



# **San Jacinto River Waste Pits Superfund Site**

**Community Update Meeting  
June 10, 2021**

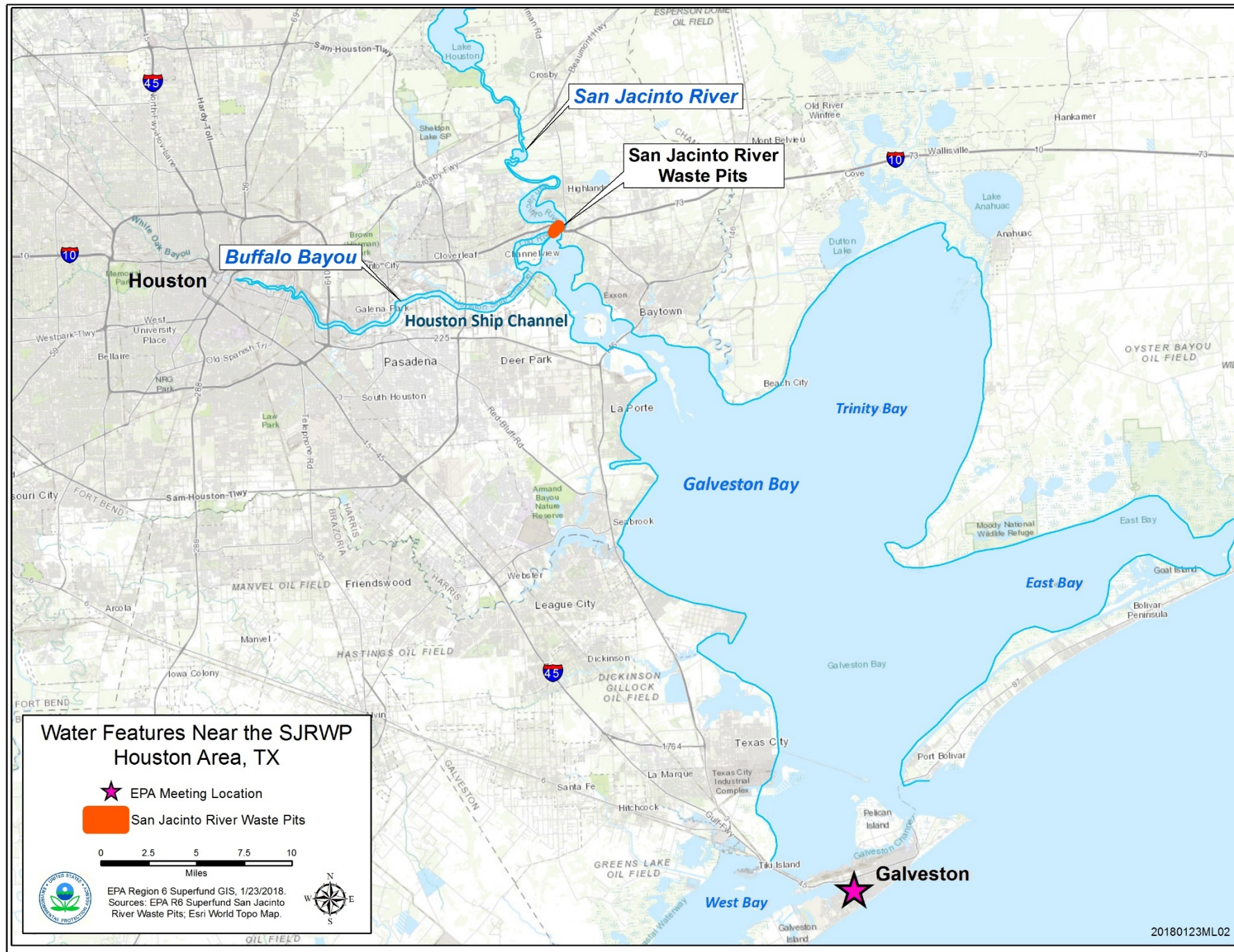
# Discussion Topics

- Site Overview
- Current Status
  - Southern Impoundment
  - Northern Impoundment
- Overall Remedial Design Update
  - Northern Impoundment Challenges and Uncertainties
  - Supplemental Design Investigation Sampling
  - Update to Schedule
- Community Update



# Site Overview





20180123ML02





San Jacinto River

Sand Separation Area

Northern Impoundments

Southern Impoundment

10

San Jacinto River

San Jacinto River Waste Pits  
Harris County, TX



EPA Region 6  
Superfund GIS  
6/9/2021  
20210609ML01

# Background

- Built in the mid-1960s for disposal of paper mill wastes
- Northern & southern impoundments cover about 15 acres each
- Contaminated with dioxins and furans
- San Jacinto River Waste Pits added to the National Priorities List (Superfund) in 2008



# Changing River Conditions

1966

1997

2006



# Why Actions Taken to Cap Pits

- Dioxin exposed at surface and in the river
- People were being exposed
- Uncontrolled releases to river
- Time to complete site investigations
- Temporary cap was necessary to prevent releases & exposures



**Cap Construction: 2010 to 2011**

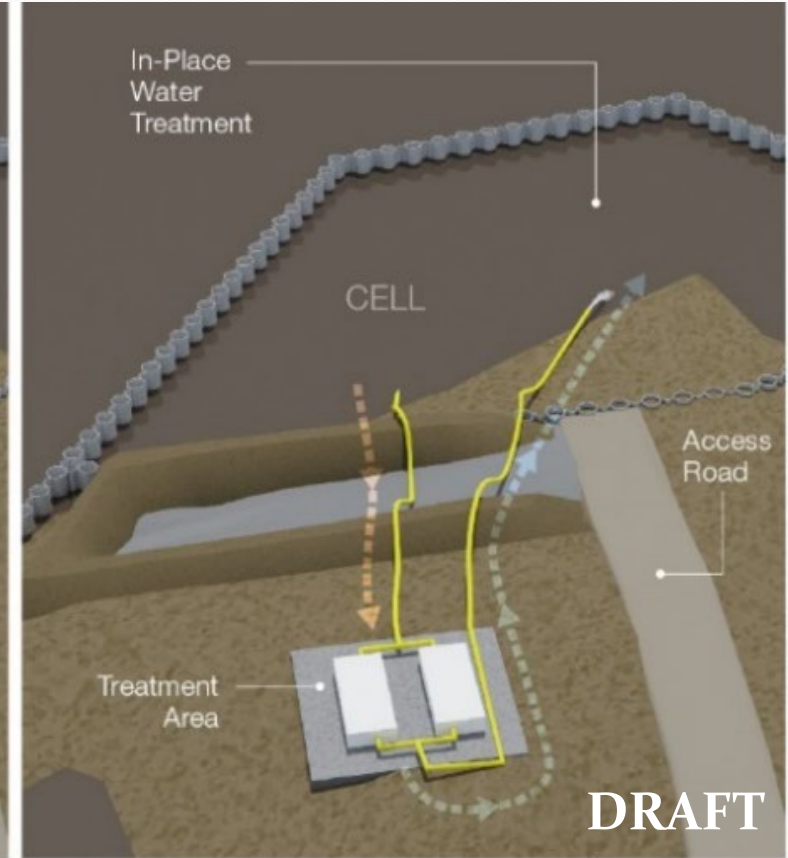
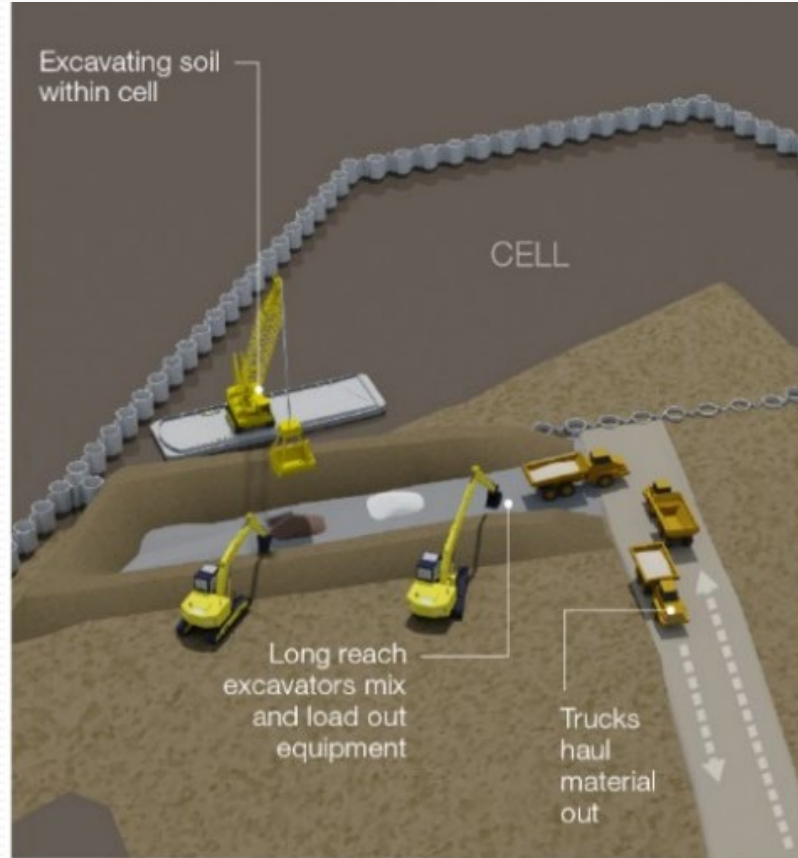


# Summary of Selected Remedy – Oct 2017

- Remove 212,000 cubic yards of waste from the northern and southern impoundment for offsite disposal.
- Critical element to prevent releases from Northern Impoundment:
  - BMP (containment wall) around excavation area.

# Treatability Study Conclusion

- Treatability study determined the proposed excavation approach B determined to be unsafe because water could not be treated to a clean level within the 6-month excavation season.

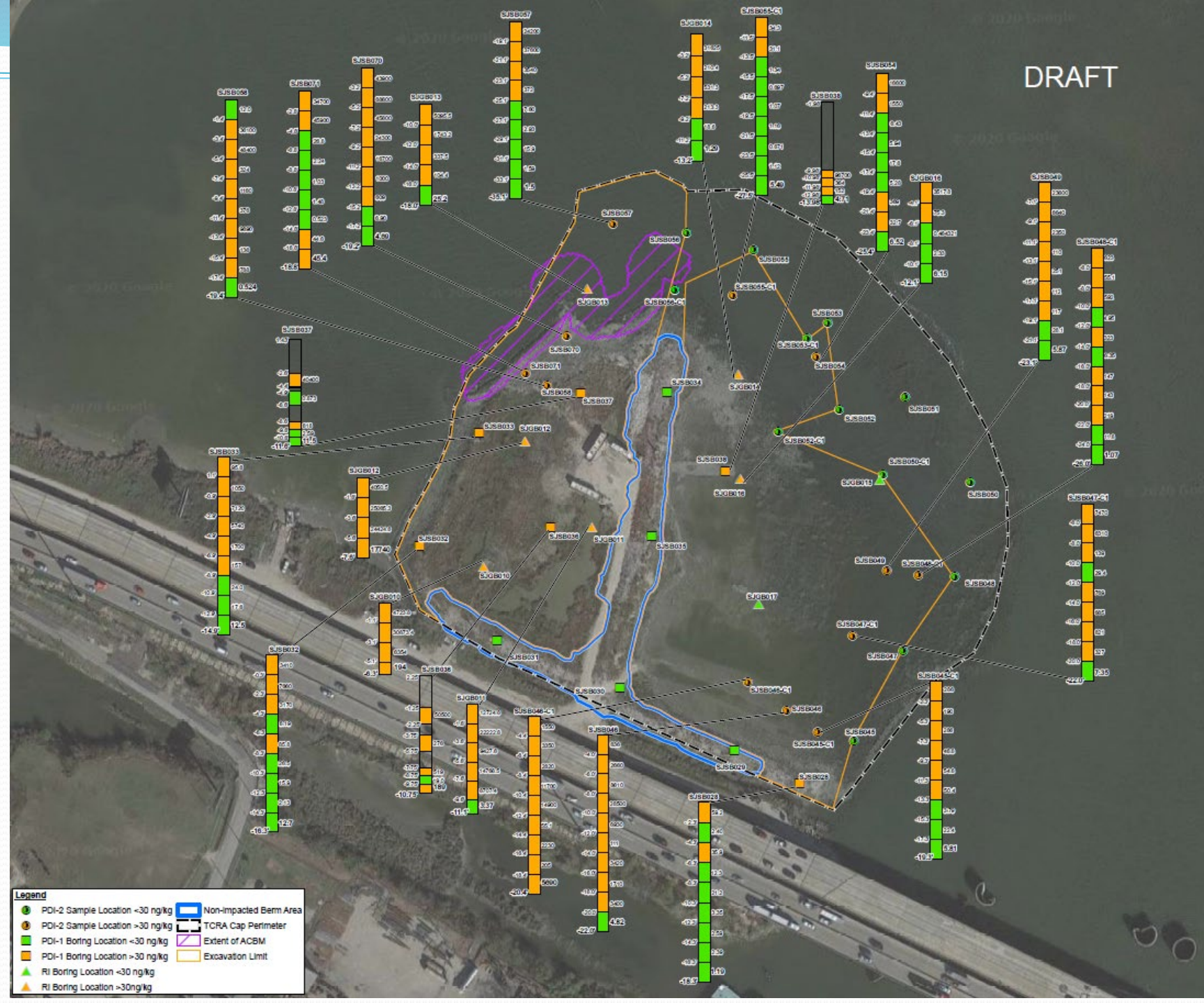


**✘ Approach B Conceptual Removal Method**



# Pre-Design Investigation 2 Results

- Waste is a lot deeper than expected.
- Need additional data to engineer a more complex wall to ensure remedy is safe.



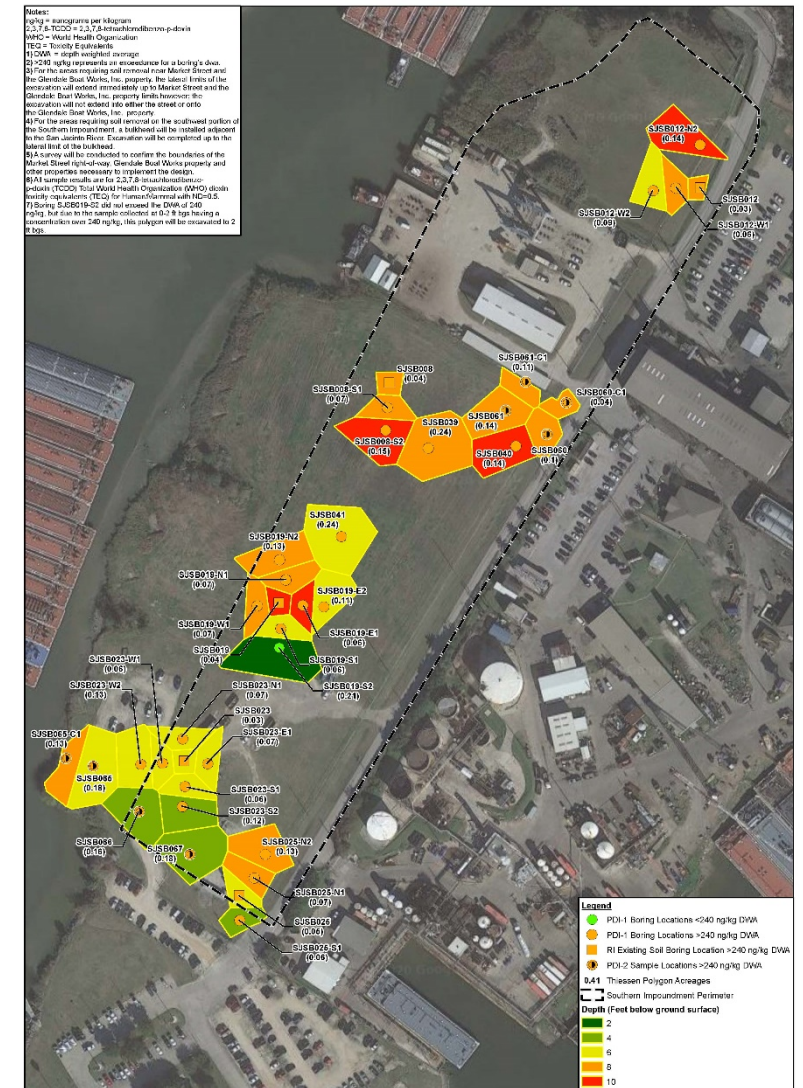


# Current Status



# Southern Impoundment

- The Final 100% Remedial Design for the Southern Impoundment was approved by EPA on May 7, 2021.
  - Excavation/backfill on site
  - 24,600 cubic yards for off-site disposal
- A copy of the final document can be found on the EPA website: <https://www.epa.gov/tx/sjrwp>



# Summary of Northern Impoundment Technical Challenges and Uncertainties

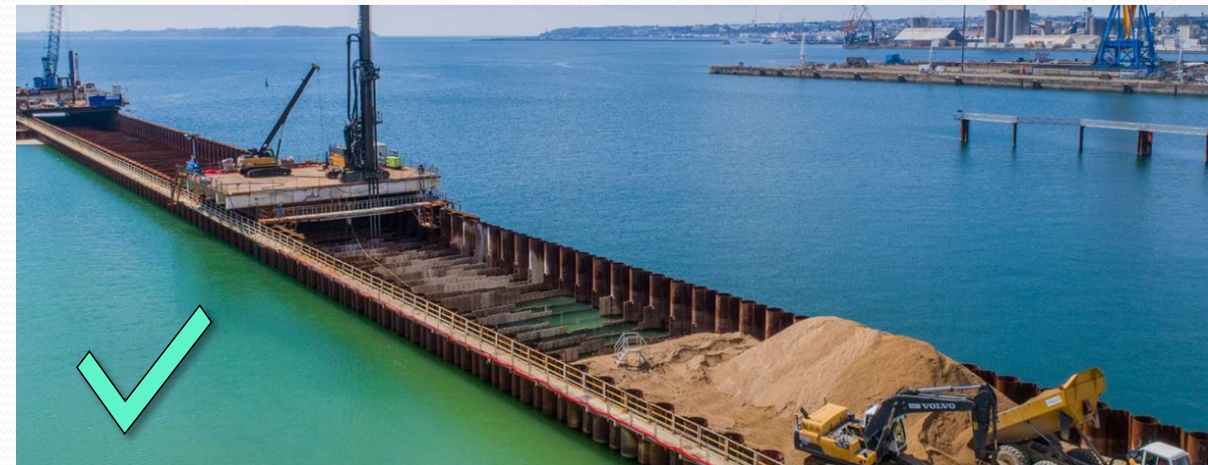
- Current Excavation Strategy
  - Excavation depth
  - BMP (Wall) Design
  - Water infiltration and risk of hydraulic heave
  - Confirmation Sampling
- TxDOT I-10 Bridge Replacement
- Expansion of Lake Houston Control Structures
  - Data currently being incorporated into design.



# Alternative BMP (Wall) Design

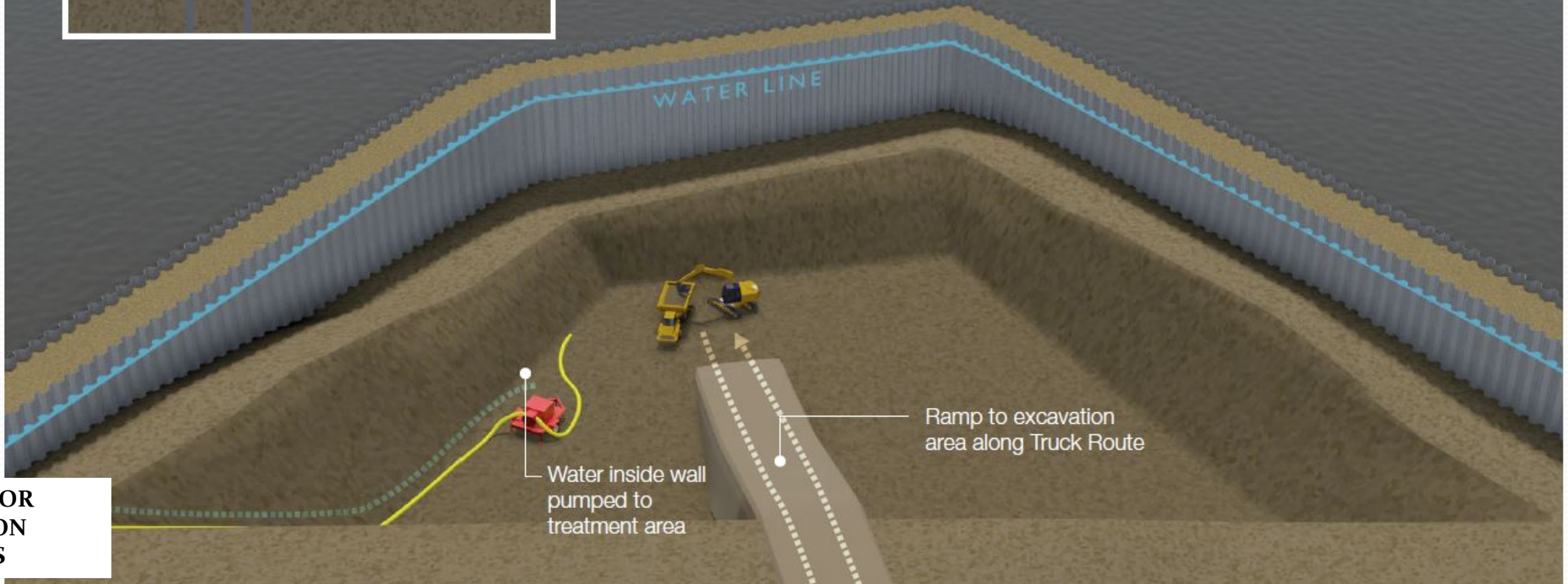
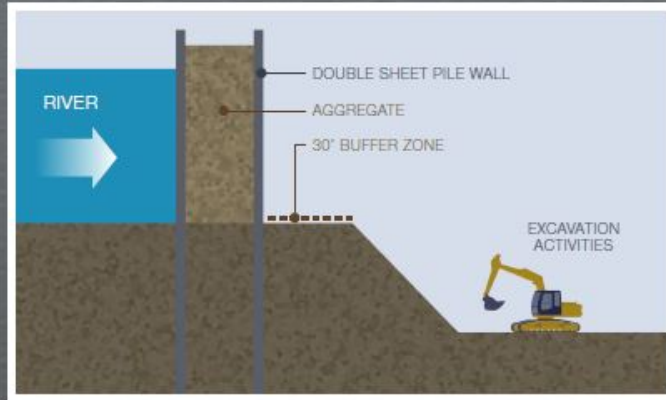
## Exterior Double Wall

- Could be installed around perimeter first, prior to excavation
- Space between walls would be filled with sand/aggregate
- Walls would be tensioned together with tie-rods
- Requires less robust pile types and shallower tip depths than the wall considered for the 30% Remedial Design Package



# Conceptual Double Wall Illustration

Conceptual illustration for discussion purposes only

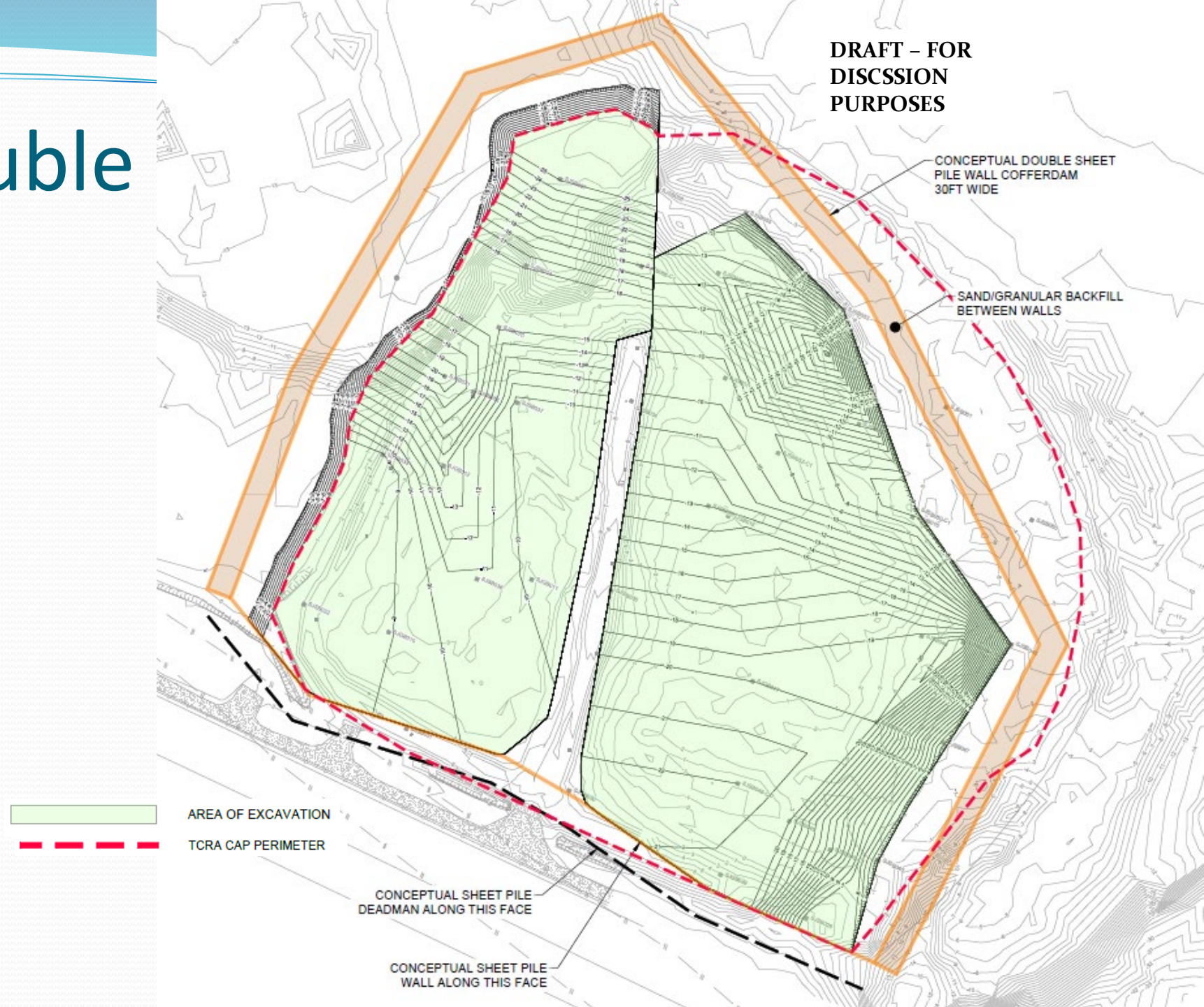


**DRAFT - FOR  
DISCUSSION  
PURPOSES**



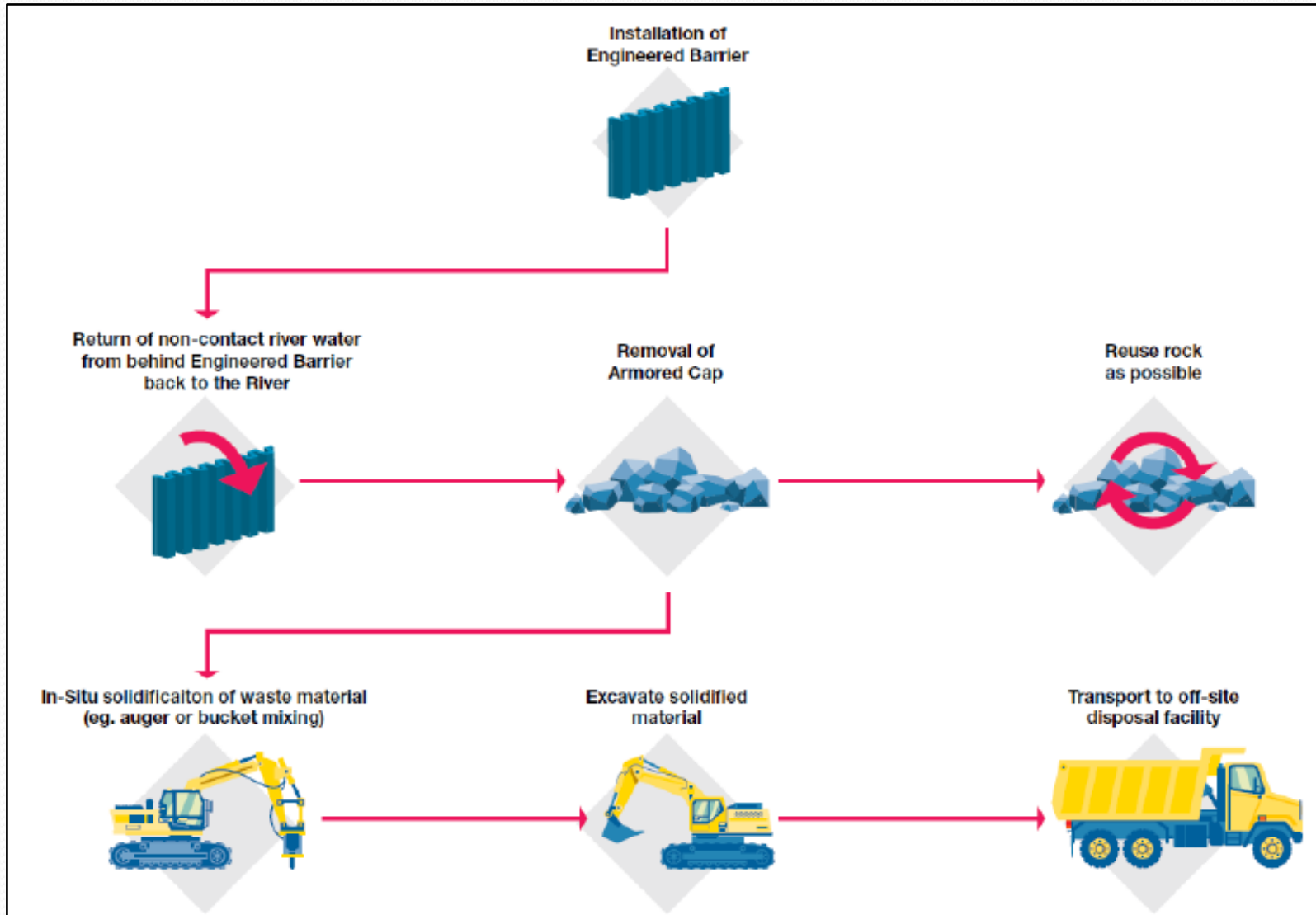
# Conceptual Double Wall Alignment and Excavation Approach

- Excavation months: November to April
- Planning to subdivide into seasonal cells.





# Construction Strategy

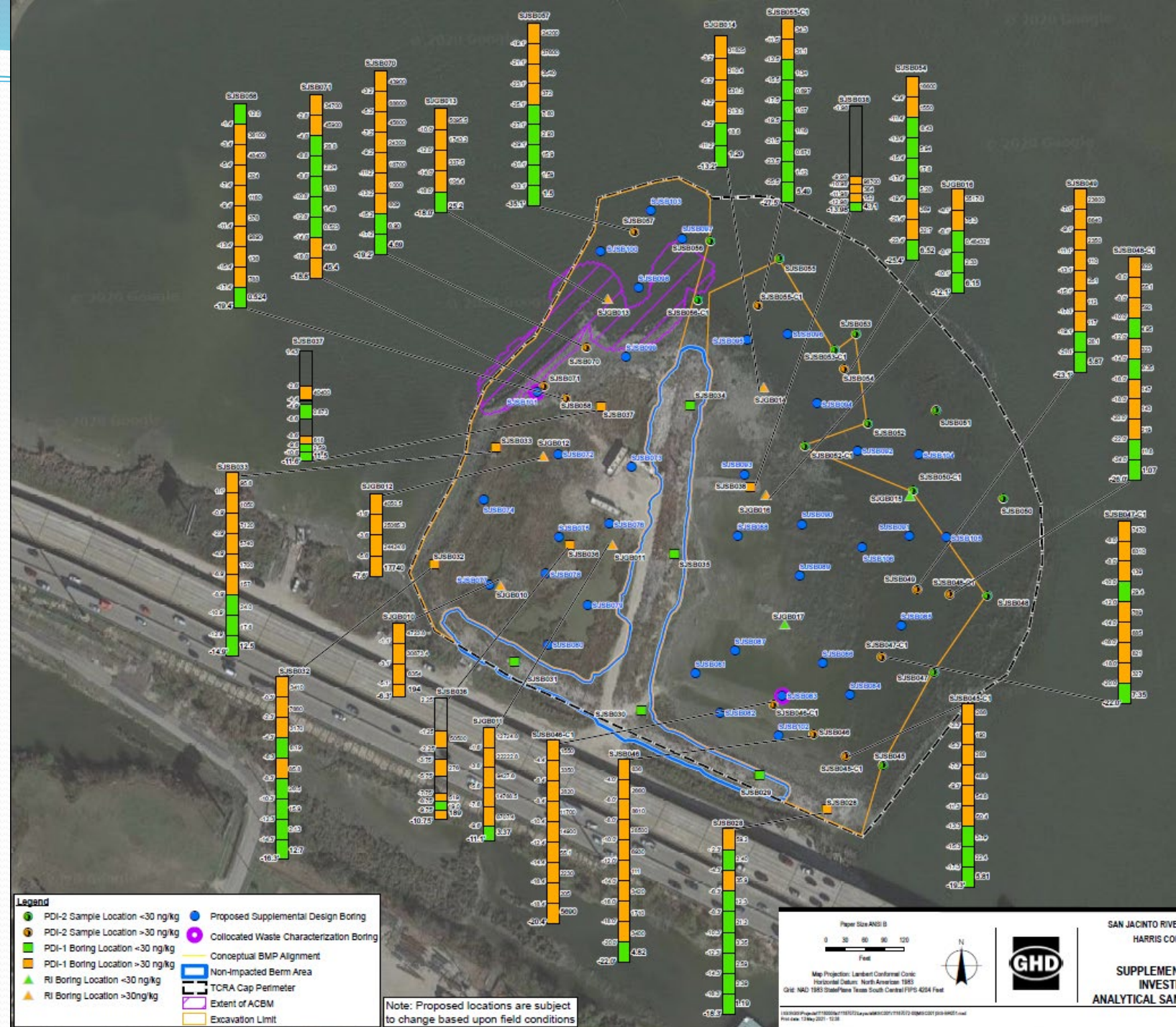


# Supplemental Design Investigation Sampling Plan

- *Supplemental Design Investigation Sampling Plan* was approved on June 4, 2021.
- Field work will begin late June/early July 2021.

# Analytical Information

- Depth of Waste
- Volume of Waste
- Waste Characterization





# Geotechnical Information

- Site specific CPT (soil) data where wall will be installed.
  - Wall needs to be more robust.
  
- Piezometers to measure hydraulic conductivity.
  - Water Management
  - Concern of hydraulic heave.



# Remedial Design Updated Schedule

- Sampling Field Event – June/July 2021
- Technical Workgroup Meetings – Ongoing
- Construction Design Submittals
  - Pre-final 90% Design for Northern Impoundment – January 2022
  - Final 100% Design for Northern Impoundment – February 2022





# TxDOT Update

- EPA has Quarterly Meetings with TxDOT
- Dolphin/Fender Project – June/July 2021
- I-10 Bridge Project
  - Not currently funded
  - Stakeholder Meetings
    - Maritime Focus
    - Community Focus



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# Additional Community Updates

- Updates to Website: <https://www.epa.gov/tx/sjrwp>
  - Extension Request Approval, Final Southern Impoundment RD, and Community Meeting Information and Presentation
- How to Access Publicly Available Documents on EPA Website
- Emergency Contact: National Response Center (800-424-8802)
- Community Awareness Committee Meetings Continue
  - 4-20-21, 2-12-20, 7-29-20, 12-10-20

# QUESTIONS?

Additional information available at

<https://www.epa.gov/tx/sjrwp>

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