



# Hudson River Park Update

June 9, 2026



# Agenda

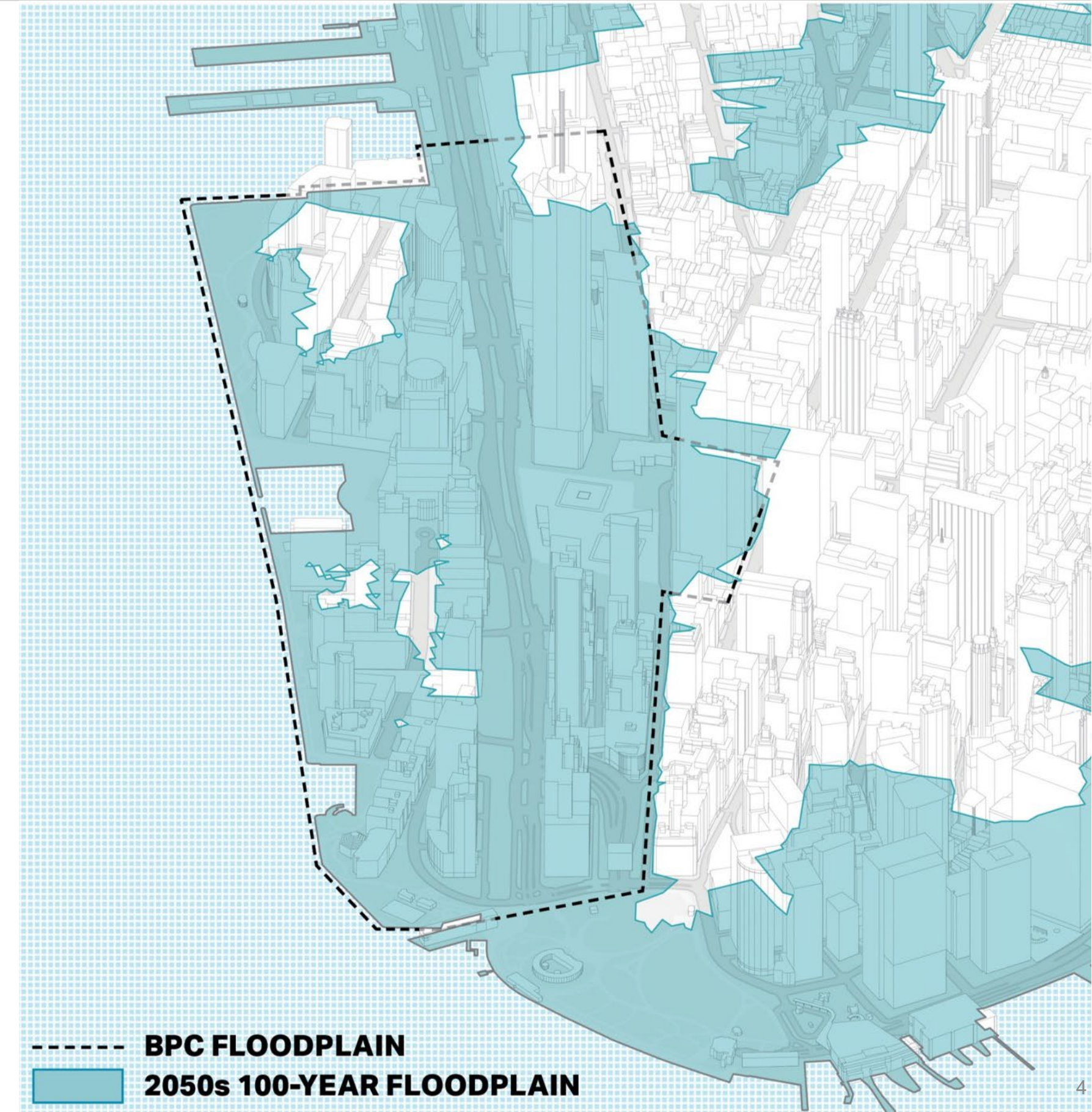
- 1. Project Background**
- 2. North Esplanade Design**
- 3. HRPT-Relevant Work**
- 4. Habitat Enhancement**
- 5. Discussion**

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# Project Background

# Why We Are Here

- By the 2050s, **37% of buildings in Lower Manhattan and supporting infrastructure** will be at risk from storm surge, with the frequency and intensity of storms only increasing
- By the 2050's, **Heat waves projected to be 250% more frequent and 50% longer**
- More frequent heavy rain and cloudburst events in recent years have highlighted the **urgent need to improve interior drainage** in Lower Manhattan
- BPC floodplain includes **120 buildings, 25,000 residents, 61,000 jobs, critical infrastructure and cultural institutions including the WTC areas further east**



# Resiliency Benefits

- **Flood Risk Reduction** responsive to 2050s 100-year storm, including 2.5 feet of projected sea level rise, additional **cooling capacity** during heat events, and **prevention of ponding** of more than 1' depth during rain events in Battery Park City.
- **Potential Reduction of Homeownership Costs:** FEMA's removal of BPC from the current flood zone may eliminate homeowners' need to purchase flood insurance for federally-backed mortgages.
- **Enhancement of Public Space** with universal accessibility, remediated circulation pinch points, and increased and improved seating.
- **Increased Landscaping:** Over 30% increase in total planting coverage within the project area, including 2x near the Ferry Terminal.



*Blue lampposts along the esplanade illustrate the elevation of storm surge for a projected 2050's 100-year storm, including 2.5 feet of sea level rise. This one at Rector Place is approximately 10.5 feet above the Esplanade*

# Lower Manhattan Coastal Resiliency Project

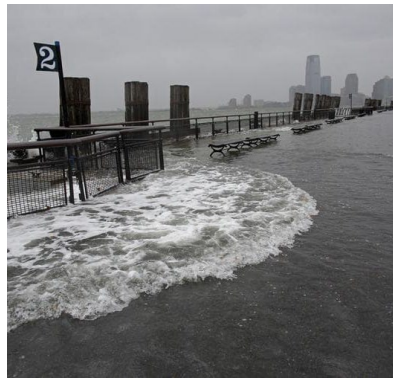


NEW YORK STATE OF OPPORTUNITY  
**Battery Park City Authority**

Turner **CRUZ** **ARCADIS** **SCAPE** **BIG** **WSP**

# Timeline

**2012:** Superstorm Sandy



**2019:** Lower Manhattan Coastal Resiliency Project



**North/West Battery Park City Resiliency Project**  
**2021-2025:** Planning and Design  
**2025-2030:** Construction



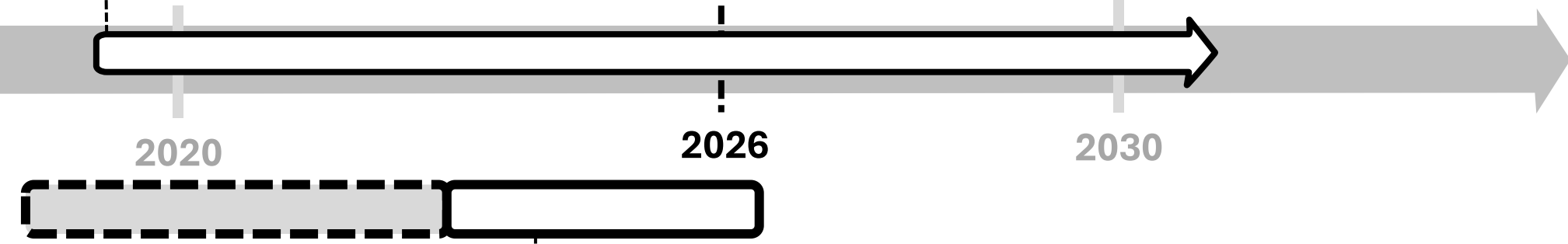
**2007:** PlaNYC introduces coastal flood resilience measures



**2014:** Rebuild by Design “Big U”



**South Battery Park City Resiliency Project**  
**2018-2023:** Planning and Design  
**2023-2026:** Construction



# Extensive Review – Permitting Entities

## FEDERAL

- United States Army Corps of Engineers
- National Fish and Wildlife Service
- National Marine Fisheries Service
- Federal Emergency Management Agency

## REGIONAL

- Port Authority of New York and New Jersey

## UTILITIES

- ConEdison
- ECS/Verizon/AT&T/Altice

## STATE OF NEW YORK

- **Hudson River Park Trust**
- Department of Environmental Conservation
- Department of Transportation
- Department of State
- Office of Parks, Recreation, and Historic Preservation
- City University of New York
- Office of General Services

## CITY OF NEW YORK

- Office of Management & Budget
- Department of Buildings
- Department of Transportation
- Department of Environmental Protection
- Department of City Planning
- Landmarks Preservation Commission
- Public Design Commission
- Department of Parks and Recreation

# Community Engagement

- **Large Public Meetings**
  - August 4, 2021
  - December 16, 2021
  - June 29, 2022
  - September 19, 2022
  - June 26, 2023
  - November 30, 2023
  - June 20, 2024
  - March 11, 2026
- **“Site Walks”**
- **On-going CB1 Presentations**
- **Reach-Specific Workshops**
- **Building-Specific Meetings**
- **HRPT Meetings**
  - 6/13/23 HRPK Advisory Council
  - 6/10/24 HRPK Advisory Council
  - 6/10/25: FEIS Presentation
  - TODAY: 6/9/26 HRPK Advisory Council
- Dozens of smaller meetings with stakeholders throughout



# Project Alignment



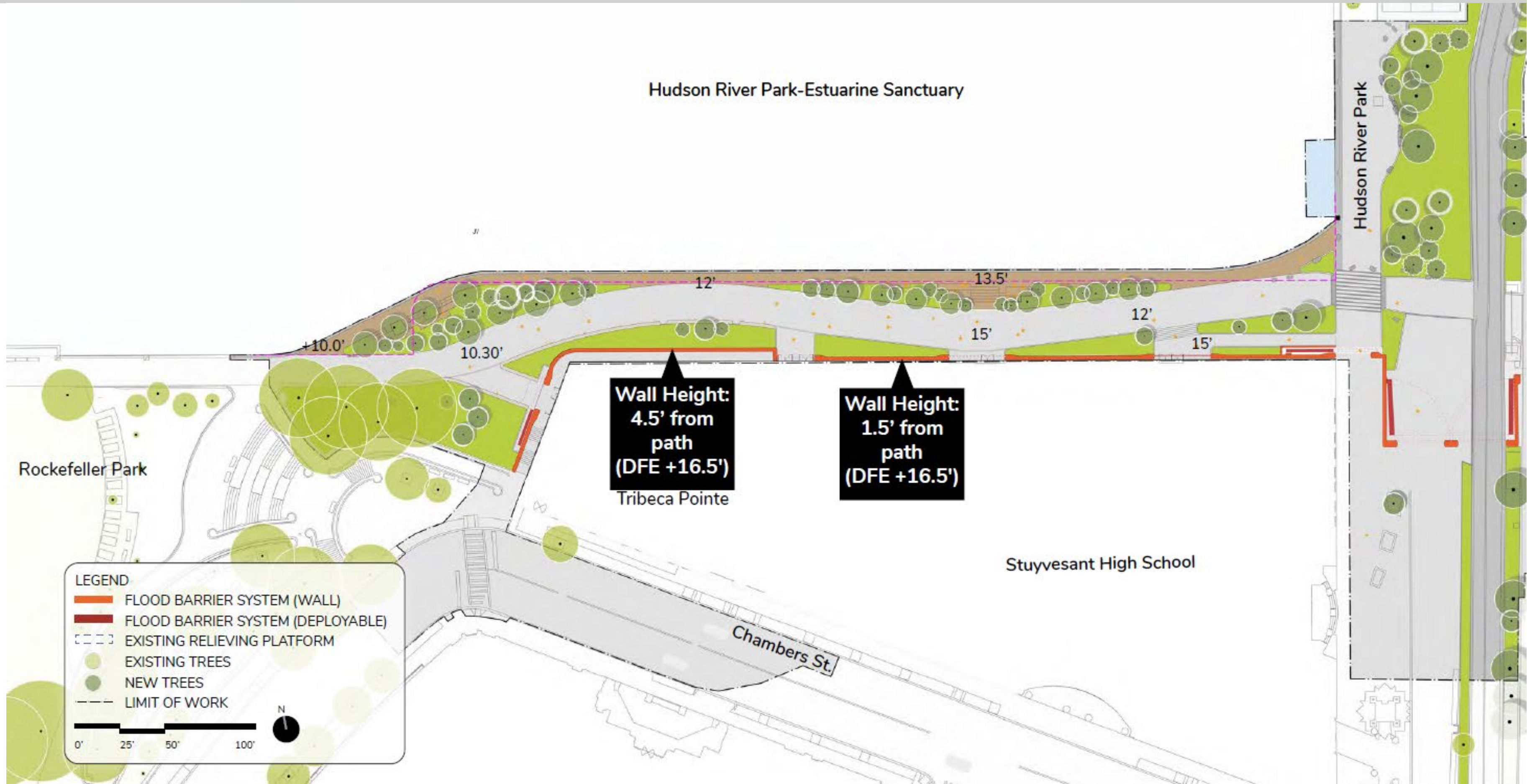
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# North Esplanade Design

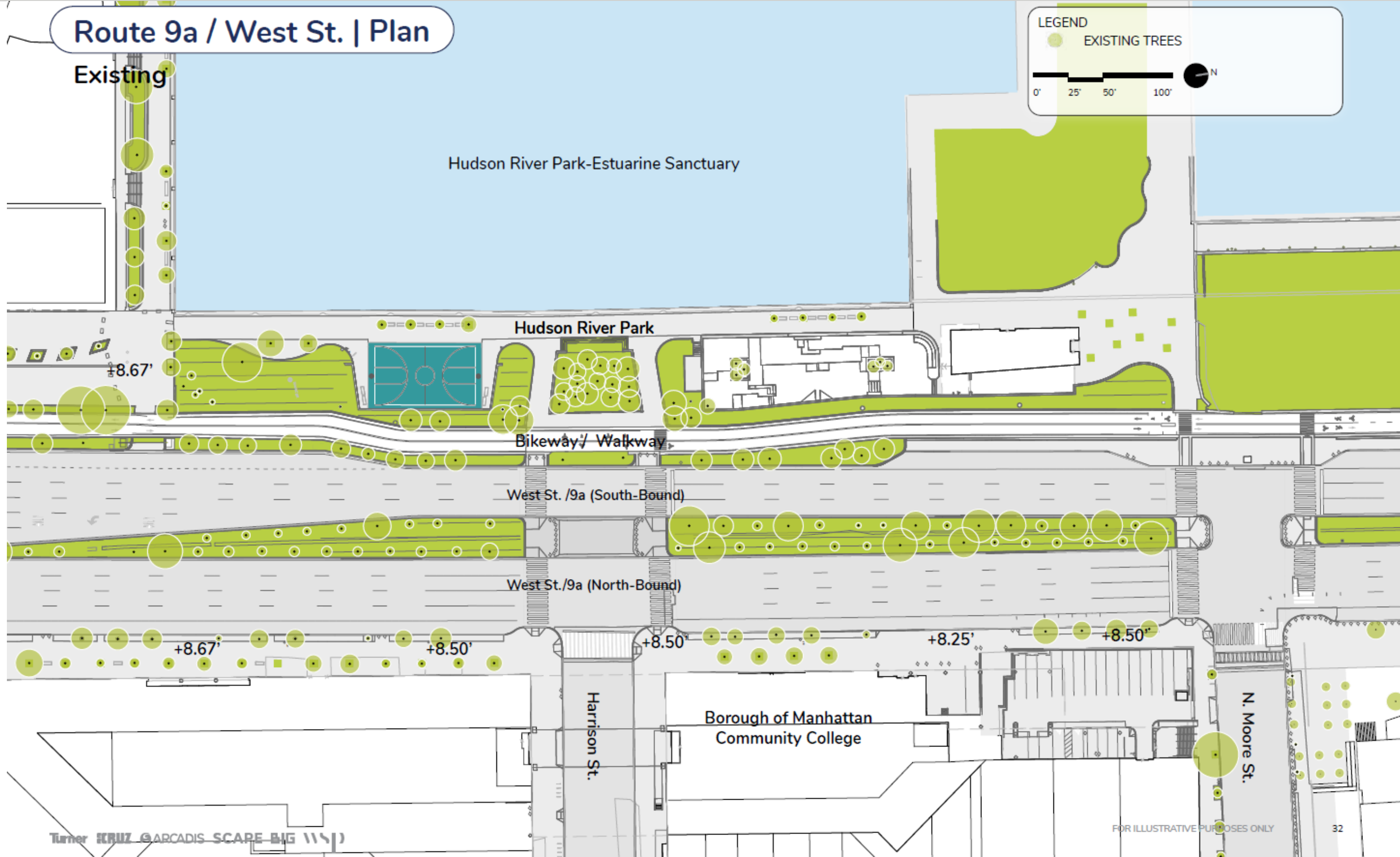
# North Esplanade: Existing



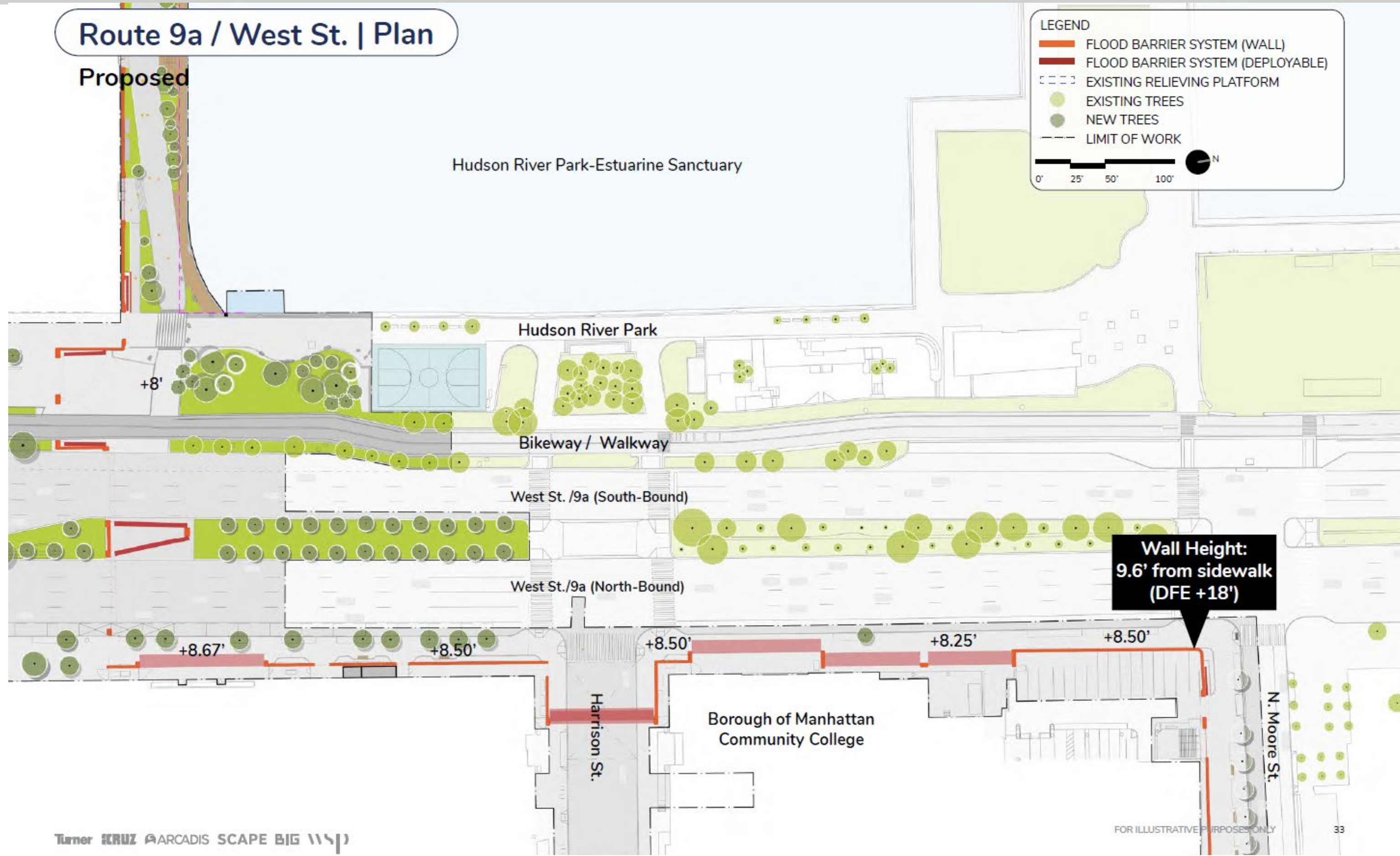
# North Esplanade: Flood Wall Alignment



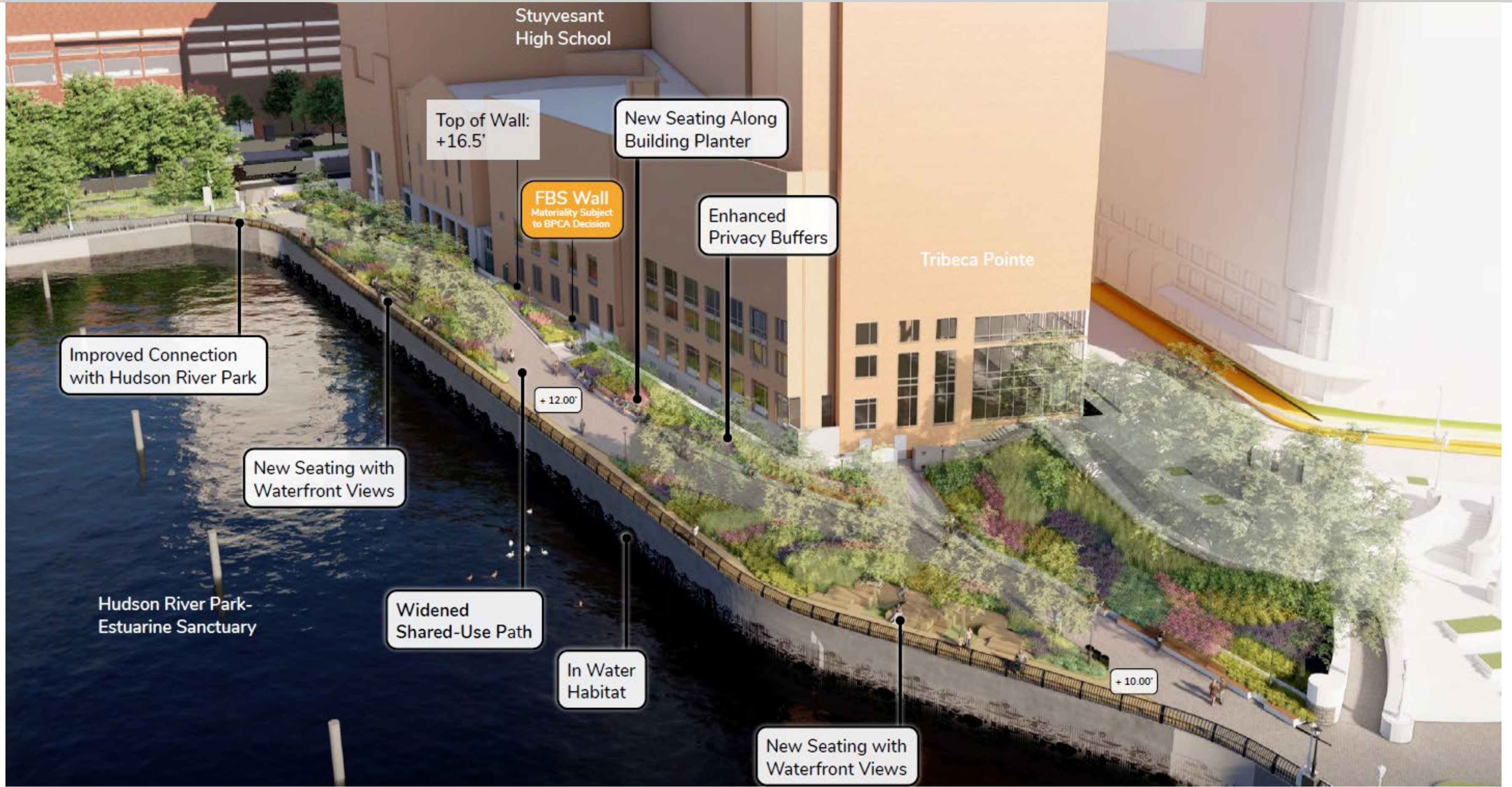
# Route 9A/ Hudson River Park: Existing



# Route 9A/ Hudson River Park: Flood Wall Alignment



# North Esplanade/ Hudson River Park Axon



# North Esplanade: Existing



# North Esplanade: After Construction



# North Esplanade: Existing



# North Esplanade: After Construction



New Seating at Waterfront Edge

Integrated Wheelchair Space

New Planting and Trees

+ 12'

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**HRPT-Relevant Work**

# Stuyvesant Plaza – Tide Gate Installation

## Timeline:

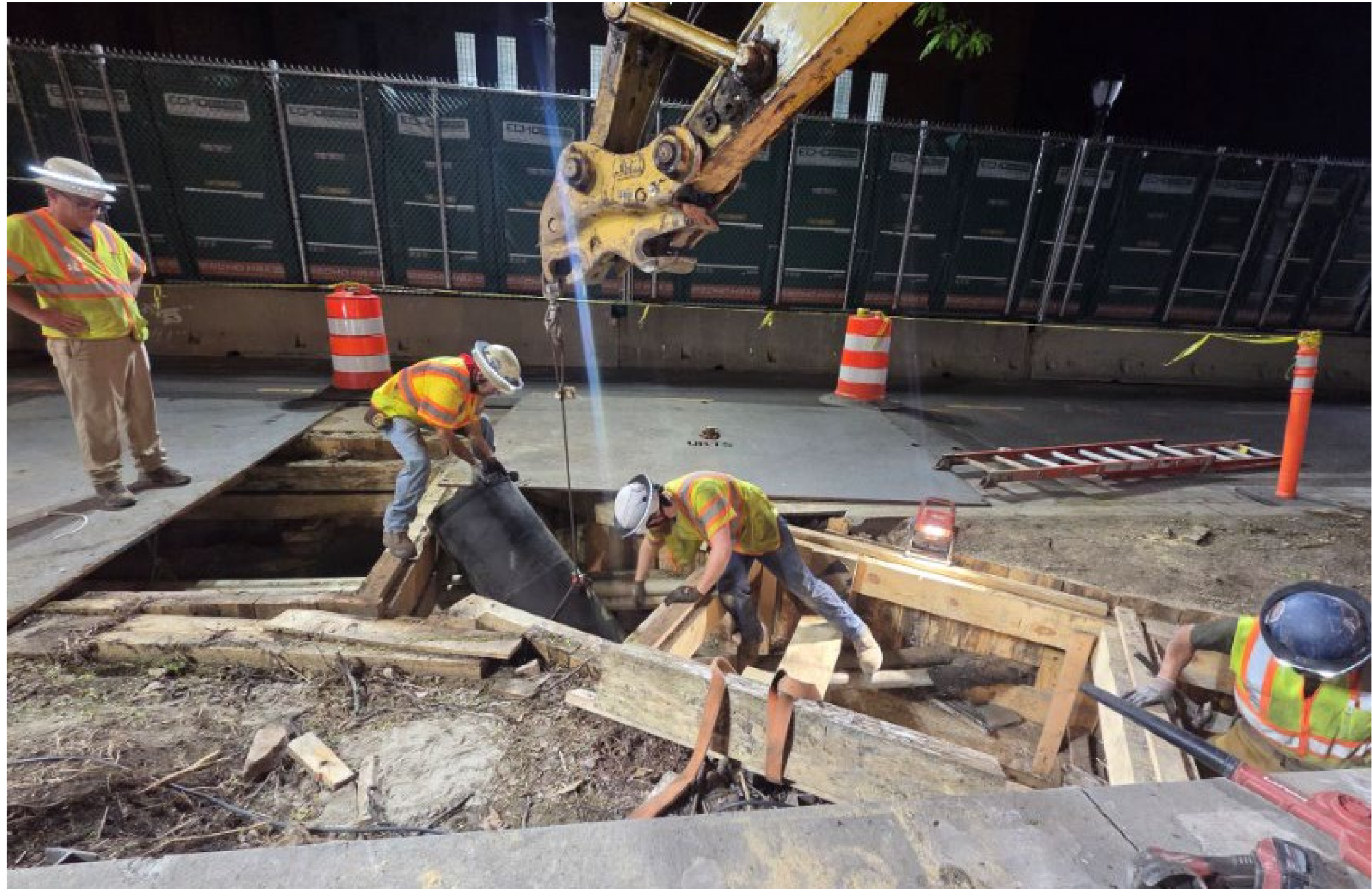
- Tide Gate installation expected to finish early 2027

## Access:

- Pedestrian and bike access maintained through construction

## 3 month look-ahead:

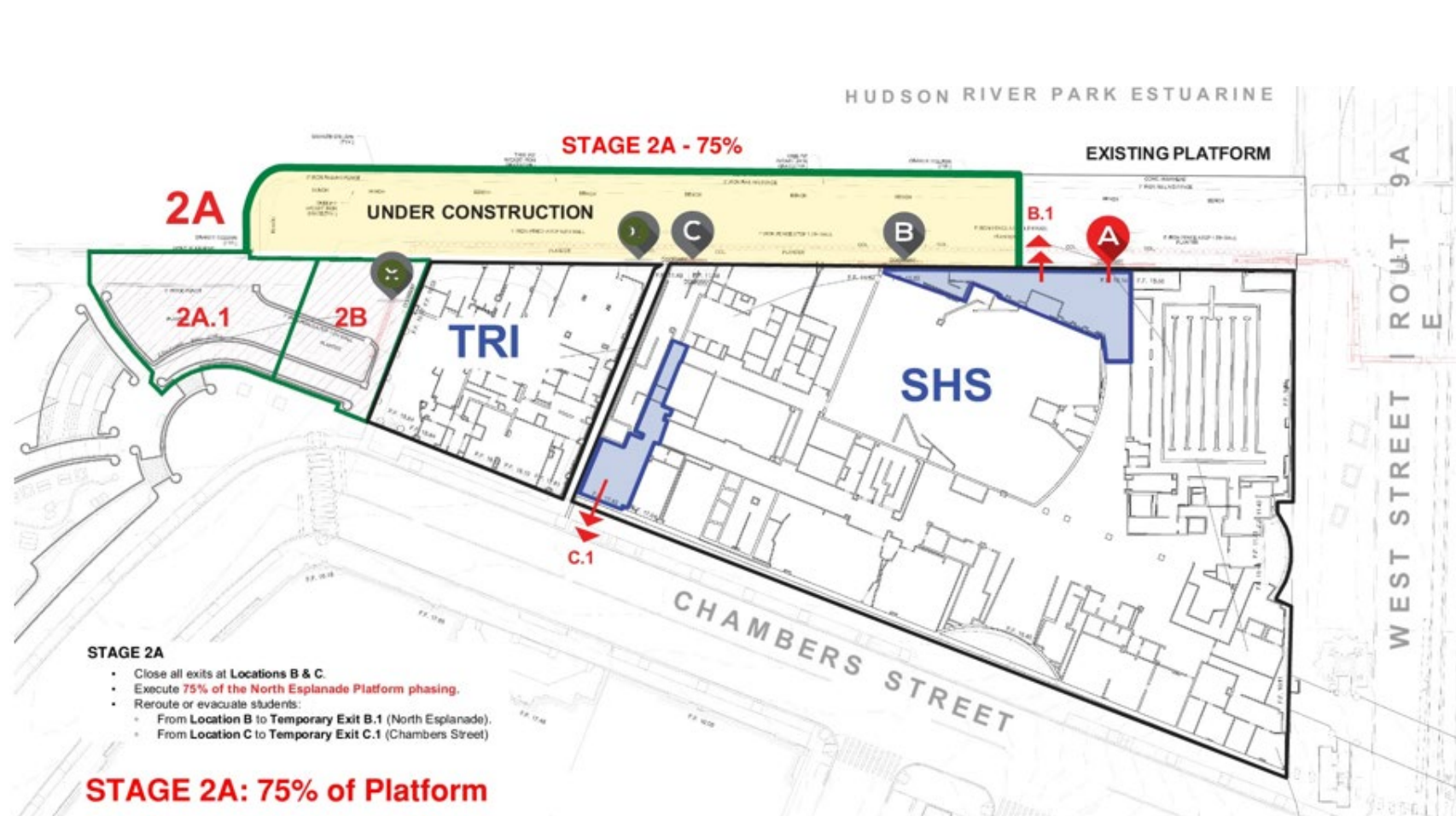
- Continue relocation of water main and electric ductbank in Route 9A during nighttime work
- Drill piles, install support of excavation (SOE), and start building subsurface drainage structures (starting soon)



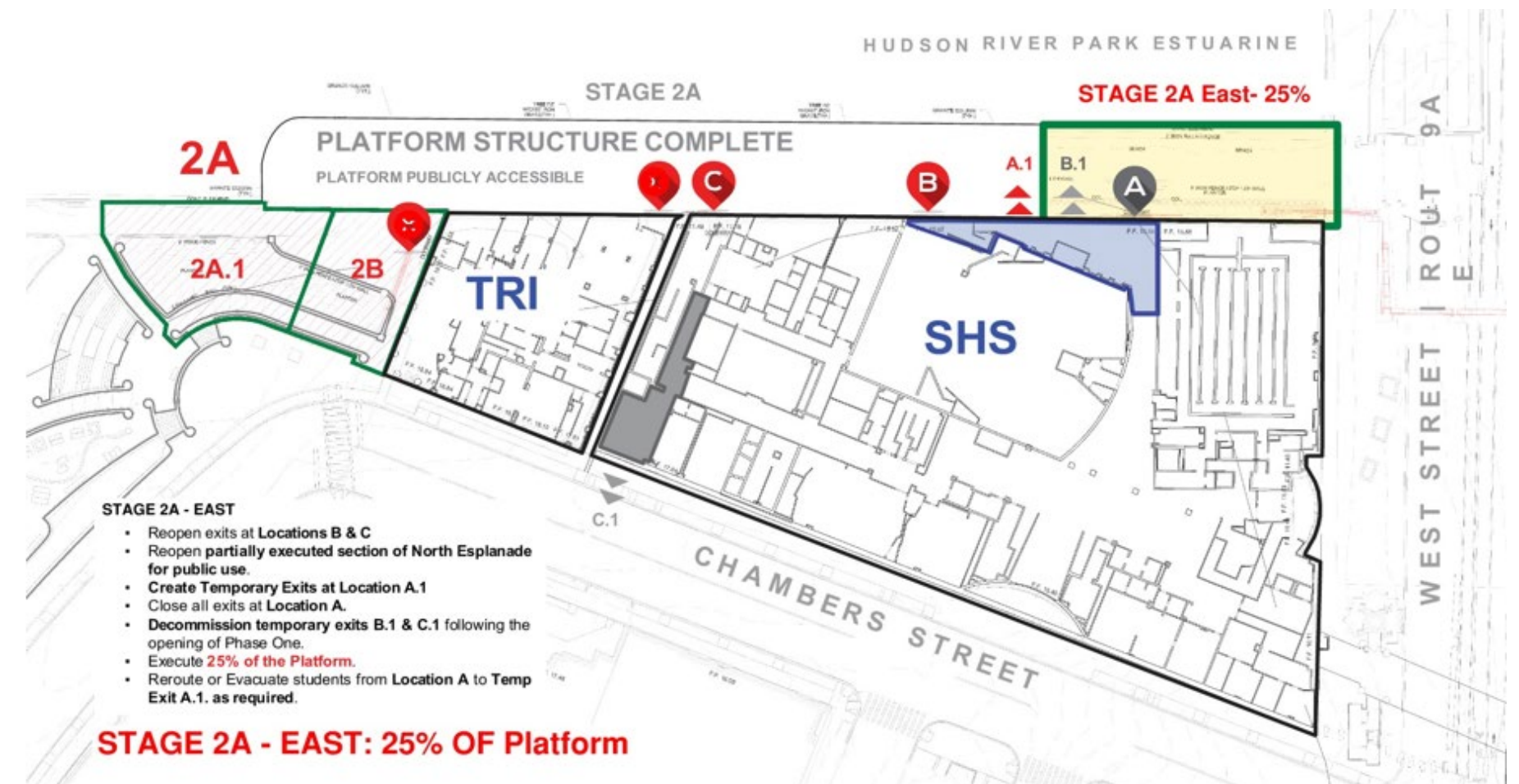
*Installation of water main in Route 9a (nighttime work)*

# Flood Barrier Construction Timing: North Esplanade

- **Reconstruction of platform** to be completed in two phases (2A West and 2A East) due to egress requirements for Stuyvesant
- Construction scheduled for **July 2026** (starting with surface demolition) **through 2<sup>nd</sup> Q 2030**
- Marine mobilization scheduled for November 2026



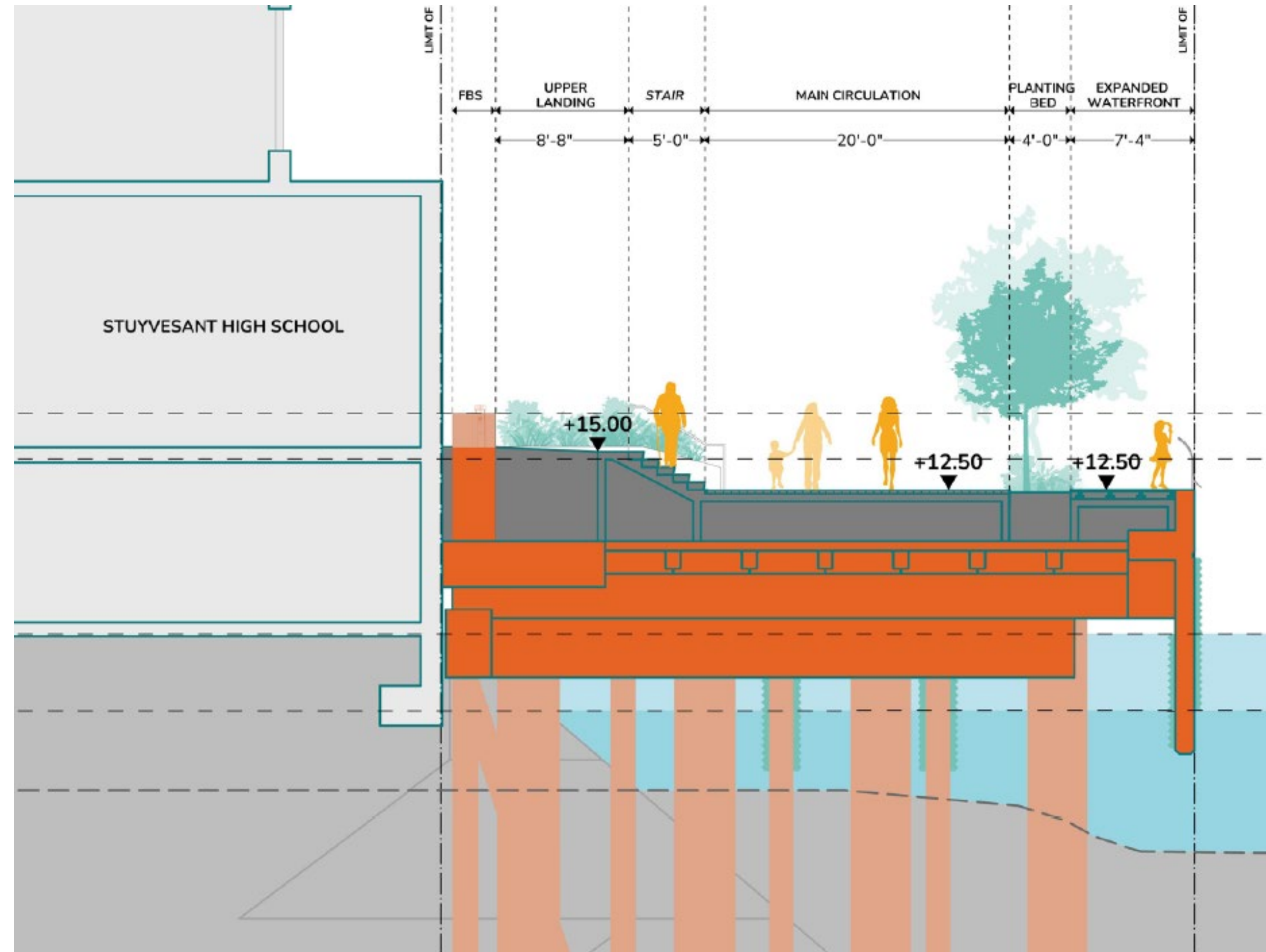
2A West



2A East

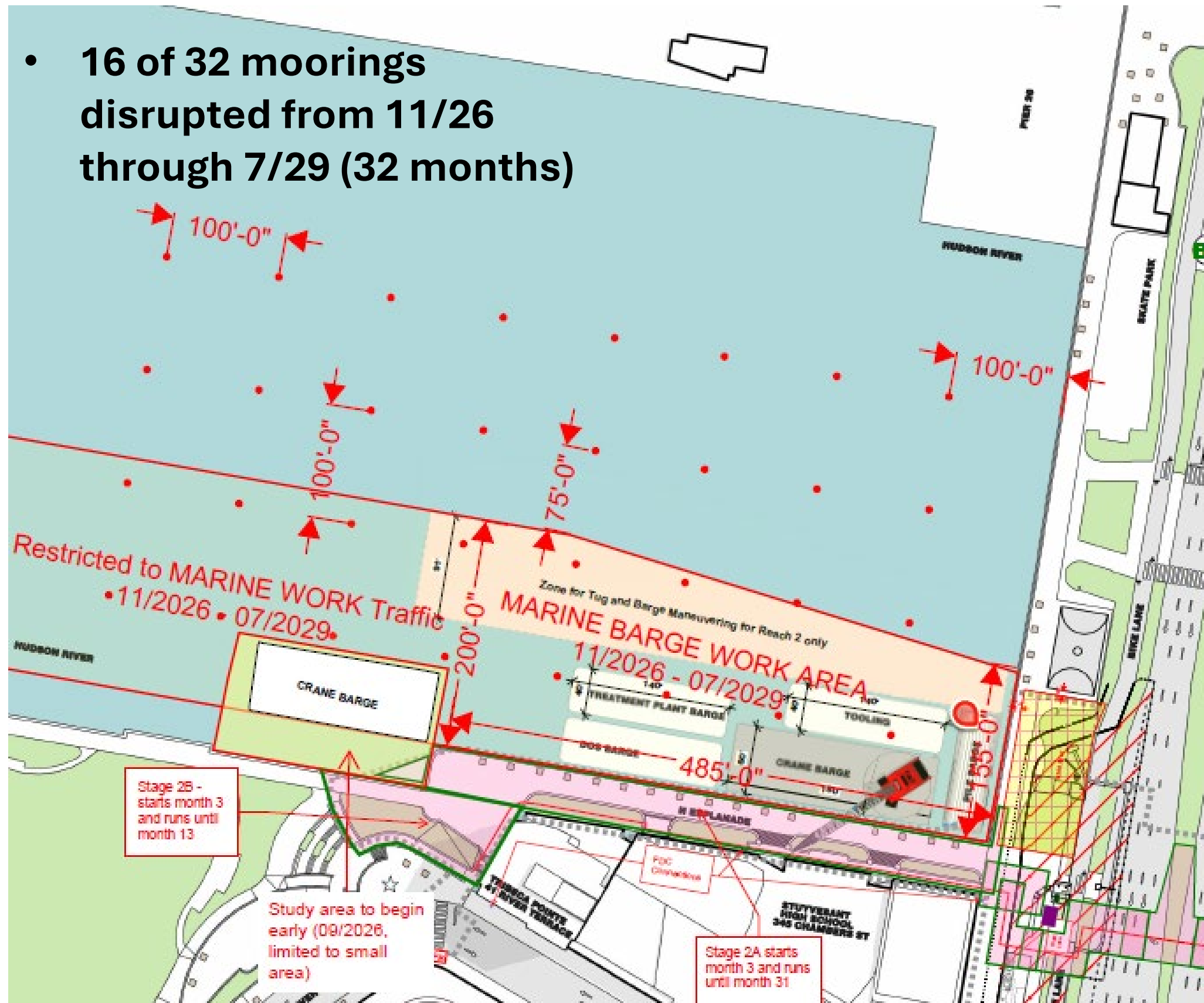
# Marine Barge Work Area and Mooring System: Scope

- **89 drilled shaft piles, 3' diameter**
- **126 welded IPP (Interlocking Pipe Piles) for seepage wall**
- All will be **drilled into the soil to bedrock** with the Mincon drilling system



# Marine Barge Work Area and Mooring System: Timing (Estuarine only)

- 16 of 32 moorings disrupted from 11/26 through 7/29 (32 months)



www.hazeletmarine.com  
Tel 802-863-6376

There are optional spar buoy caps available to protect your boat's finish (not shown here)

Pendant loads are normally reduced by 75% when using the Hazelett Marine Elastic Mooring System.

The short scope of the elastic mooring system produces high holding force early when the boat starts to move. This holding force is higher than chain produces when a boat starts to move.

However, the total holding force produced with the elastic mooring system is lower than the force produced when a rapidly moving boat reaches the end of the chain slack.

**Hazelett Marine 5-ton rated single rode elastic mooring system**

1/4" makes a 1.25-inch dia forged corrosion resistant, galv anchor ball for \$35. Concrete blocks cost approximately \$10/100-lb.

2000-lb out of water weight block required or 1000-lb in water weight.

The S/S swivel and pendant are included with our system.

The Hazelett Marine spar buoy moves very little in any type of wave action. Very little motion relates to less wear on any of the parts.

Our standard system tensile strength is 24,000-lb using Yale Cordage rope. We offer rope options to 110,000-lb tensile strength using 1-inch Puget Sound Plasma rope.\*

The Hazelett Marine elastic rode is made of polyurethane in the USA. This polyurethane formula gets better with age.

Hazelett Marine uses oversize hardware made to our specifications with low corrosion steel and then galvanized.

**Hazelett Marine 16-ton rated double rode elastic mooring system**

\*1-inch Plasma rope is stronger than 1-inch Navy chain. It is very chafe resistant and better used in pendant applications.

4000-lb out of water weight block required or 2000-lb in water weight.

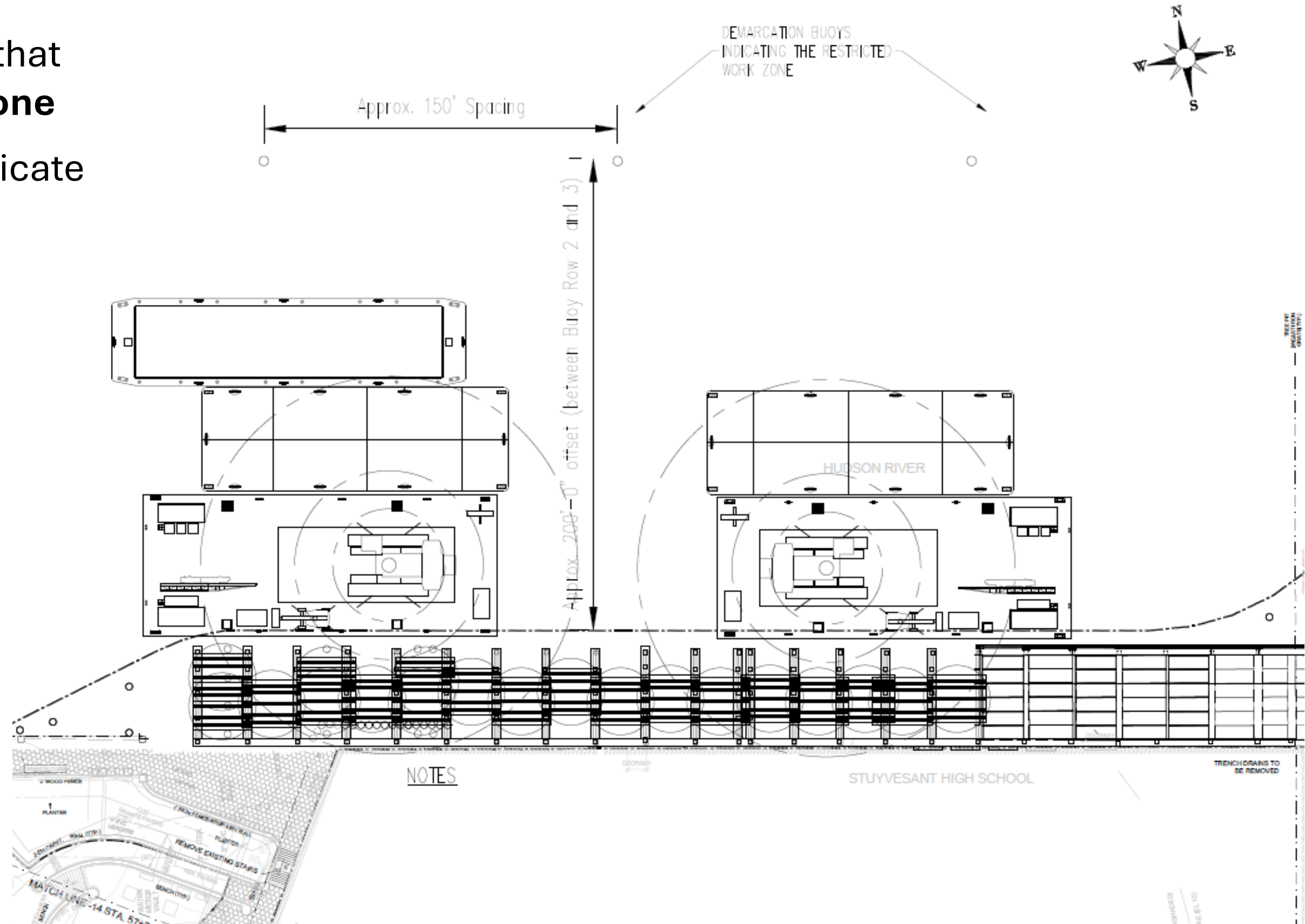
# Buoys to be used during In-Water Work

- Between BPCA and Pier 25, buoys that indicate a **restricted work area/ zone**
- Along Hudson River, buoys that indicate **slow or no wake zone**

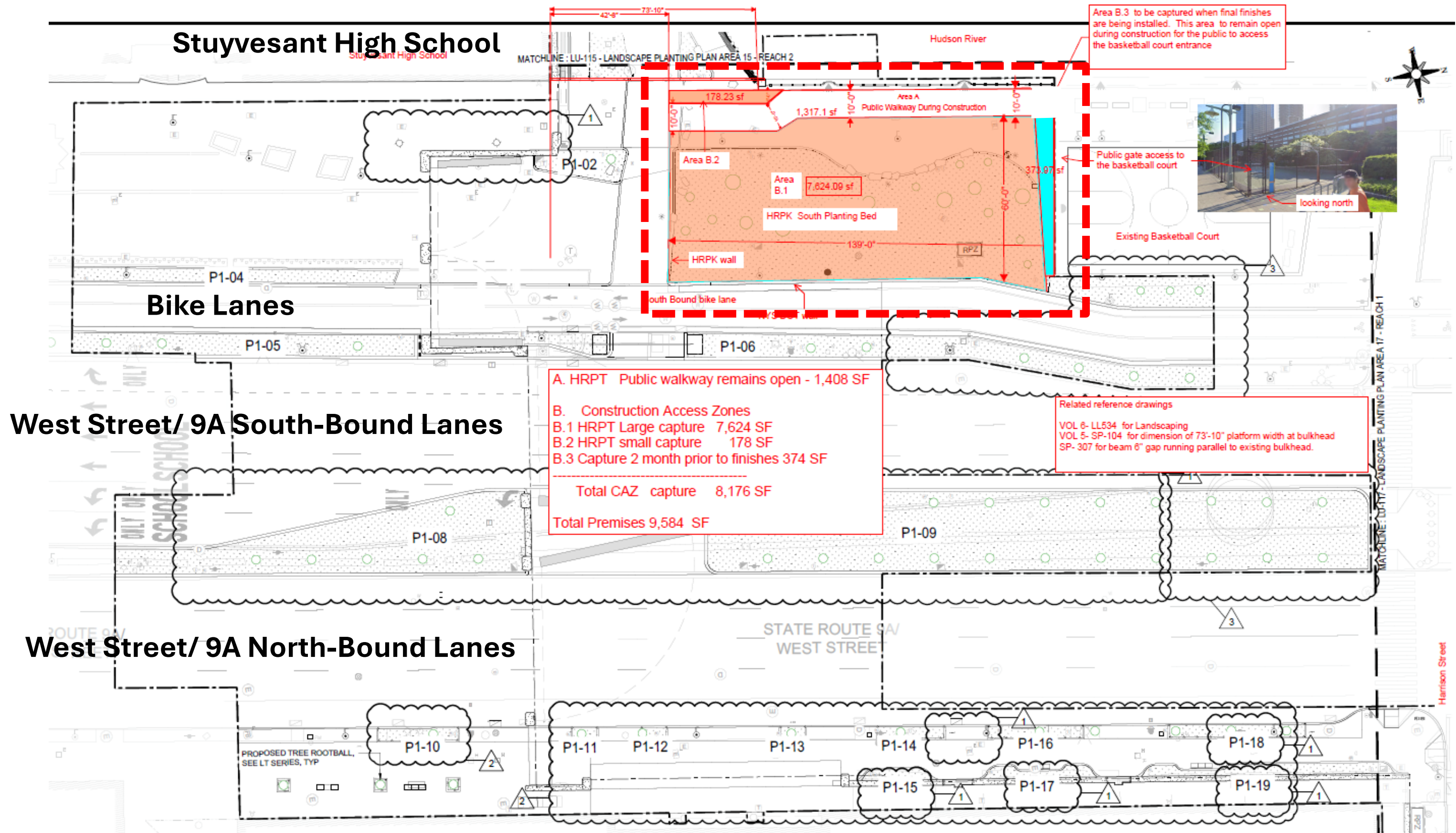


KEEP OUT BUOY:

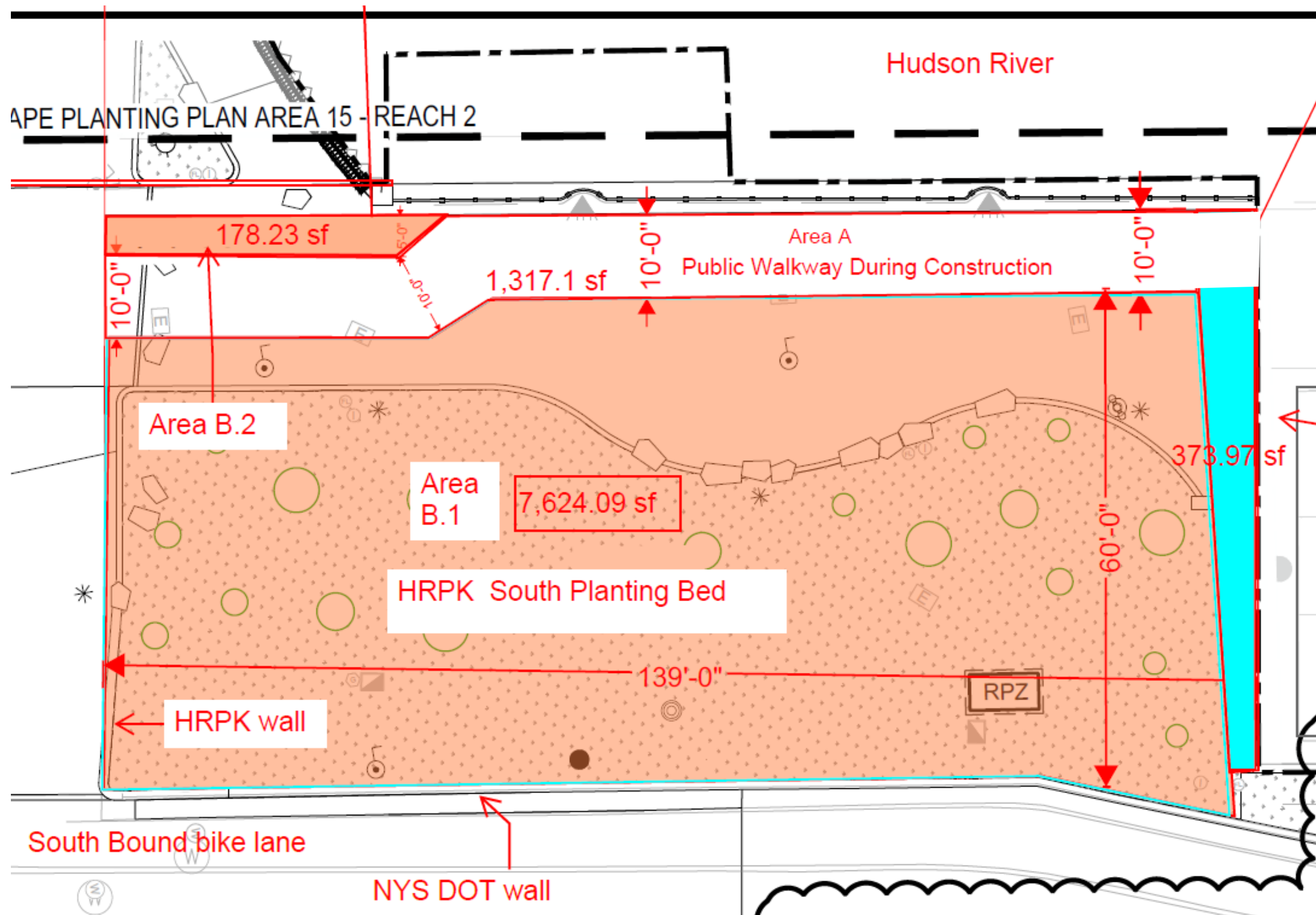
CONTROL BUOY:



# Flood Barrier Construction Timing: HRPK Area



# Flood Barrier Construction Timing: HRPK Area



Area B.3 to be captured when final finishes are being installed. This area to remain open during construction for the public to access the basketball court entrance

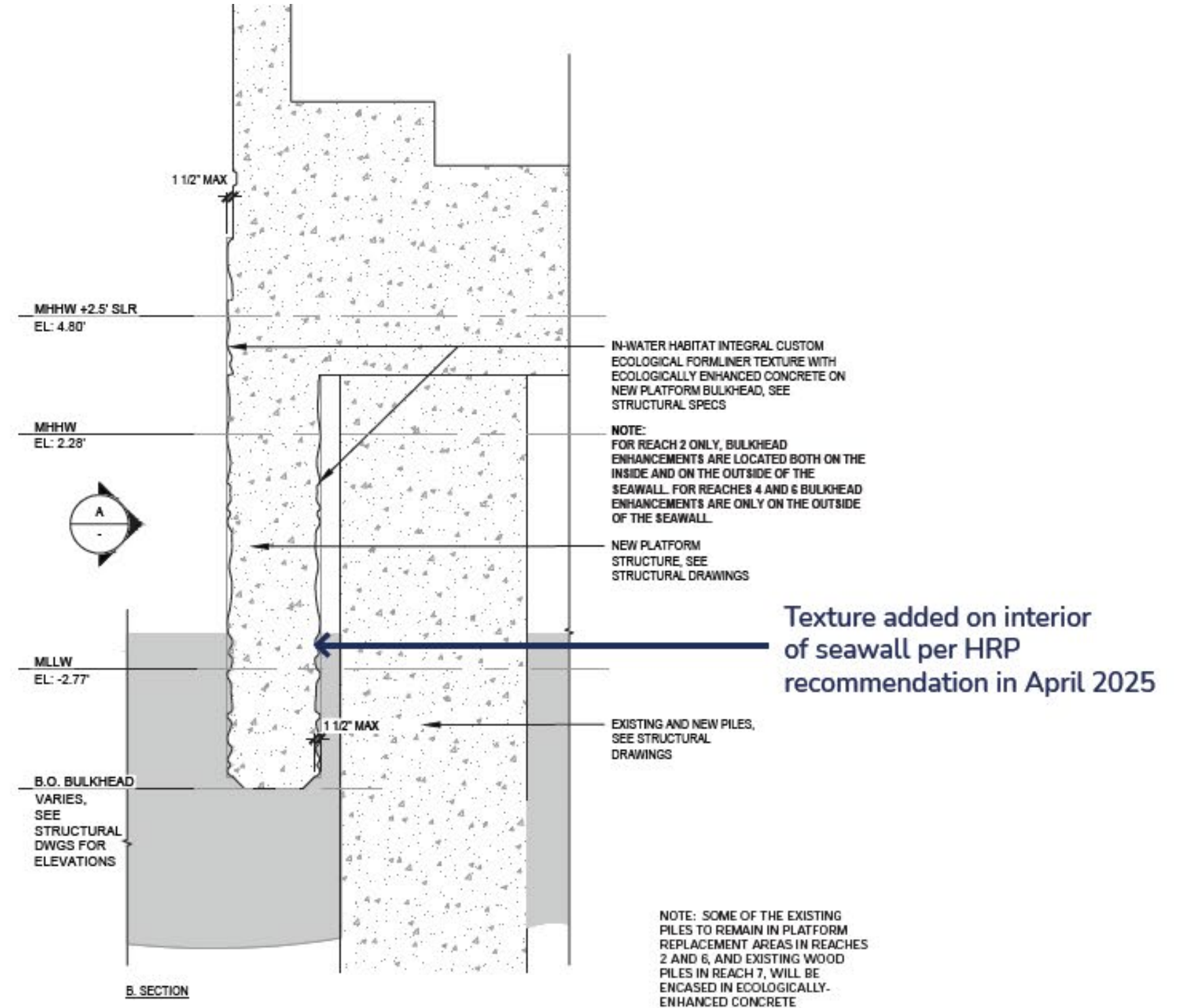
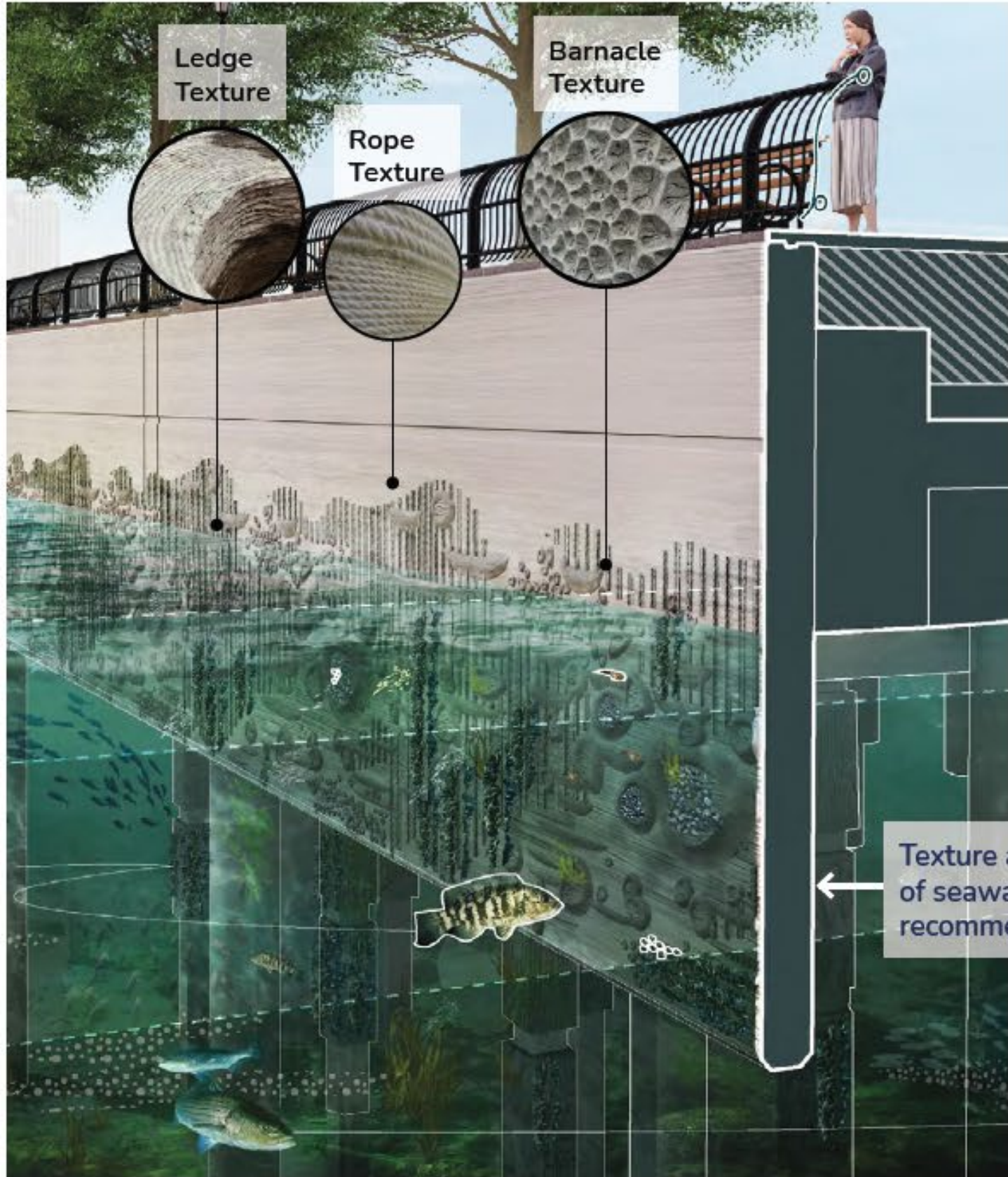
- **B1: Ongoing through 2<sup>nd</sup> Q 2030**
- **B2: Beginning 11/26 through 2<sup>nd</sup> Q 2030**
- **B3: last ~2 months of construction**

A. HRPT	Public walkway remains open - 1,408 SF
B. Construction Access Zones	
B.1 HRPT Large capture	7,624 SF
B.2 HRPT small capture	178 SF
B.3 Capture 2 month prior to finishes	374 SF
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Total CAZ capture	8,176 SF
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Total Premises	9,584 SF

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## **Habitat Enhancement**

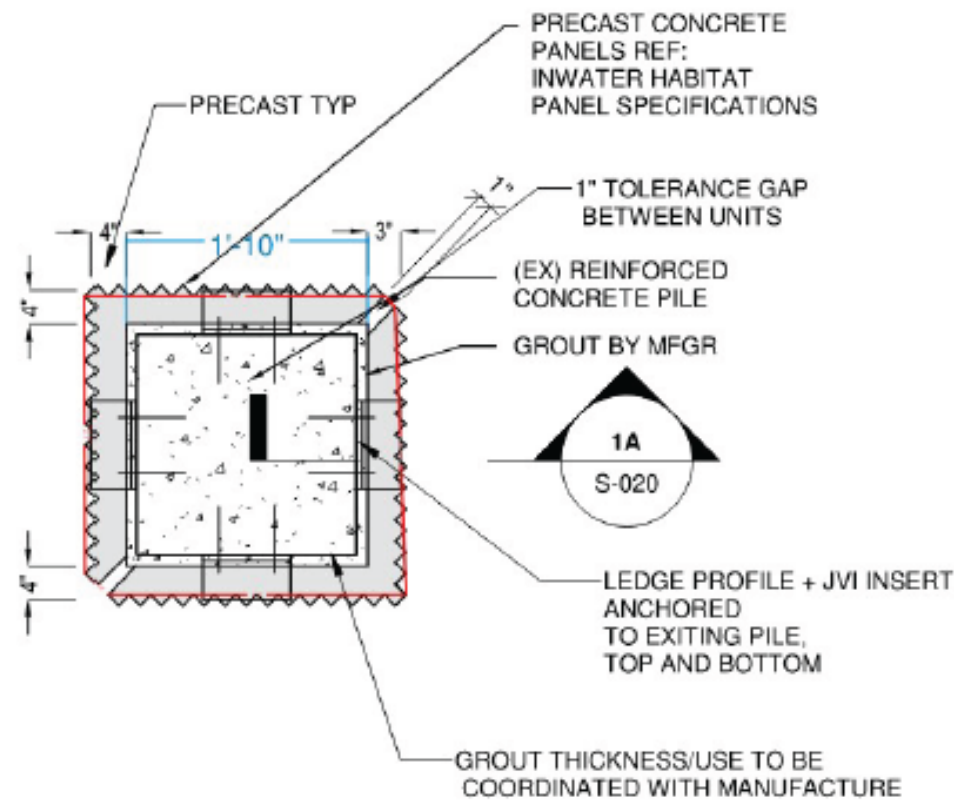
# Habitat Enhancement: Ecologically Enhanced Concrete Seawall



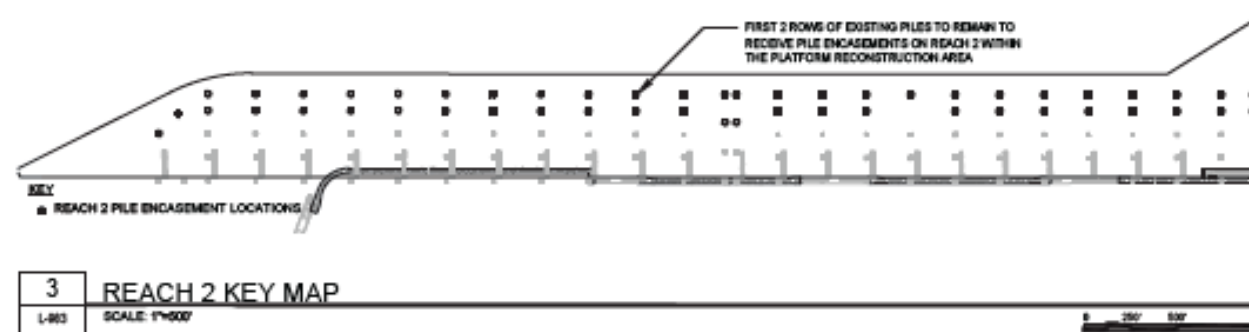
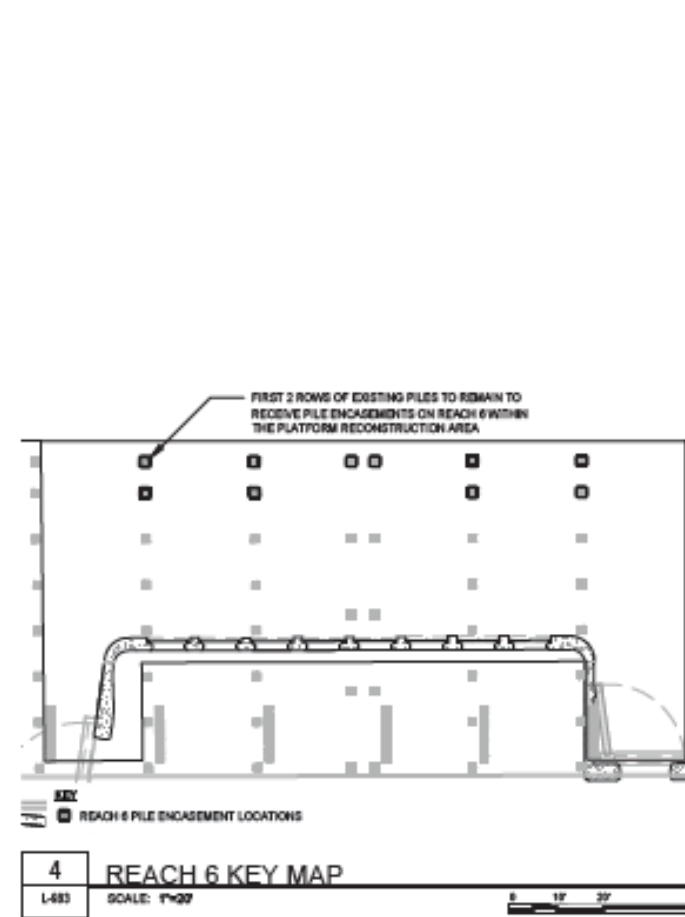
1 BULKHEAD HABITAT INTEGRAL TEXTURE  
L-982 SCALE: 1/2" = 1'-0"

# Habitat Enhancement: Pile Encasement of Existing Piles

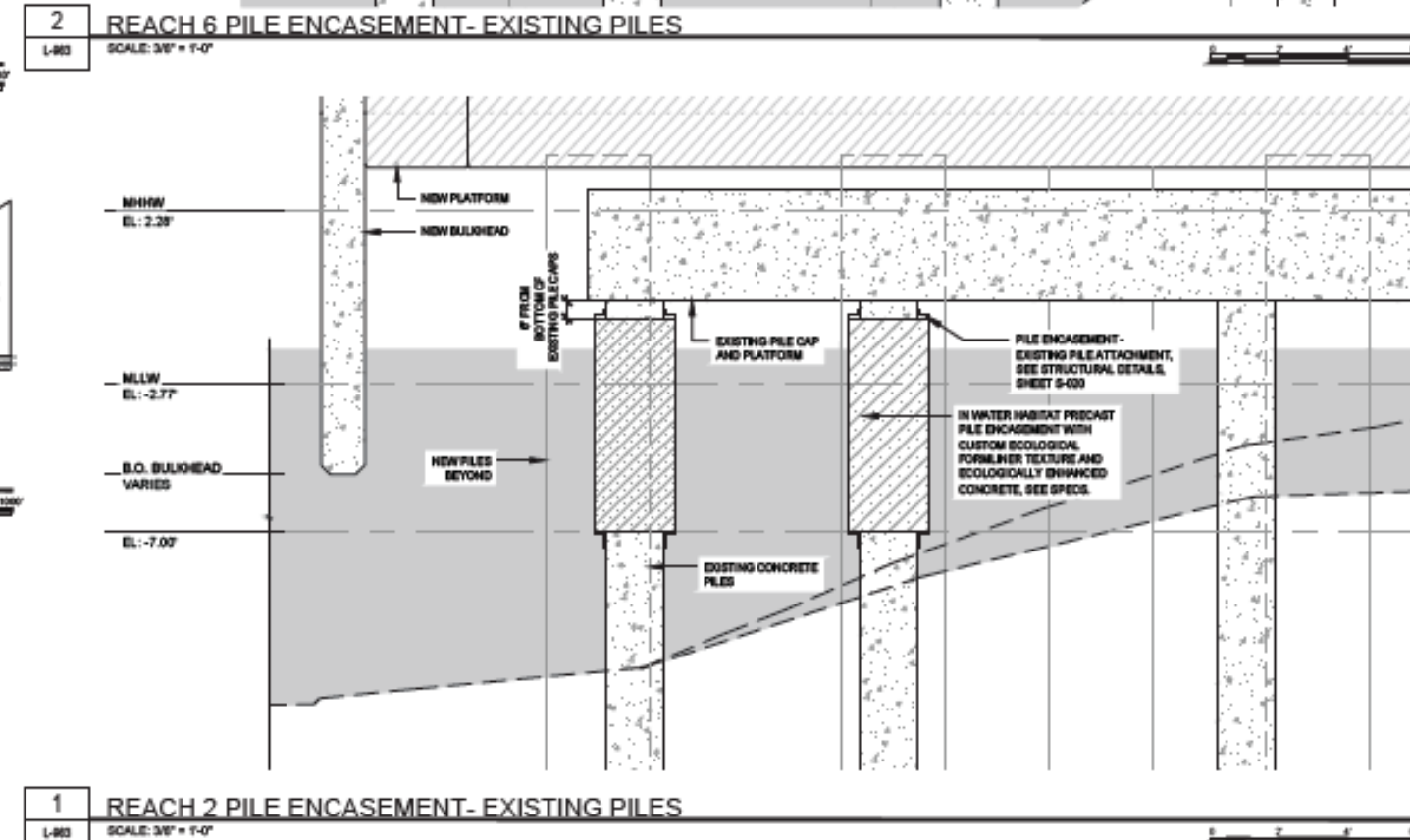
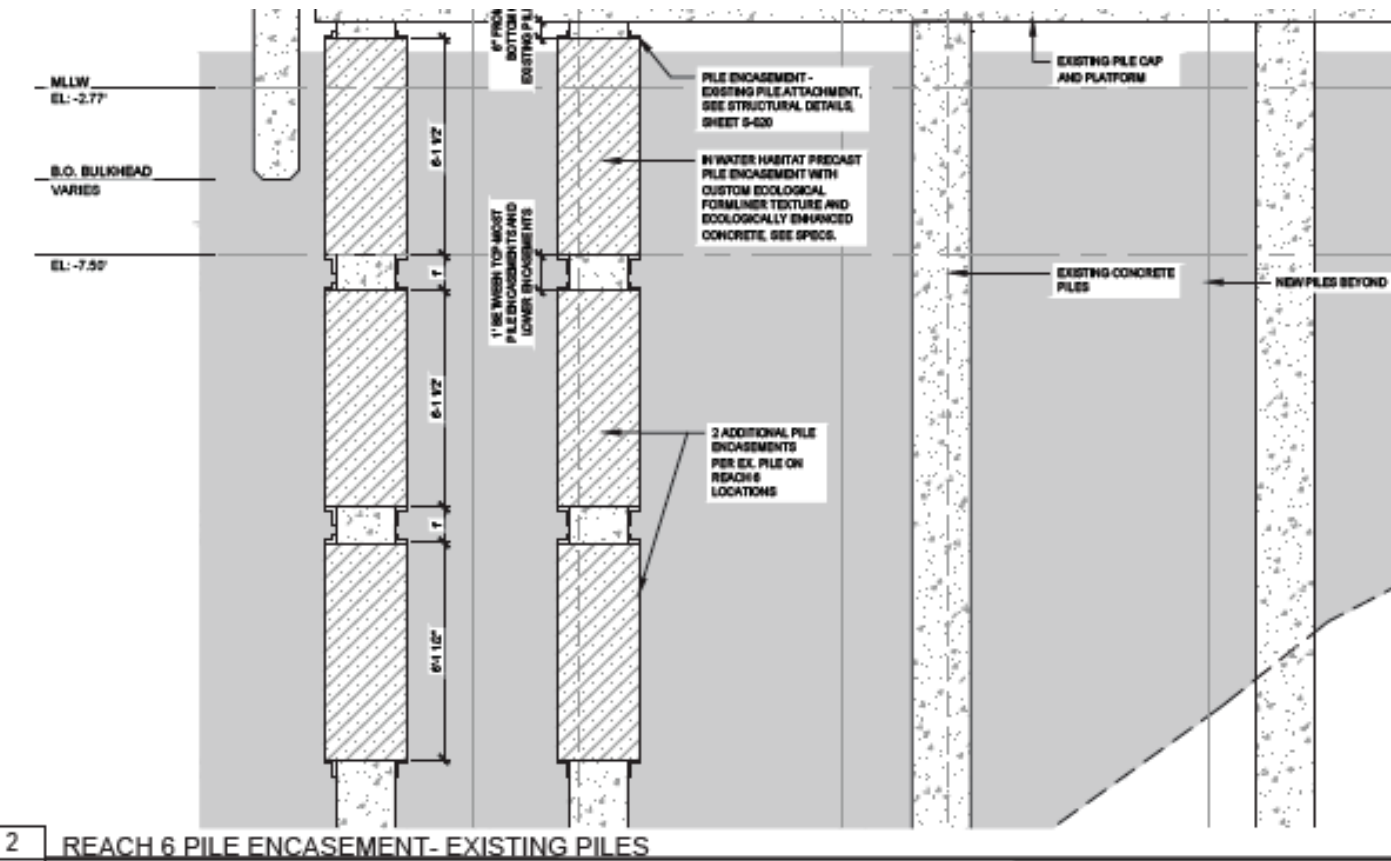
- Elevation for install: EL. -7' - EL. T.O. Pile, not to exceed EL. +5' NAVD88
- Pile texture is ecologically informed to benefit marine species that attach to surfaces.
- Piles are no longer load-bearing, assume inspection is not needed



Sheet S-020 from IFC Set

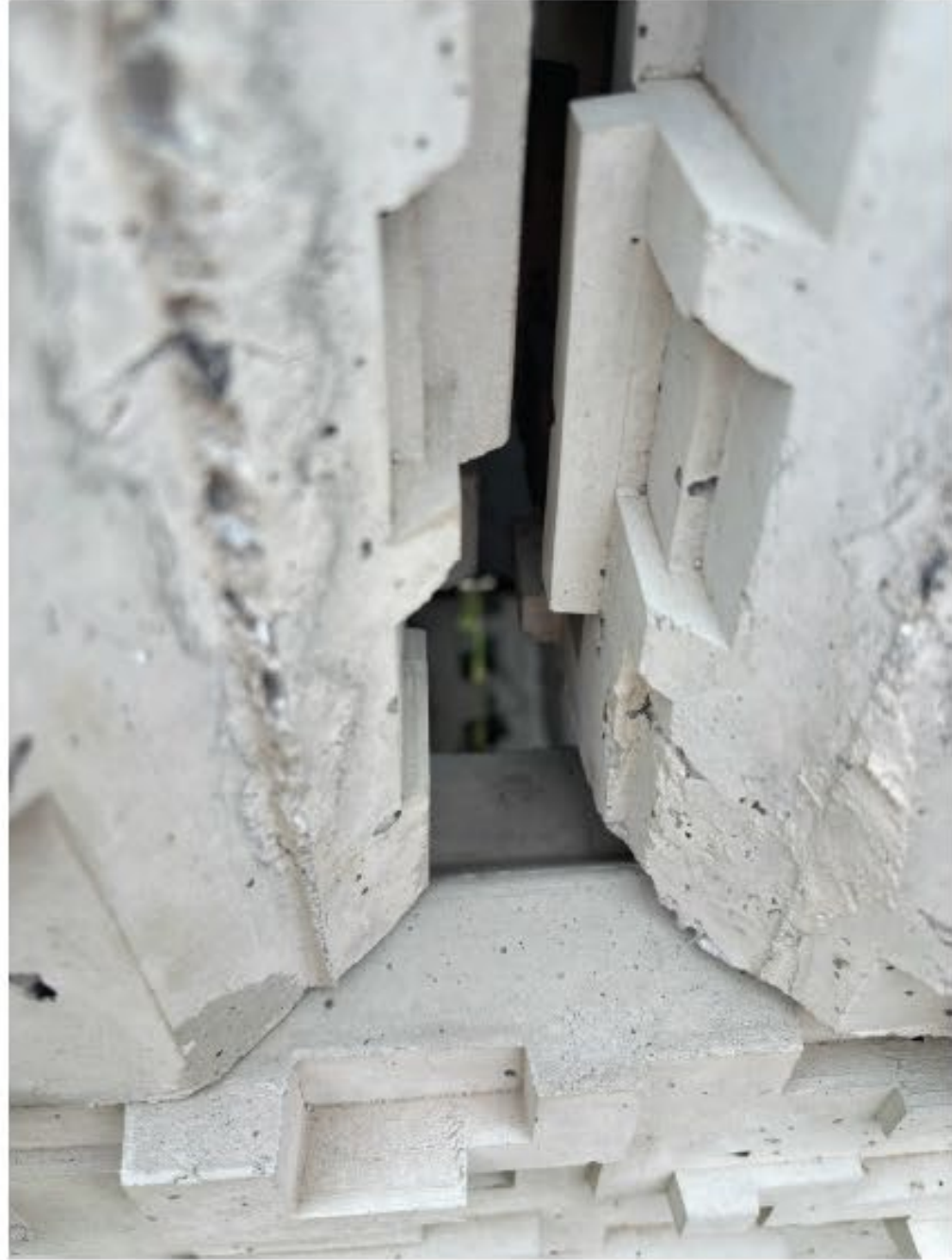


Sheet L-983 from IFC Set



Sheet L-983 from IFC Set

# Habitat Enhancement: Pile Encasement Mockups



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**Discussion**