NORTH/WEST BATTERY PARK CITY RESILIENCY PROJECT

Reach 3-4 Workshop

February 8, 2023

NEW YORK STATE OF OPPORTUNITY. | Battery Park City Authority

Turner | DE CRUZ | ARCADIS | SCAPE | BIG | WSP

Project Team

CLIENT TEAM:

CLIENT:

NEW YORK STATE OF OPPORTUNITY. | Battery Park City Authority

ADVISORS:

AECOM one architecture

CONSULTANTS:

AKRF

EIS CONSULTANT

DESIGN-BUILD TEAM:

PRIMARY CONTRACT:

Turner and CRUZ

CONSTRUCTION

CONSULTANT:

ARCADIS

CIVIL / STRUCTURAL ENGINEERING

SUB-CONSULTANTS:

BIG

URBAN DESIGN

SCAPE

LANDSCAPE ARCHITECTURE

wsp

GEOTECHNICAL

Project Schedule



Precise construction completion dependent upon agency permitting and approvals

A Piece of a Connected & Resilient Waterfront



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Today's Focus Area



Future Flood Risk



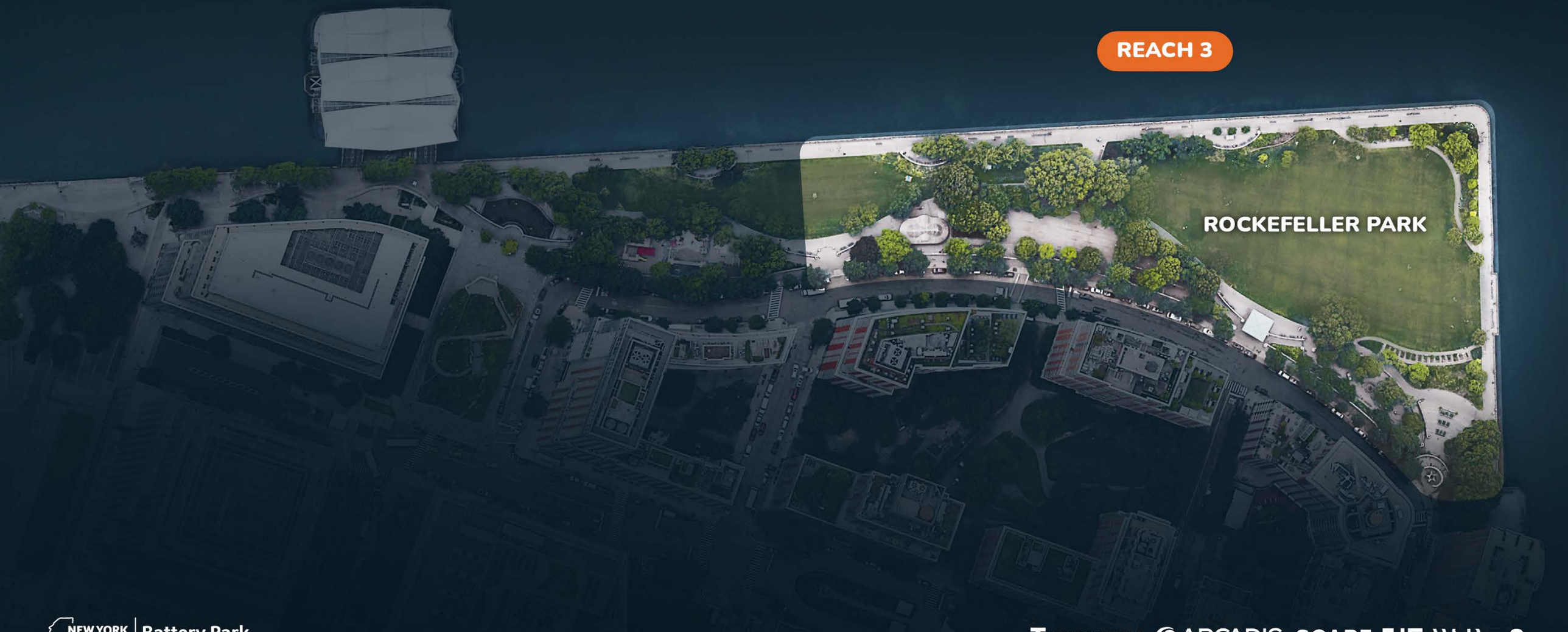
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Reach 3 + 4


FERRY TERMINAL
REACH 3
ESPLANADE
LILY POND
ROCKEFELLER PARK
REACH 4
PLAYGROUND
IRISH HUNGER MEMORIAL

Rockefeller Park and Lawns



Existing Conditions



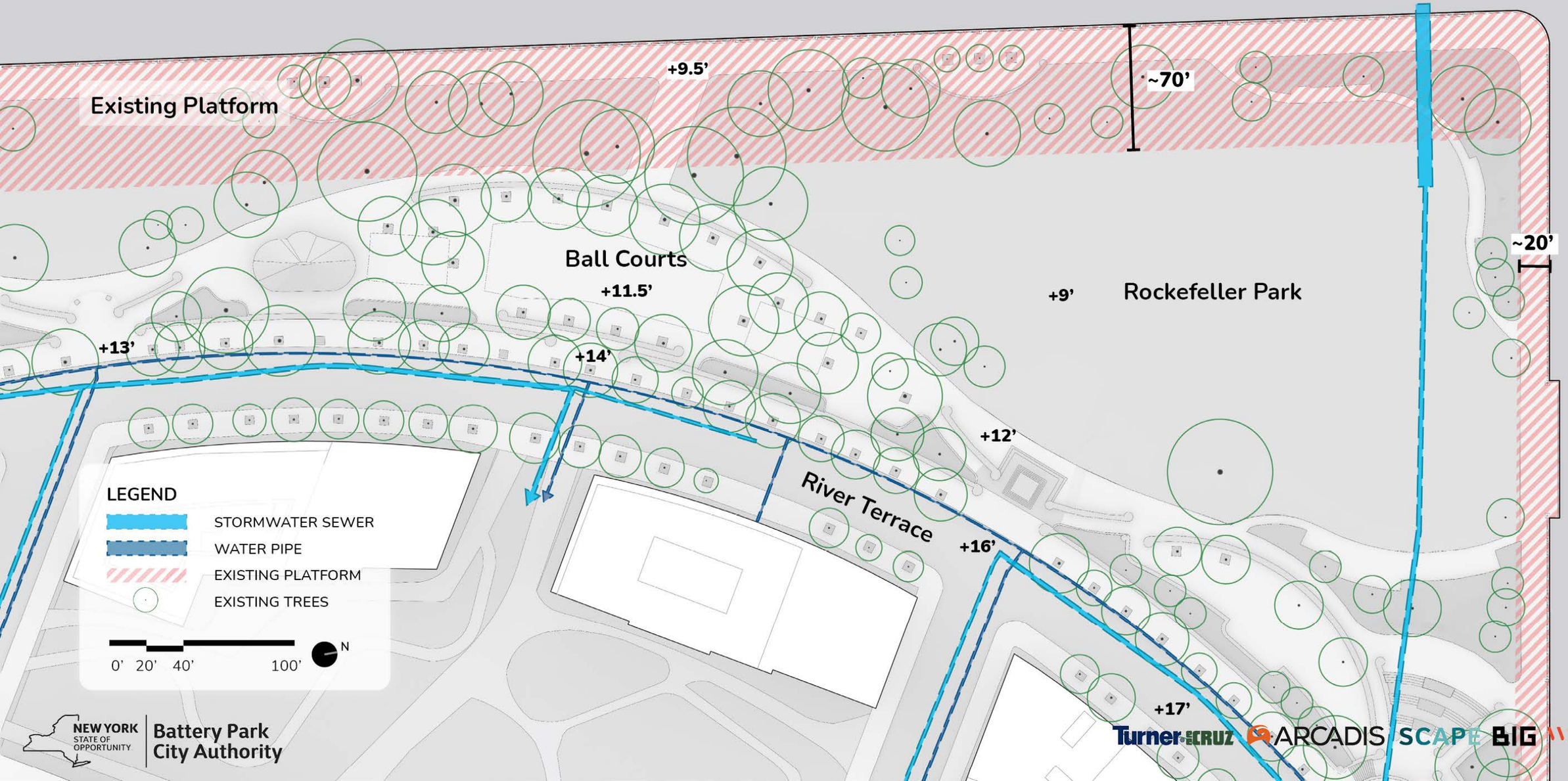
Existing Conditions



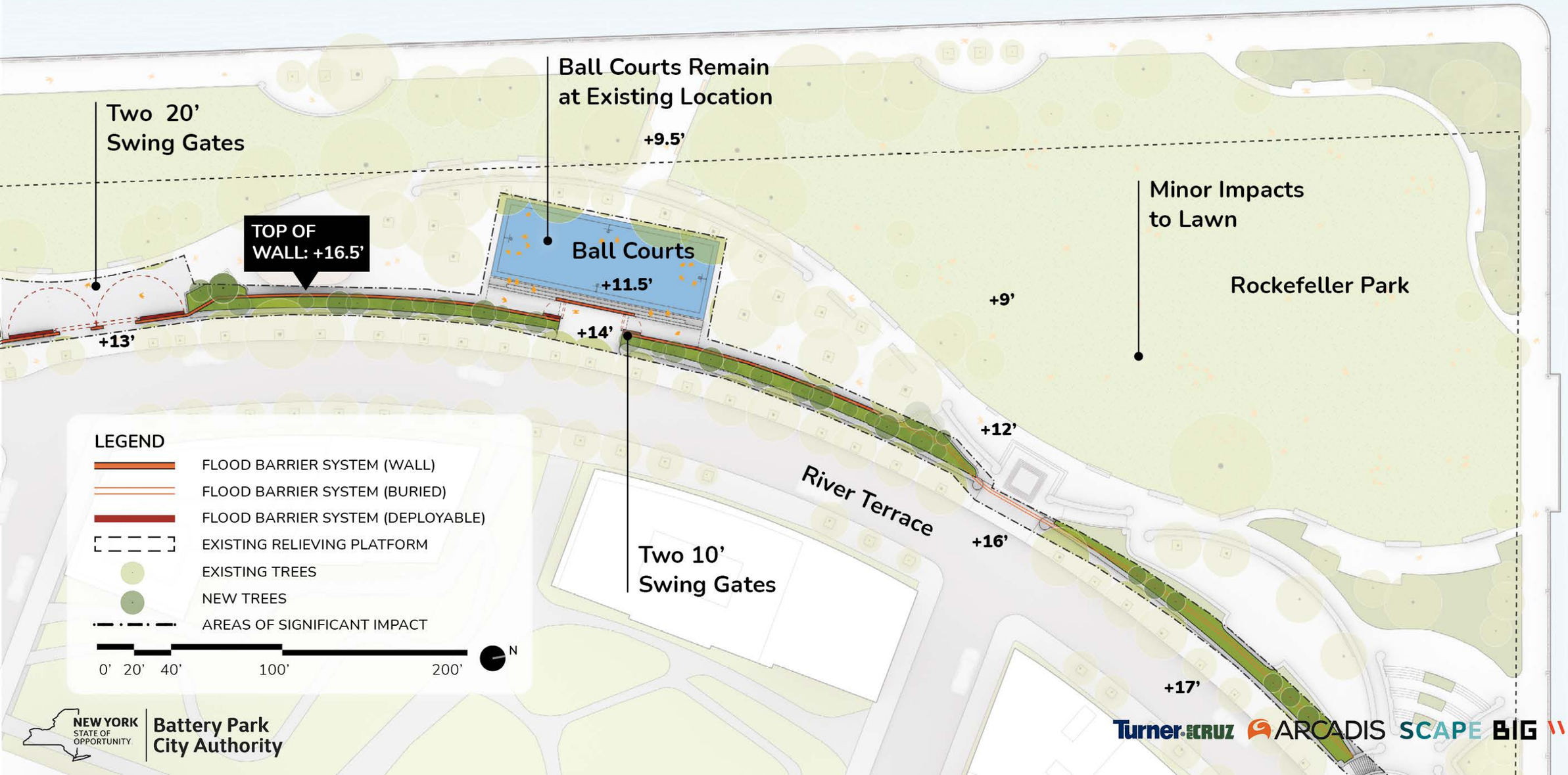
What We Heard

- Minimize changes to the existing space
- Minimize impact to existing trees

Design Constraints



Proposed Design



Existing Conditions: Esplanade



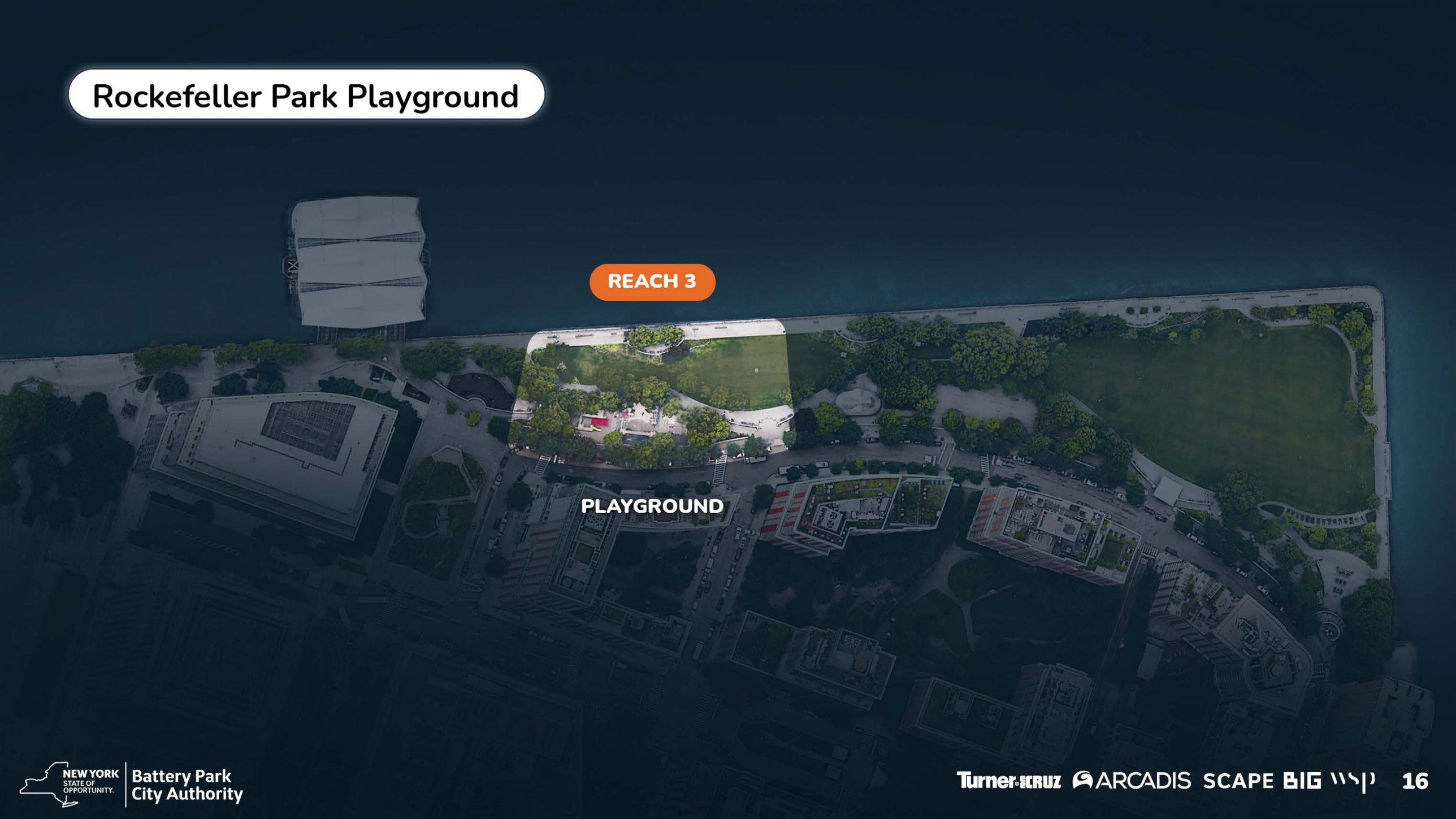
Proposed Design: Esplanade



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Rockefeller Park Playground



Existing Conditions



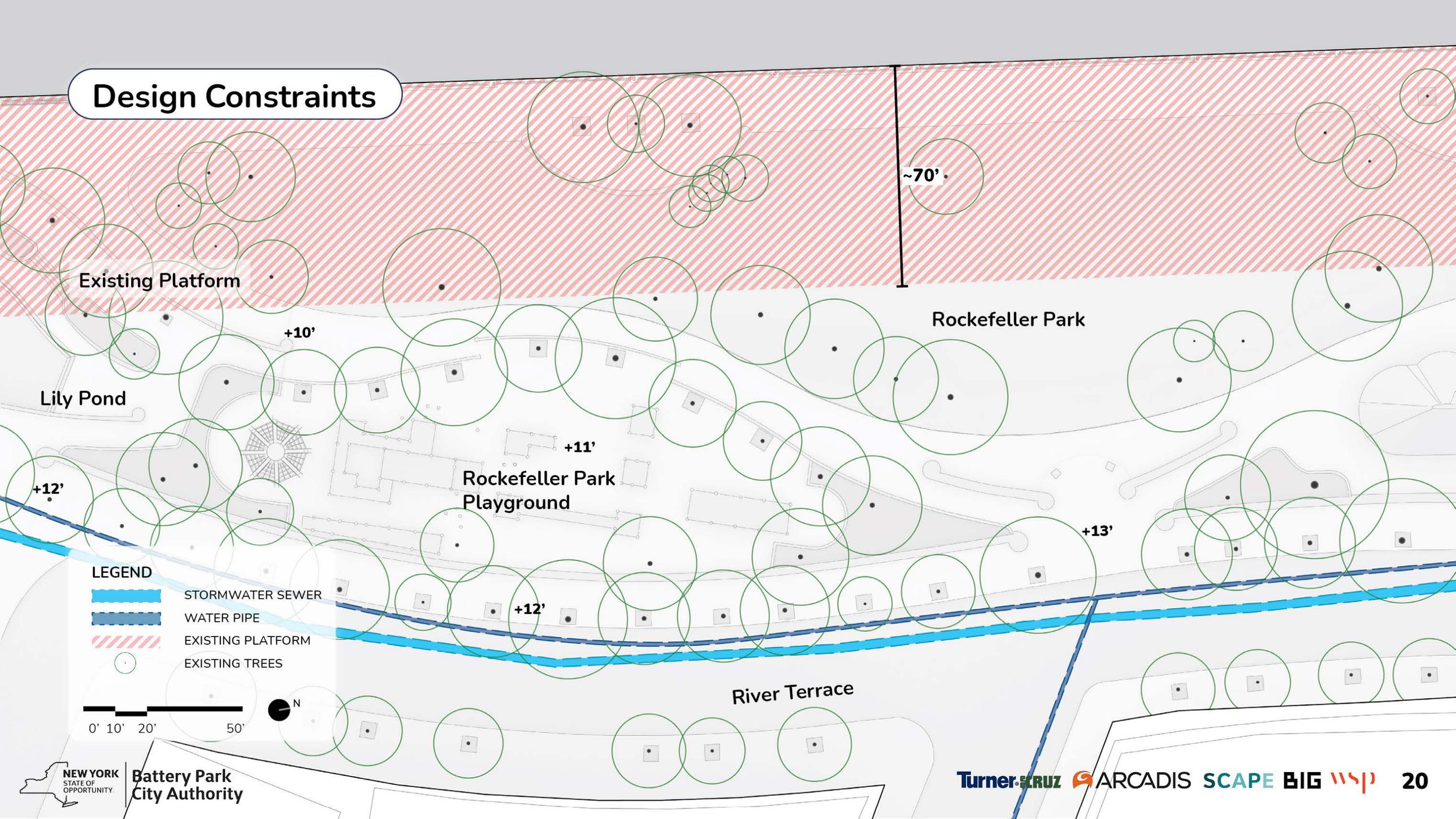
Existing Conditions



What We Heard

- Minimize impact to existing play equipment
- Minimize duration of playground closure
- Maintain connectivity to Rockefeller Park
- Minimize impact to existing trees

Design Constraints



New Design Options

1: Floodwall along street next to existing stone wall

Constructed from street with impacts to street trees and River Terrace, minimal playground impact



2: Floodwall along street replacing existing stone wall

Constructed from park with reconstructed playground and minimal street impact

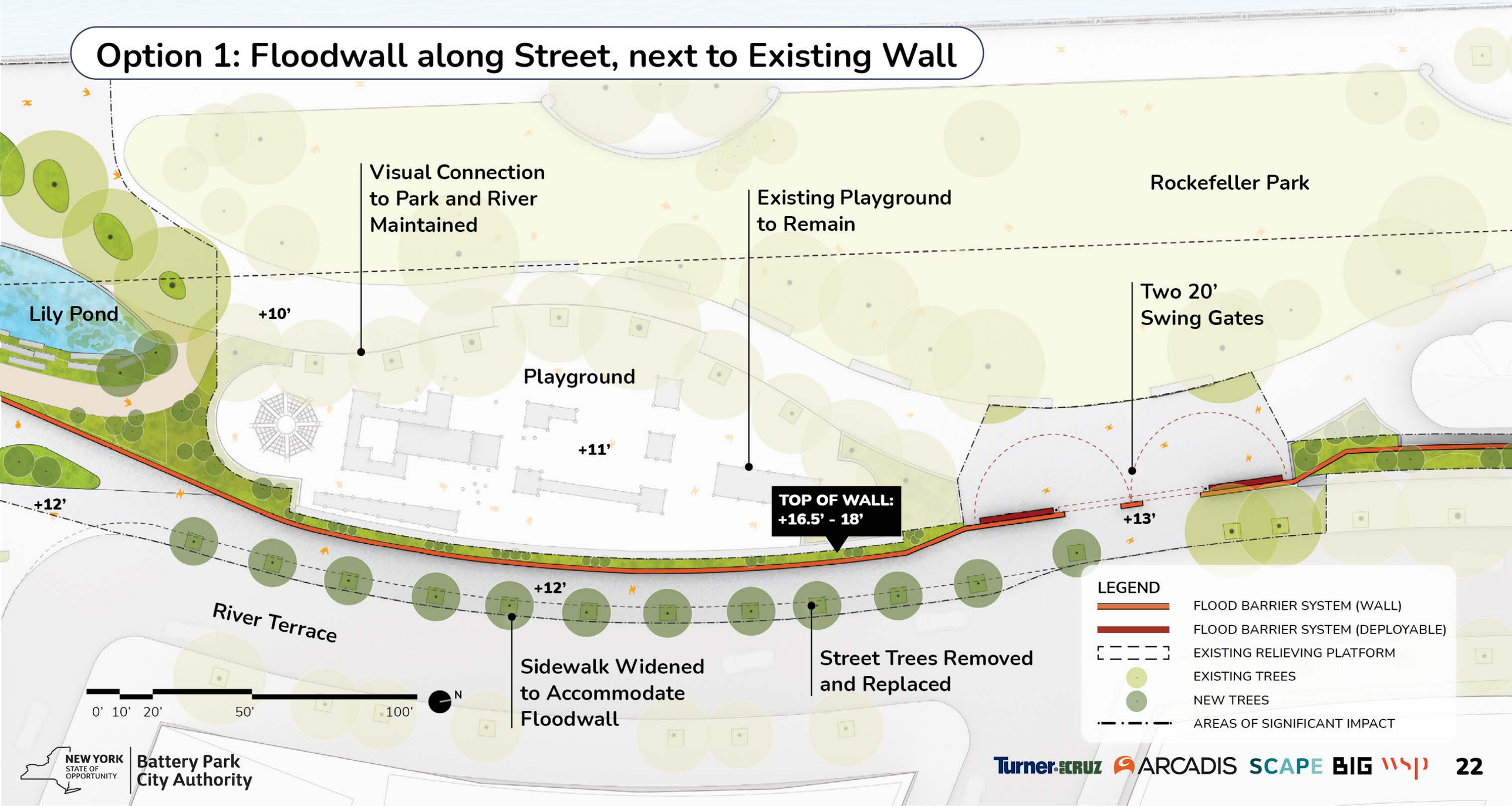


3: Floodwall between park and playground

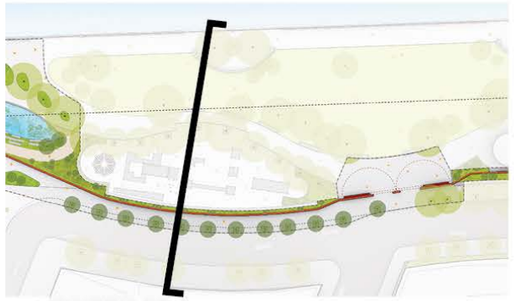
Constructed from park with reconstructed and raised playground and no street impact

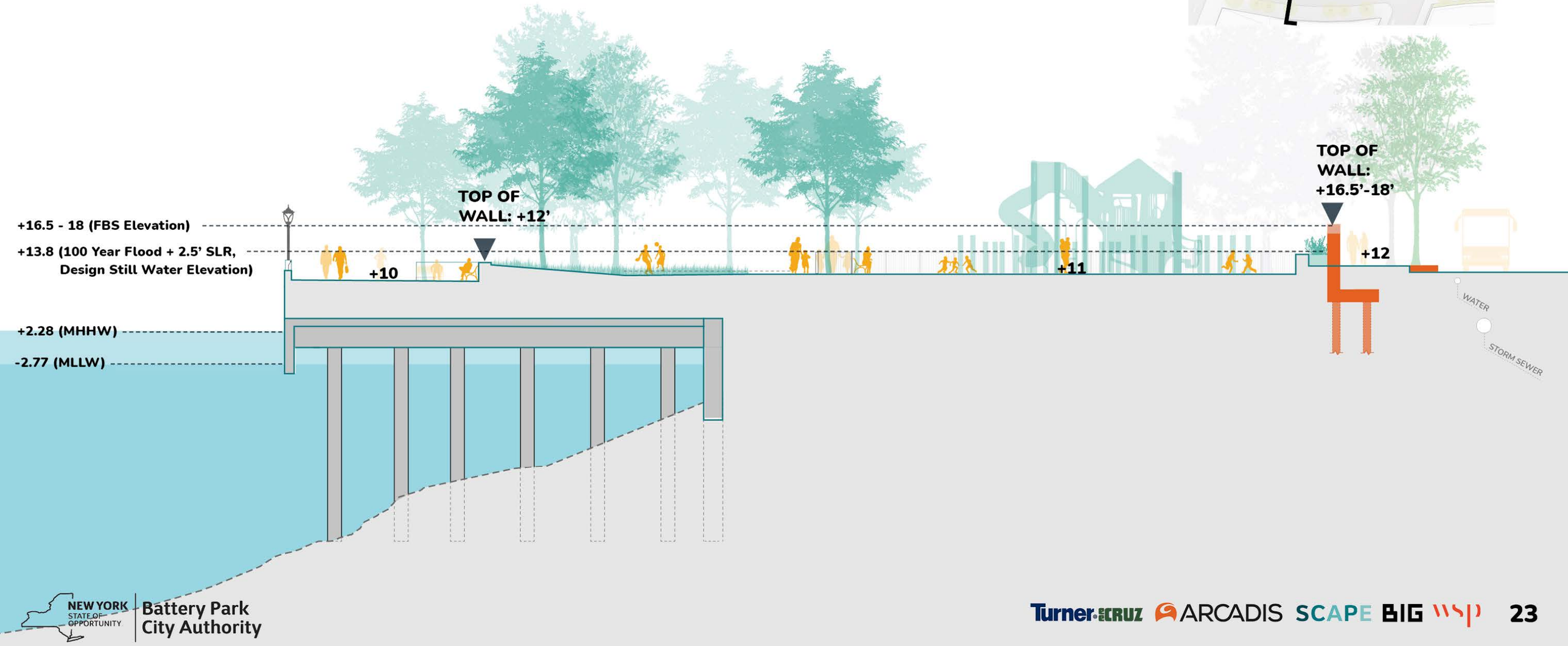


Option 1: Floodwall along Street, next to Existing Wall



Option 1: Floodwall along Street, next to Existing Wall





Existing View from the Lily Pond

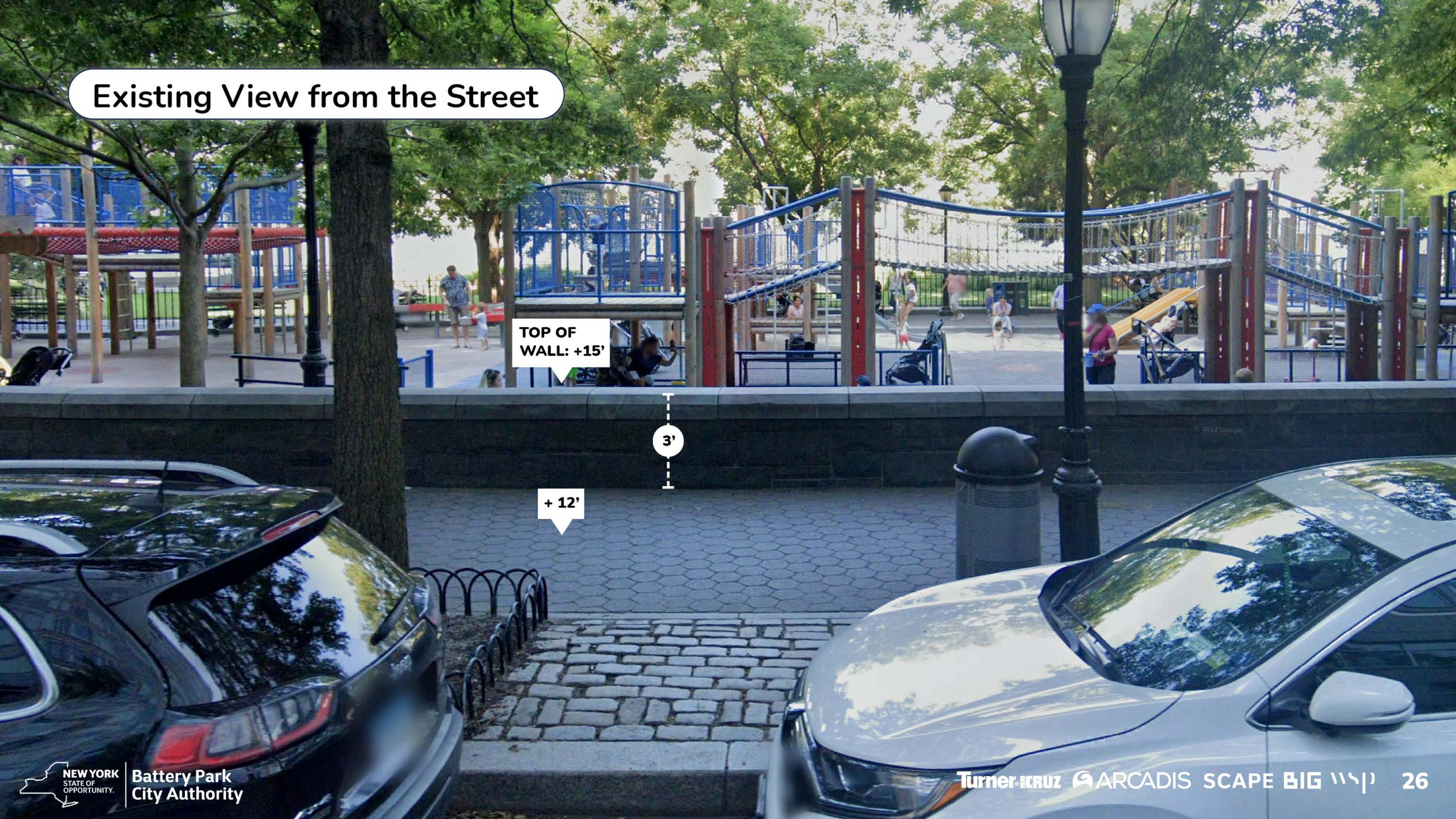


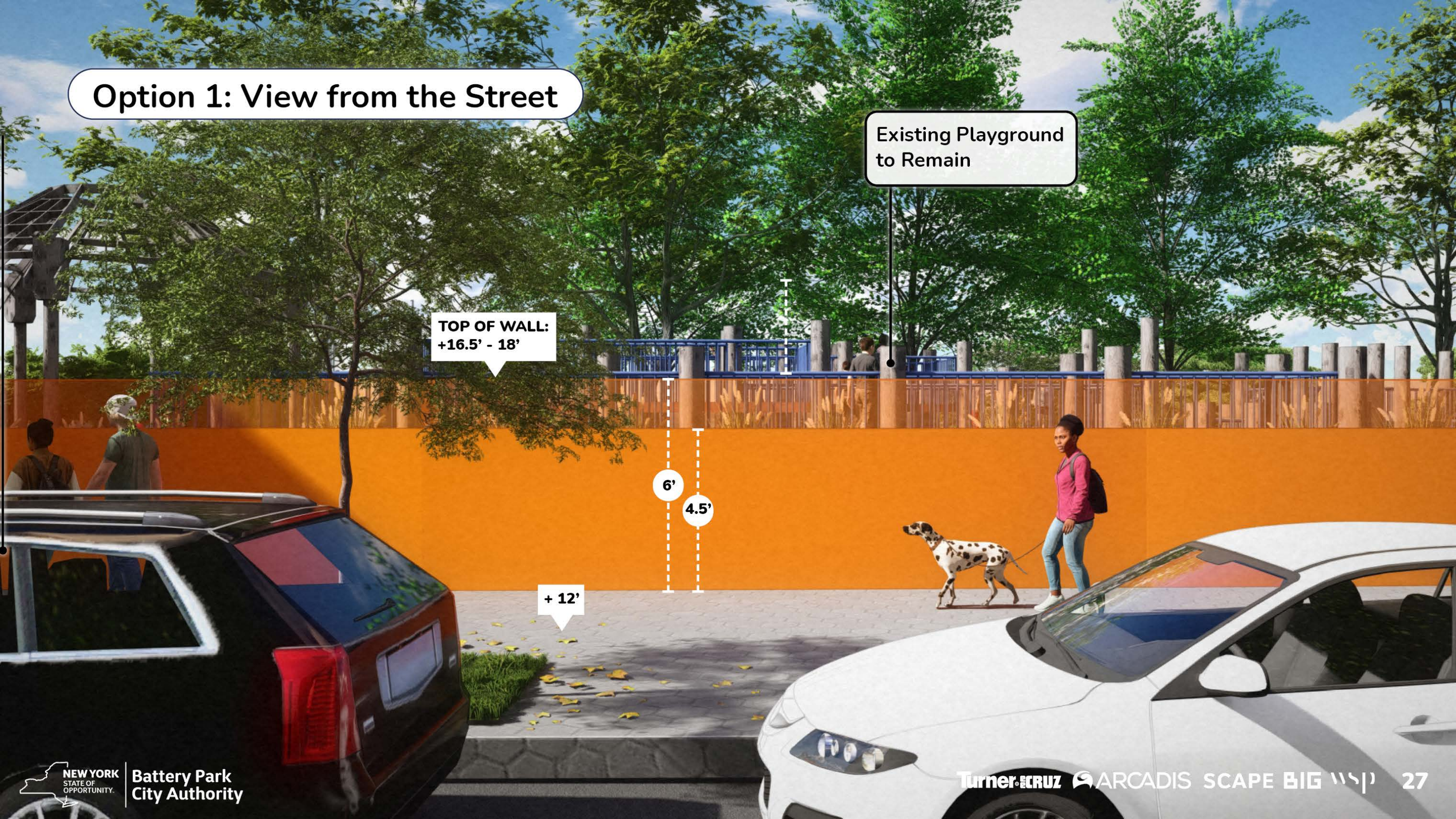
Option 1: View from the Lily Pond



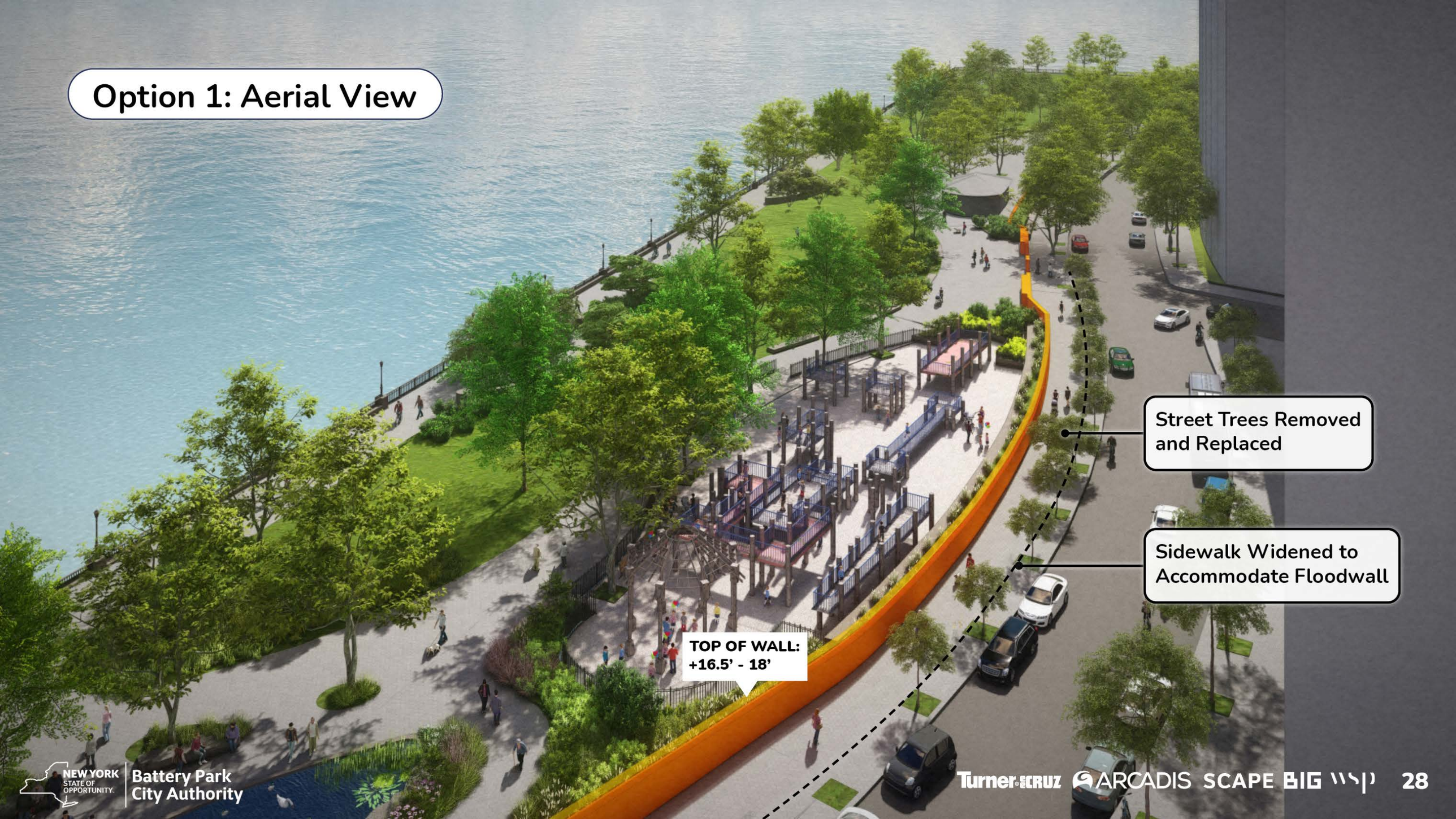
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Existing View from the Street

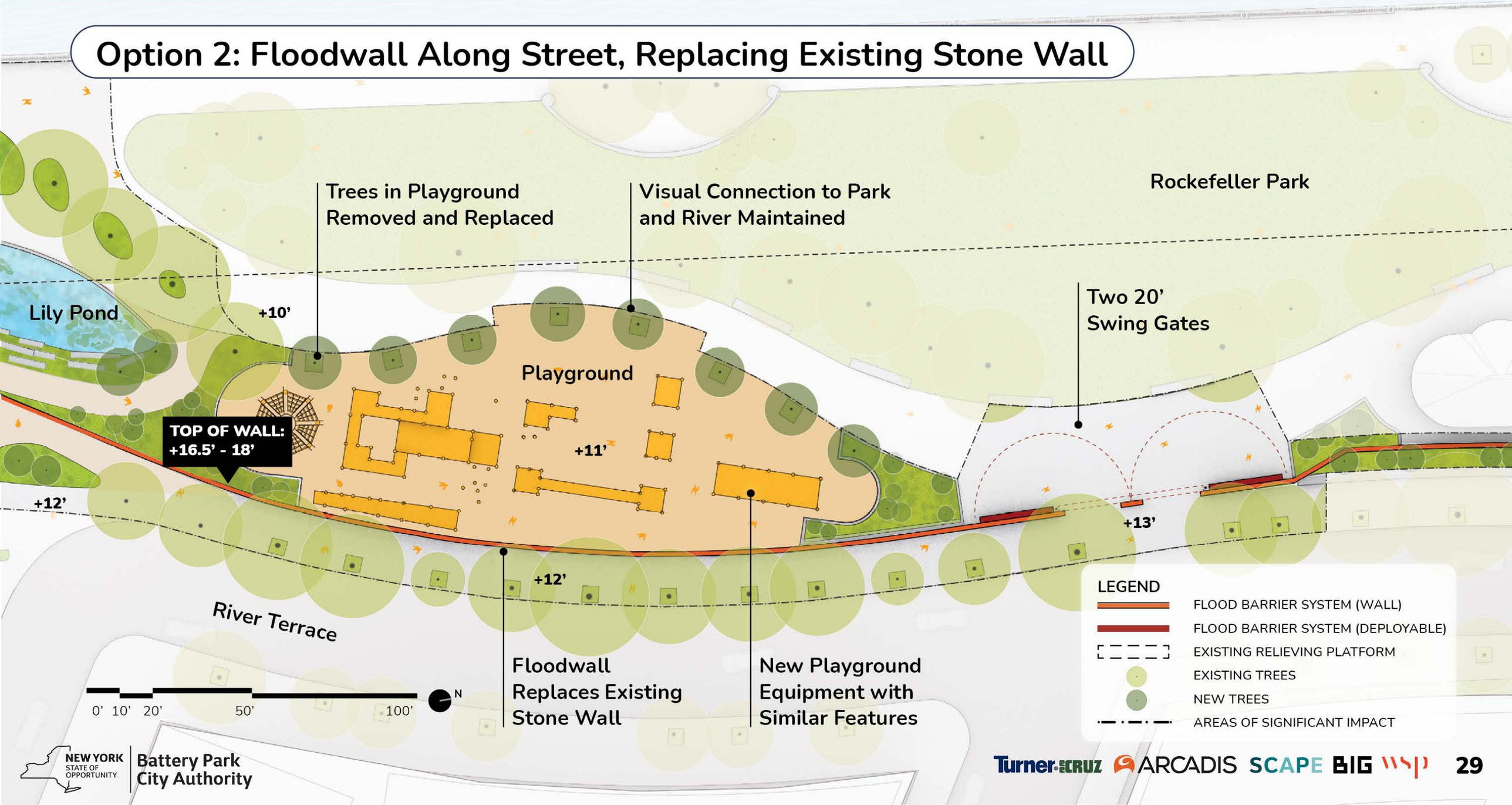



Option 1: View from the Street
Existing Playground to Remain
TOP OF WALL: +16.5’ - 18’
6’
4.5’
+ 12’

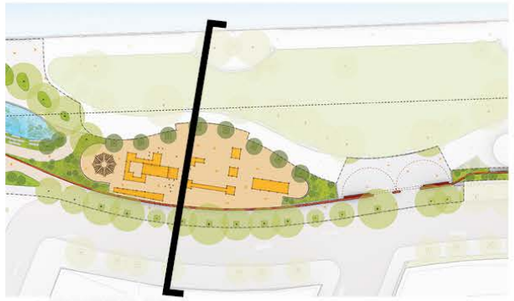
Option 1: Aerial View

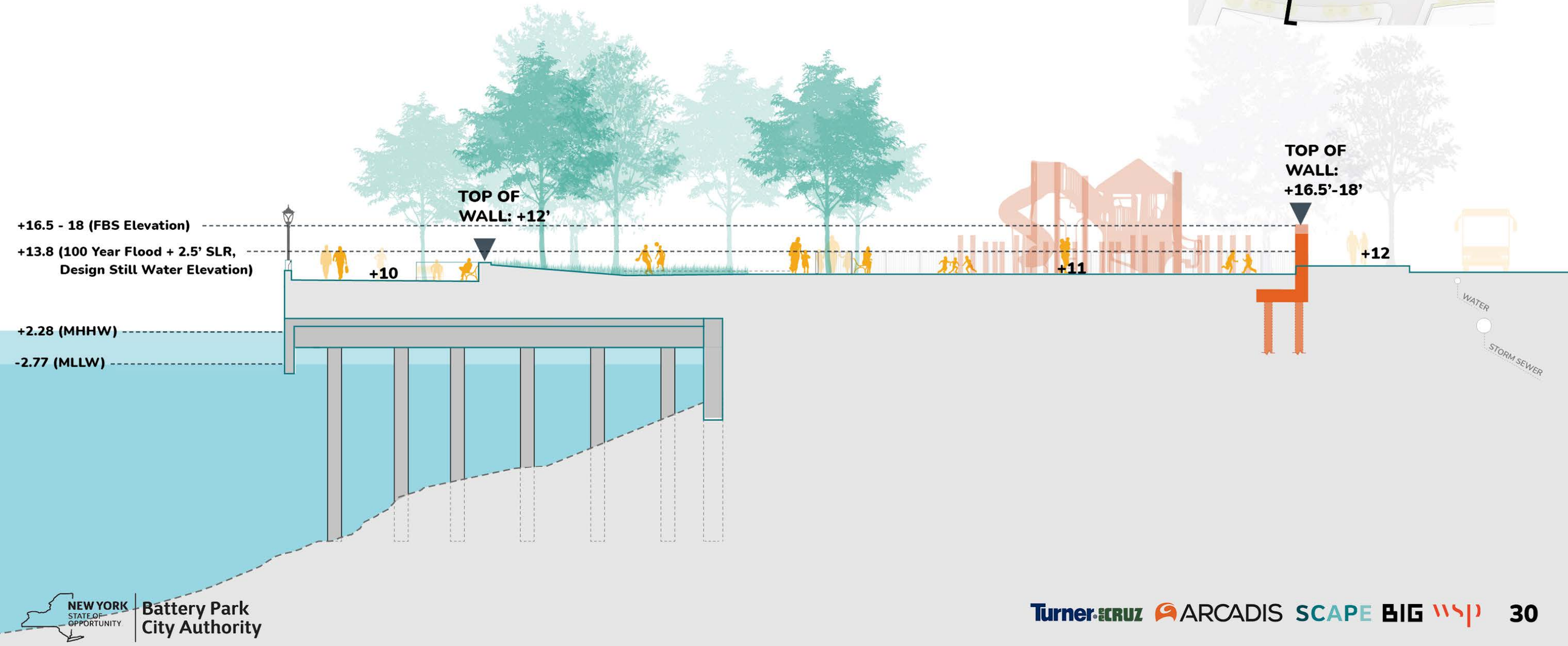


Option 2: Floodwall Along Street, Replacing Existing Stone Wall



Option 2: Floodwall Along Street, Replacing Existing Stone Wall





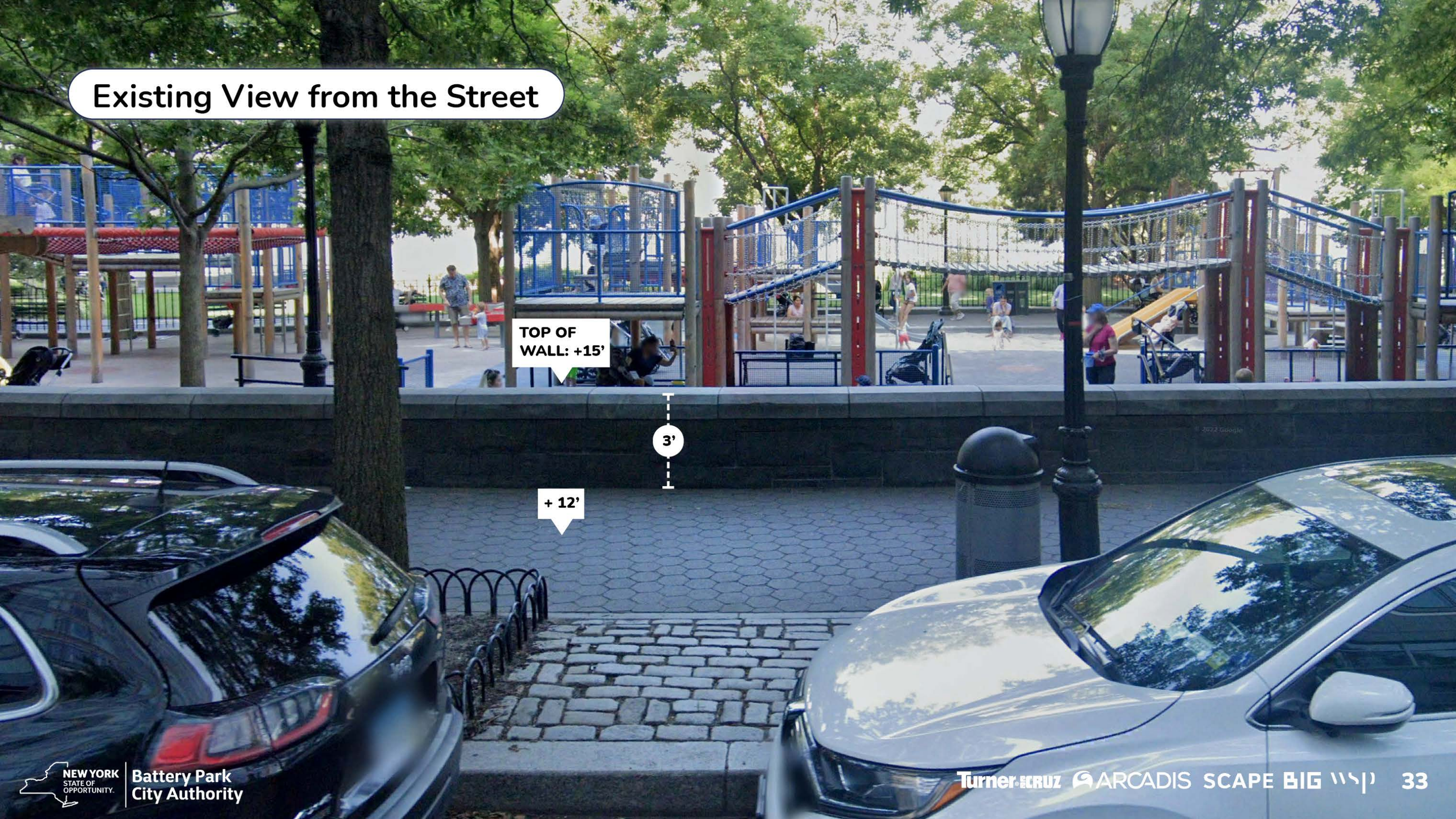
Existing View from the Lily Pond



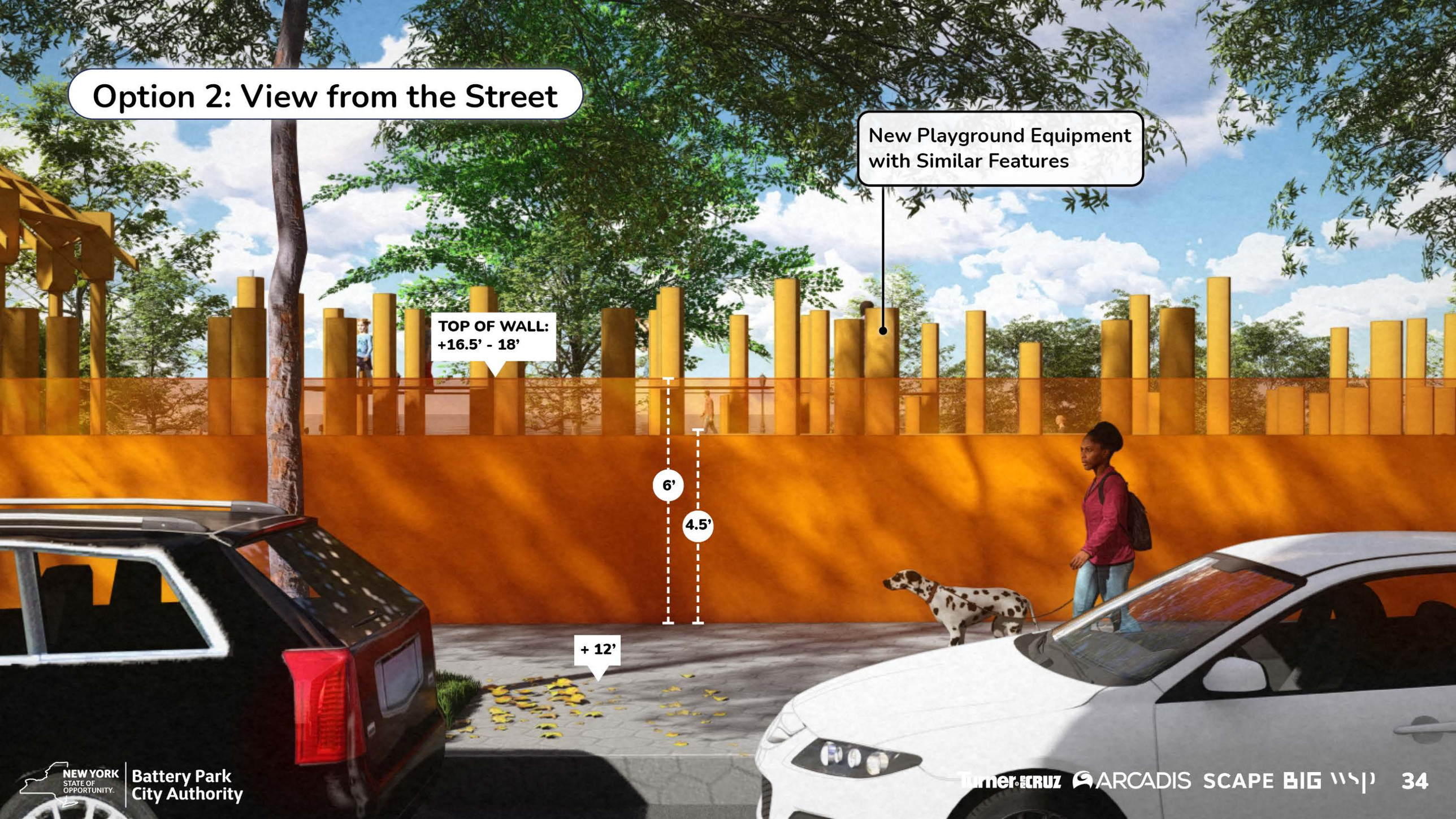
Option 2: View from the Lily Pond



Existing View from the Street



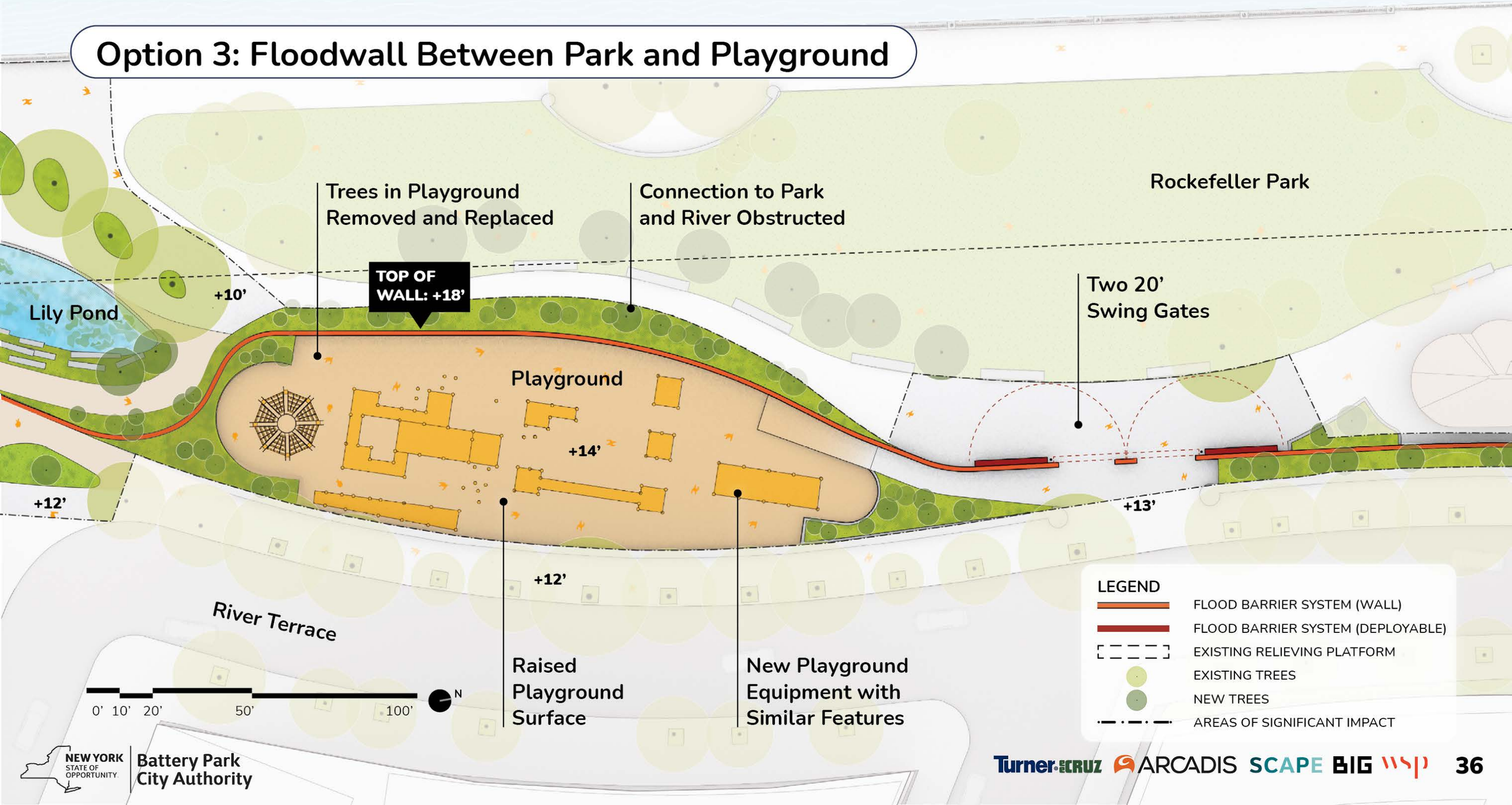
Option 2: View from the Street



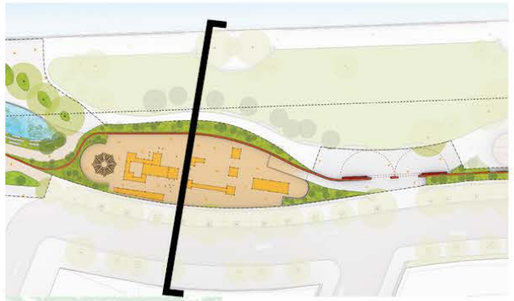
Option 2: Aerial View

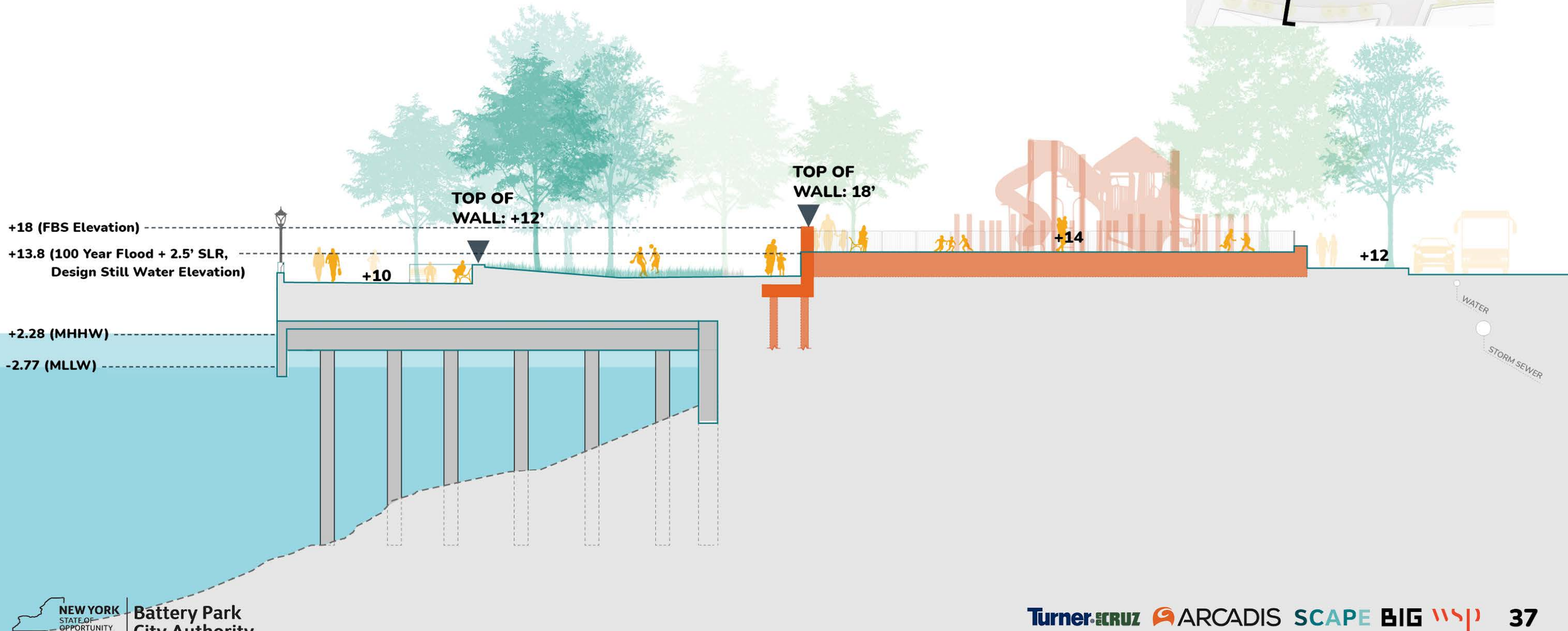


Option 3: Floodwall Between Park and Playground



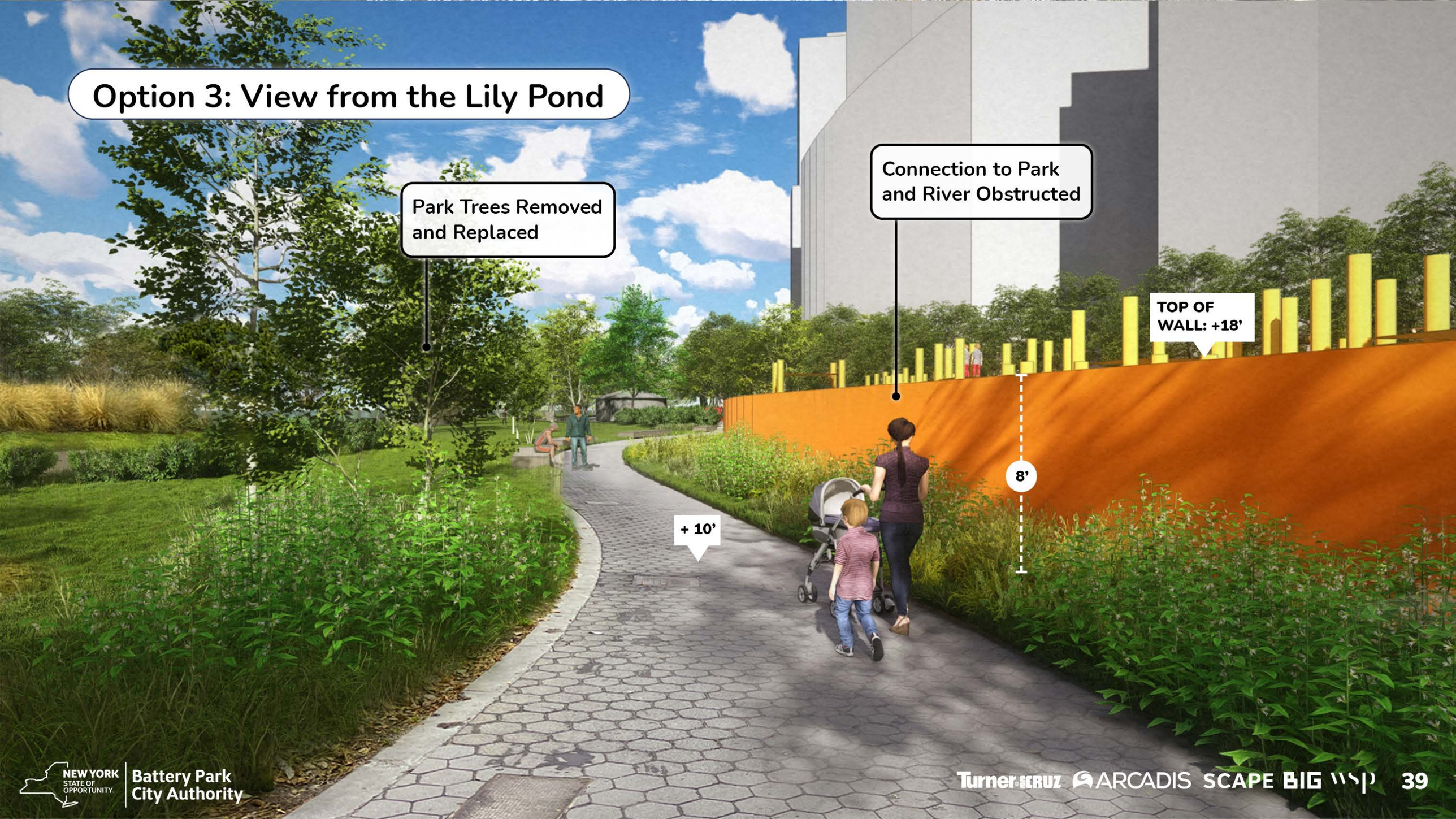
Option 3: Floodwall Between Park and Playground



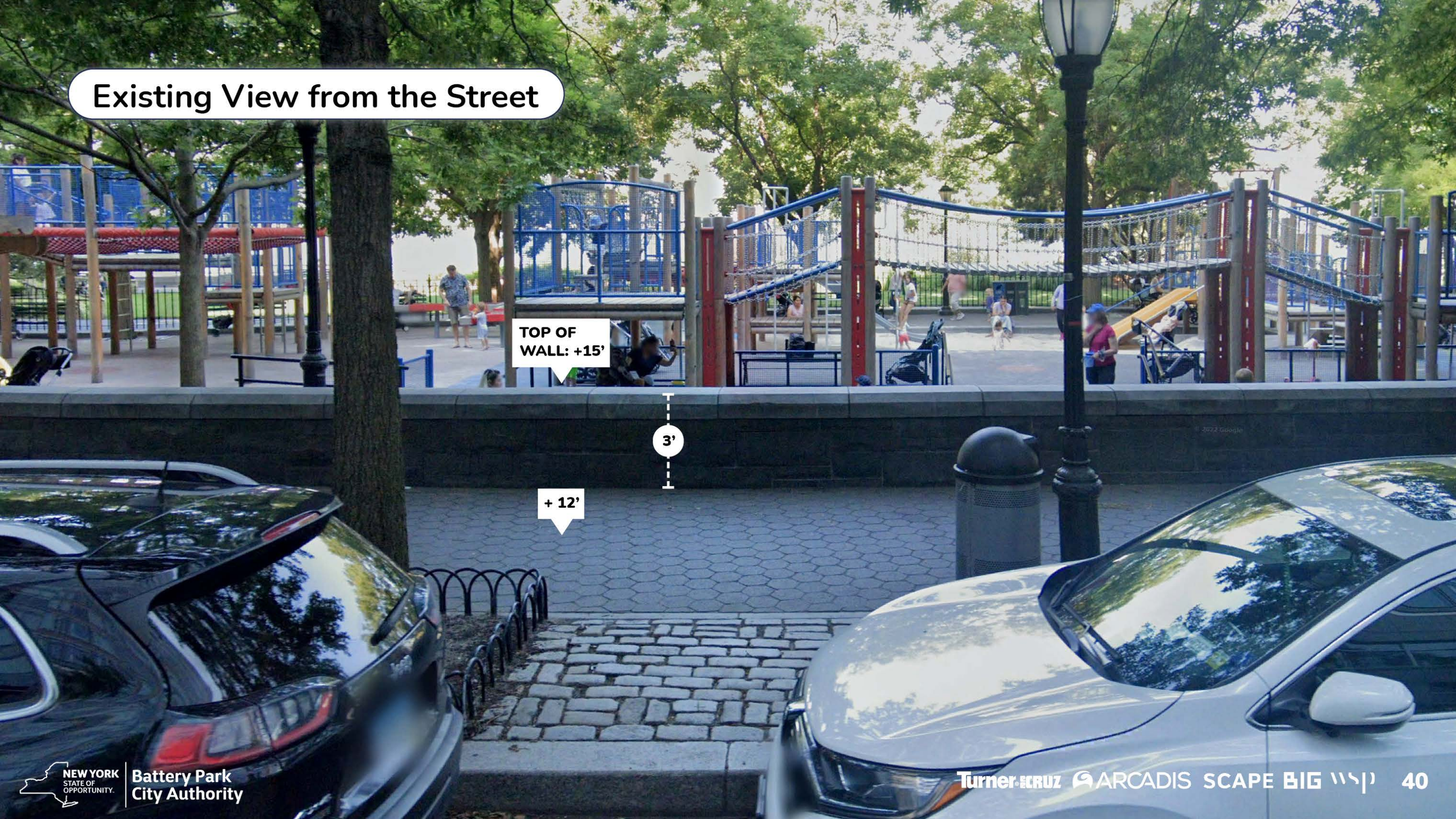


Existing View from the Lily Pond



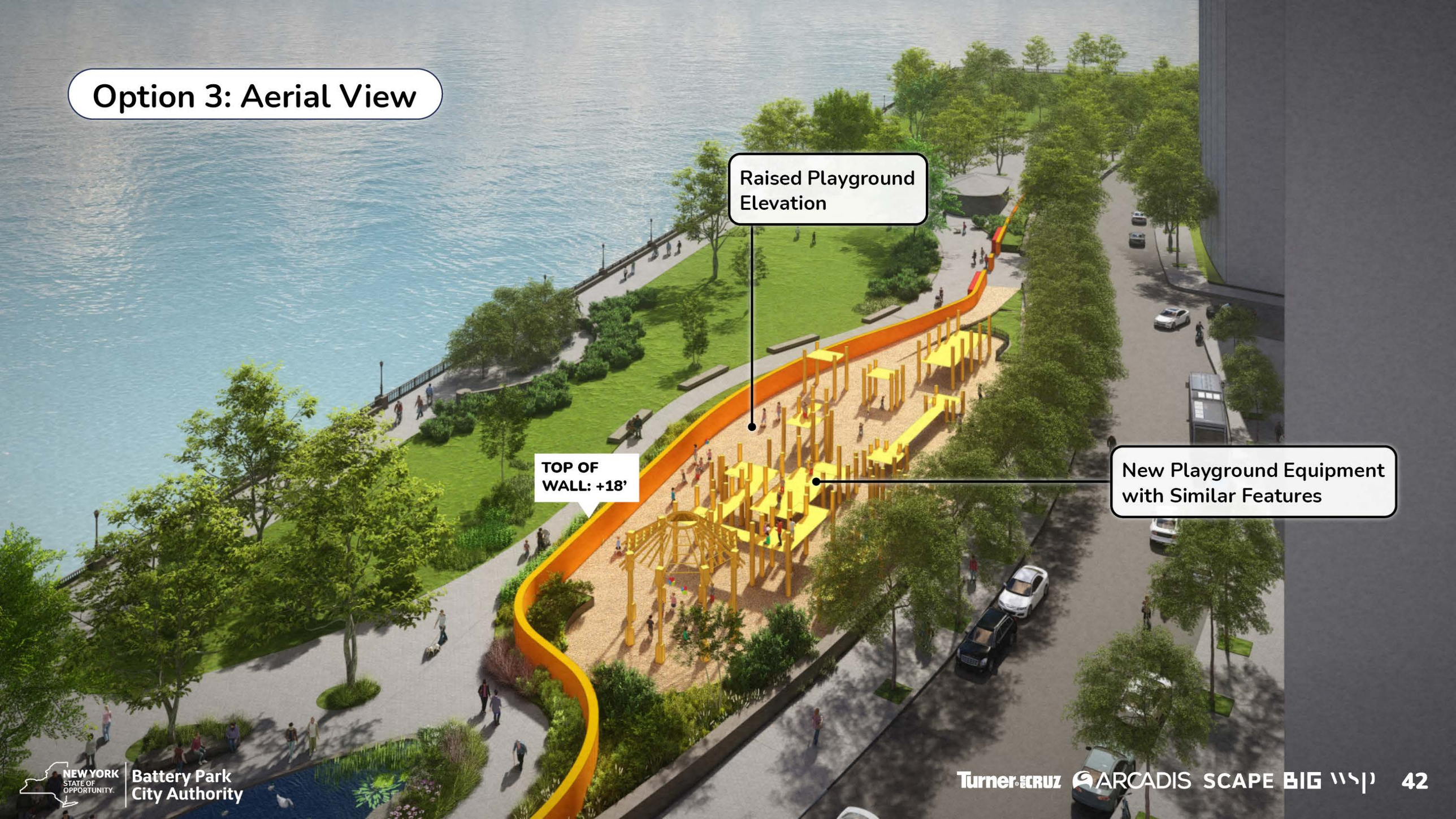

Option 3: View from the Lily Pond
Park Trees Removed and Replaced
Connection to Park and River Obstructed
TOP OF WALL: +18’
8’
+ 10’

Existing View from the Street

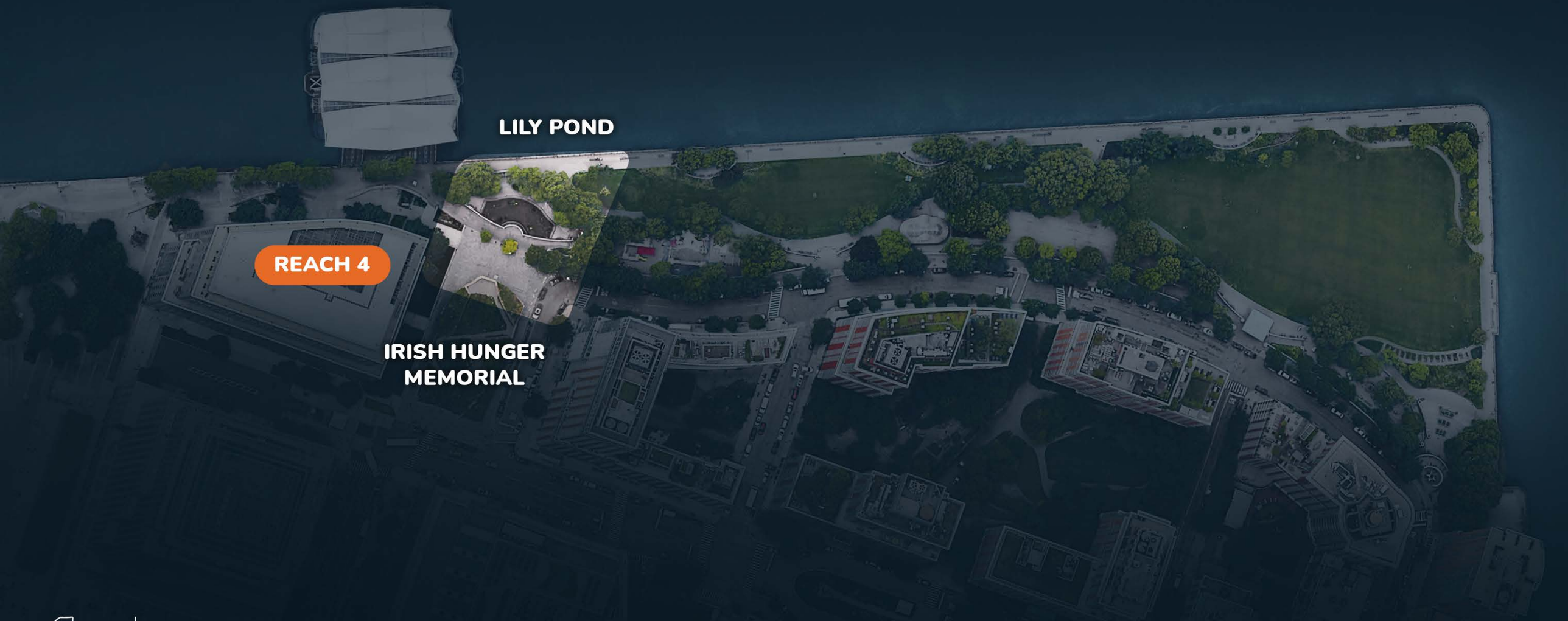



Option 3: View from the Street
Views of the River Obstructed
New Playground Equipment with Similar Features
TOP OF WALL: +18’
+ 14’
4’
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Option 3: Aerial View



Lily Pond and Irish Hunger Memorial Area



Existing Conditions



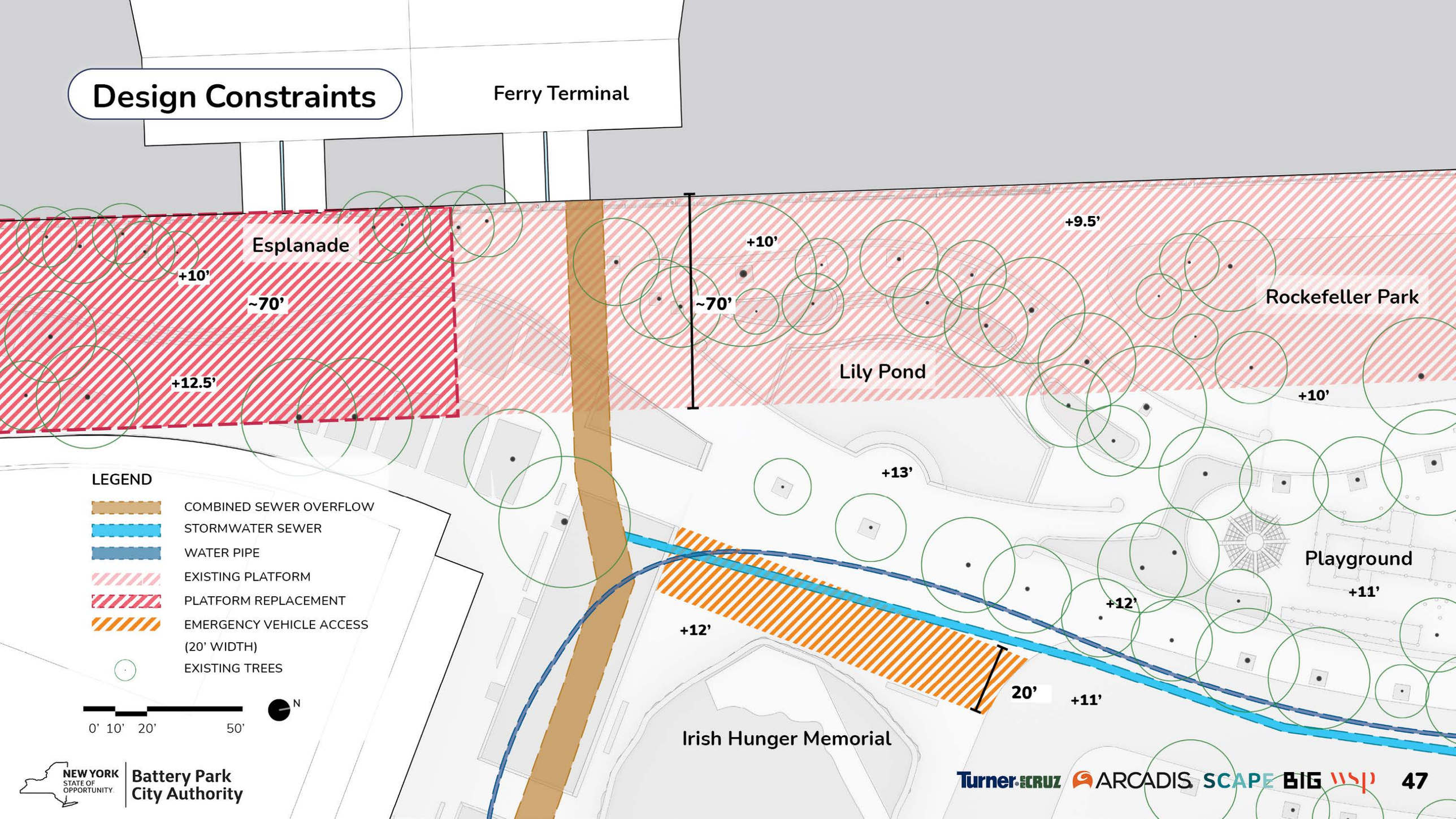
Existing Conditions



What We Heard

- Respect and reflect qualities of the existing space
- Improve and enhance circulation and accessibility
- Enhance the ecological and habitat value
- Minimize impact to existing trees

Design Constraints



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New Design Options

1: Floodwall and roller gate

Minimal impact to lily pond



2: Floodwall with swing gates and plaza regrading

Expanded lily pond with habitat improvements

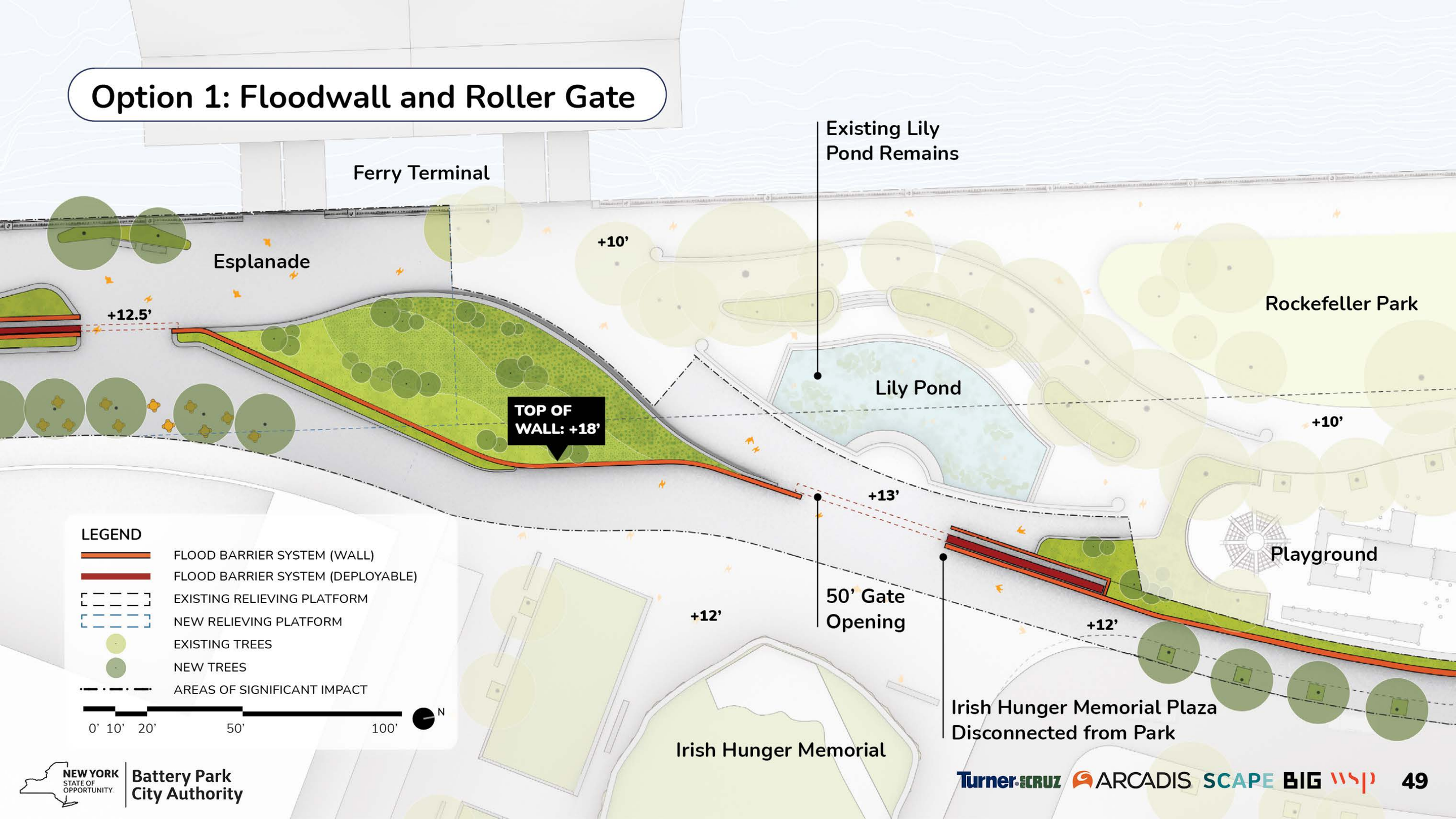


3: Passive berm with partially concealed floodwall

Berm and expanded lily pond with habitat improvements

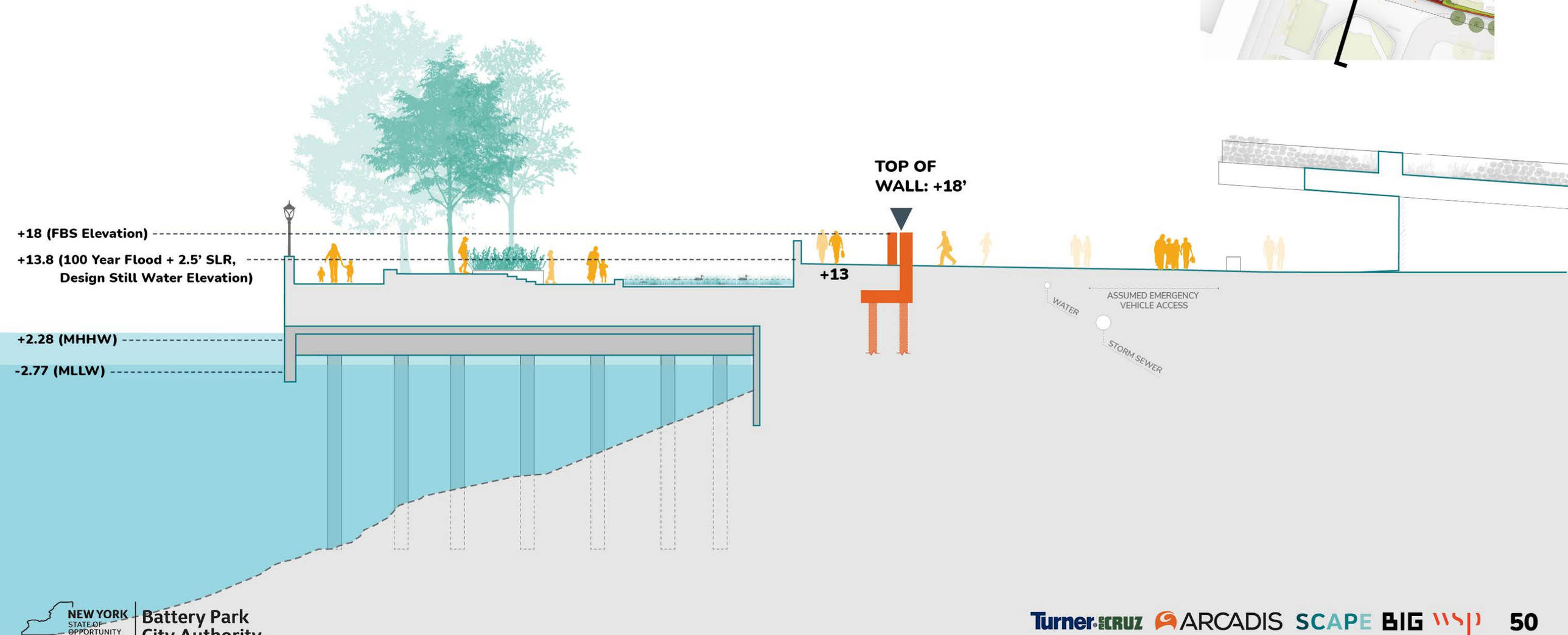


Option 1: Floodwall and Roller Gate



Option 1: Floodwall and Roller Gate





Existing Conditions



Option 1: View Toward Lily Pond



Existing Conditions

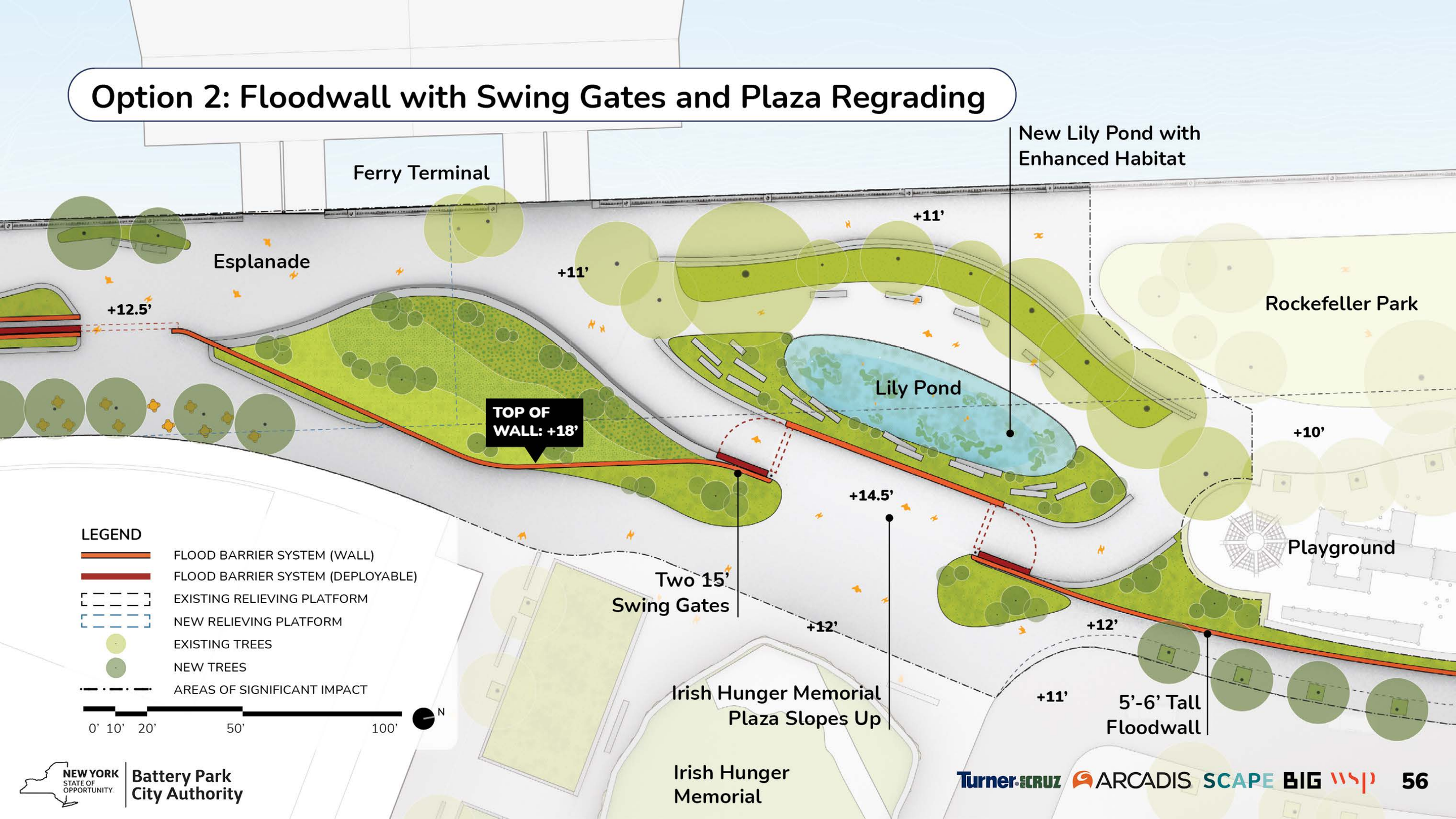


Option 1: From the Irish Hunger Memorial



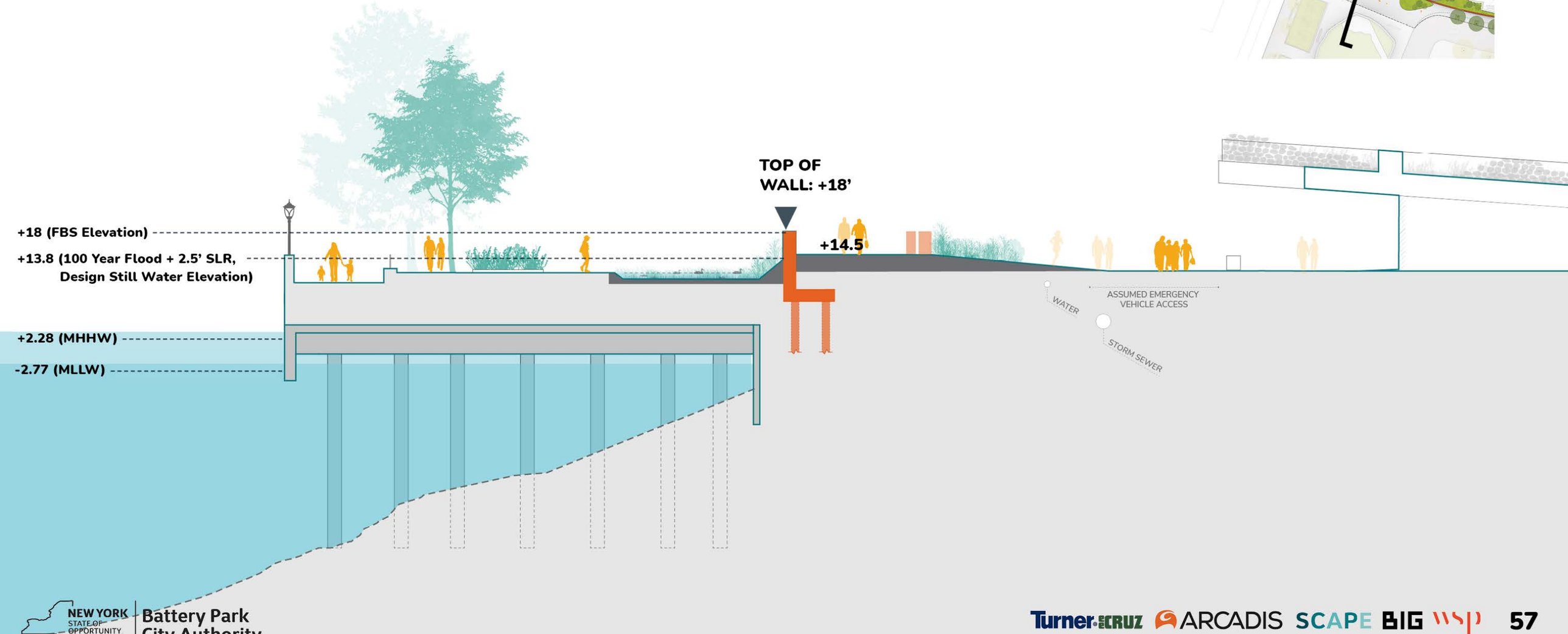

Option 1: Aerial View
TOP OF WALL: +18’
Existing Lily Pond to Remain
+ 13’
5’-6’ Tall Floodwall
+ 10’
Irish Hunger Memorial Disconnected from Park
+ 12’
+ 12’

Option 2: Floodwall with Swing Gates and Plaza Regrading



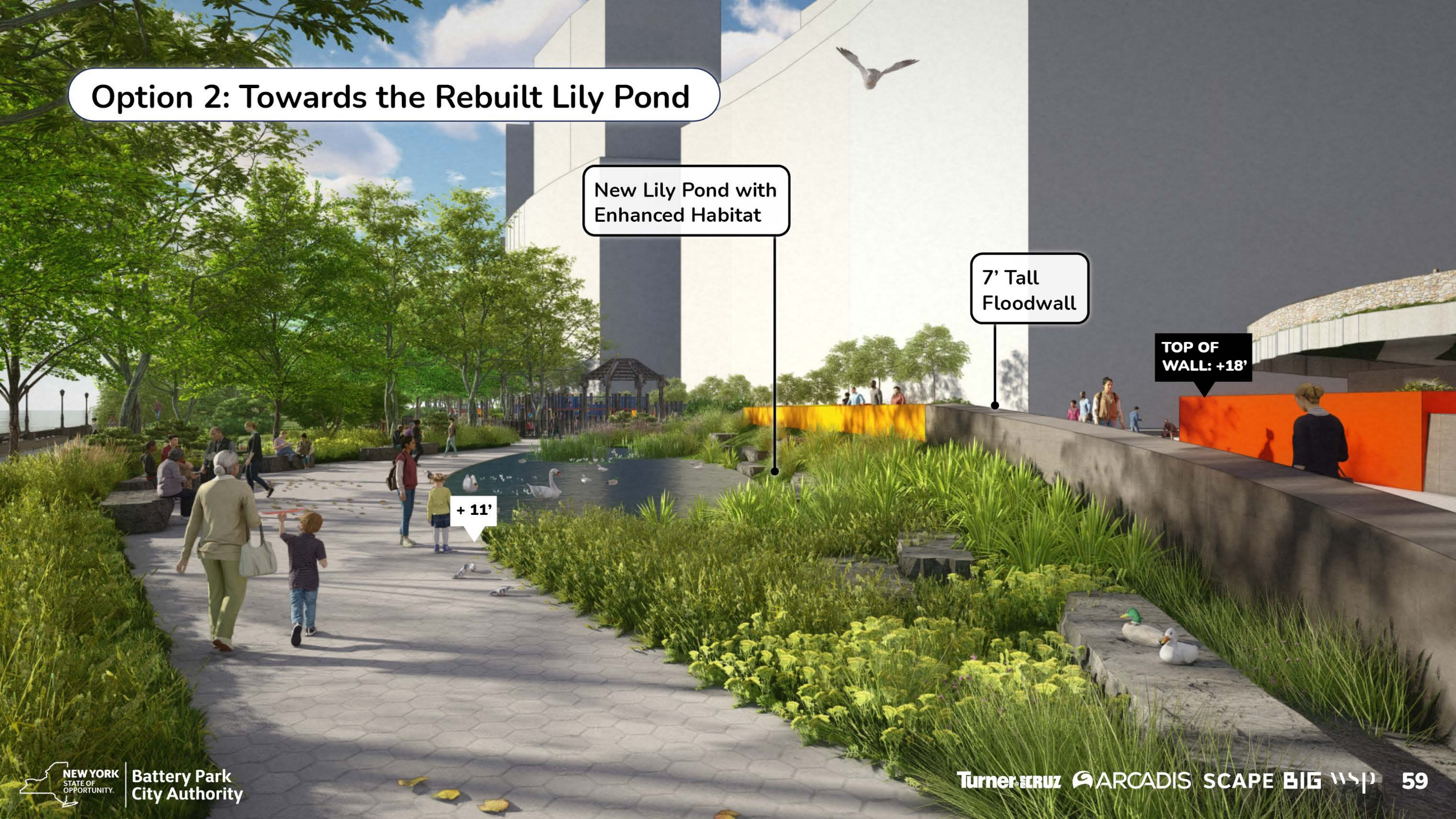
Option 2: Floodwall with Swing Gates and Plaza Regrading






Existing Conditions
TOP OF WALL: +15.2’

Option 2: Towards the Rebuilt Lily Pond

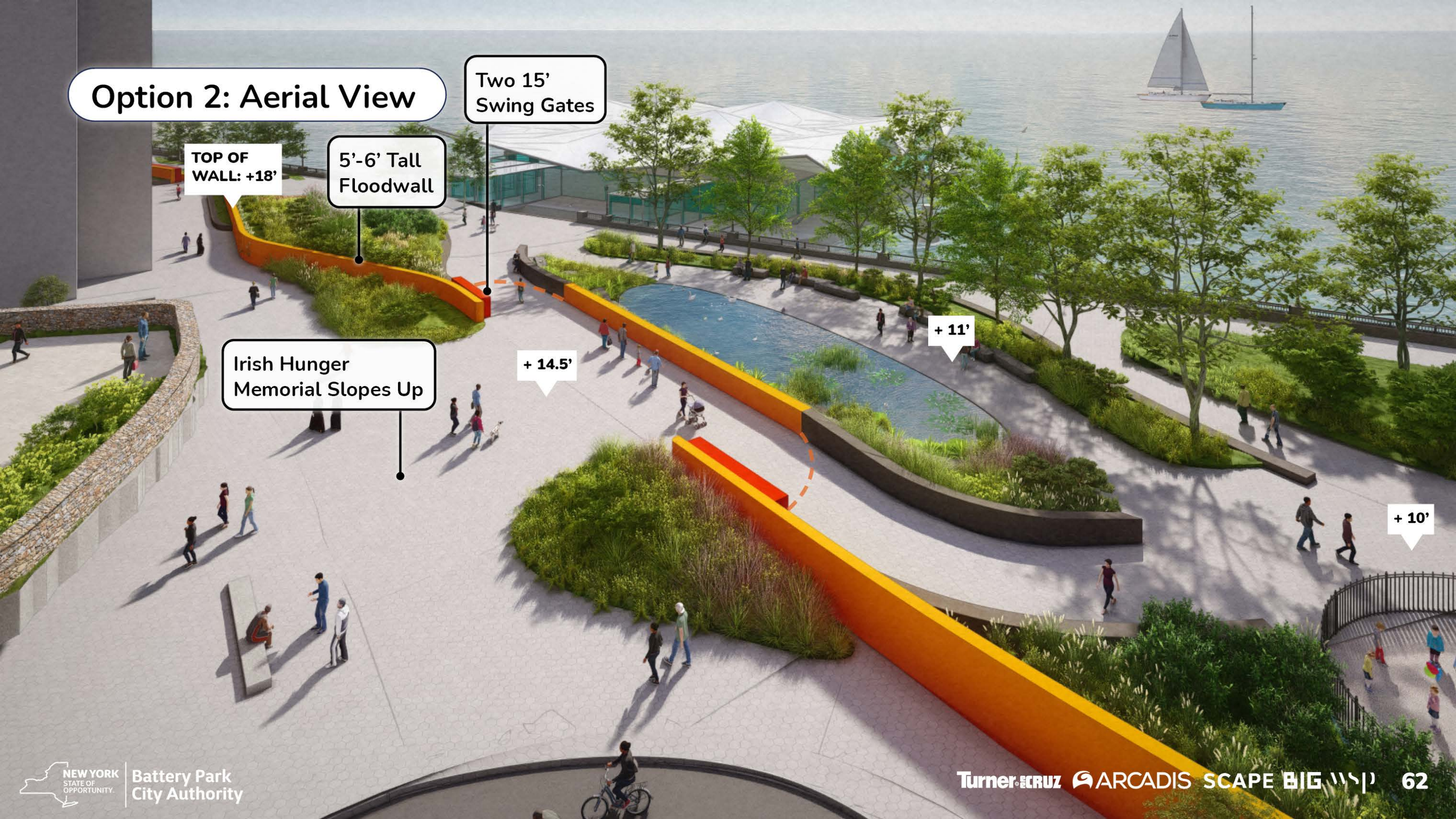


Existing Conditions

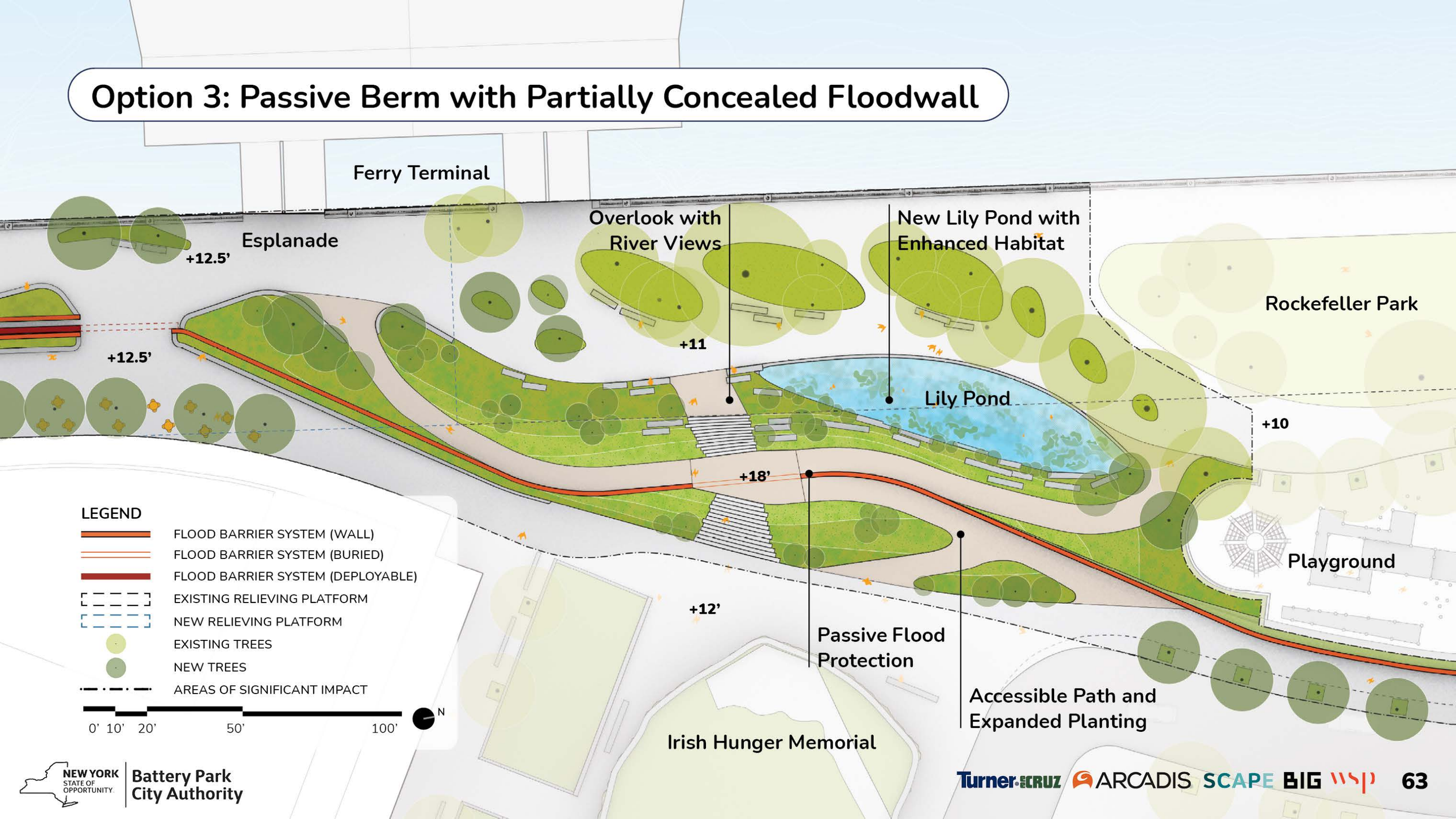


Option 2: From the Irish Hunger Memorial



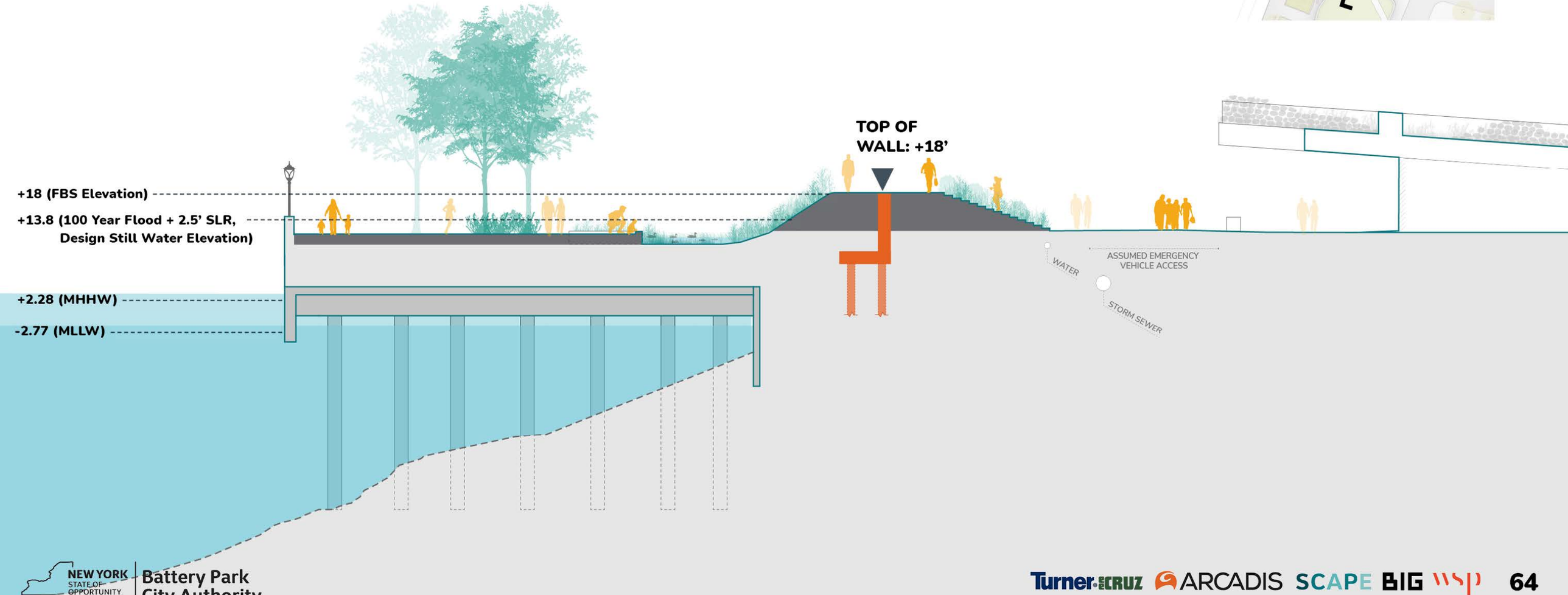

Option 2: Aerial View
Two 15’ Swing Gates
TOP OF WALL: +18’
5’-6’ Tall Floodwall
Irish Hunger Memorial Slopes Up
+ 14.5’
+ 11’
+ 10’

Option 3: Passive Berm with Partially Concealed Floodwall



Option 3: Passive Berm with Partially Concealed Floodwall

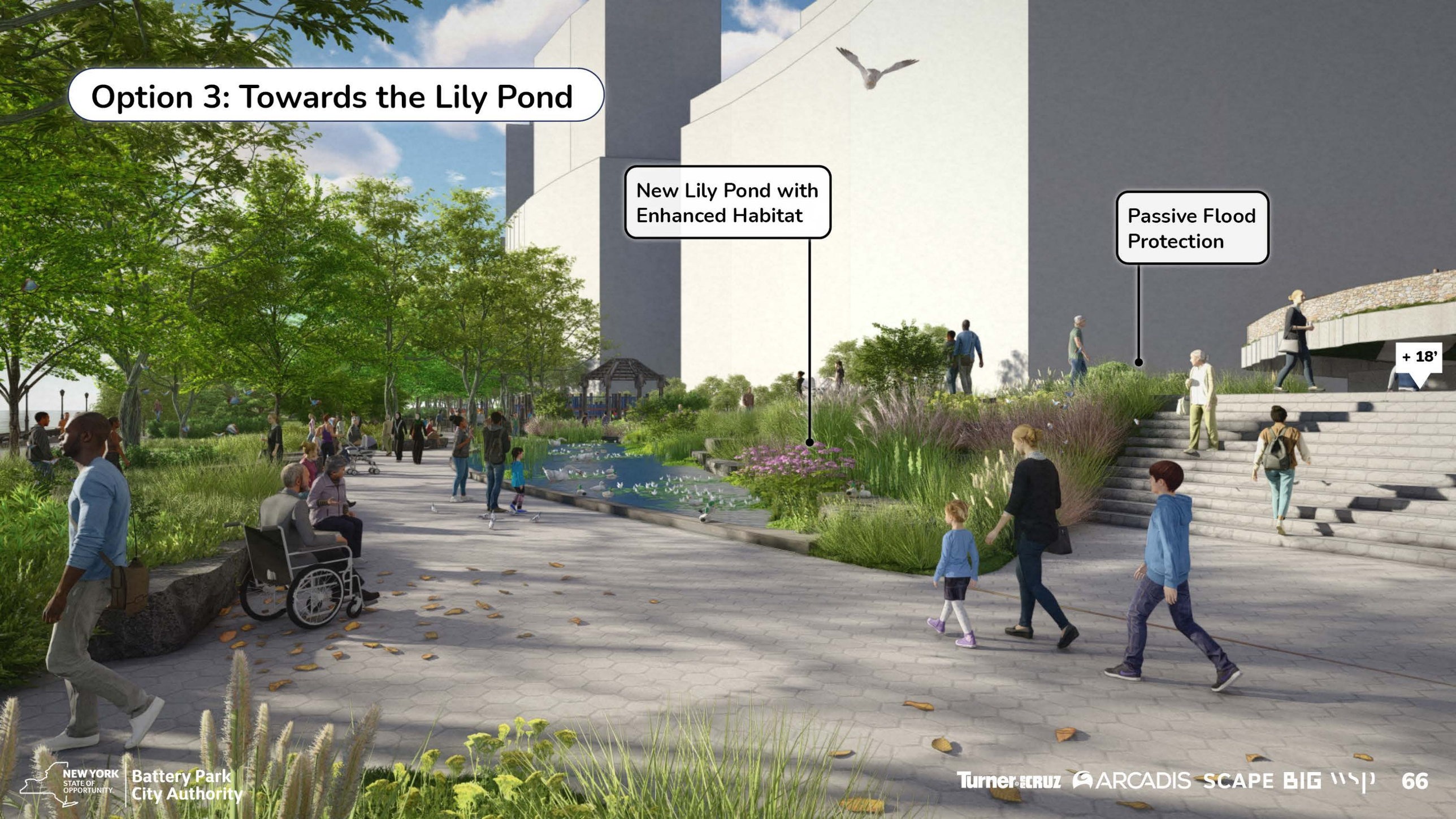




Existing Conditions



Option 3: Towards the Lily Pond



Existing Conditions



Option 3: From the Irish Hunger Memorial




Option 3: Aerial View
Overlook with River Views
Passive Flood Protection
New Lily Pond with Enhanced Habitat
TOP OF WALL: +18’
+ 18’
+ 11’
+ 10’
Enhanced Irish Hunger Memorial Plaza

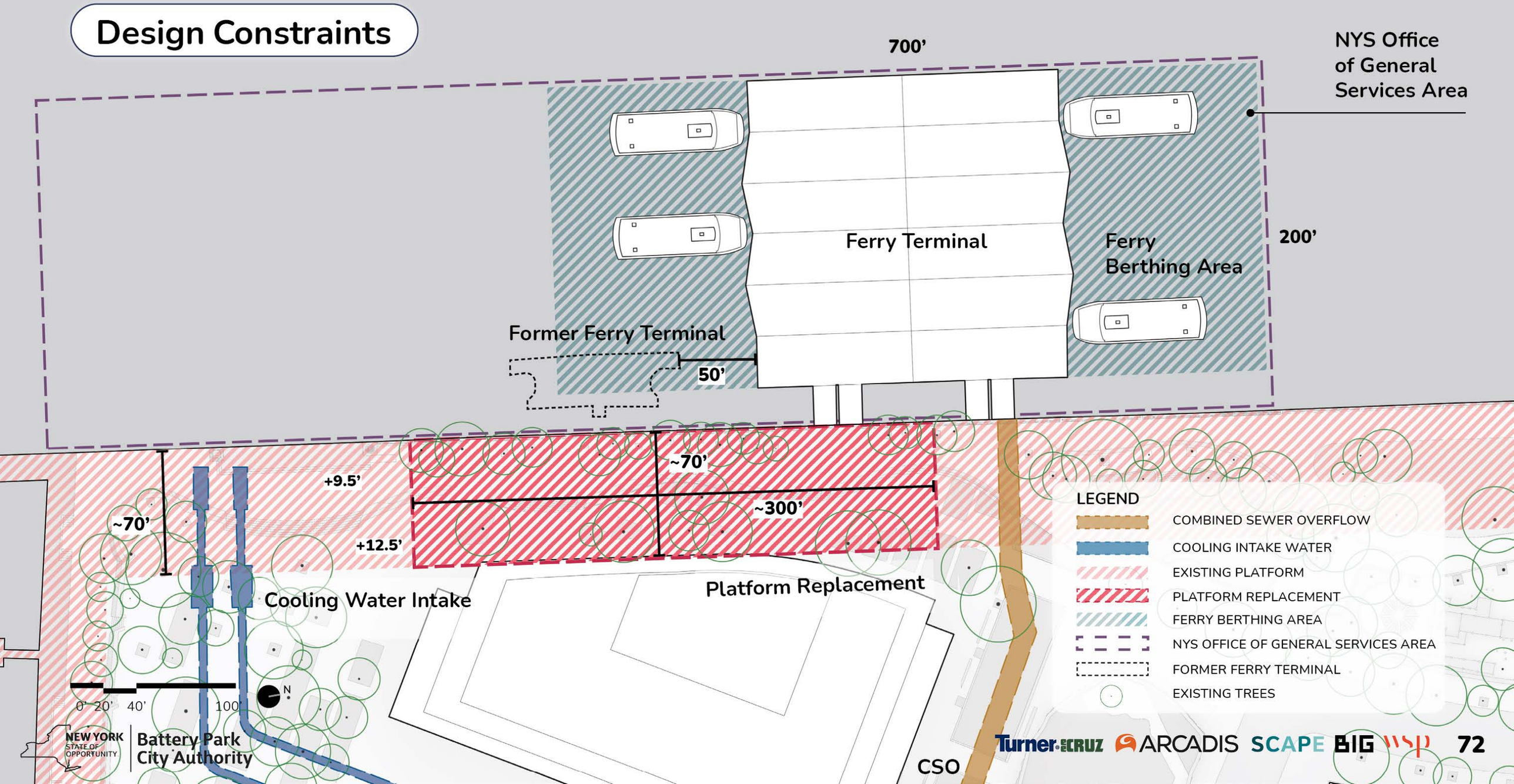
Esplanade and Ferry Terminal



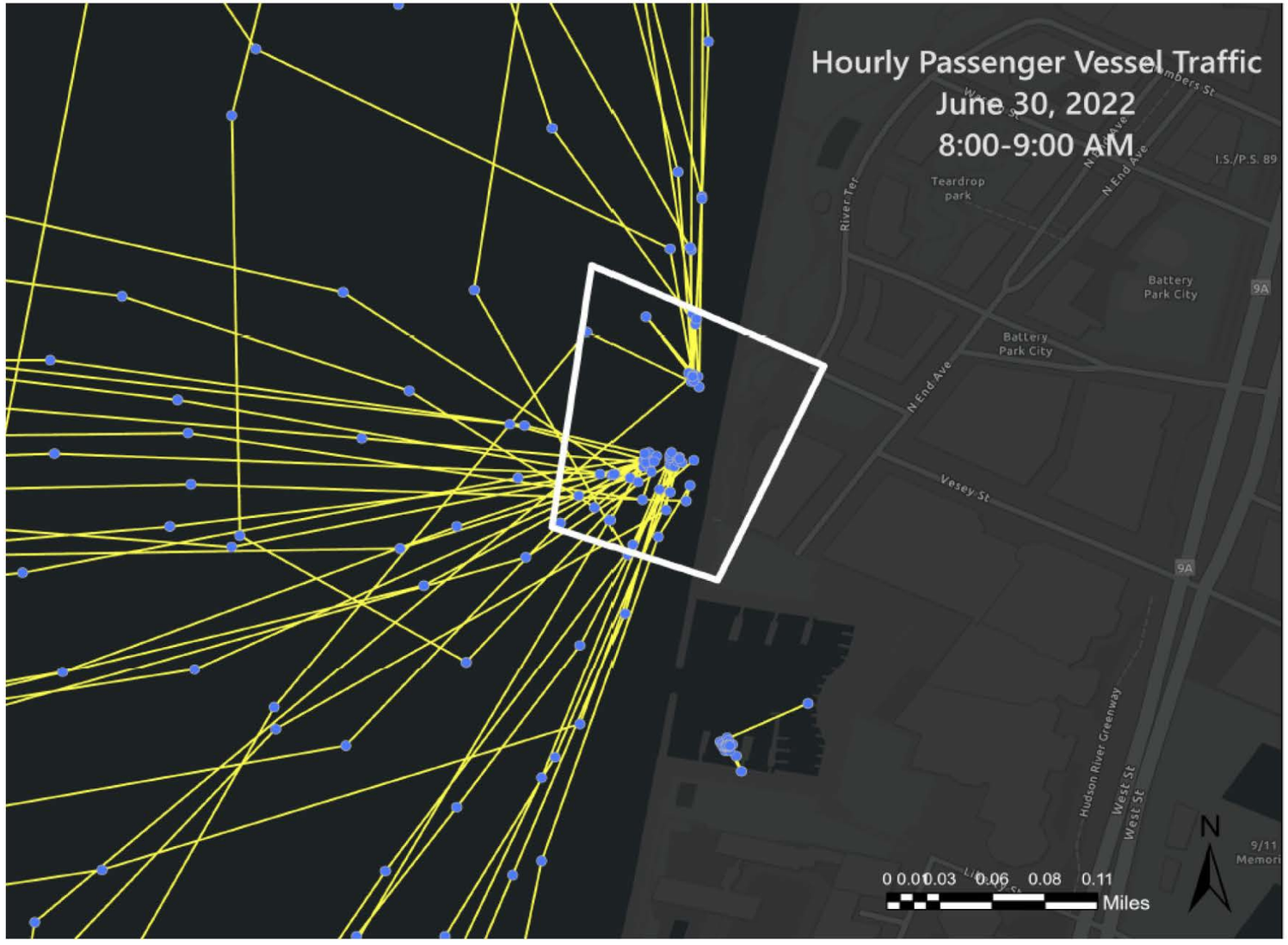
What We Heard

- Existing ferry operation is a source of disruption due to noise and vibrations
- Moving the ferry terminal to the north, even temporarily, will exacerbate these challenges

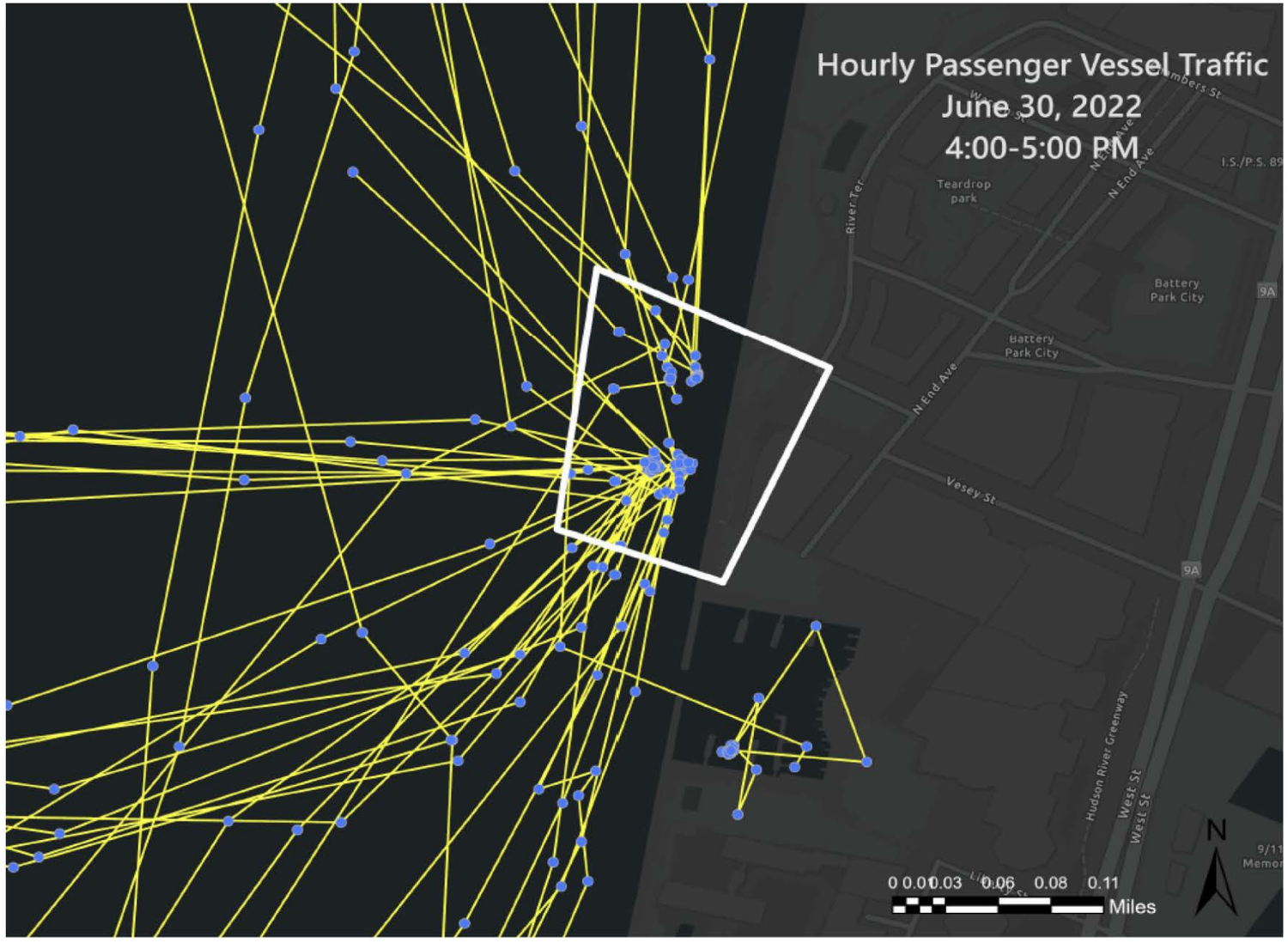
Design Constraints



Ferry Operations



Ferry Operations



Ferry Terminal: Next Steps Underway

- Evaluation of alternatives is still underway, and no option has been eliminated.
- Additional coordination with PANYNJ – better understanding of operational constraints and flexibility.
- Better understanding of concerns with intake sedimentation and potential mitigation options
- Construction logistics development for temporary relocation during construction or for leaving the terminal in place during construction – what is really feasible?
- What are the tradeoffs for a permanent terminal relocation after construction?