

THE BATTERY COASTAL RESILIENCE

CB-1 Meeting
February 5th, 2024



NYC / EDC



NYC Parks



Stantec

Project Overview

EDC Managing Project on Behalf of Parks

Design Team: Stantec Consulting Services Inc.
Construction Manager: Hunter Roberts CG

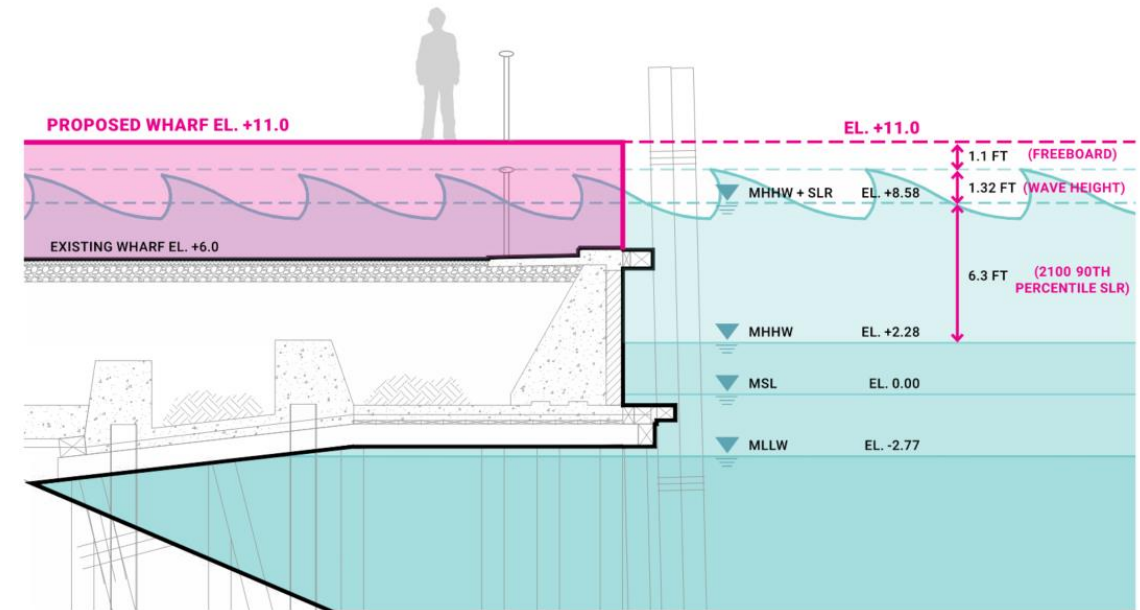
Current Project Budget: \$200M

Stakeholder Coordination:

- ▶ Finalized Coordination with Multiple stakeholders on 100% design

Project Progress:

- ▶ 100% Coordinated Design Complete June 2023
- ▶ Subcontractor Awards – 90% Complete
- ▶ Phase 1 Staging Area and Work Zone Capture - Ongoing



Upcoming Milestones

- NPS Tent Operational – February '24
- Phase 1 Salvage – Commence February '24
- Phase 1 Marine Demo – Commence March '24

2100 Mean Higher High Water

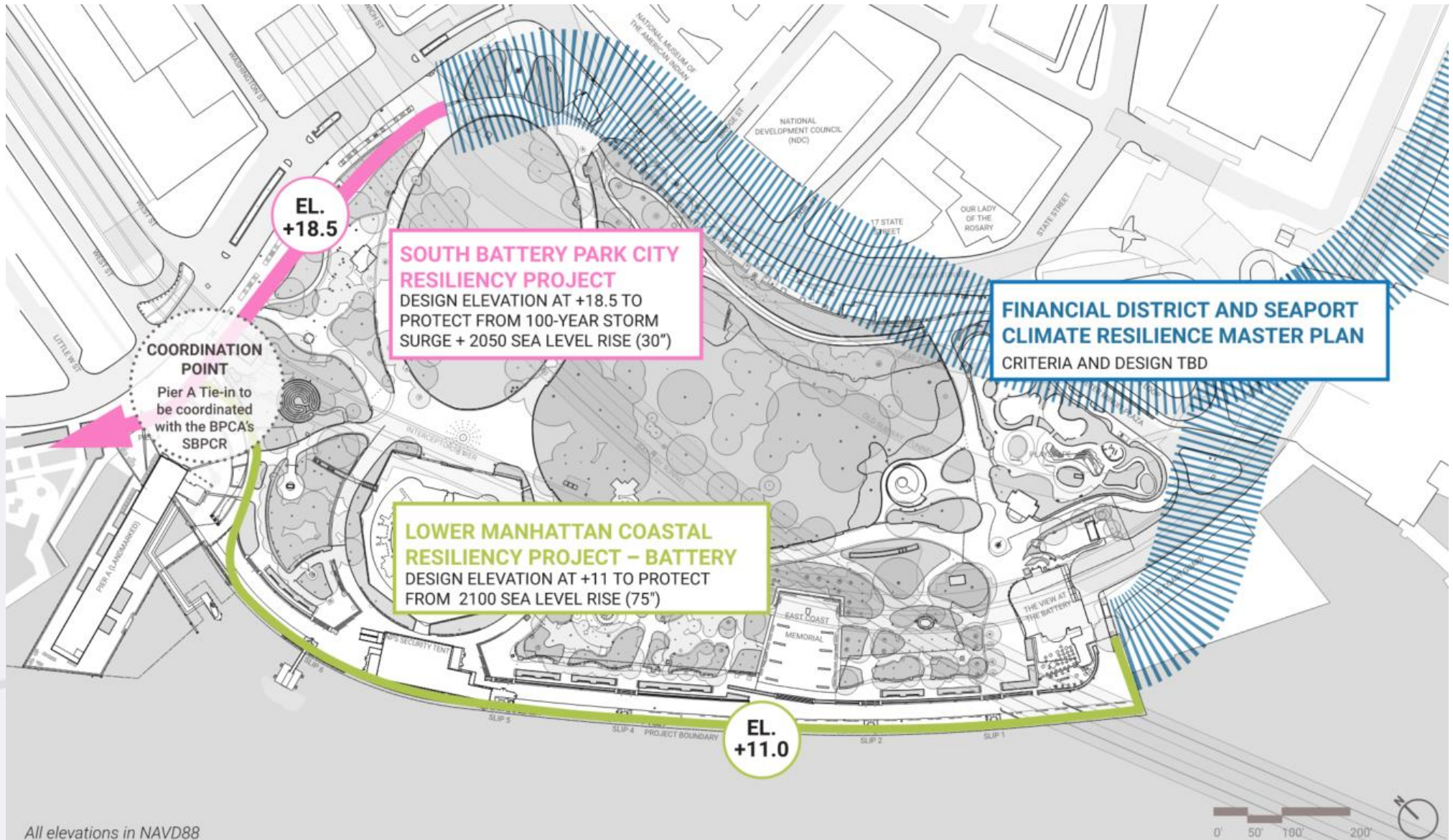
If wharf elevation Remains unchanged



Photos from Jan 12, 2024 Storm



South End/FIDI Resiliency tie-in



All elevations in NAVD88

Existing Wharf vs Proposed Wharf



Existing Wharf



Proposed Wharf

LMCR – Schedule/Phasing Update

Stage 1: Early Construction & Site Preparation Oct 2022 to June 2023 (8 Months)

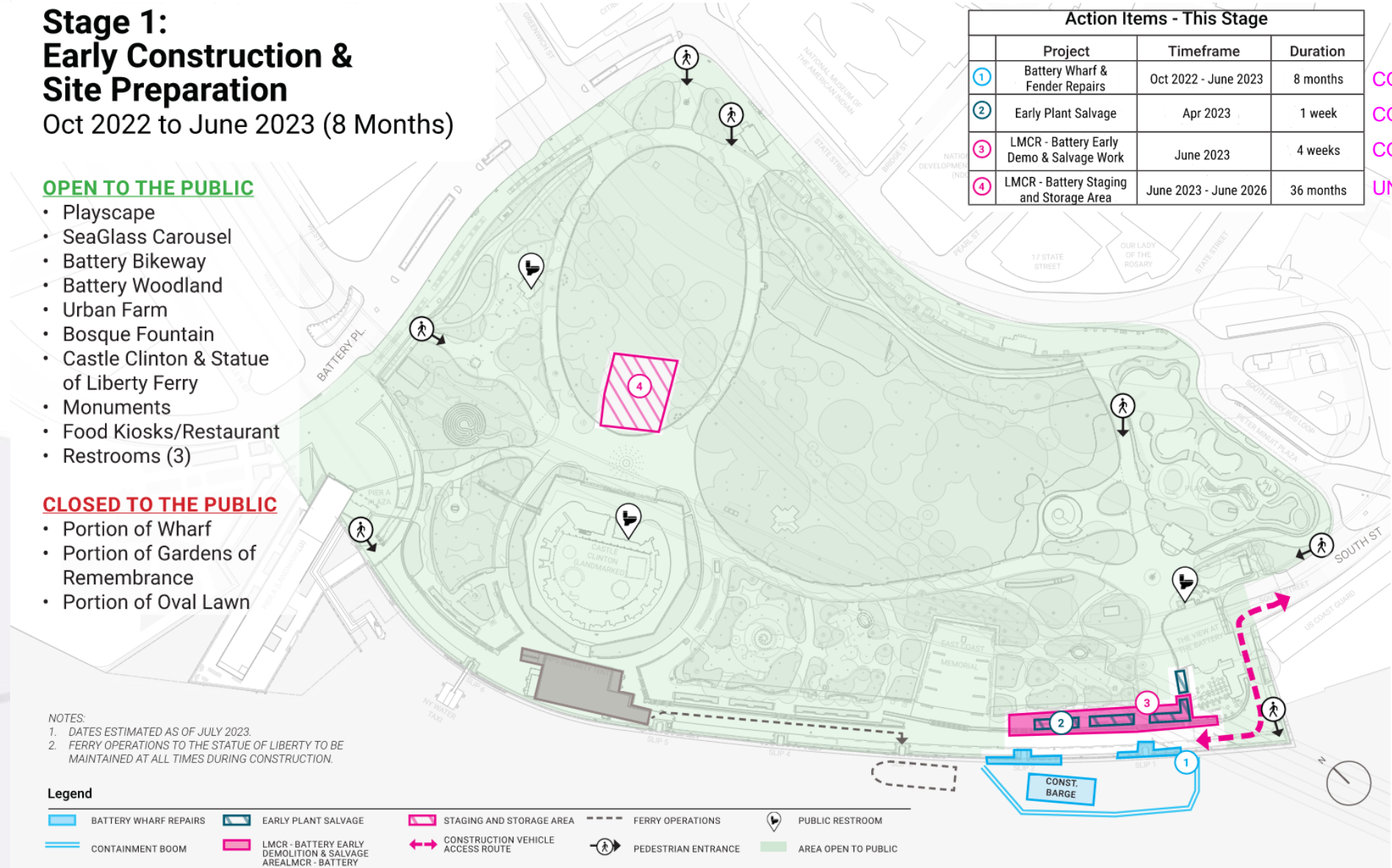
OPEN TO THE PUBLIC

- Playscape
- SeaGlass Carousel
- Battery Bikeway
- Battery Woodland
- Urban Farm
- Bosque Fountain
- Castle Clinton & Statue of Liberty Ferry
- Monuments
- Food Kiosks/Restaurant
- Restrooms (3)

CLOSED TO THE PUBLIC

- Portion of Wharf
- Portion of Gardens of Remembrance
- Portion of Oval Lawn

Action Items - This Stage				
	Project	Timeframe	Duration	
1	Battery Wharf & Fender Repairs	Oct 2022 - June 2023	8 months	COMPLETE
2	Early Plant Salvage	Apr 2023	1 week	COMPLETE
3	LMCR - Battery Early Demo & Salvage Work	June 2023	4 weeks	COMPLETE
4	LMCR - Battery Staging and Storage Area	June 2023 - June 2026	36 months	UNDERWAY



NOTES:
 1. DATES ESTIMATED AS OF JULY 2023.
 2. FERRY OPERATIONS TO THE STATUE OF LIBERTY TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

Legend					
BATTERY WHARF REPAIRS	EARLY PLANT SALVAGE	STAGING AND STORAGE AREA	FERRY OPERATIONS	PUBLIC RESTROOM	
CONTAINMENT BOOM	LMCR - BATTERY EARLY DEMOLITION & SALVAGE AREA	CONSTRUCTION VEHICLE ACCESS ROUTE	PEDESTRIAN ENTRANCE	AREA OPEN TO PUBLIC	

LMCR – Schedule/Phasing Update

Stage 2: Interim NPS Tent Construction July 2023 to Jan 2024 (7 Months)

OPEN TO THE PUBLIC

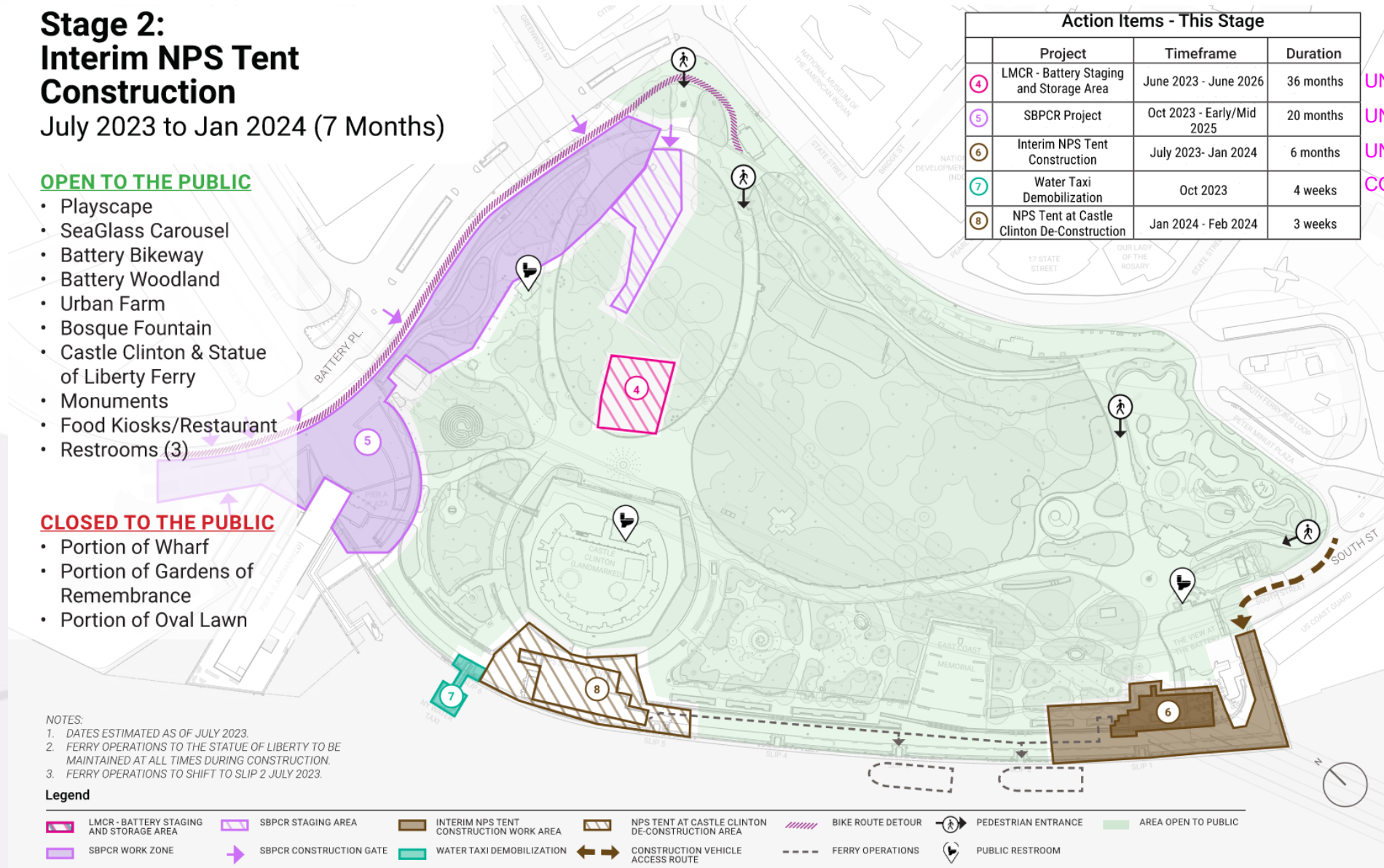
- Playscape
- SeaGlass Carousel
- Battery Bikeway
- Battery Woodland
- Urban Farm
- Bosque Fountain
- Castle Clinton & Statue of Liberty Ferry
- Monuments
- Food Kiosks/Restaurant
- Restrooms (3)

CLOSED TO THE PUBLIC

- Portion of Wharf
- Portion of Gardens of Remembrance
- Portion of Oval Lawn

Action Items - This Stage			
	Project	Timeframe	Duration
④	LMCR - Battery Staging and Storage Area	June 2023 - June 2026	36 months
⑤	SBPCR Project	Oct 2023 - Early/Mid 2025	20 months
⑥	Interim NPS Tent Construction	July 2023 - Jan 2024	6 months
⑦	Water Taxi Demobilization	Oct 2023	4 weeks
⑧	NPS Tent at Castle Clinton De-Construction	Jan 2024 - Feb 2024	3 weeks

UNDERWAY
UNDERWAY
UNDERWAY
COMPLETE



NOTES:
 1. DATES ESTIMATED AS OF JULY 2023.
 2. FERRY OPERATIONS TO THE STATUE OF LIBERTY TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
 3. FERRY OPERATIONS TO SHIFT TO SLIP 2 JULY 2023.

Legend

- LMCR - BATTERY STAGING AND STORAGE AREA
- SBPCR STAGING AREA
- INTERIM NPS TENT CONSTRUCTION WORK AREA
- NPS TENT AT CASTLE CLINTON DE-CONSTRUCTION AREA
- BIKE ROUTE DETOUR
- PEDESTRIAN ENTRANCE
- AREA OPEN TO PUBLIC
- SBPCR WORK ZONE
- SBPCR CONSTRUCTION GATE
- WATER TAXI DEMOBILIZATION
- CONSTRUCTION VEHICLE ACCESS ROUTE
- FERRY OPERATIONS
- PUBLIC RESTROOM

LMCR – Schedule/Phasing Update

Stage 3: LMCR - Battery Phase 1 Construction Jan 2024 to July 2025 (19 Months)

OPEN TO THE PUBLIC

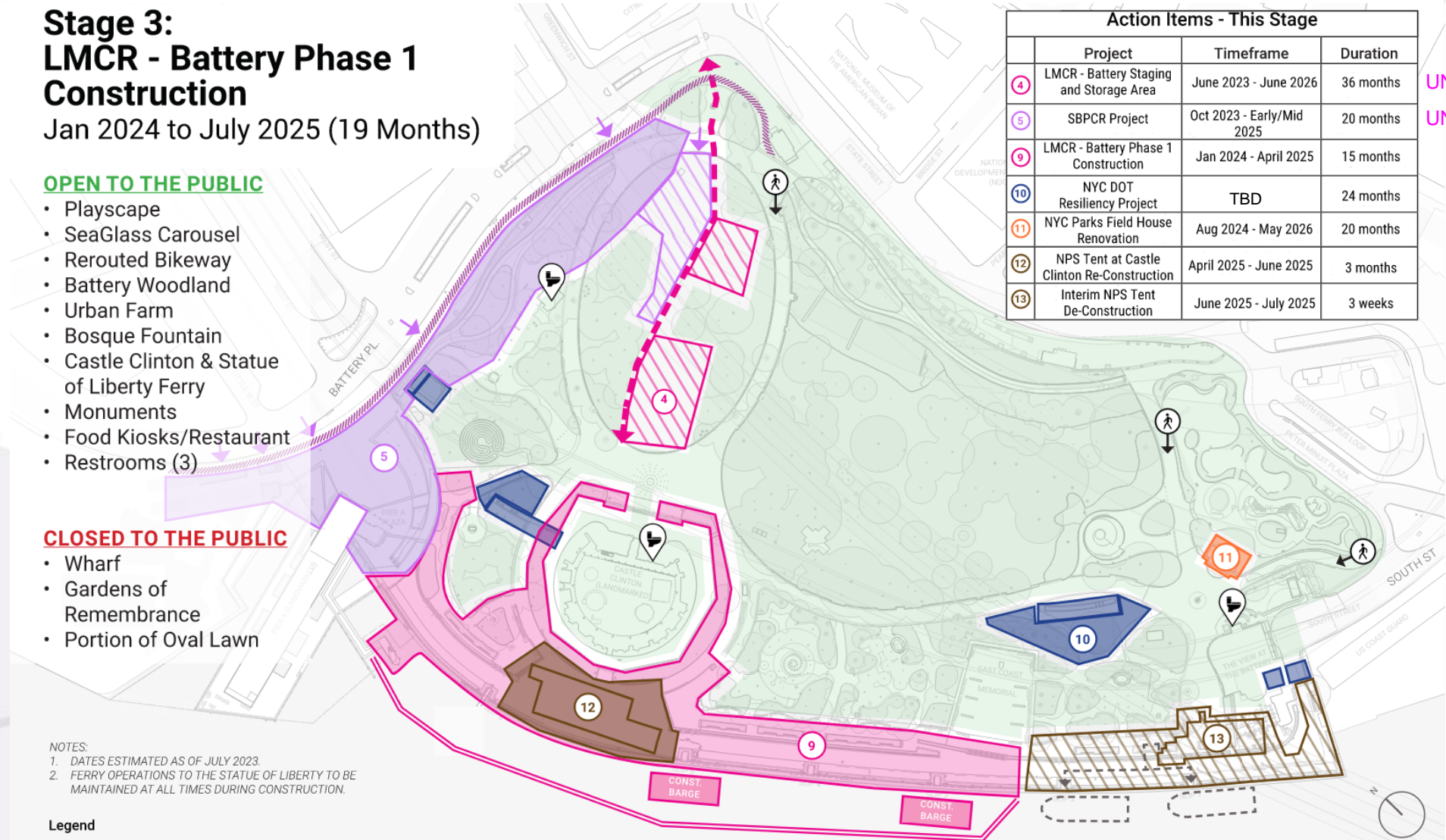
- Playscape
- SeaGlass Carousel
- Rerouted Bikeway
- Battery Woodland
- Urban Farm
- Bosque Fountain
- Castle Clinton & Statue of Liberty Ferry
- Monuments
- Food Kiosks/Restaurant
- Restrooms (3)

CLOSED TO THE PUBLIC

- Wharf
- Gardens of Remembrance
- Portion of Oval Lawn

Action Items - This Stage			
	Project	Timeframe	Duration
4	LMCR - Battery Staging and Storage Area	June 2023 - June 2026	36 months
5	SBPCR Project	Oct 2023 - Early/Mid 2025	20 months
9	LMCR - Battery Phase 1 Construction	Jan 2024 - April 2025	15 months
10	NYC DOT Resiliency Project	TBD	24 months
11	NYC Parks Field House Renovation	Aug 2024 - May 2026	20 months
12	NPS Tent at Castle Clinton Re-Construction	April 2025 - June 2025	3 months
13	Interim NPS Tent De-Construction	June 2025 - July 2025	3 weeks

UNDERWAY
UNDERWAY



NOTES:
1. DATES ESTIMATED AS OF JULY 2023.
2. FERRY OPERATIONS TO THE STATUE OF LIBERTY TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

Legend

- SBPCR WORK ZONE
- SBPCR STAGING AREA
- SBPCR CONSTRUCTION GATE
- LMCR - BATTERY STAGING AND STORAGE AREA
- LMCR - BATTERY PHASE 1 WORK AREA
- NYC DOT RESILIENCY PROJECT SURFACE WORK AREAS
- NYC PARKS FIELD HOUSE RENOVATION WORK AREA
- NPS TENT AT CASTLE CLINTON RE-CONSTRUCTION AREA
- INTERIM NPS TENT DE-CONSTRUCTION WORK AREA
- CONSTRUCTION VEHICLE ACCESS ROUTE
- CONTAINMENT BOOM
- BIKE ROUTE DETOUR
- FERRY OPERATIONS
- PEDESTRIAN ENTRANCE
- PUBLIC RESTROOM
- AREA OPEN TO PUBLIC

LMCR – Schedule/Phasing Update

Stage 4: LMCR - Battery Phase 2 Construction July 2025 to June 2026 (11 months)

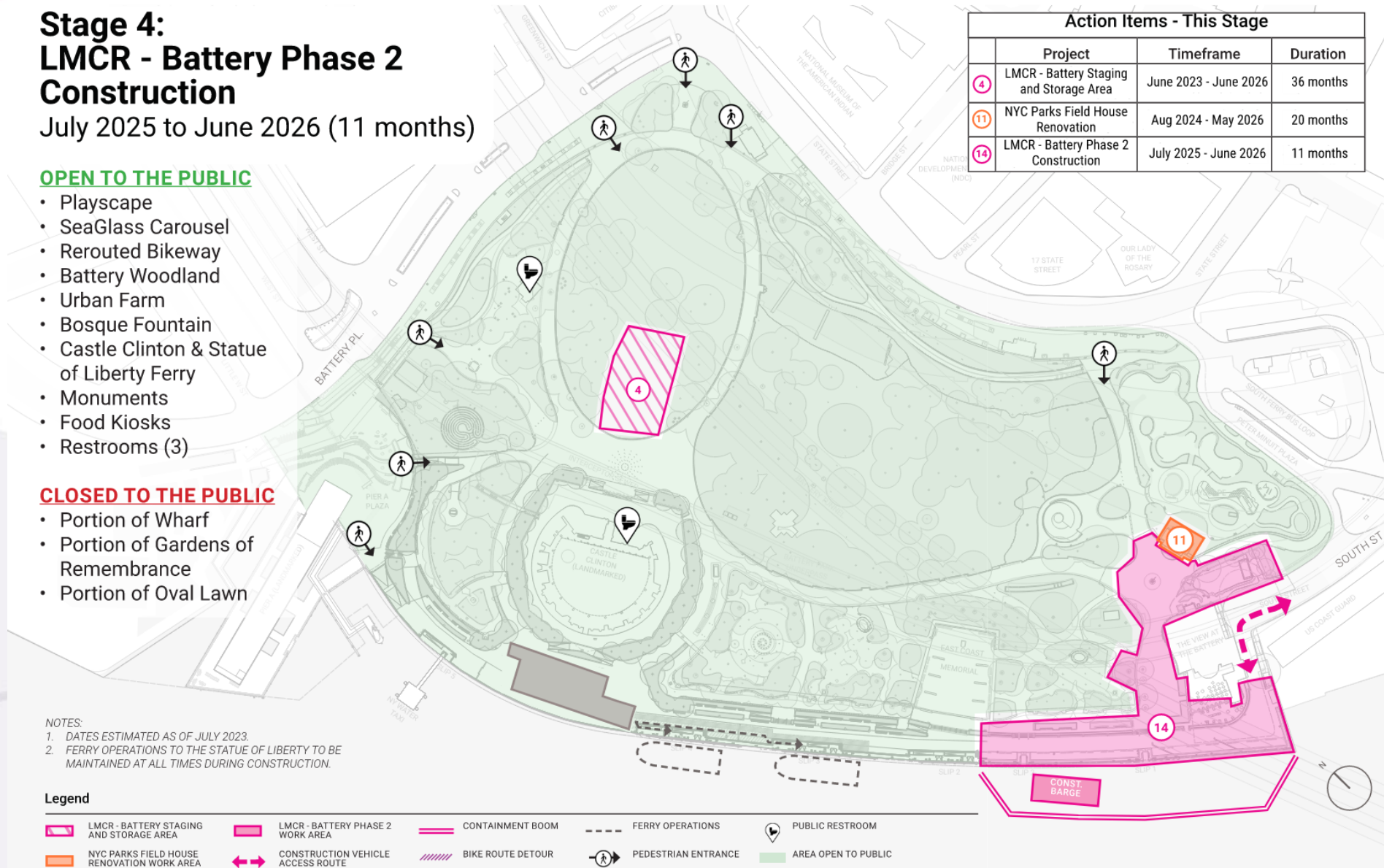
OPEN TO THE PUBLIC

- Playscape
- SeaGlass Carousel
- Rerouted Bikeway
- Battery Woodland
- Urban Farm
- Bosque Fountain
- Castle Clinton & Statue of Liberty Ferry
- Monuments
- Food Kiosks
- Restrooms (3)

CLOSED TO THE PUBLIC

- Portion of Wharf
- Portion of Gardens of Remembrance
- Portion of Oval Lawn

Action Items - This Stage			
	Project	Timeframe	Duration
4	LMCR - Battery Staging and Storage Area	June 2023 - June 2026	36 months
11	NYC Parks Field House Renovation	Aug 2024 - May 2026	20 months
14	LMCR - Battery Phase 2 Construction	July 2025 - June 2026	11 months



NOTES:

1. DATES ESTIMATED AS OF JULY 2023.
2. FERRY OPERATIONS TO THE STATUE OF LIBERTY TO BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

Legend

- | | | | | |
|--|-----------------------------------|-------------------|---------------------|---------------------|
| LMCR - BATTERY STAGING AND STORAGE AREA | LMCR - BATTERY PHASE 2 WORK AREA | CONTAINMENT BOOM | FERRY OPERATIONS | PUBLIC RESTROOM |
| NYC PARKS FIELD HOUSE RENOVATION WORK AREA | CONSTRUCTION VEHICLE ACCESS ROUTE | BIKE ROUTE DETOUR | PEDESTRIAN ENTRANCE | AREA OPEN TO PUBLIC |

Current Status of The Battery



Current Status of The Battery



Construction Fence Installation In Progress

Salvaged Material Storage



Current Status of The Battery

NPS East Tent

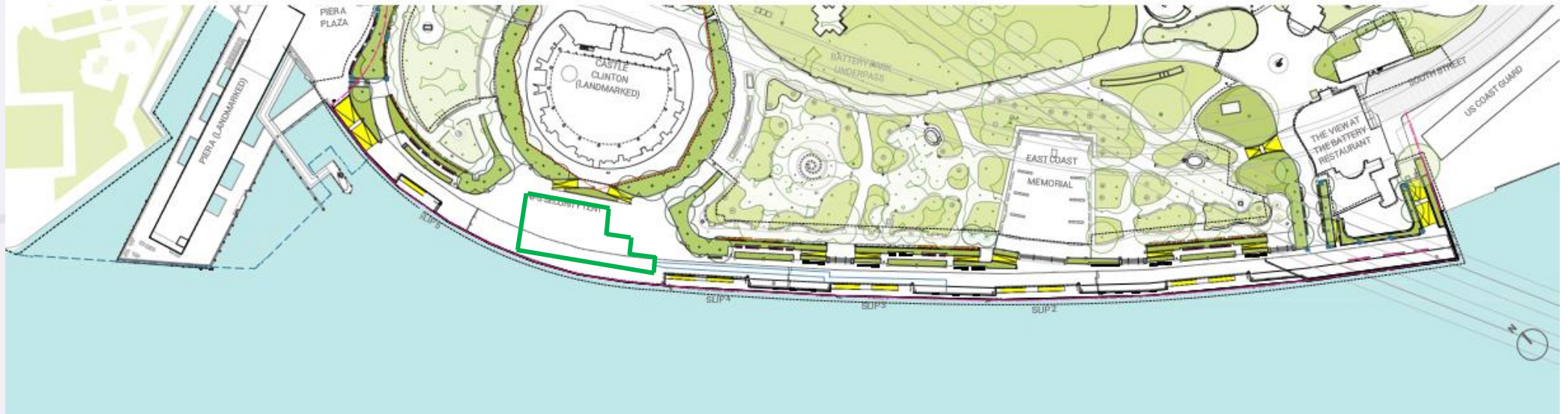


Overall Wharf Plan

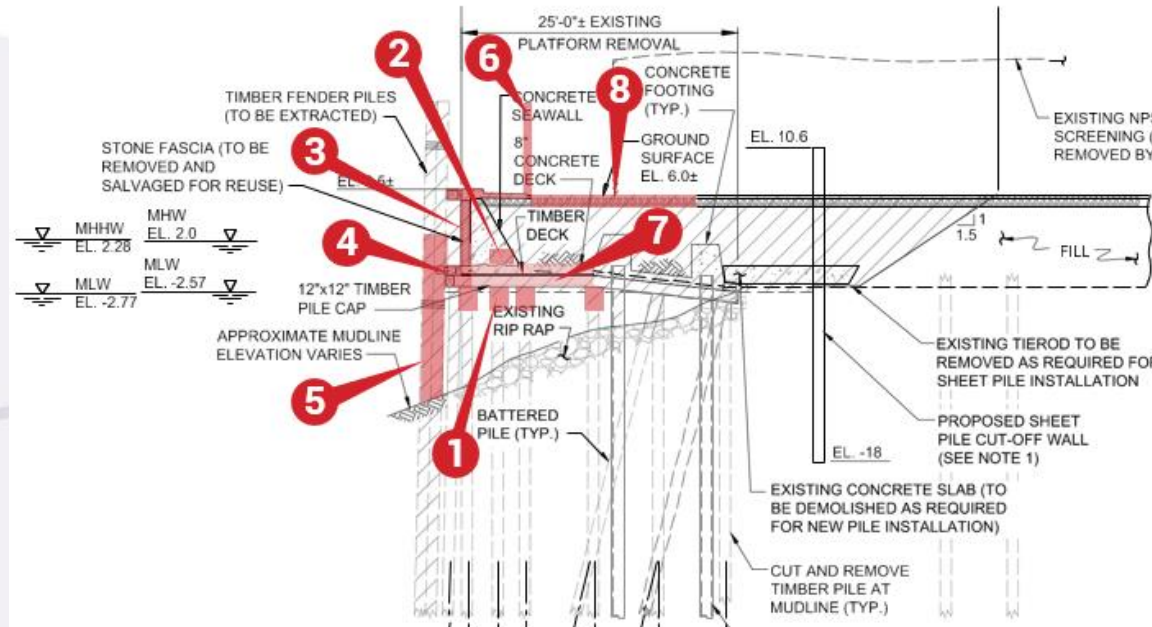
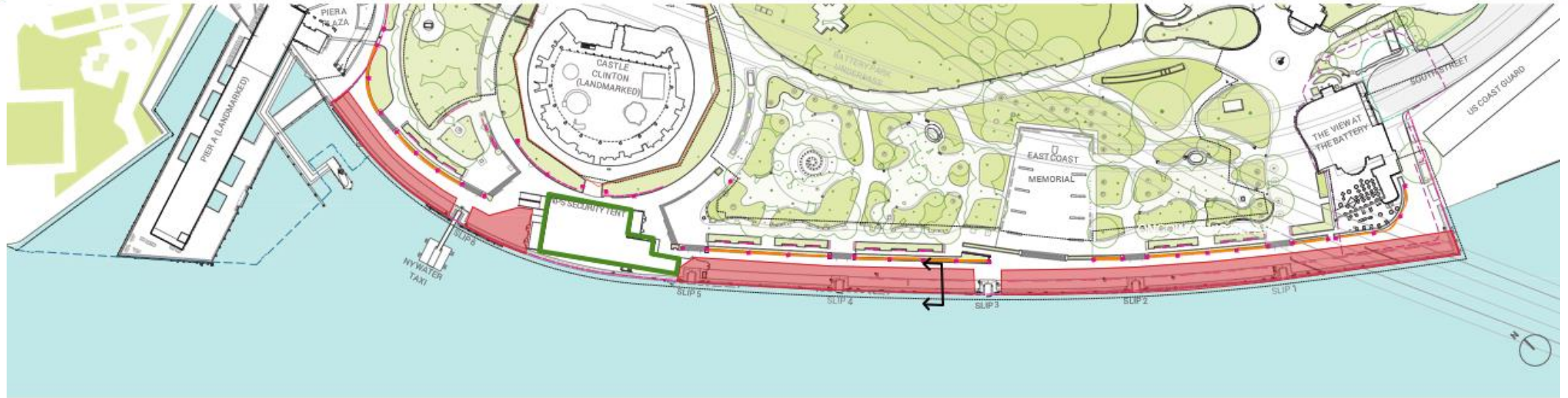
Existing Plan



Proposed Plan



Existing Conditions



- 1** SECTIONS OF TIMBER PILES MISSING DUE TO ROT
- 2** STRUCTURAL CRACK IN CONCRETE CAP
- 3** EXPOSED CONCRETE GRAVITY WALL FACE DUE TO COLLAPSING GRANITE BLOCK FASCIA
- 4** DAMAGE TO TIMBER LINECAP
- 5** MARINE DEGRADATION AND TIMBER ROT
- 6** DAMAGED SEA RAIL
- 7** DAMAGED DECK
- 8** SINKHOLES

Existing Conditions (continued)



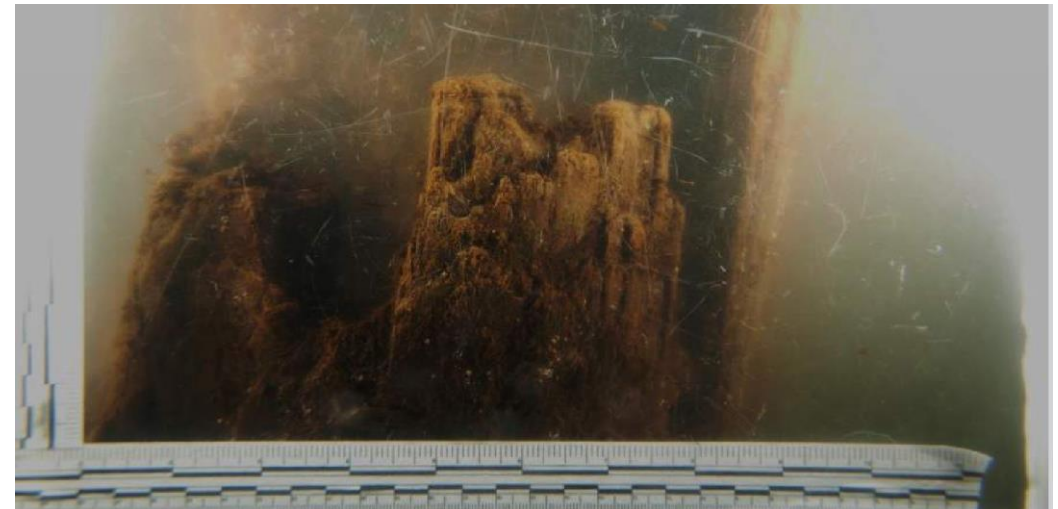
SINKHOLE



DAMAGED CONCRETE



LOSS OF GRANITE BLOCK FASCIA

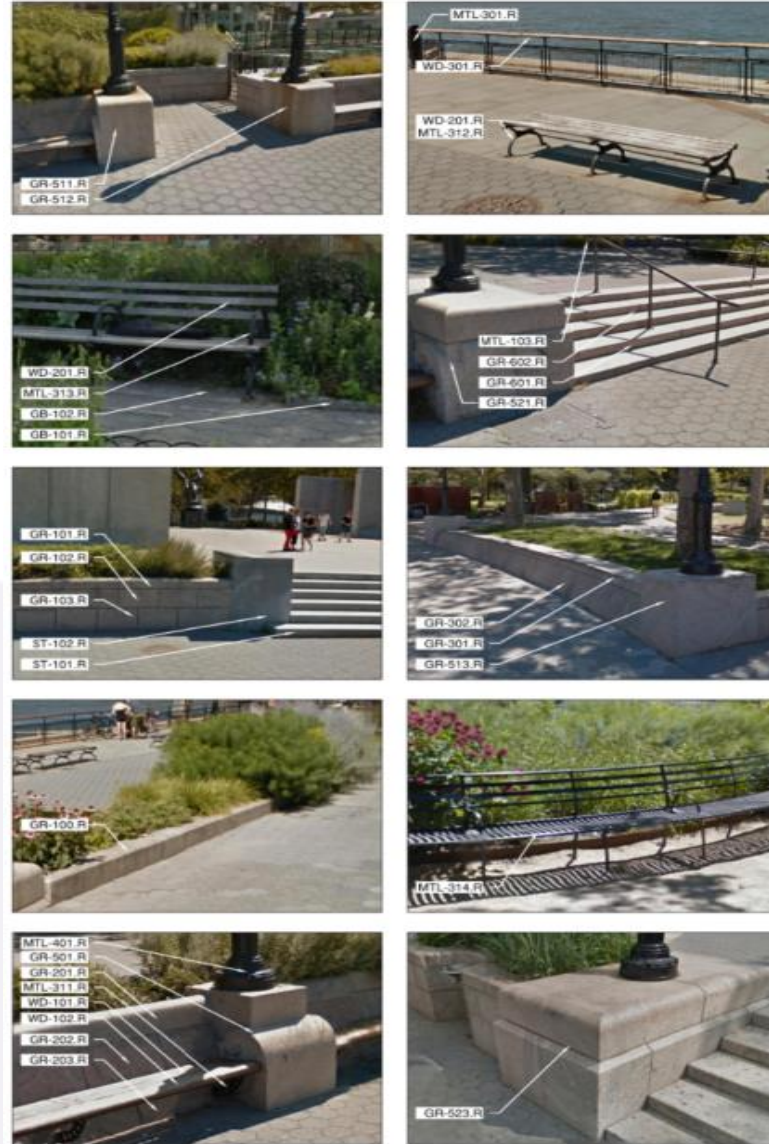


TIMBER PILE LOSS DUE TO ROT

Demolition & Salvage

Site Salvage Materials

SITE MATERIAL INVENTORY PHOTOS

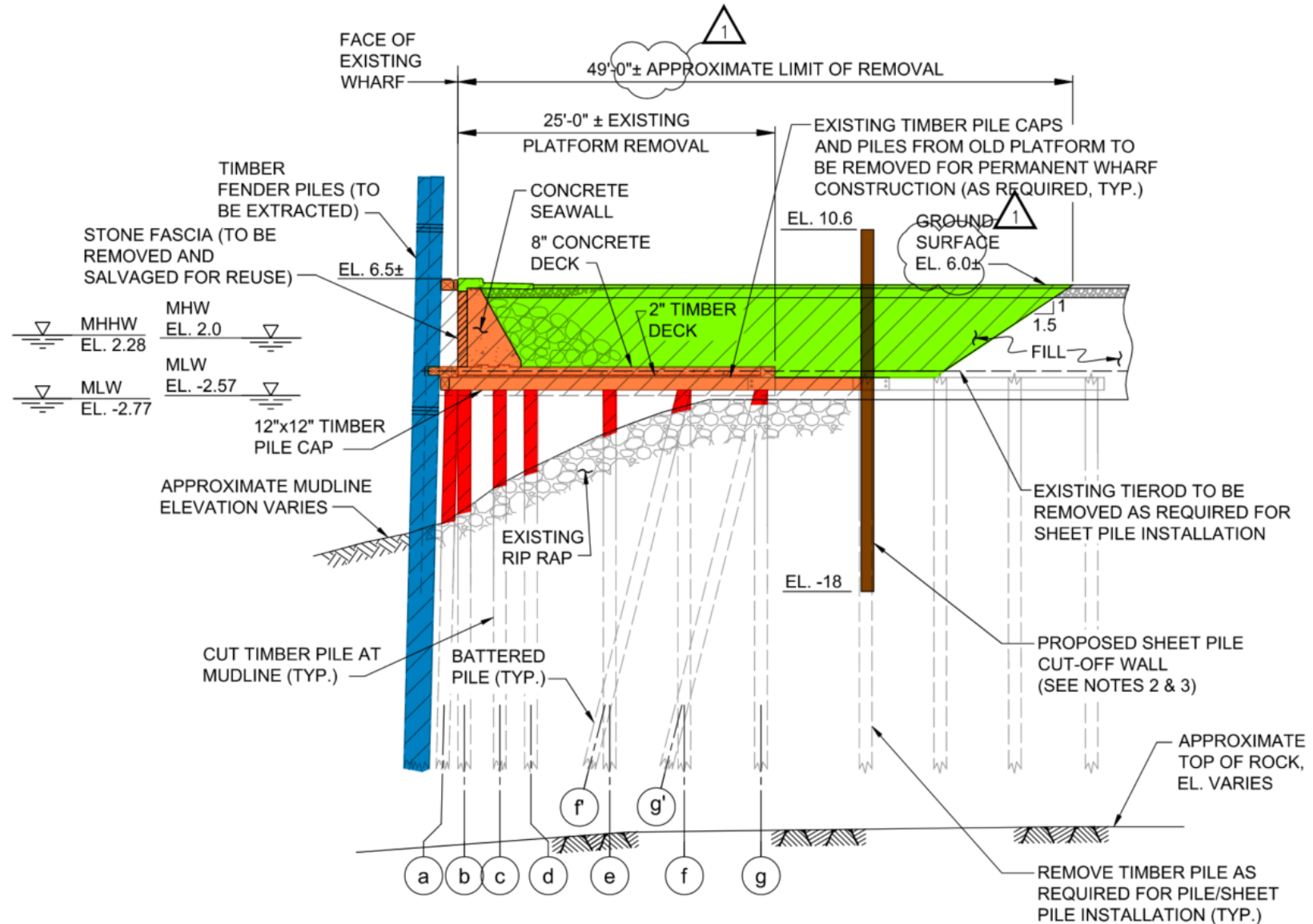


SITE MATERIAL SALVAGE INVENTORY

MATERIAL TYPE	MATERIAL SUBTYPE	MATERIAL CODE	ELEMENT TYPES	MANAGEMENT STRATEGY	TYPICAL SIZE	
STONE	PINK GRANITE	GR-100.R	GRANITE CURB	REUSE ON SITE	47.5" x 12" x 12"	
		GR-101.R	GRANITE WALL - CAPSTONE	REUSE ON SITE	47.5" x 12" x 6"	
		GR-102.R	GRANITE WALL - VENEER UPPER COURSE	REUSE ON SITE	23.5" x 12.5" x 3"	
		GR-103.R	GRANITE WALL - VENEER LOWER COURSE	REUSE ON SITE	23.5" x 19.5" x 3"	
		GR-104.R	GRANITE WALL - SOLID UPPER COURSE	REUSE ON SITE	23.5" x 12.5" x 12"	
		GR-105.R	GRANITE WALL - SOLID LOWER COURSE	REUSE ON SITE	23.5" x 19.5" x 12"	
		GR-201.R	GRANITE BACKED BENCH WALL - CAPSTONE	REUSE ON SITE	47.5" x 8" x 15"	
		GR-202.R	GRANITE BACKED BENCH WALL - VENEER UPPER COURSE	REUSE ON SITE	23.5" x 12.5" x 3"	
		GR-203.R	GRANITE BACKED BENCH WALL - VENEER LOWER COURSE	REUSE ON SITE	23.5" x 19.5" x 3"	
		GR-301.R	GRANITE LOW WALL - CAPSTONE	REUSE ON SITE	22" x 6" x 60"	
		GR-302.R	GRANITE LOW WALL - VENEER	REUSE ON SITE	15" x 3" x 30"	
		GR-501.R	GRANITE PIER TYPE A	REUSE ON SITE	29" x 39" x 36"	
		GR-511.R	GRANITE PIER TYPE B - LEFT HAND SCROLL FACING LAND	REUSE ON SITE		
		GR-512.R	GRANITE PIER TYPE B - RIGHT HAND SCROLL FACING LAND	REUSE ON SITE		
		GR-513.R	GRANITE PIER TYPE B - NO SCROLL	REUSE ON SITE		
		GR-521.R	GRANITE PIER TYPE C - LEFT HAND SCROLL FACING LAND	REUSE ON SITE	36" x 39" x 12"	
		GR-522.R	GRANITE PIER TYPE C - RIGHT HAND SCROLL FACING LAND	REUSE ON SITE	30.5" x 31" x 31"	
		GR-523.R	GRANITE PIER TYPE C - NO SCROLL	REUSE ON SITE	30.5" x 31" x 31"	
		GR-531.R	GRANITE PIER TYPE E	REUSE ON SITE		
		GR-601.R	STEP TREAD - GRANITE	REUSE ON SITE	18" x 84" x 4"	
		GR-602.R	STEP TREAD - GRANITE WITH TEXT	REUSE ON SITE	18" x 84" x 4"	
		GR-001.R	WHARF GRANITE FASCIA	REUSE ON SITE	72" x 24" x 12"	
		LIMESTONE	ST-101.R	STEP TREAD (AT EAST COAST MEMORIAL)	REUSE ON SITE	96" x 17" x 5"
			ST-102.R	PIER TYPE D (AT EAST COAST MEMORIAL)	REUSE ON SITE	36" x 62" x 76"
			ST-103.R	CASTLE CLINTON BOLLARD	REUSE ON SITE	36" x 10"
		COBBLESTONE	GB-101.R	GRANITE COBBLE CURB	REUSE ON SITE	12" x 4" x 12"
			GB-102.R	GRANITE COBBLE PAVER - TYPE 1	REUSE ON SITE	Varies
			GB-103.R	GRANITE COBBLE PAVER - TYPE 2	REUSE ON SITE	Varies
		BLUESTONE	BL-101.R	CASTLE CLINTON BLUESTONE COPING	REUSE ON SITE	91.92" x 30" x 4"
		BRONZE	MTL-103.R	HANDRAIL BRONZE SCROLL/VOLUTE	REUSE ON SITE	
METAL	PAINTED METAL	MTL-104.R	CASTLE CLINTON BOLLARD CHAIN	REUSE ON SITE	96"	
		MTL-301.R	SEARAIL BOLLARD	REUSE ON SITE		
		MTL-311.R	BENCH SEAT SUPPORT BRACKETS	REUSE ON SITE		
		MTL-312.R	WORLD'S FAIR BENCH LEGS - BACKLESS (COMPLETE SET OF 3)	REUSE ON SITE		
		MTL-313.R	WORLD'S FAIR BENCH LEGS - WITH SEATBACK (COMPLETE SET OF 3)	REUSE ON SITE		
		MTL-314.R	WORLD'S FAIR BENCH	REUSE ON SITE		
		MTL-401.R	8 POLE (STANDARD PARK SECURITY LIGHTING)	PROVIDE TO DOT		
ALUMINUM	MTL-501.R	WATERFRONT PUBLIC ACCESS SIGN	REUSE ON SITE			
WOOD	WOOD	WD-101.R	BENCH SEAT - SLAT	REUSE ON SITE	96" long	
		WD-102.R	SEATWALL - BULLNOSE FASCIA PIECE	REUSE ON SITE	96" long	
		WD-301.R	WORLD'S FAIR BENCH SLAT (FOR BOTH BACKLESS AND WITH SEATBACK)	REUSE ON SITE	96" long	
		WD-301.R	SEARAIL TOP RAIL	REUSE ON SITE	Varies	

Demolition & Salvage

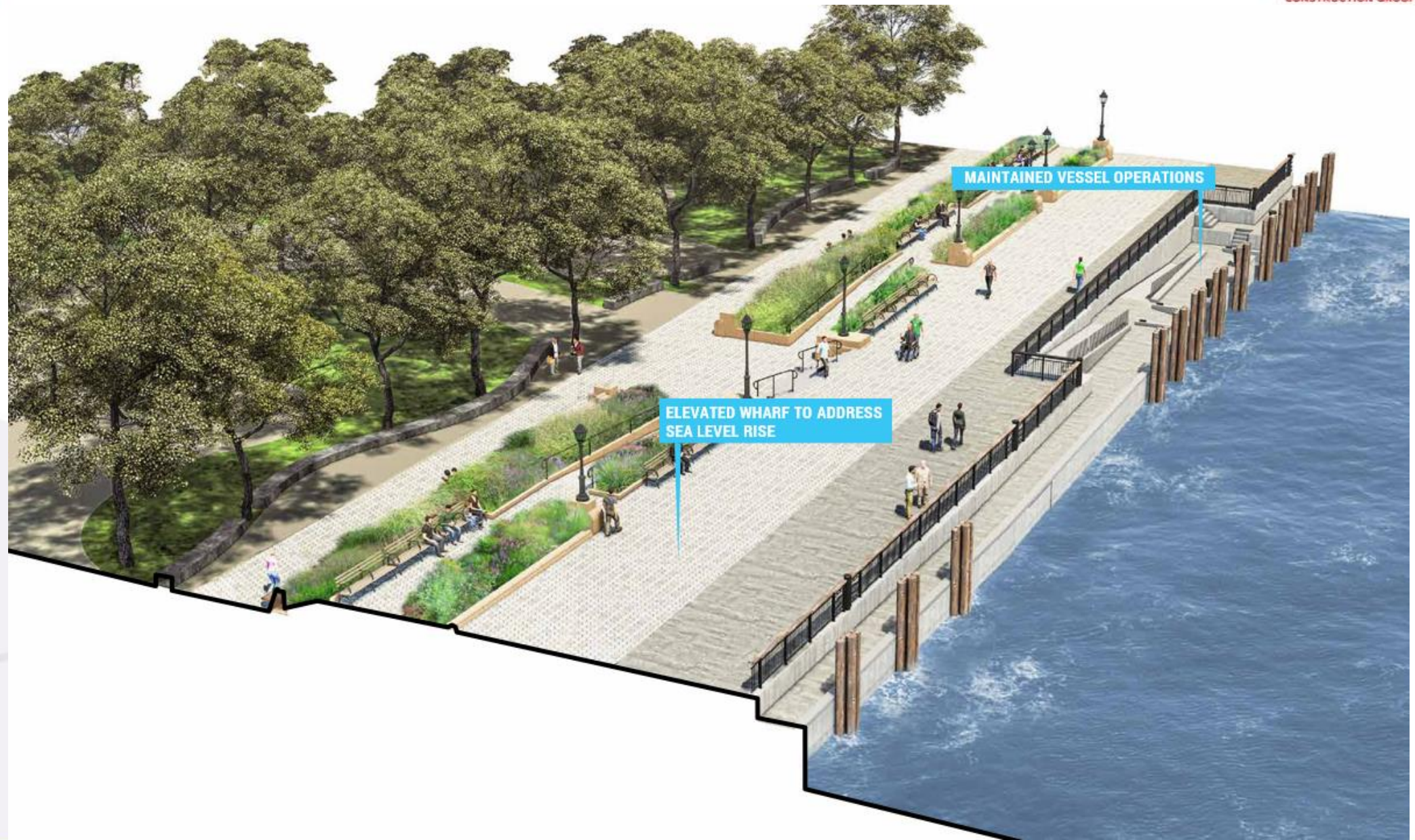
Wharf Demolition



LEGEND

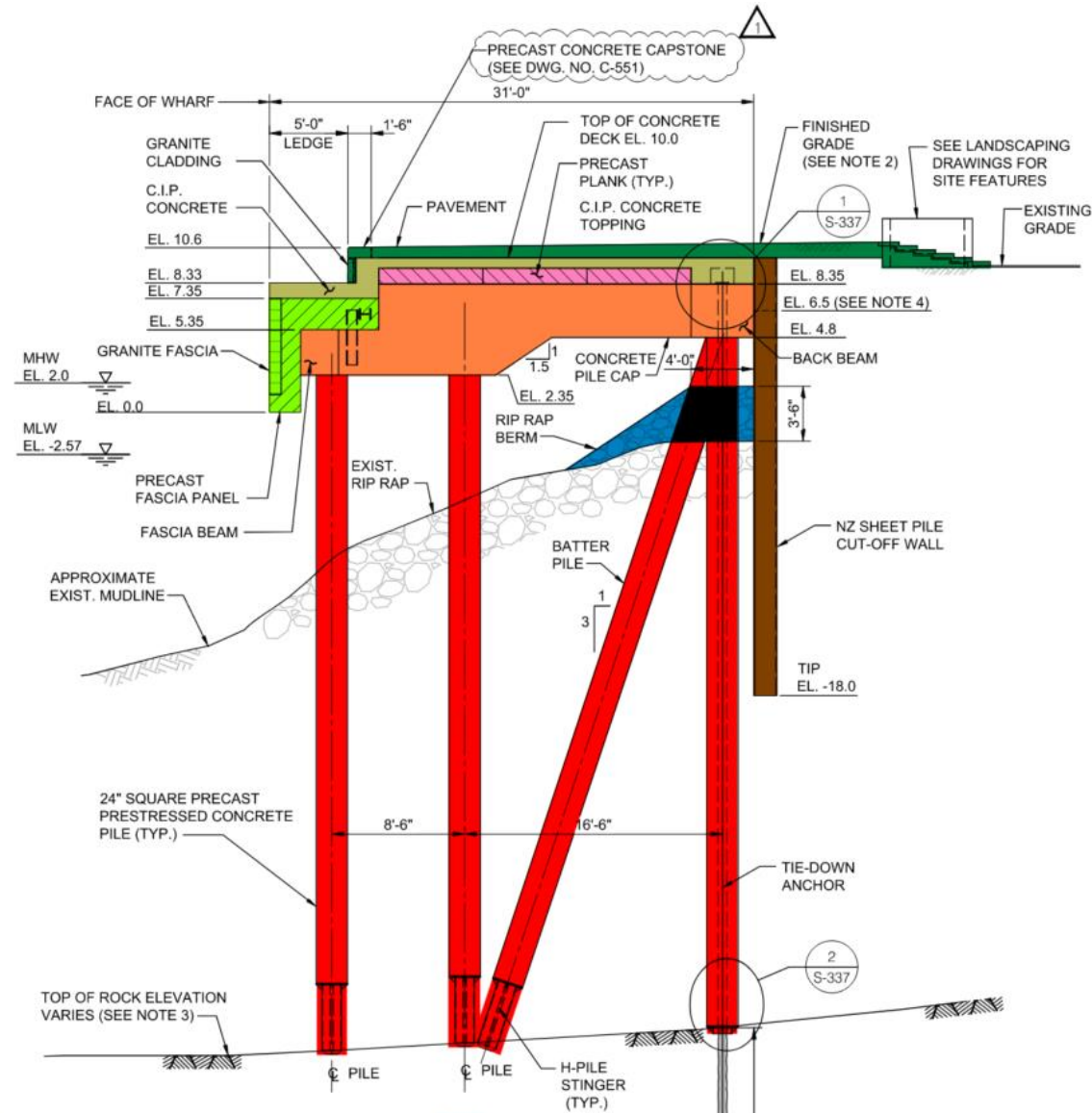
- █ - Fender Piles (Extracted)
- █ - Piles (Cut at Mudline or Extracted)
- █ - Existing Wharf Structure
- █ - Existing Hardscape & Fill
- █ - New Sheet Pile Cutoff Wall

Reconstruction



Reconstruction

Typical Wharf Section

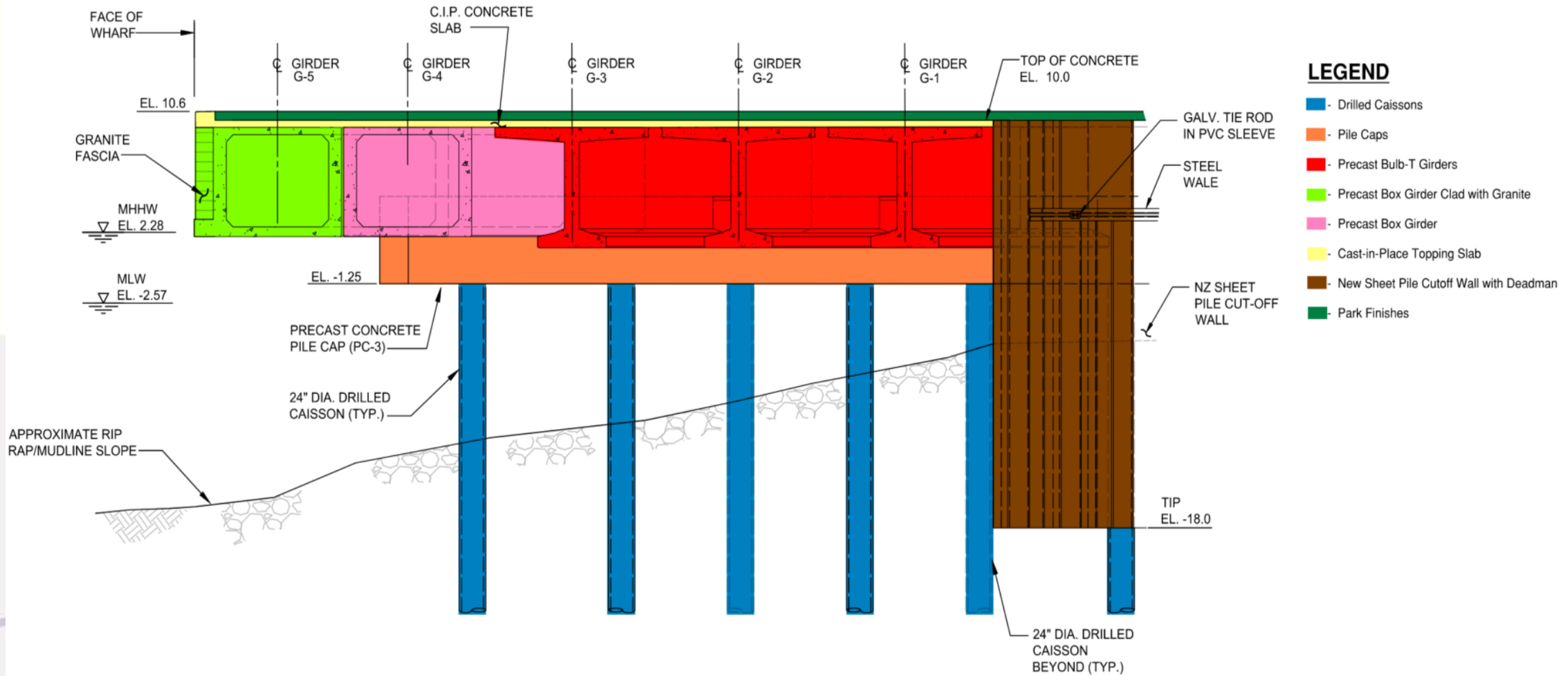


LEGEND

- RipRap Berm
- Precast Concrete Piles
- Pile Caps & Longitudinal Beams
- Precast Fascia Panels Clad with Granite
- Precast Planks
- Cast-in-Place Topping Slab
- New Sheet Pile Cutoff Wall
- Park Finishes

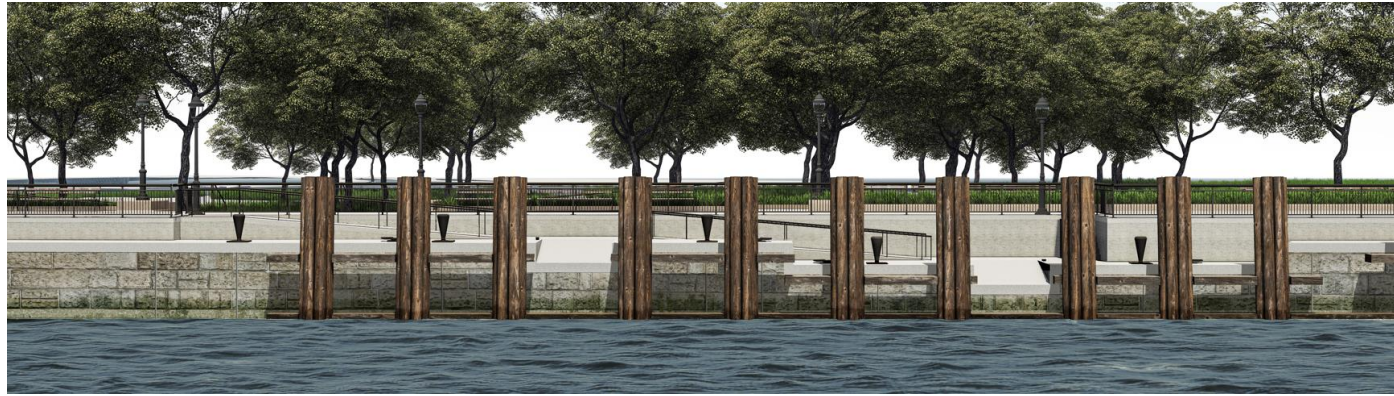
Reconstruction

Wharf Section Over Tunnel



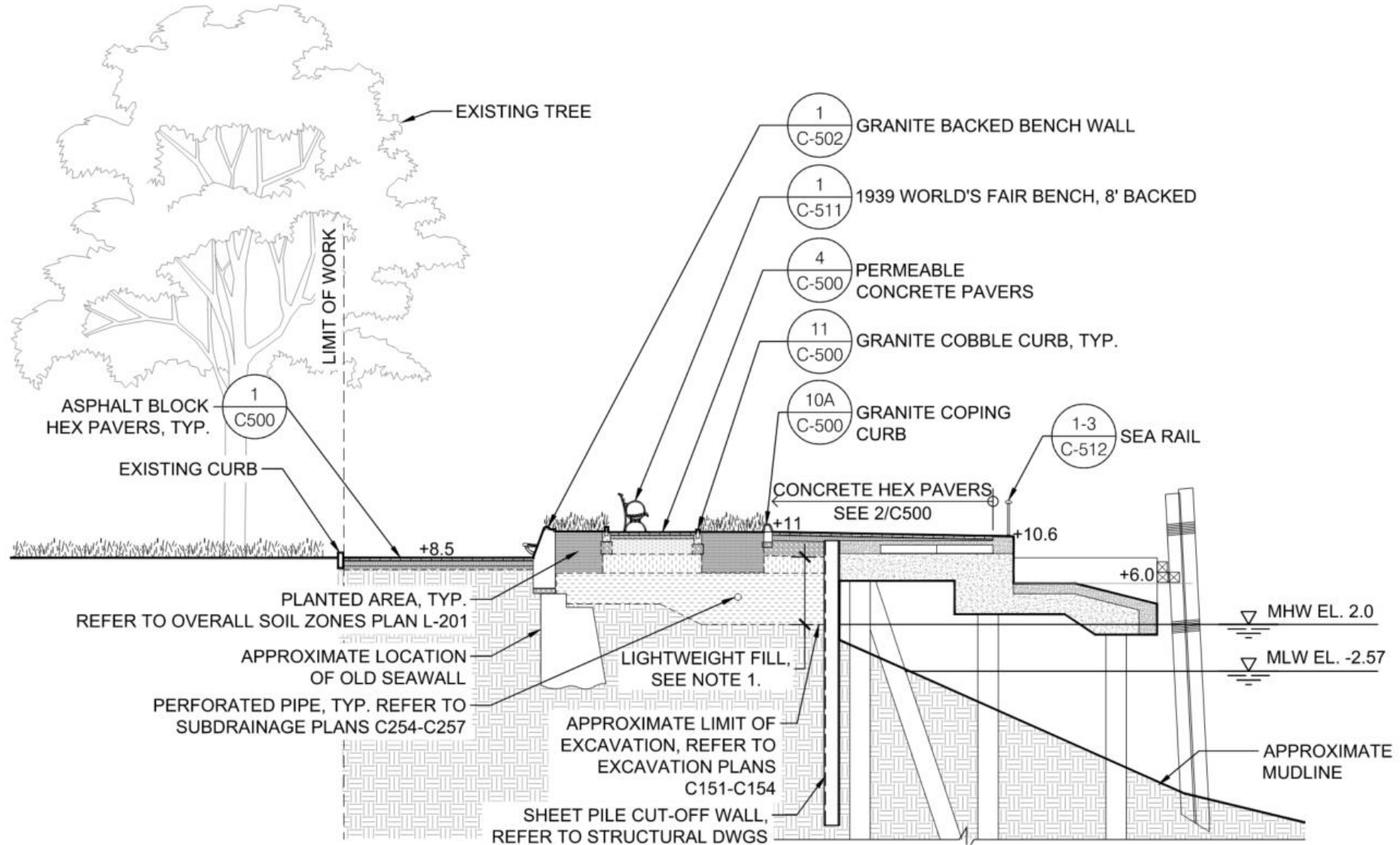
Reconstruction

Typical Vessel Slip



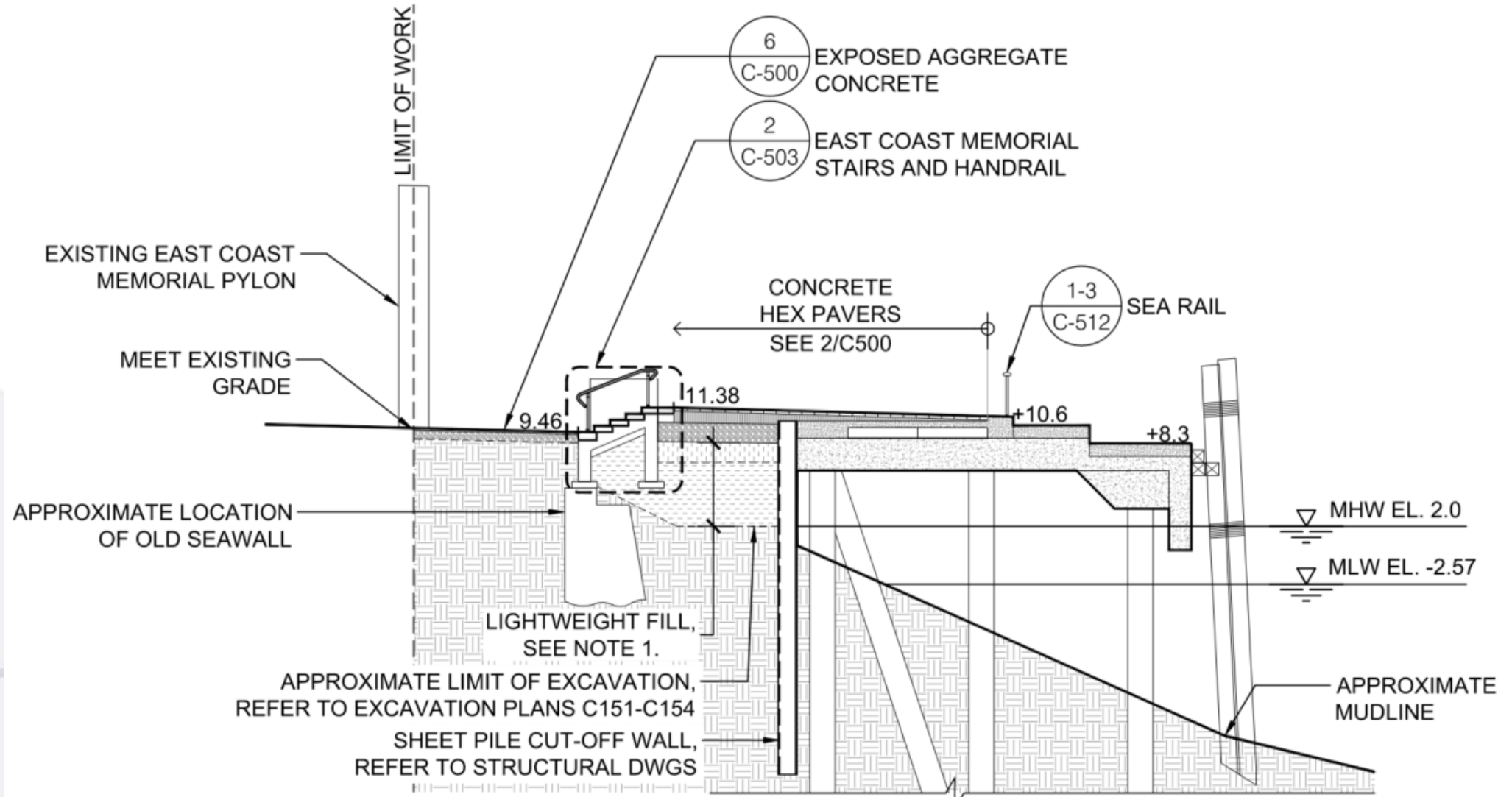
Reconstruction

Typical Promenade Section



Reconstruction

Promenade Section at East Coast Memorial



Reconstruction

Pier A Tie-In



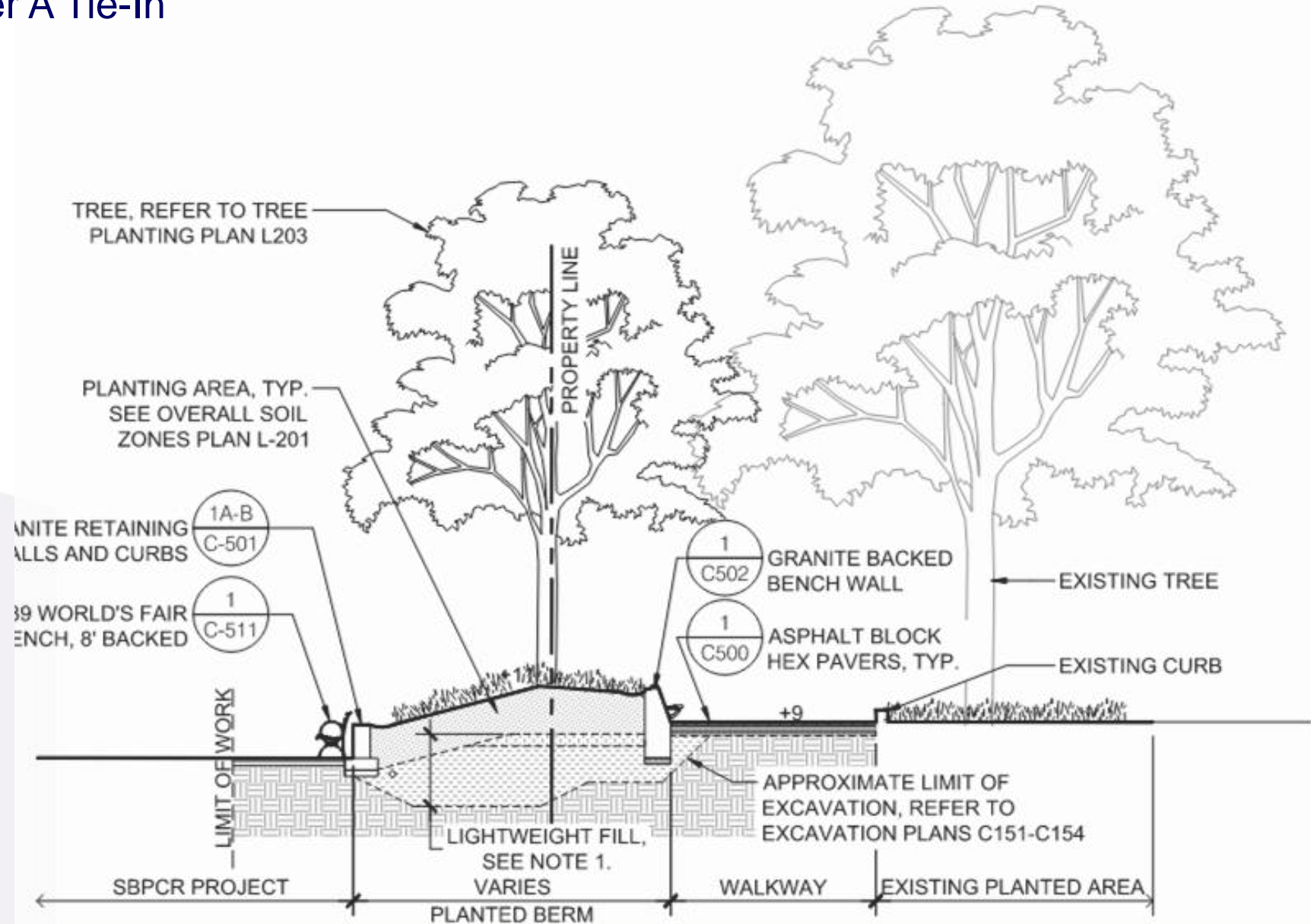
Reconstruction

Pier A Tie-In



Reconstruction

Pier A Tie-In



Additional Signage



Along Battery Place

Communications



Stakeholder Walkthrough Feb 2, 2024

Construction Community Liaison

Karp Strategies: Lily Zaballos

Phone: (347) 201-1596

Email: info@batterycoastalresilience.com

Website: <https://www.nyc.gov/site/lmcr/progress/battery-coastal-resilience>

Lower Manhattan Coastal Resiliency Battery Coastal Resilience

Construction Notification | Date Issued: 01/09/2024

Project Summary

The Battery Coastal Resilience Project will rebuild and elevate the Battery wharf to reduce risk from future tidal flooding and low level coastal storms, while maintaining the character and uses of the promenade and the rest of the park. The Battery Coastal Resilience Project is one of several projects, which together are known as the Lower Manhattan Coastal Resiliency (LMCR) Project.

The Battery Coastal Resilience Project will:

- Reconstruct the deteriorating wharf
- Protect The Battery from rising seas
- Accommodate passenger ferry uses
- Preserve and enhance park character and gardens
- Design for universal accessibility to create a welcoming and accessible esplanade
- Protect the park's historical and cultural resources

The project will be implemented in two phases. Phase 1 will reconstruct the western portion of and adjacent areas, and Phase 2 will reconstruct the eastern portion of the wharf and adjacent map and listing on next page for open vs closed park entrances, park areas, and features.

Anticipated Construction Schedule:

Phase 1 - 2024 - 2025
Phase 2 - 2025 - 2026

Summary of Upcoming Work

- Set up of construction fencing for Phase 1 construction zone. Fence will be in place duration of the Phase 1 of The LMCR - Battery Coastal Resilience Project.

Expected Start Date:
01/15/2024 (~3 week duration)

Please contact info@batterycoastalresilience.com or Lily Zaballos at 347-201-1596 with questions or concerns.



Visit <https://www.nyc.gov/site/lmcr/progress/battery-coastal-resilience> page to learn more about this project.

Lower Manhattan Coastal Resiliency Battery Coastal Resilience

Construction Notification | Date Issued: 01/09/2024

Map of Open and Closed Park Areas and Access Points



Public Access to Park

- | | | |
|--|---|---|
| Features that remain open: <ul style="list-style-type: none"> • Playscape • SeaGlass Carousel • Bikeway • Battery Woodland • Urban Farm • Bosque Fountain • Castle Clinton • Statue of Liberty Ferry • Portions of the Oval Lawn • Food Kiosks/Restaurants • Restrooms (3) | Features that are closed: <ul style="list-style-type: none"> • Battery Wharf • Gardens of Remembrance • Portions of the Oval Lawn | Monuments that are inaccessible: <ul style="list-style-type: none"> • Admiral George Dewey Memorial • American Merchant Mariners Memorial • Emma Lazarus Memorial Plaque • Korean War Veterans Monument • Netherlands Memorial Flagpole • Norwegian Veterans Memorial • Peter Cassar Alberti Marker • River That Flows Two Ways • The Immigrants • Walloon Soldiers Memorial |
|--|---|---|

Please contact info@batterycoastalresilience.com or Lily Zaballos at 347-201-1596 with questions or concerns.



Visit <https://www.nyc.gov/site/lmcr/progress/battery-coastal-resilience> page to learn more about this project.



Current Status of The Battery

