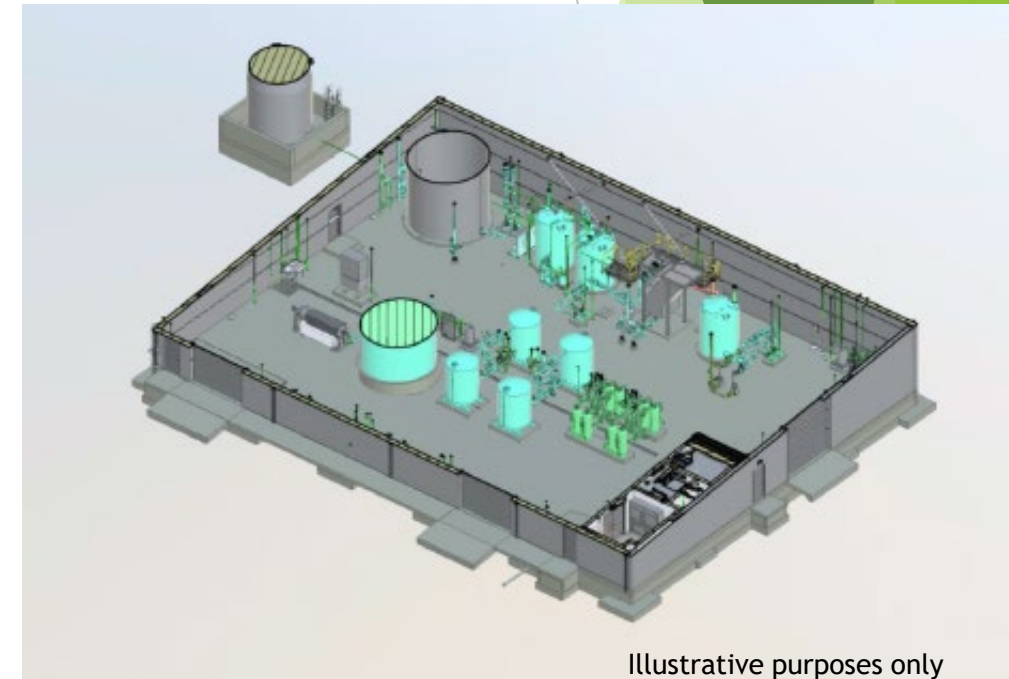
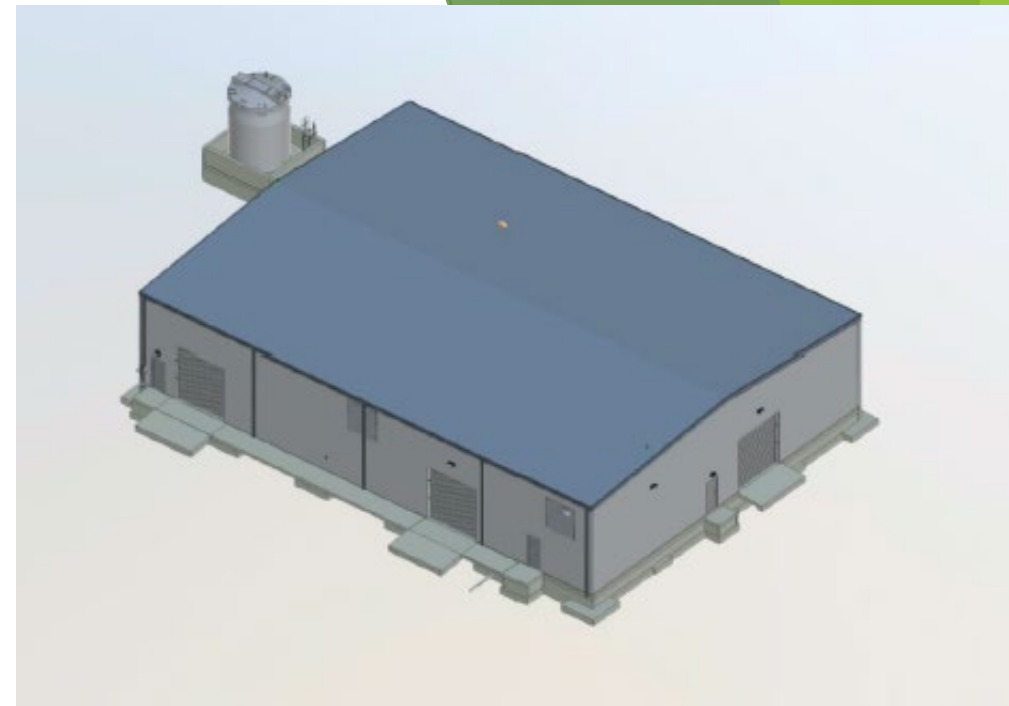
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Water Treatment Facility

- ▶ New 8,800 square foot single story building
- ▶ Groundwater from drains inside perimeter barrier
- ▶ Sumps and conveyance piping bring it to water treatment facility
- ▶ Treats the water for PFAS/PFOS, VOCs, SVOCs, mercury and other metals
- ▶ Two 150,000-gallon tanks to store water
- ▶ 48 gpm average with up to 120 gpm water treatment rate
- ▶ Treated water discharged under permit



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New Investigations - since 60% BOD

▶ Geotechnical Investigation

- ▶ 5 soil borings
- ▶ Determine stability of area for supporting new water treatment system building and water storage tanks

▶ Heavy Dock Investigation

- ▶ 16 Soil borings to determine amount of fill material, existing bulkhead, and potential voids
- ▶ Findings:
 - ▶ Concrete Hoist is intact 3-5 ft thick
 - ▶ No evidence of subsidence or settlement
 - ▶ Steel Pile Bulkhead in good condition

▶ Southern Perimeter Focused Investigation

- ▶ 2 Soil borings
- ▶ Refine depth of clay-layer that the perimeter barriers will be imbedded into



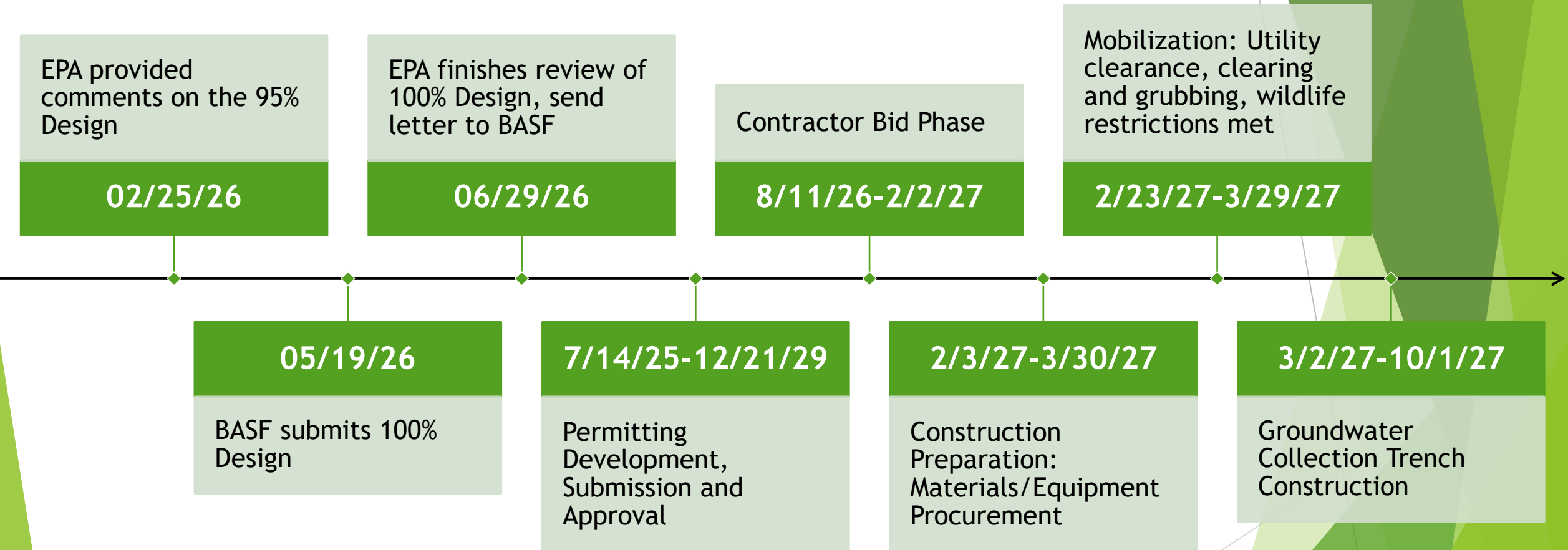
- Proposed Soil Boring Location to ~70-ft bgs
- Proposed Soil Boring Location to ~50-ft bgs

Groundwater Model refinement

- ▶ Site-specific stormwater model was used to
- ▶ Gives clear picture of where and how much water enters the ground
- ▶ The design is better tailored to this site and more resilient to future weather and river conditions, and seiche events.



Comprehensive Groundwater Interim Measure Schedule



Questions



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

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- Water Resources Division:
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- Drinking Water and Environmental Health Division:
- Sally Castle CastleS1@Michigan.gov



- Further Information
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 - BASF Website - Updates
- Community Involvement Coordinator
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- USEPA Project Manager
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 - <https://www.epa.gov/aboutepa/forms/contact-epa-region-5>