# NORTH/WEST BATTERY PARK CITY RESILIENCY PROJECT

## Reach 6 and 7 Workshop

March 6, 2023

NEW YORK STATE OF OPPORTUNITY. | Battery Park City Authority

Turner | DE LA 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

# BATTERY PARK CITY

# A Piece of a Connected & Resilient Waterfront









TRIBECA

SEAPORT

FINANCIAL DISTRICT

US ARMY CORPS OF ENGINEERS NY-NJ HARBOR AND TRIBUTARIES STUDY

BATTERY PARK CITY RESILIENCE PROJECTS
1.15 MILES

BROOKLYN BRIDGE - MONTGOMERY COASTAL RESILIENCE
.80 MILES

EAST SIDE COASTAL RESILIENCY

THE FINANCIAL DISTRICT AND SEAPORT CLIMATE RESILIENCE MASTERPLAN
HIGHLY CONSTRAINED AREA
.90 MILE

THE BATTERY COASTAL RESILIENCE
.33 MILES

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# Today's Focus Area



# Future Flood Risk



# REACHES 6 & 7

# Reach 6 + 7




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# REACH 6:
# SOUTH ESPLANADE

# Battery Park City Esplanade




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# Esplanade




Existing Paths

## What We Heard

- **Concerns over Impact On Waterfront: Access And Views**
- **Desire to Maintain Waterfront Esplanade and Canopy**
- **Crowding and Mobility Conflicts at Intersections**
- **Concerns Over Use of Bicycles**

# What We Heard



## REACH 6A: PRIVACY WALL

**ADVANTAGES:**
Maximizes preservation of existing mature tree canopy
Opportunity for new hard and softscape (upper promenade)
More waterfront access through construction
Lower construction cost

**DISADVANTAGES:**
Potentially increased technical complexity
Adjacent to residential structures
Lower-level view impacts

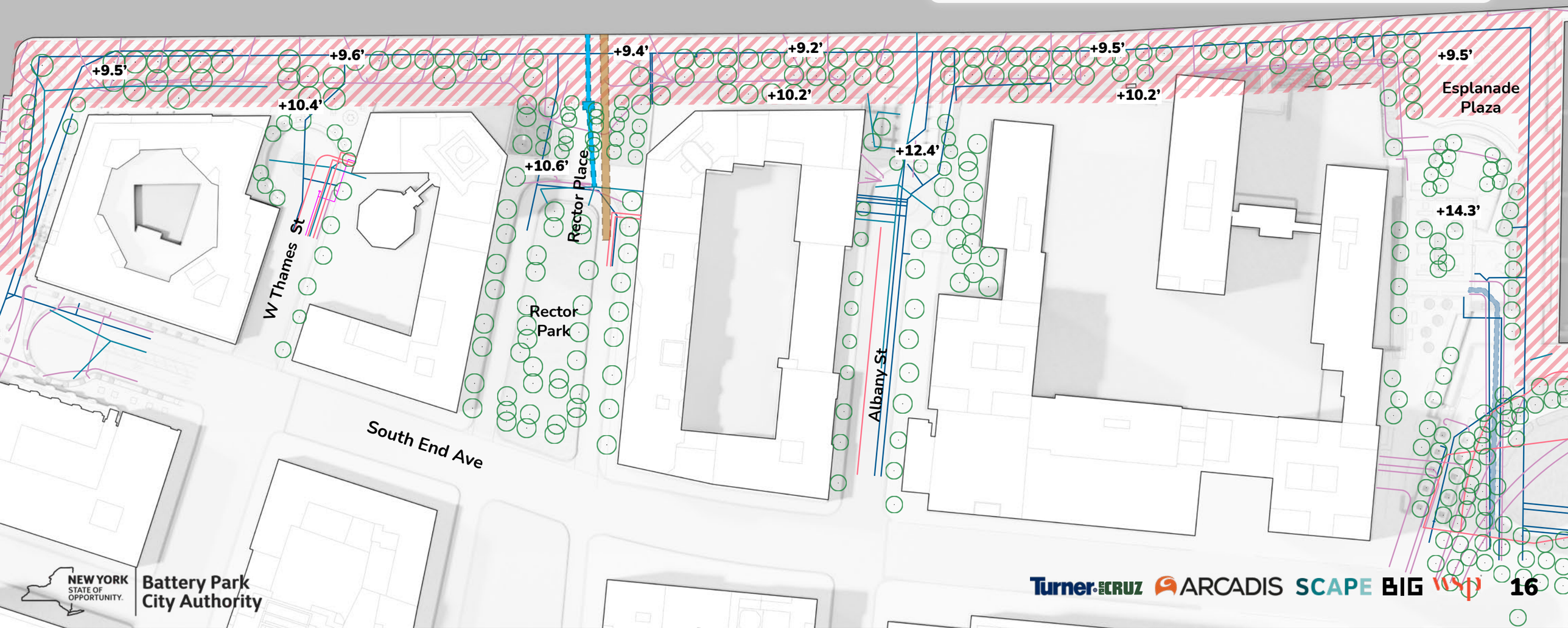


## REACH 6B: PLATFORM RECONSTRUCTION & ELEVATION (WEST OF PRIVACY WALL)

**ADVANTAGES:**
Opportunity to raise platform for more resiliency
Potential for more engagement with water's edge

**DISADVANTAGES:**
Loss of existing mature tree canopy
Disruption to waterfront access during construction
Longer construction duration
More agency coordination
Higher construction cost
Lower-level view impacts

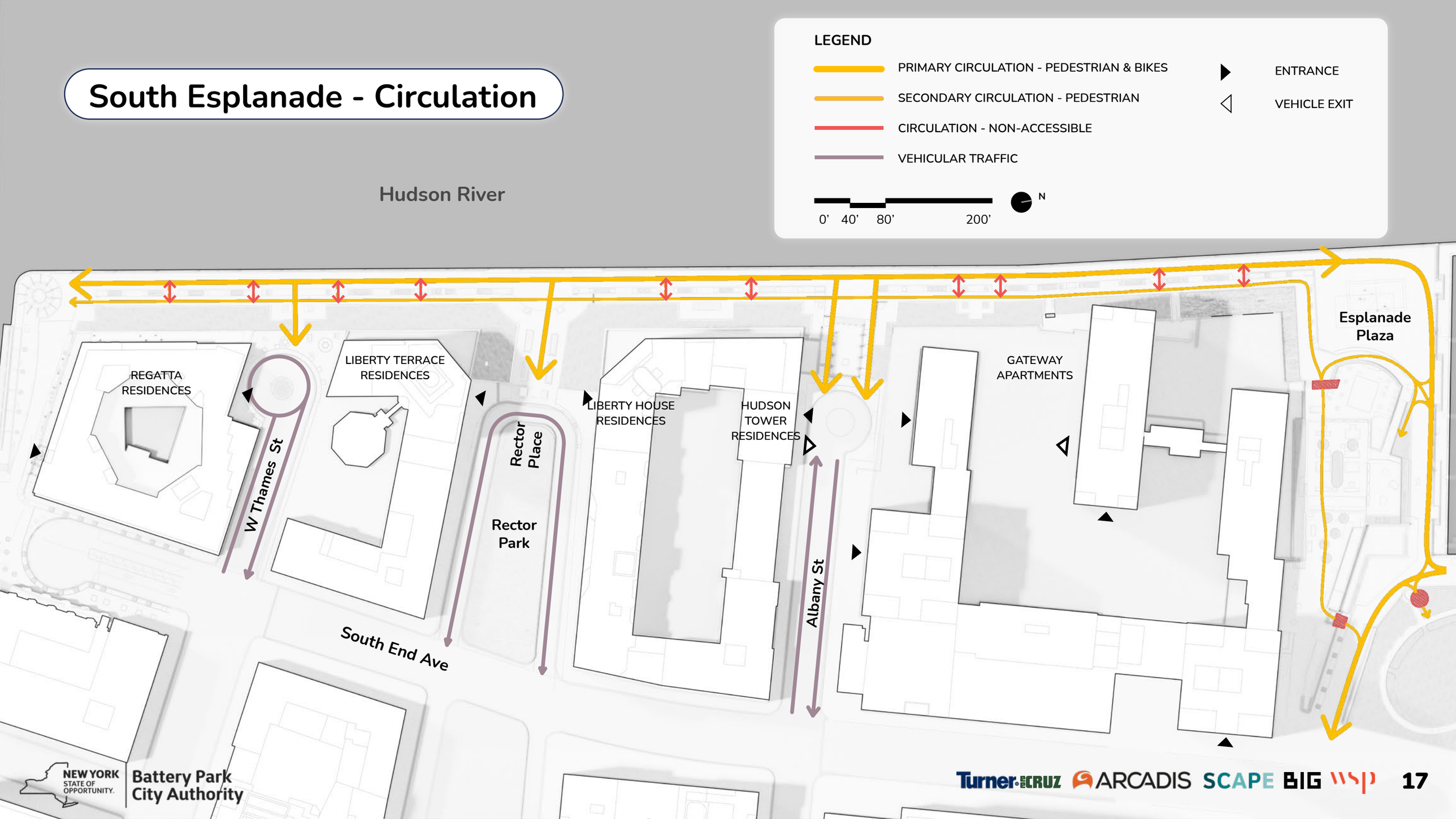
# South Esplanade - Constraints



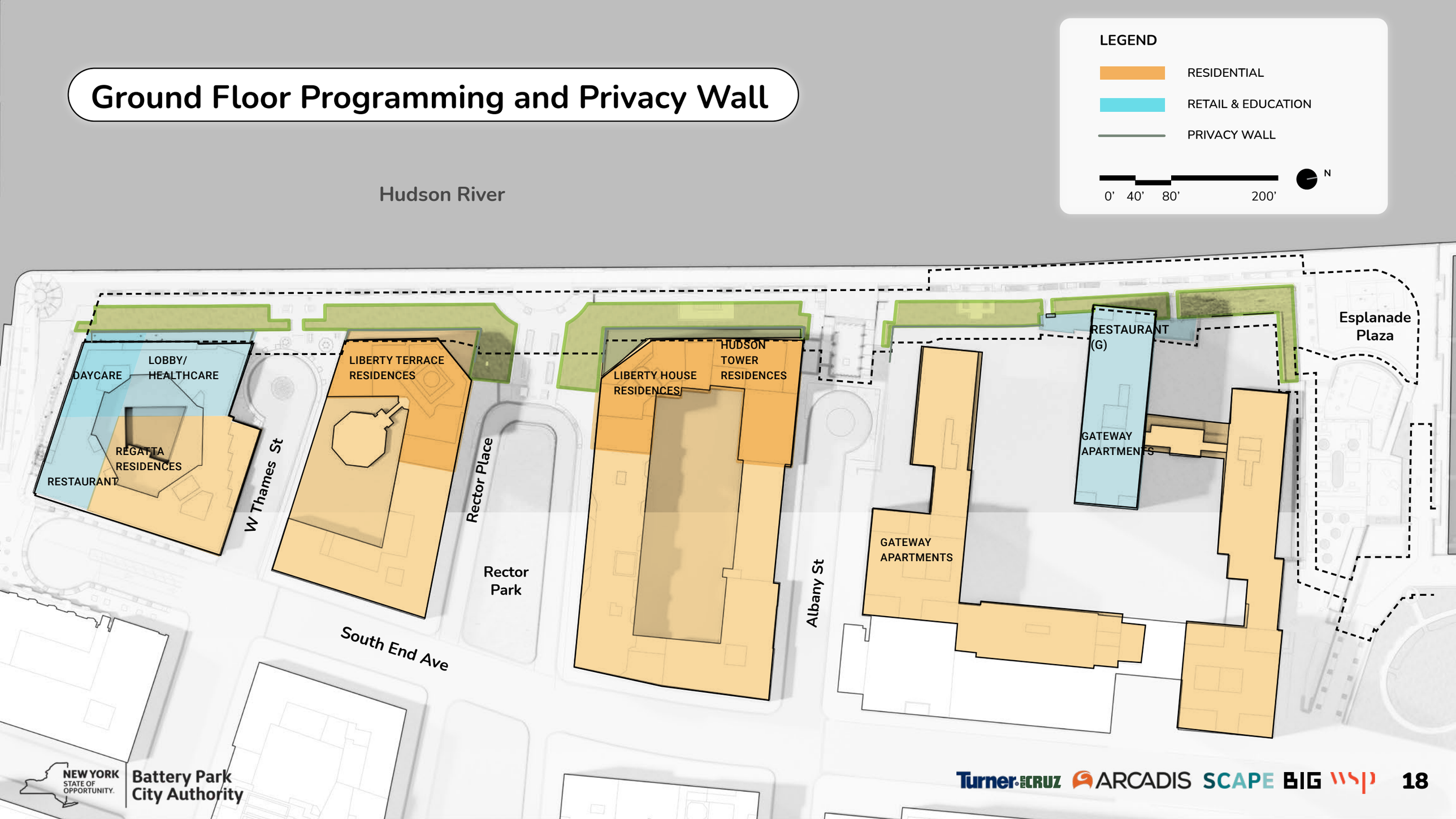

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# South Esplanade - Circulation



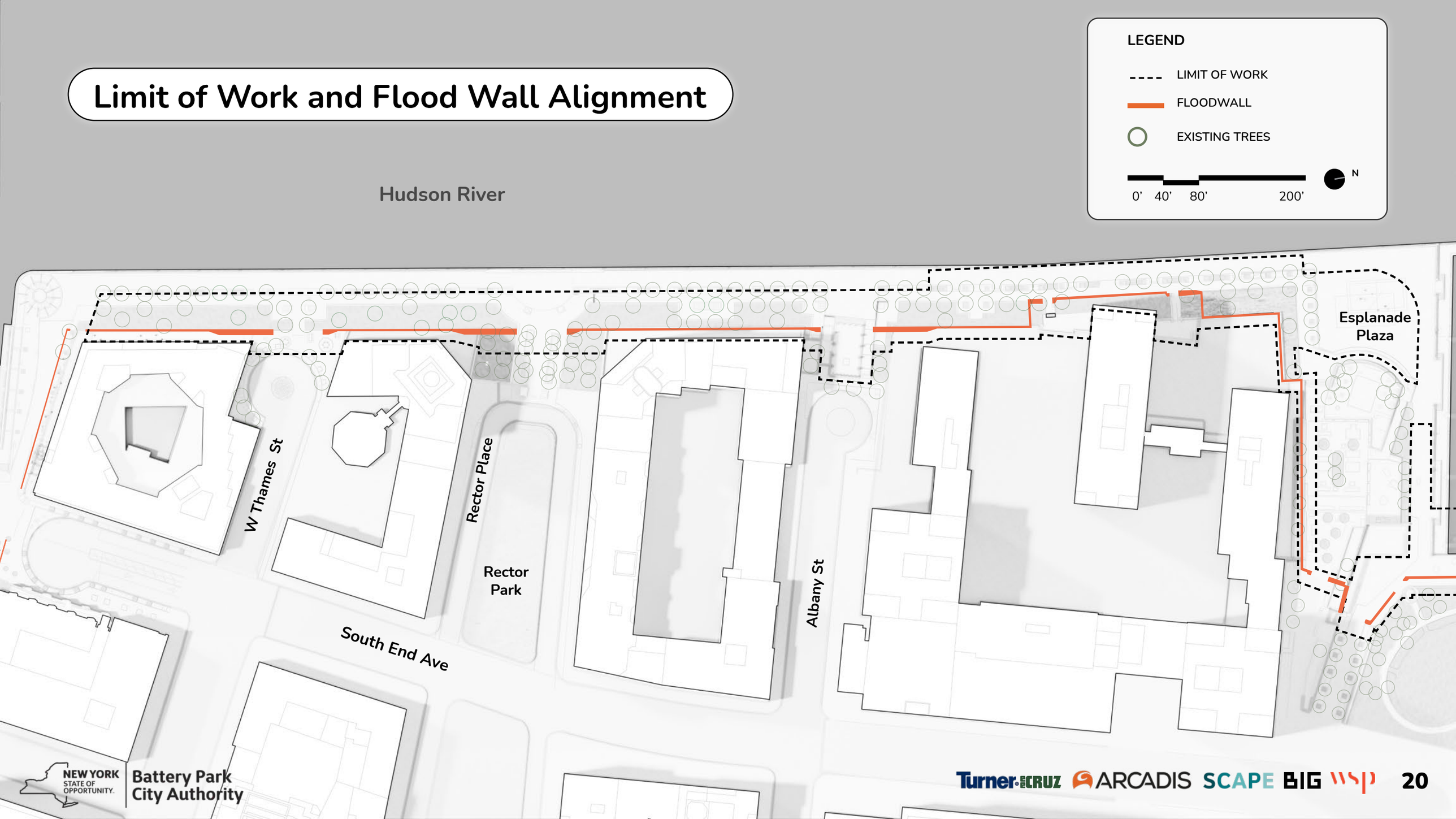
# Ground Floor Programming and Privacy Wall



# Existing Green Space and Trees



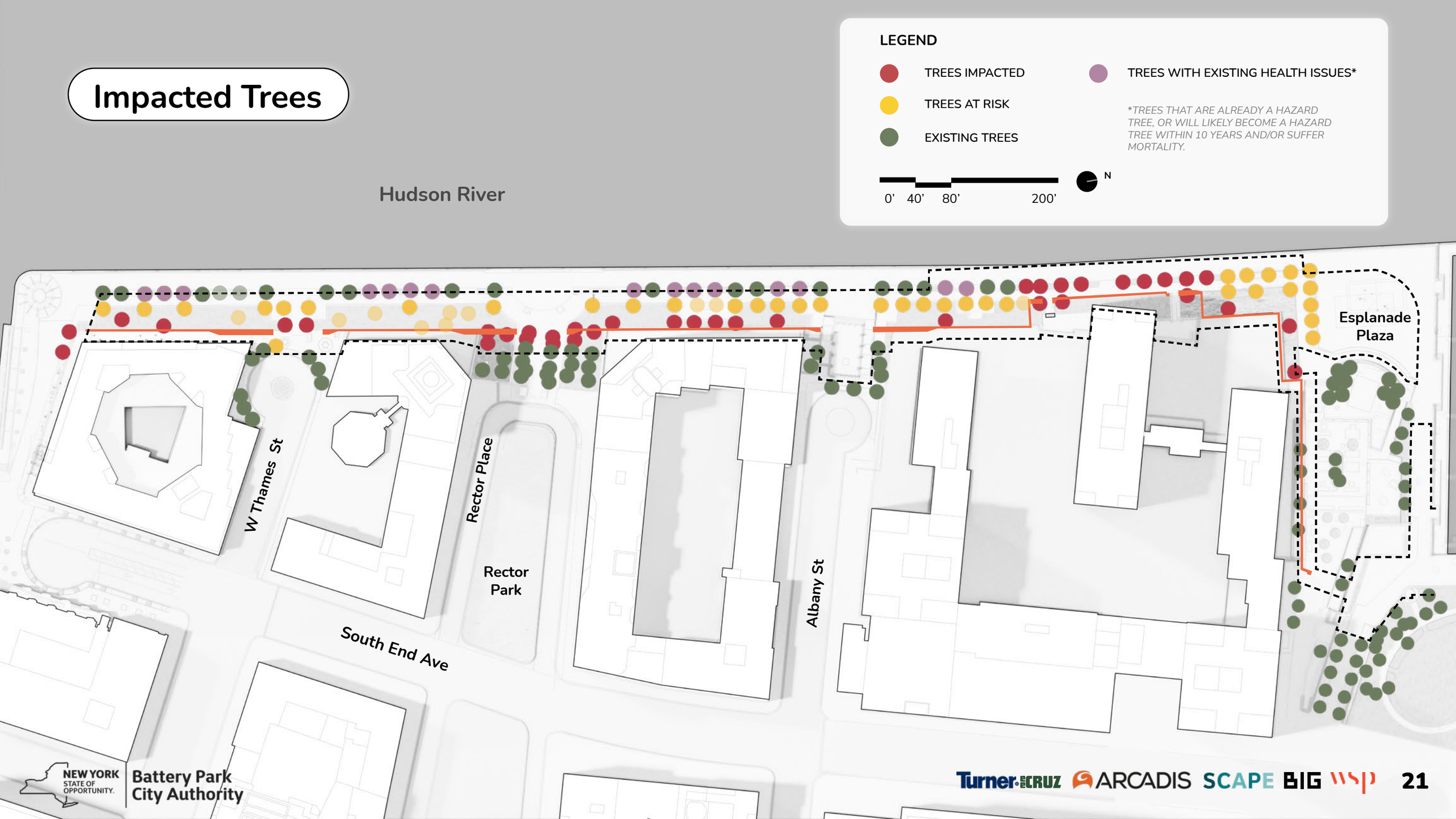
# Limit of Work and Flood Wall Alignment




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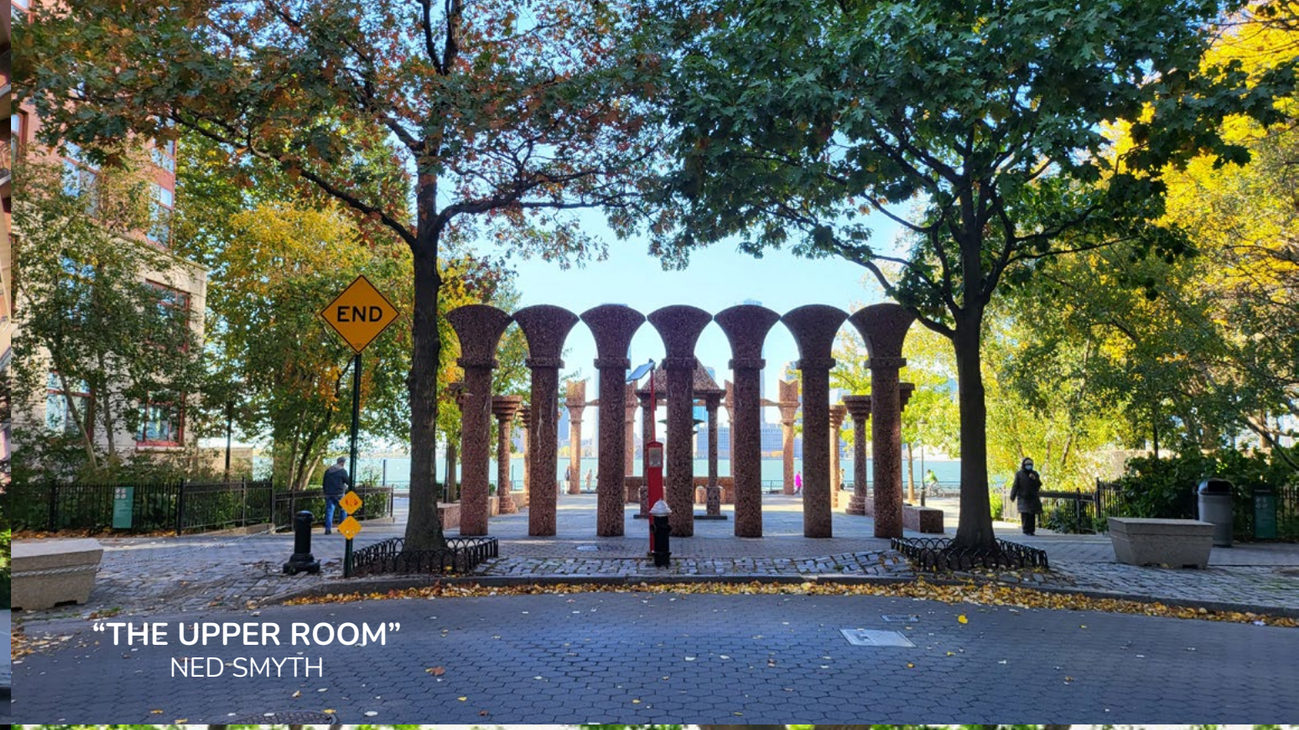
# Impacted Trees



# Public Art



**“RECTOR GATE”**
R.M. FISCHER




**“THE UPPER ROOM”**
NED SMYTH

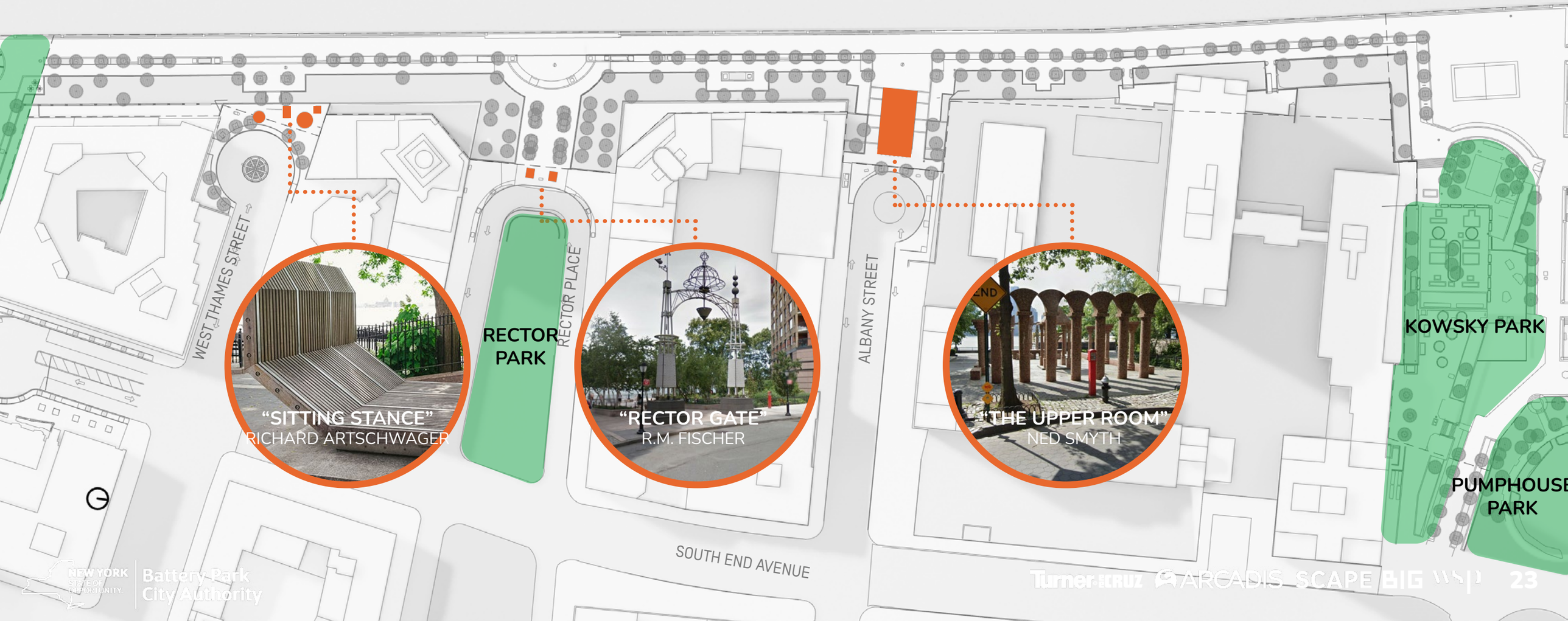


**“SITTING/STANCE”**
RICHARD ARTSCHWAGER

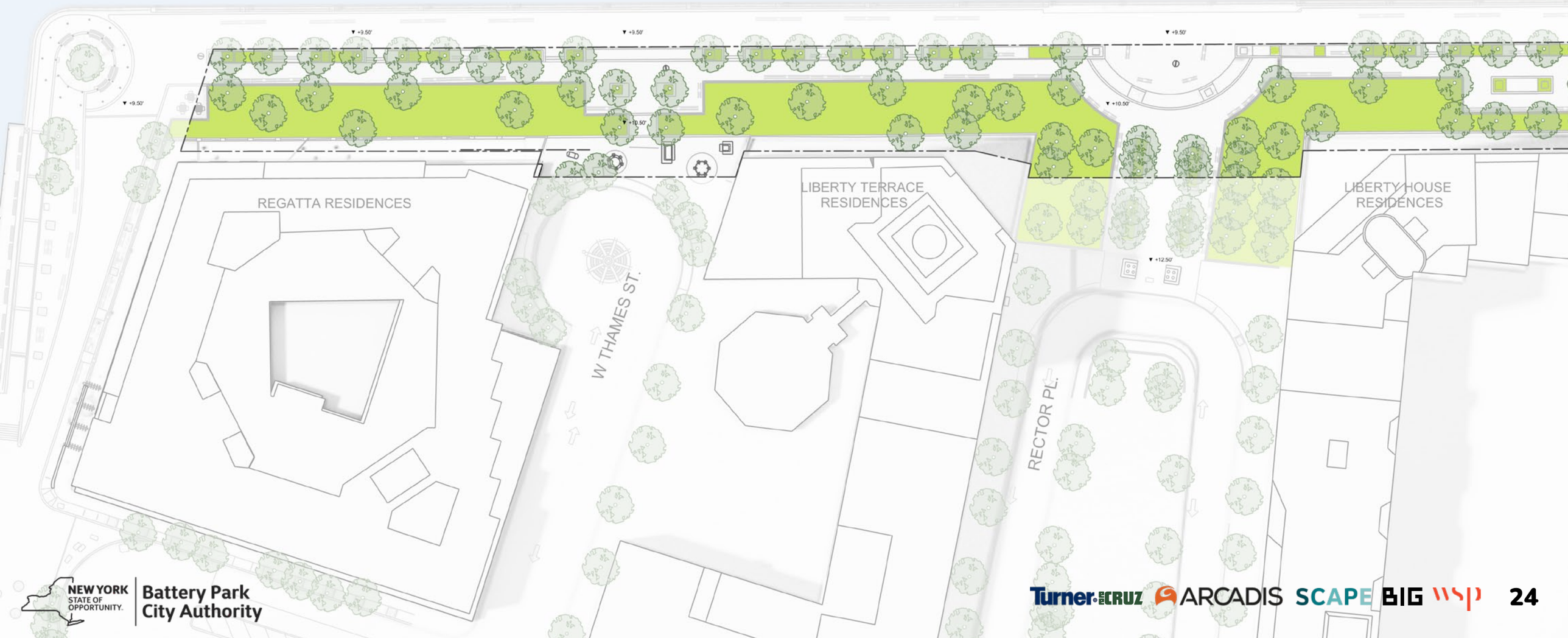


**“SITTING STANCE”**
RICHARD ARTSCHWAGER

# Public Art / Parks



# Existing Plan

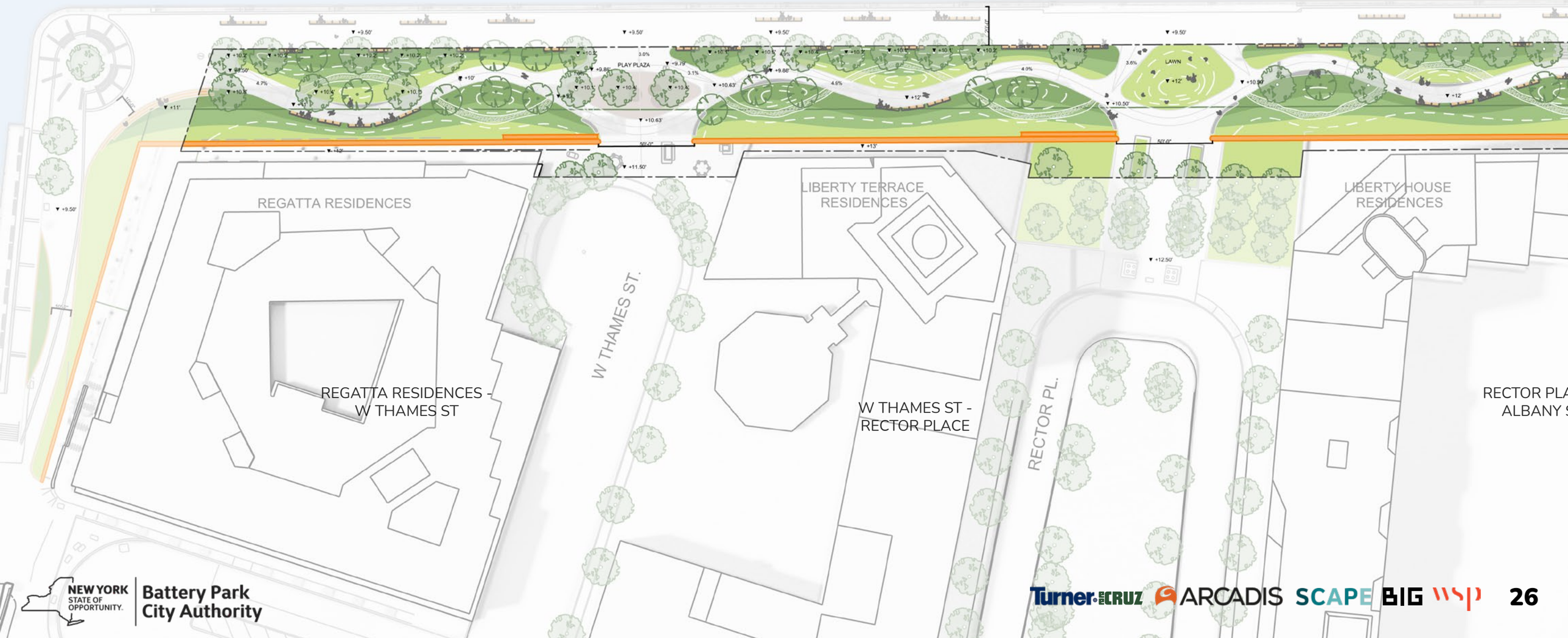


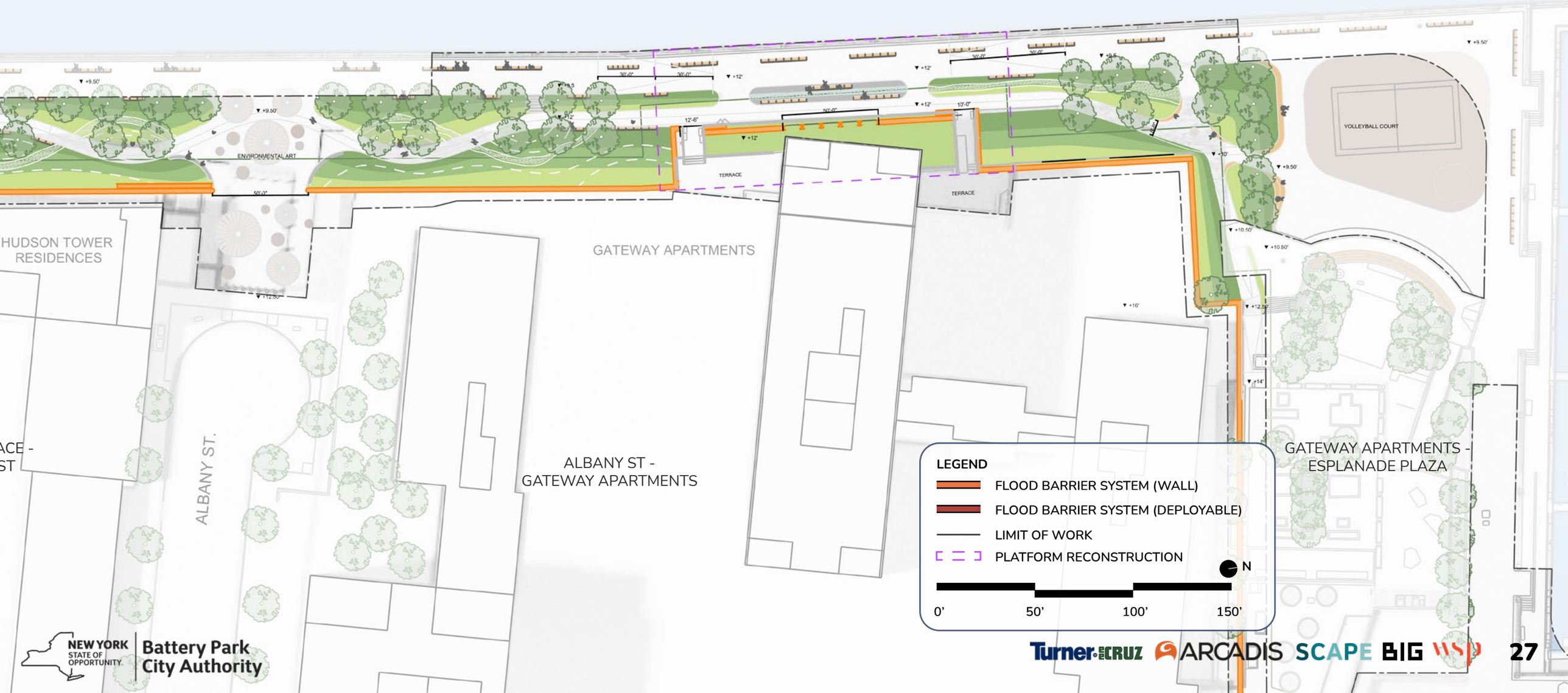



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# Proposed Plan





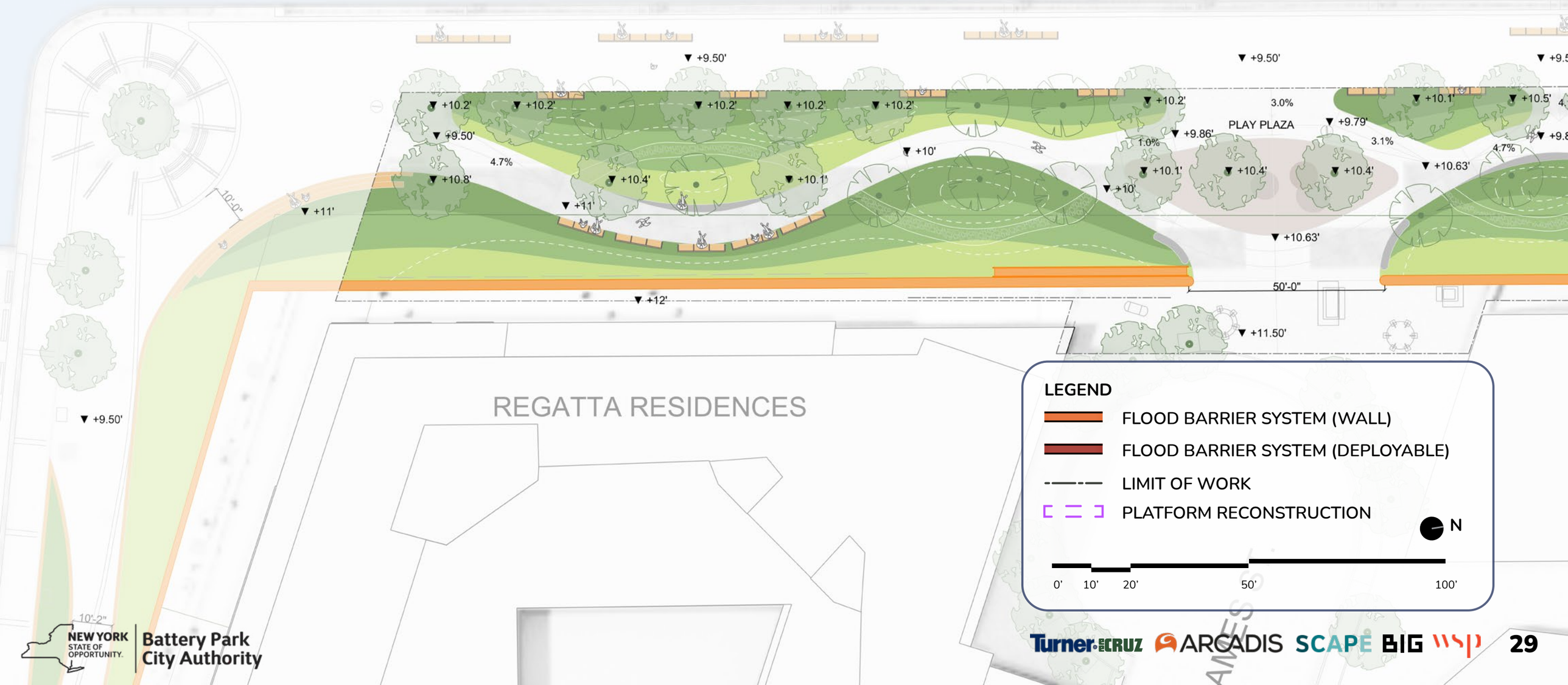

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Issues

# REGATTA RESIDENCES- W THAMES ST

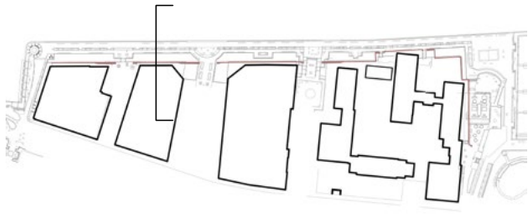
# Plan


▼ +9.50'
▼ +10.2'
▼ +10.2'
▼ +10.2'
▼ +10.2'
▼ +10.2'
▼ +10.2'
3.0%
PLAY PLAZA
▼ +9.79'
▼ +10.1'
▼ +10.5'
▼ +9.50'
4.7%
▼ +10'
1.0%
▼ +9.86'
3.1%
4.7%
▼ +10.8'
▼ +10.4'
▼ +10.1'
▼ +10.1'
▼ +10.4'
▼ +10.4'
▼ +10.63'
▼ +11'
▼ +10'
▼ +10.63'
10'-0"
50'-0"
▼ +12'
▼ +11.50'
REGATTA RESIDENCES
▼ +9.50'
10'-2"
LEGEND
FLOOD BARRIER SYSTEM (WALL)
FLOOD BARRIER SYSTEM (DEPLOYABLE)
LIMIT OF WORK
PLATFORM RECONSTRUCTION
N
0'
10'
20'
50'
100'

# Section: Existing



# Section: Proposed



# Esplanade: Existing

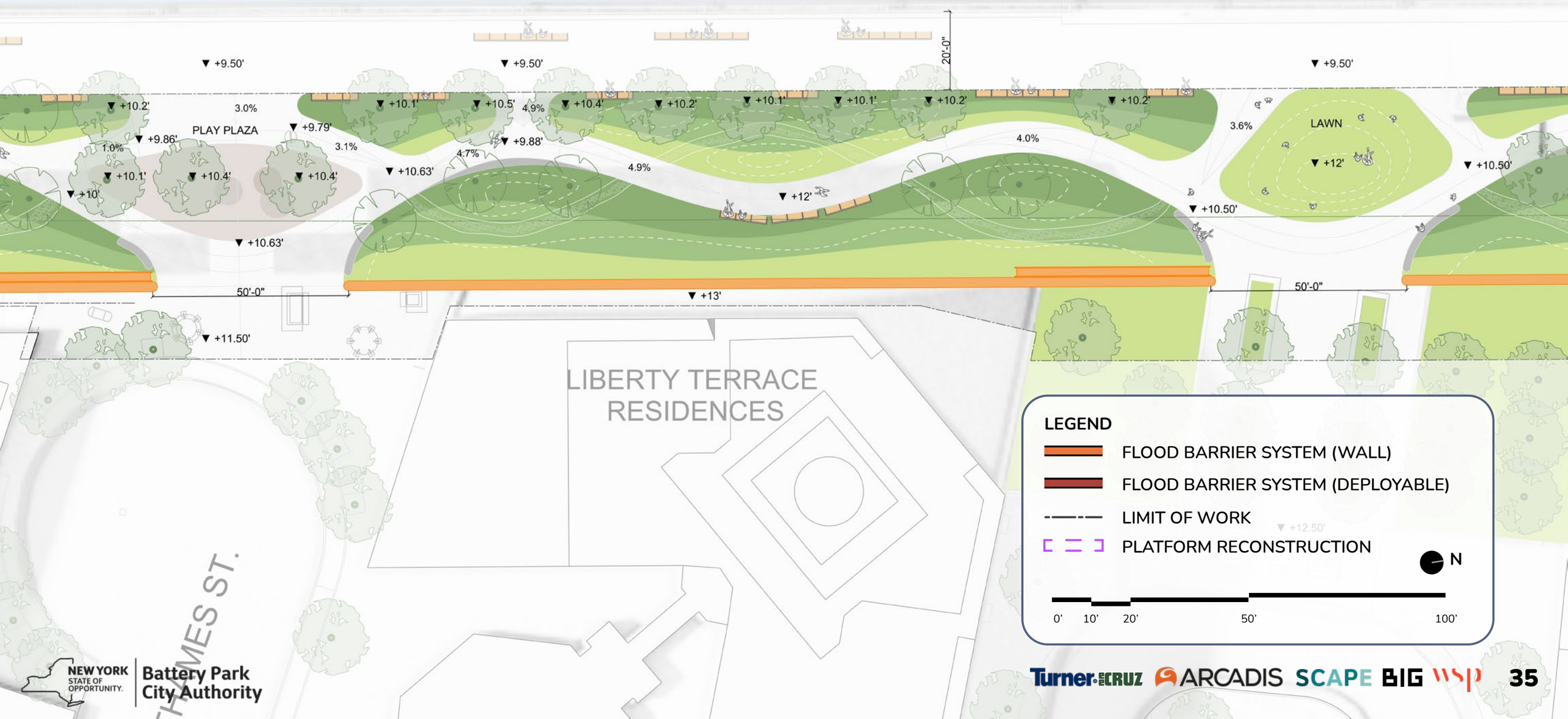


# Esplanade: Proposed



# W THAMES ST - RECTOR PLACE

# Plan




**LEGEND**

- FLOOD BARRIER SYSTEM (WALL)
- FLOOD BARRIER SYSTEM (DEPLOYABLE)
- LIMIT OF WORK
- PLATFORM RECONSTRUCTION

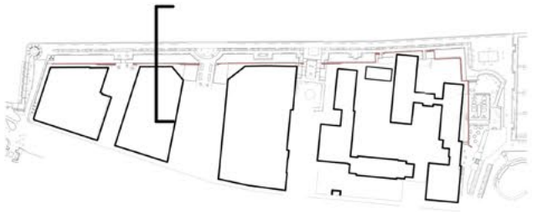
N

0' 10' 20' 50' 100'

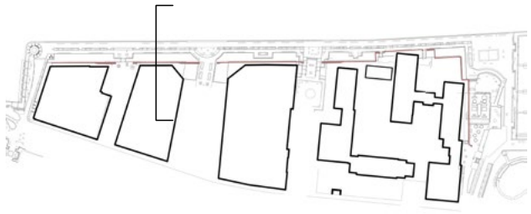
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# Section: Existing



# Section: Proposed



# Street-End: Existing

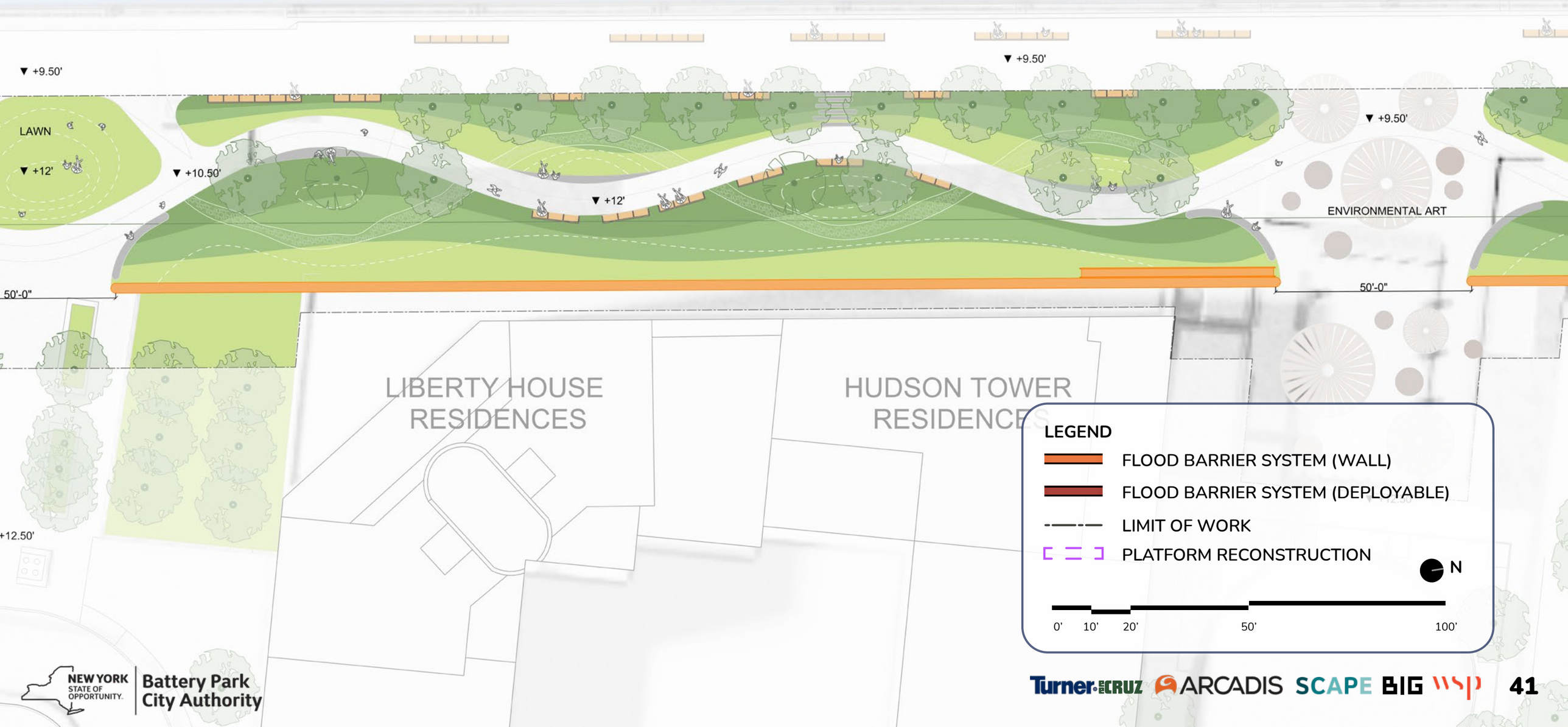


# Street-End: Proposed



# RECTOR PLACE - ALBANY ST

# Plan




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# Section: Existing



0 10 20 40

LIMIT OF WORK

124'-8"

HISTORIC PROMENADE
20'-0"

104'-8"

SEATING
7'-6"

MAIN CIRCULATION
12'-6"

PLAZA
37'-6"

THE UPPER ROOM SCULPTURE
67'-2"

T. W. FBS
+19.5'

TARGET PASSIVE EL.
+12.0'

MHHW 2080
+8.0'

MHHW 2050
+4.78'

MHHW
+2.28'

MLLW
-2.77'

+9.5'

+4.152'

+12.5'

# Section: Proposed



# Upper Path: Existing



# Upper Path: Proposed

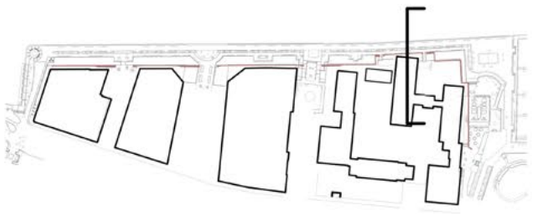


# ALBANY ST - GATEWAY APARTMENTS

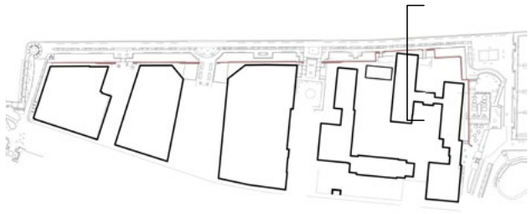
# Plan

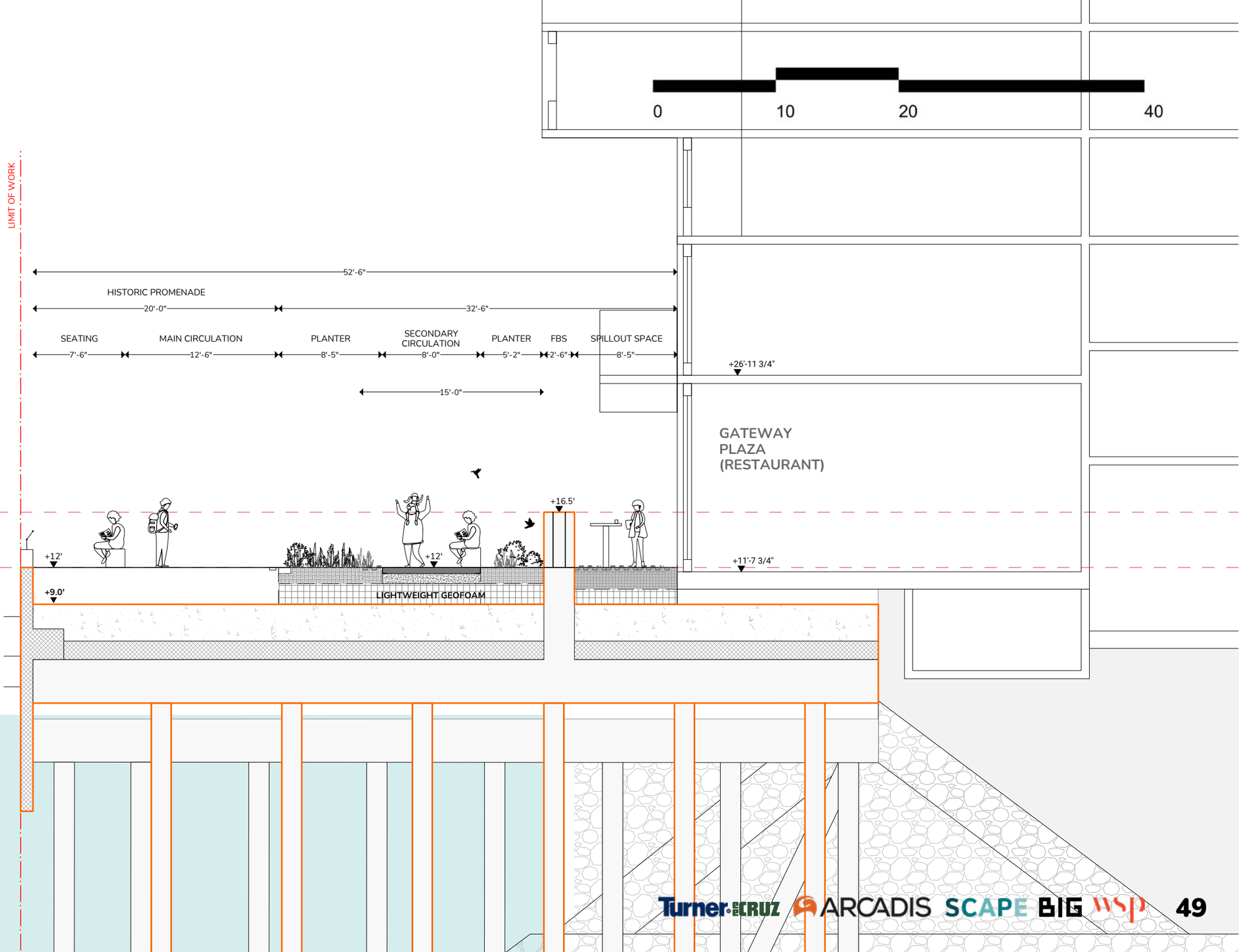

▼ +9.50'
ENVIRONMENTAL ART
50'-0"
▼ +12.50'
▼ +9.5
▼ +12'
30'-0"
30'-0"
▼ +12'
12'-6"
▼ +12'
50'-0"
▼ +12'
10'-0"
30'-0"
▼ +12'
TERRACE
TERRACE
GATEWAY APARTMENTS
LEGEND
FLOOD BARRIER SYSTEM (WALL)
FLOOD BARRIER SYSTEM (DEPLOYABLE)
LIMIT OF WORK
PLATFORM RECONSTRUCTION
N
0'
10'
20'
50'
100'

# Section: Existing



# Section: Proposed





# Street-End: Existing



# Street-End: Proposed



# GATEWAY APARTMENTS - ESPLANADE PLAZA

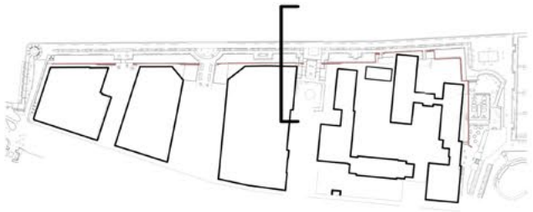
# Plan



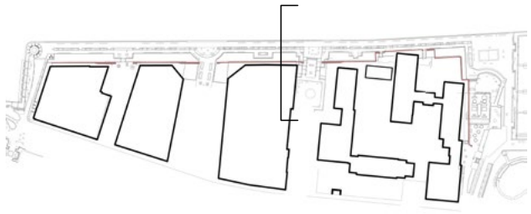

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# Section: Existing



# Section: Proposed



# Esplanade: Existing

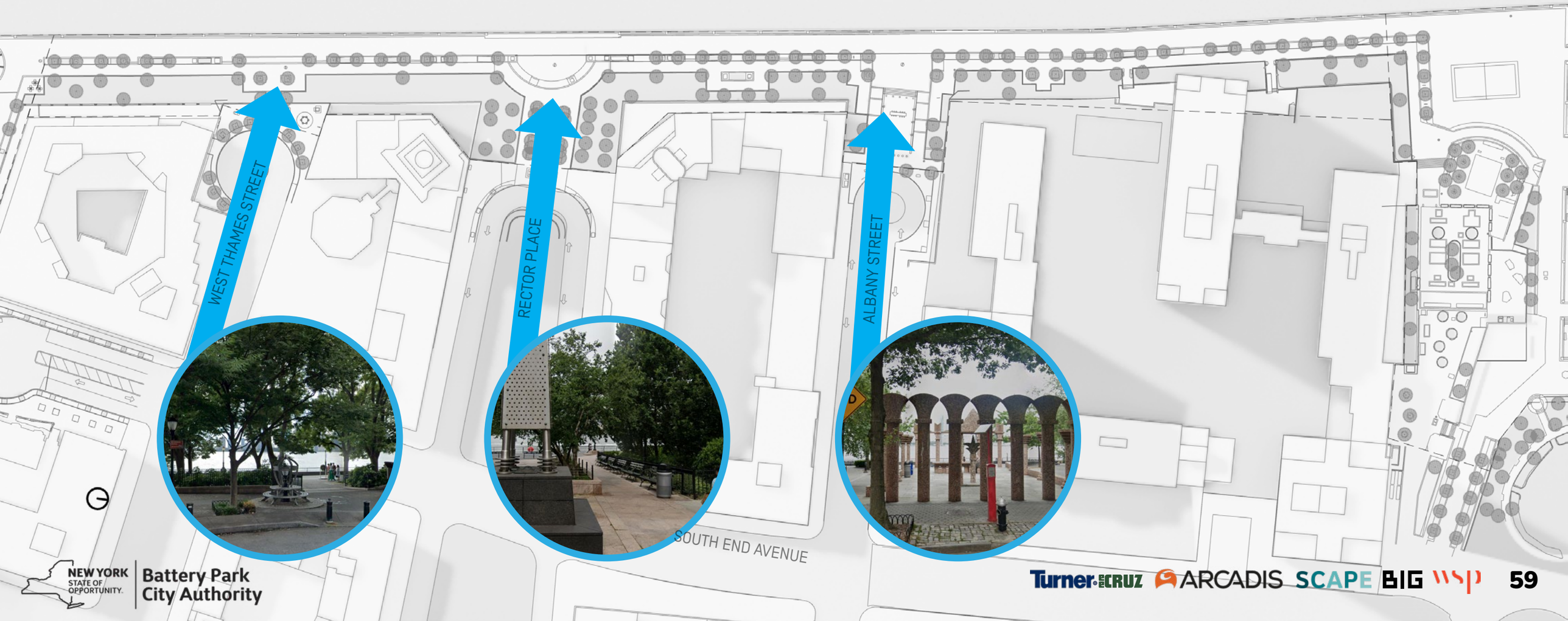


# Esplanade: Proposed



# STREET-ENDS

# Street-End Views Towards Water



# W Thames St: Existing



# W Thames St: Proposed



# Rector Place: Existing



# Rector Place: Proposed



# Albany St: Existing



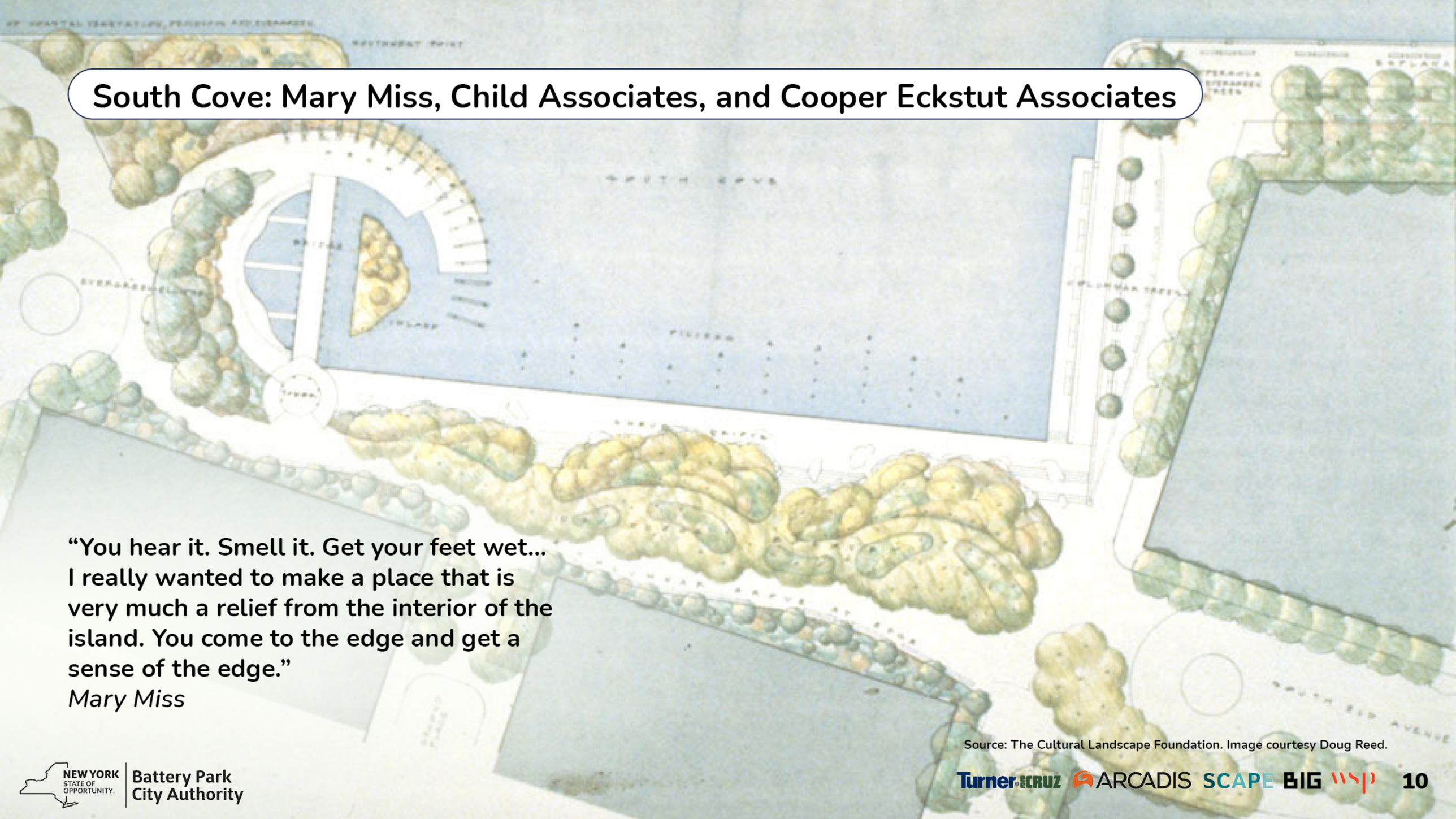
# Albany St: Proposed



# Reach 7


ESPLANADE
SOUTH COVE
DAYCARE
CAFÉ
SOUTH END AVE
2ND PLACE
3RD PLACE

# South Cove: Mary Miss, Child Associates, and Cooper Eckstut Associates



**"You hear it. Smell it. Get your feet wet… I really wanted to make a place that is very much a relief from the interior of the island. You come to the edge and get a sense of the edge."**
*Mary Miss*

Source: The Cultural Landscape Foundation. Image courtesy Doug Reed.

# South Cove: Mary Miss, Child Associates, and Cooper Eckstut Associates



**“I wanted to reveal the artifice of the terrain you’re standing on.”**
*Mary Miss*

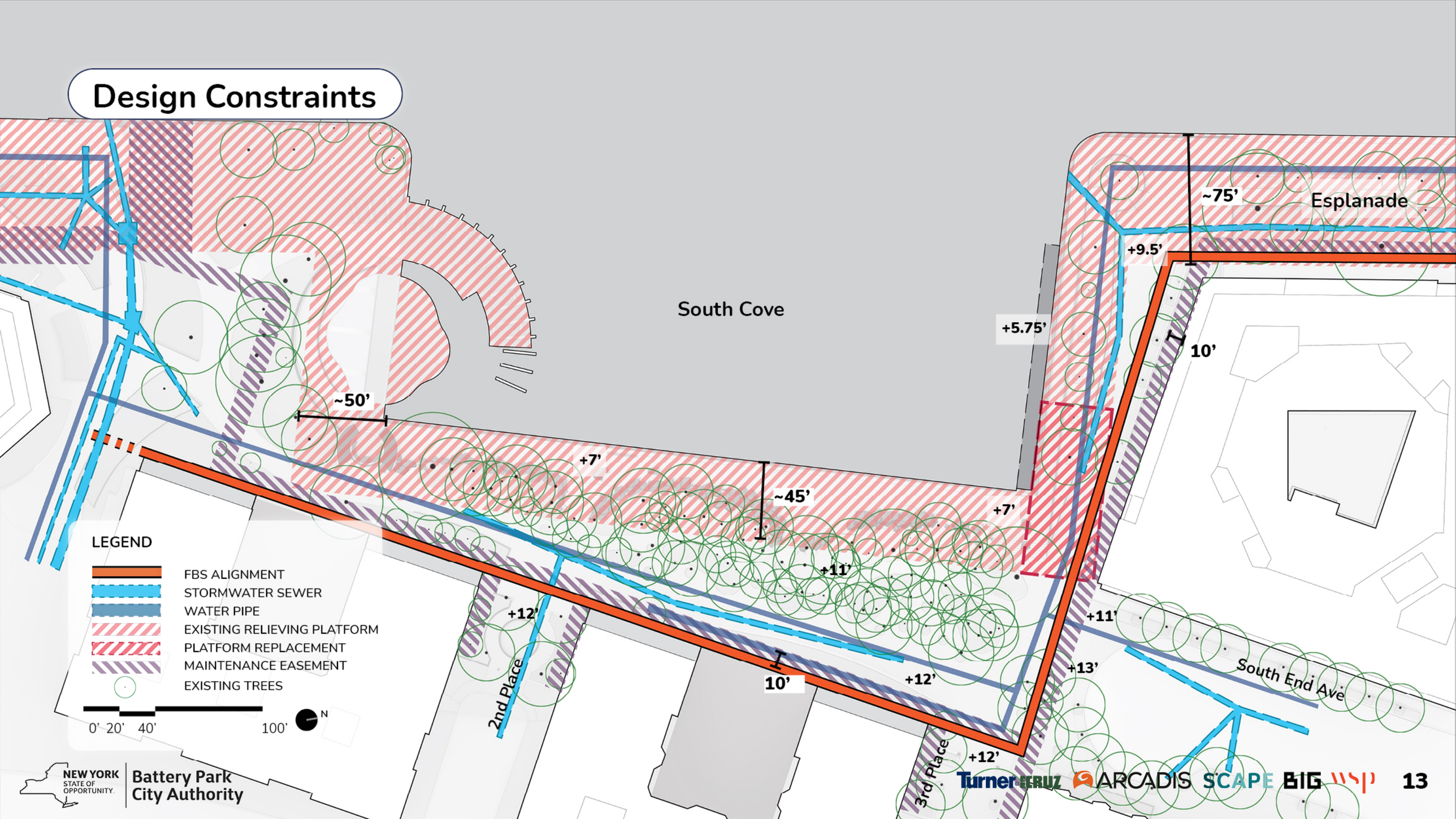


**“We came to meetings with reams of research on native plant communities, on the topography of dunes, the geology of the Manhattan coastline.”**
*Doug Reed*

## What We Heard

- Minimize impacts to existing landscape, prioritize creative solutions to preserve “forest walk”
- Maintain the proximity and views to the water
- Prioritize universal accessibility

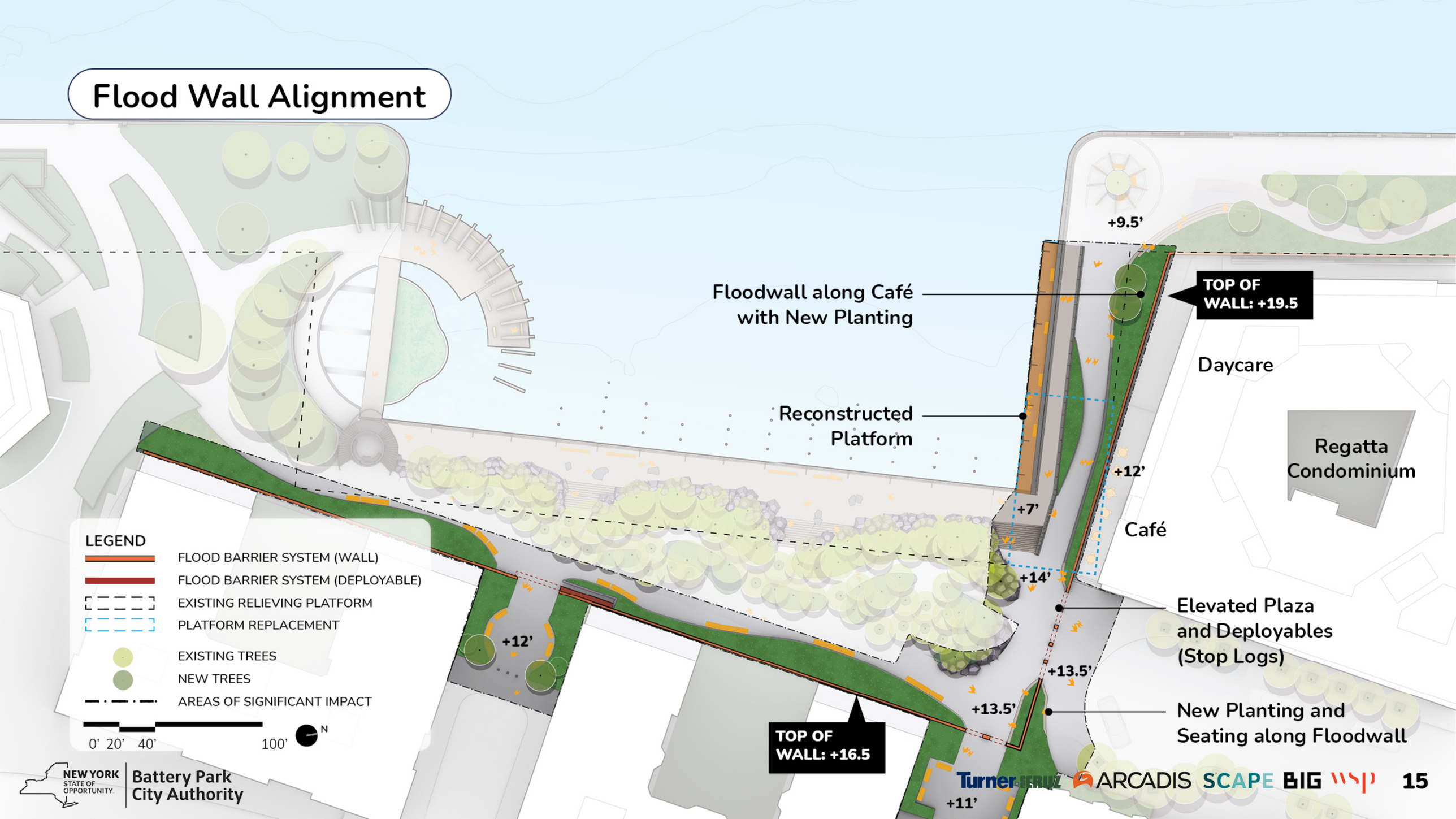
# Design Constraints



# Alignment & Street Ends



# Flood Wall Alignment

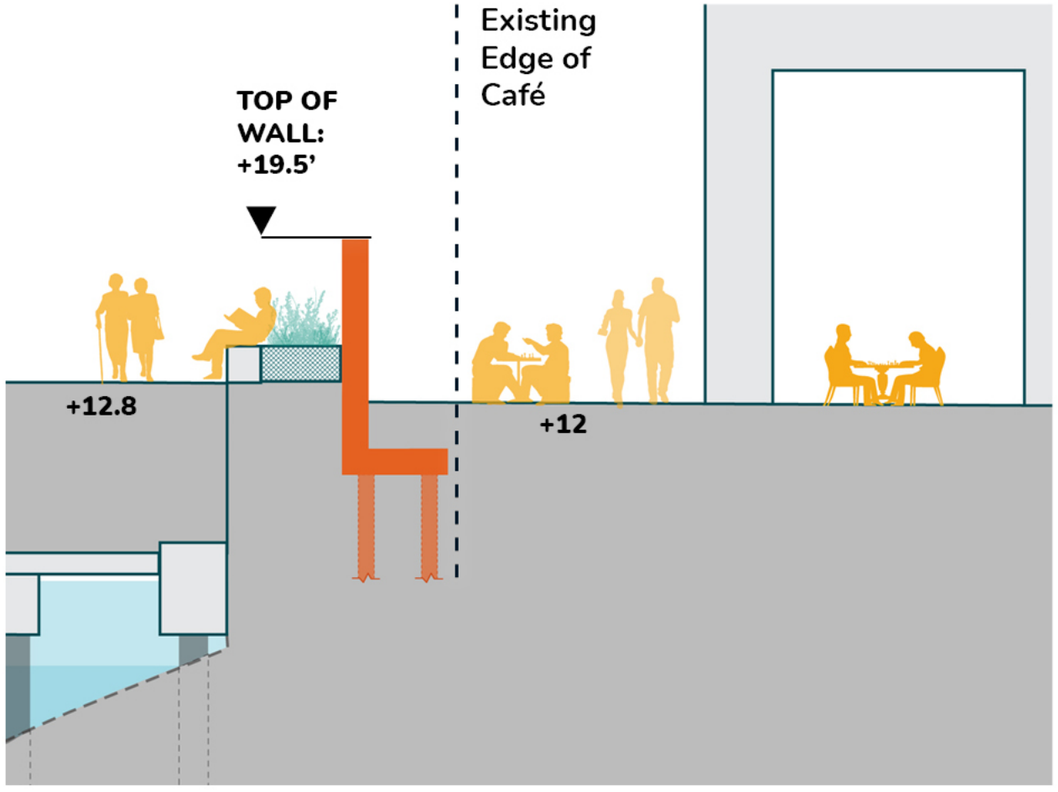



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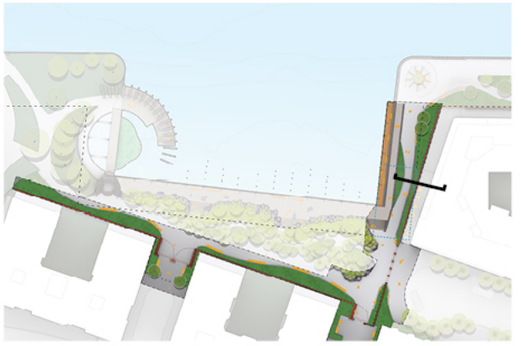
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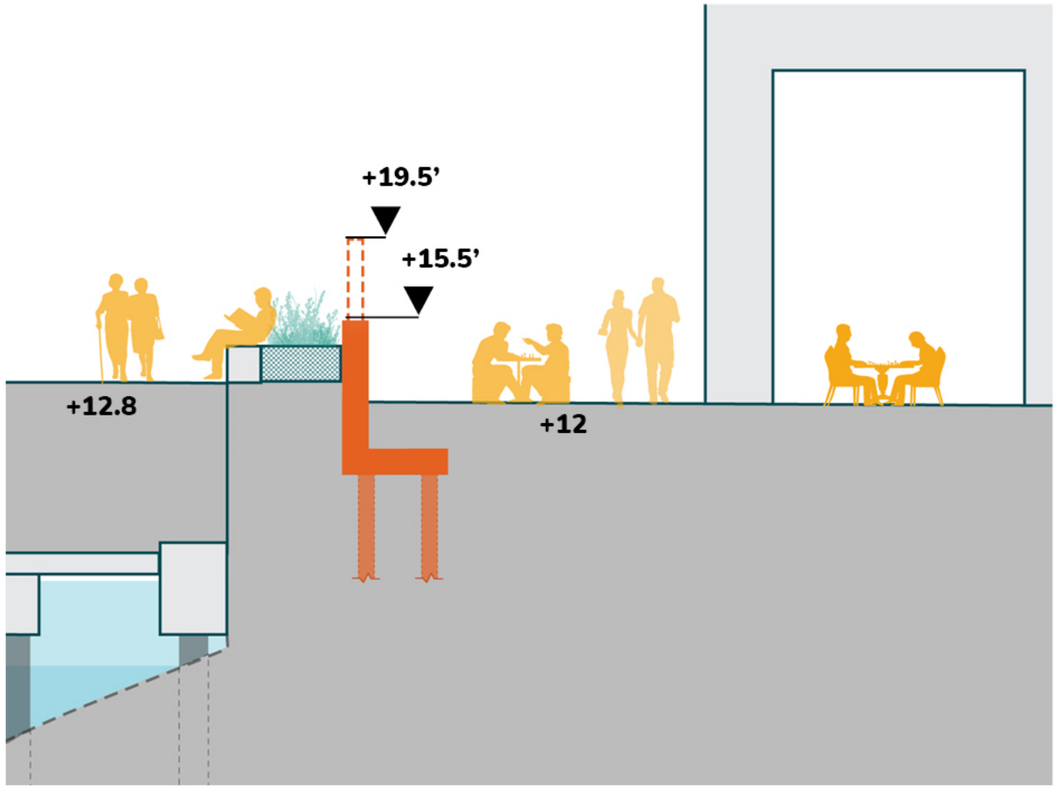
# North Platform Wall

## 1: Full Height Floodwall




## 2: Partially Deployable Flood Barrier

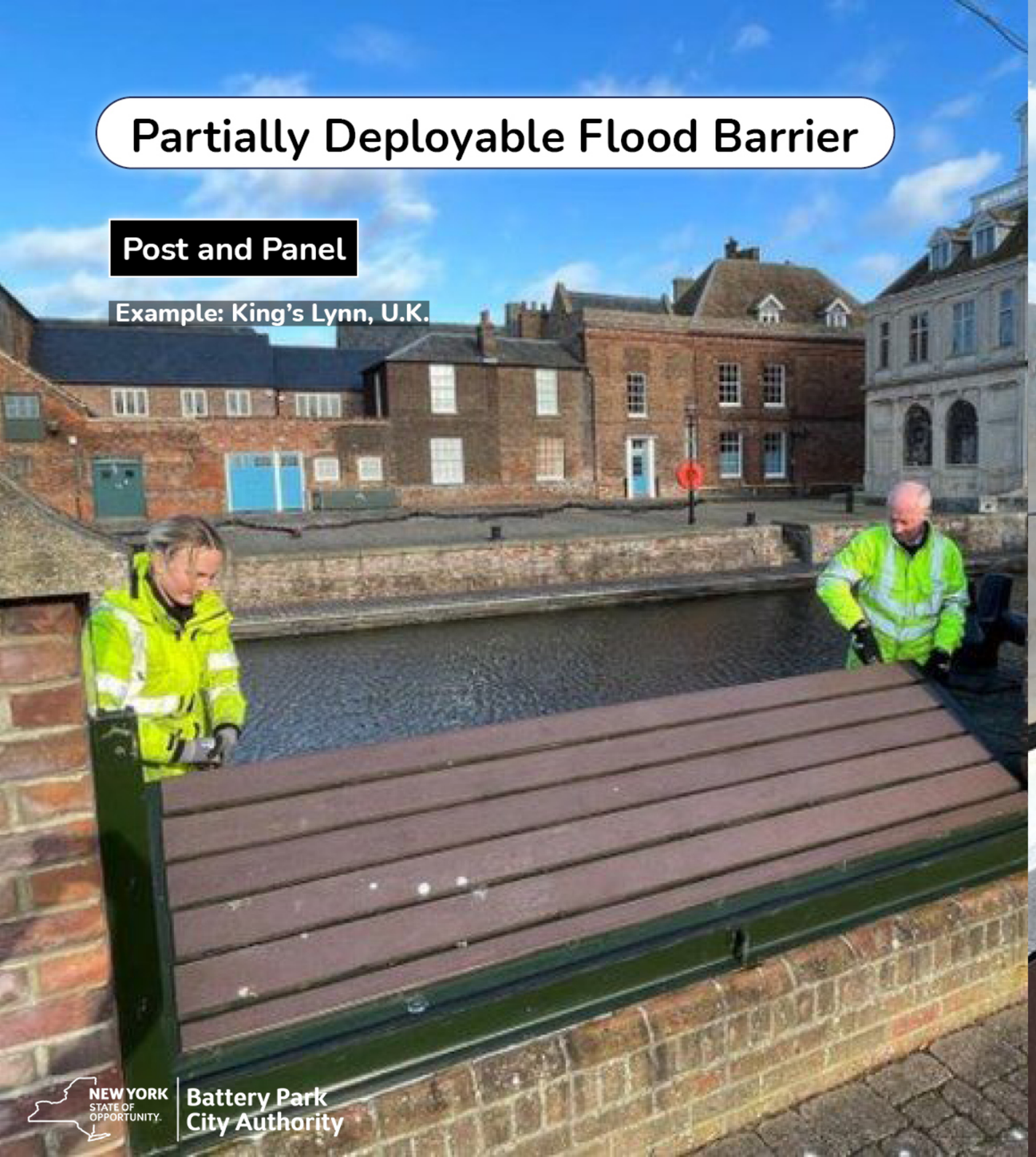




# Partially Deployable Flood Barrier

## Post and Panel

Example: King's Lynn, U.K.



## Stop Log (Plank) System

Example: Tai O, Hong Kong



# Existing View

## From Esplanade



## From Café



# Option 1: Full Height Floodwall

## From Esplanade




## From Café



# Option 2: Partially Deployable Floodwall

## From Esplanade




## From Café



# Existing View: South End Ave

## From Park

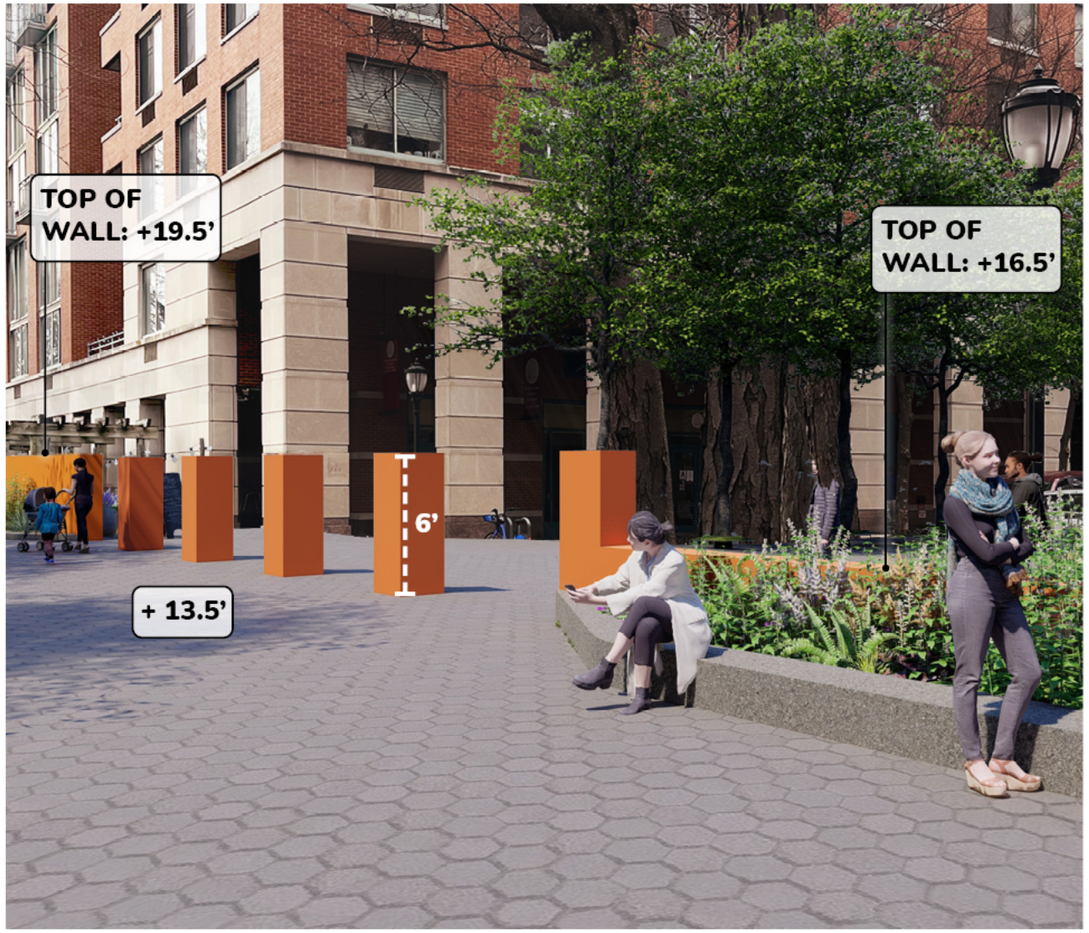


## From Street



# South End Ave: Stop Logs

## From Park

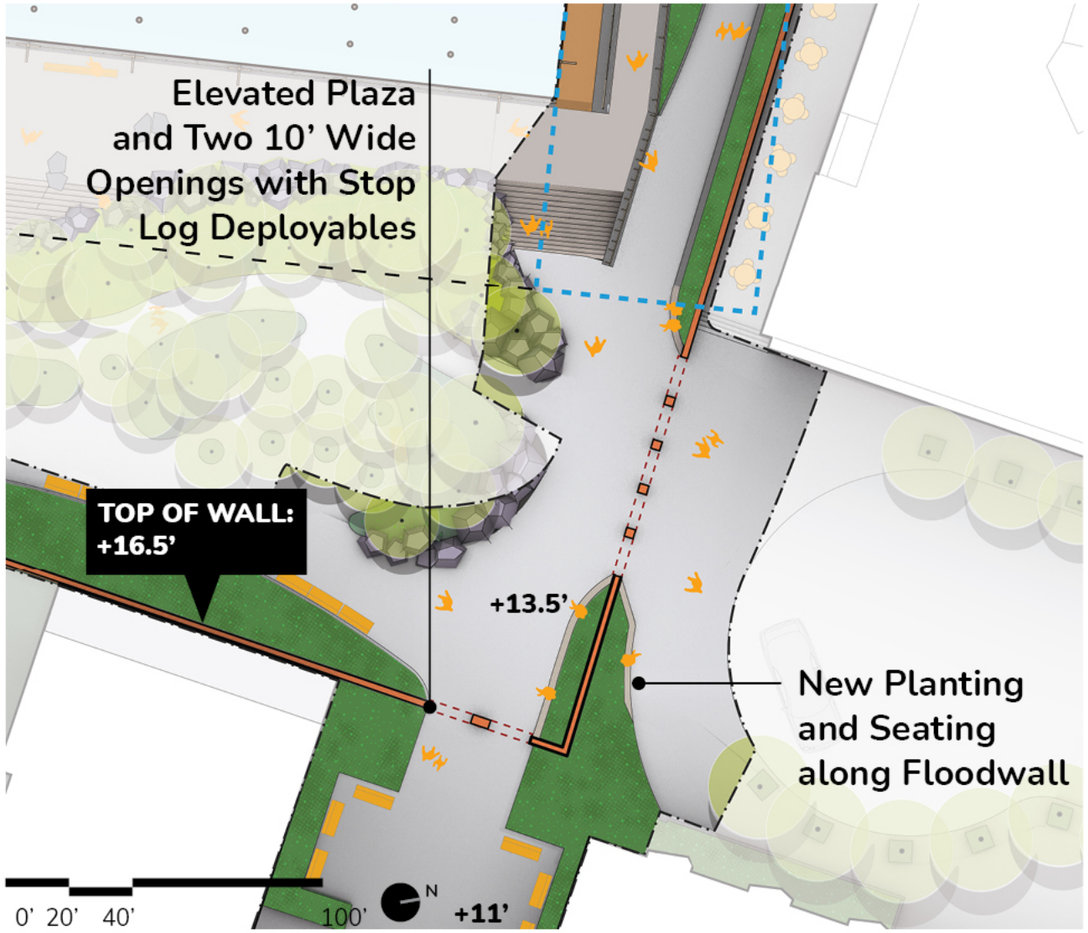



## From Street

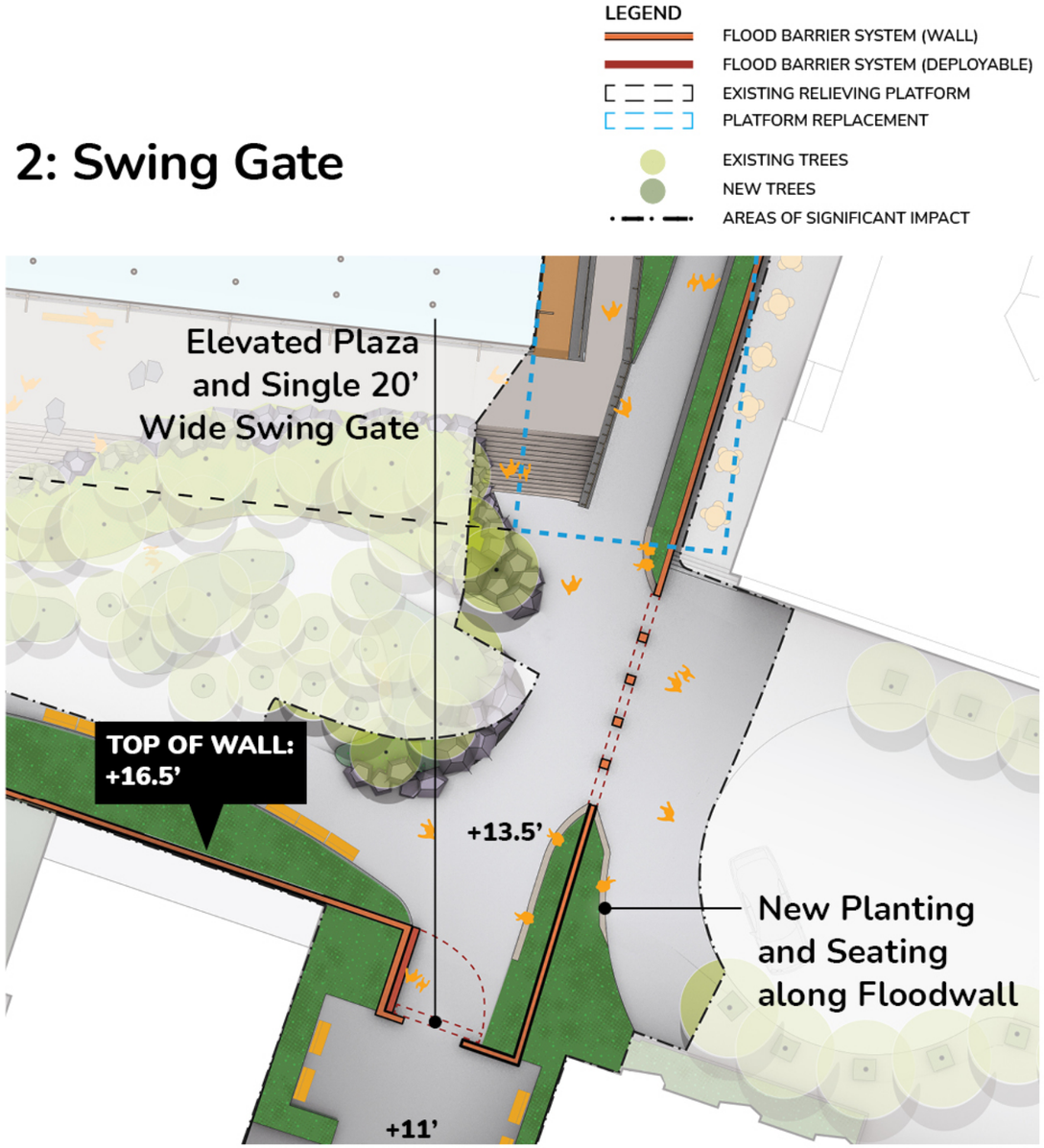


# 3rd Place

## 1: Stop Logs




## 2: Swing Gate



# Existing View: 3rd Place

## From Park



## From Street

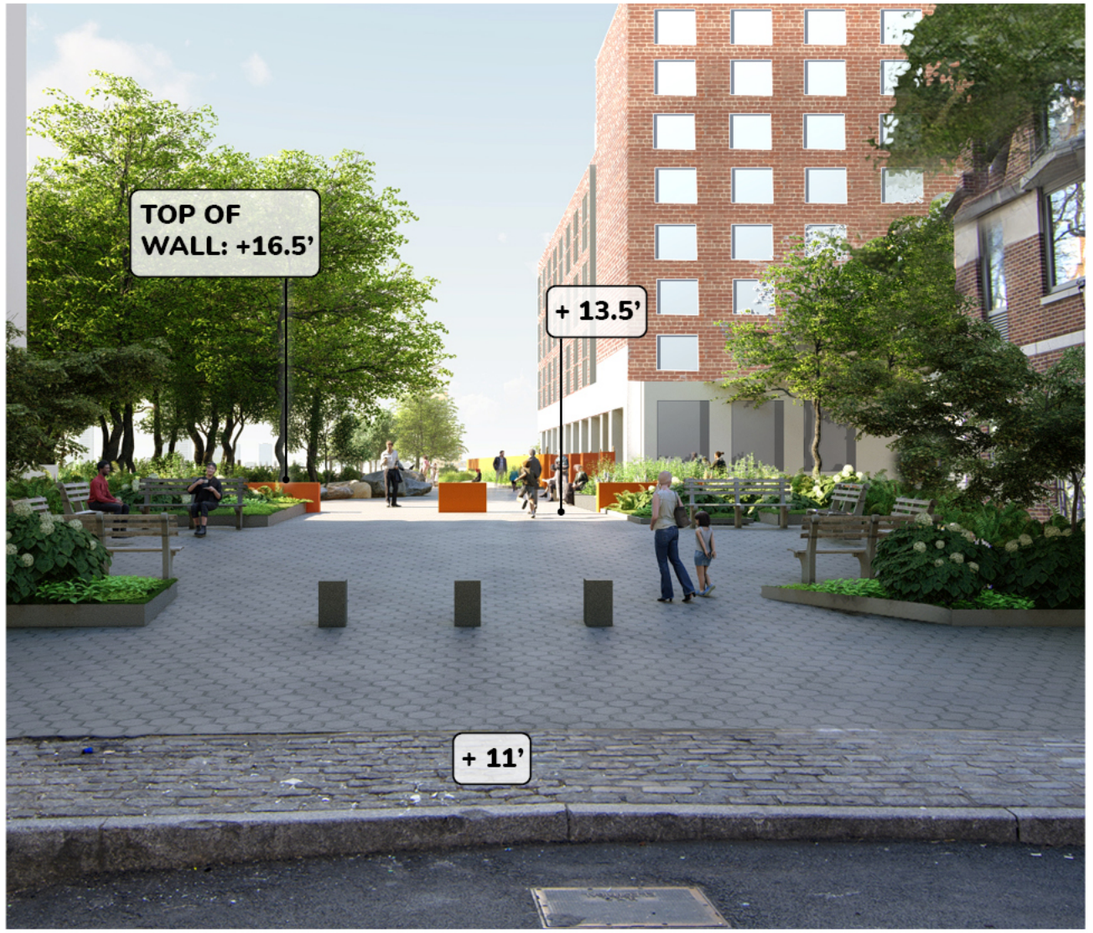


# Option 1: Stop Logs

## From Park




## From Street

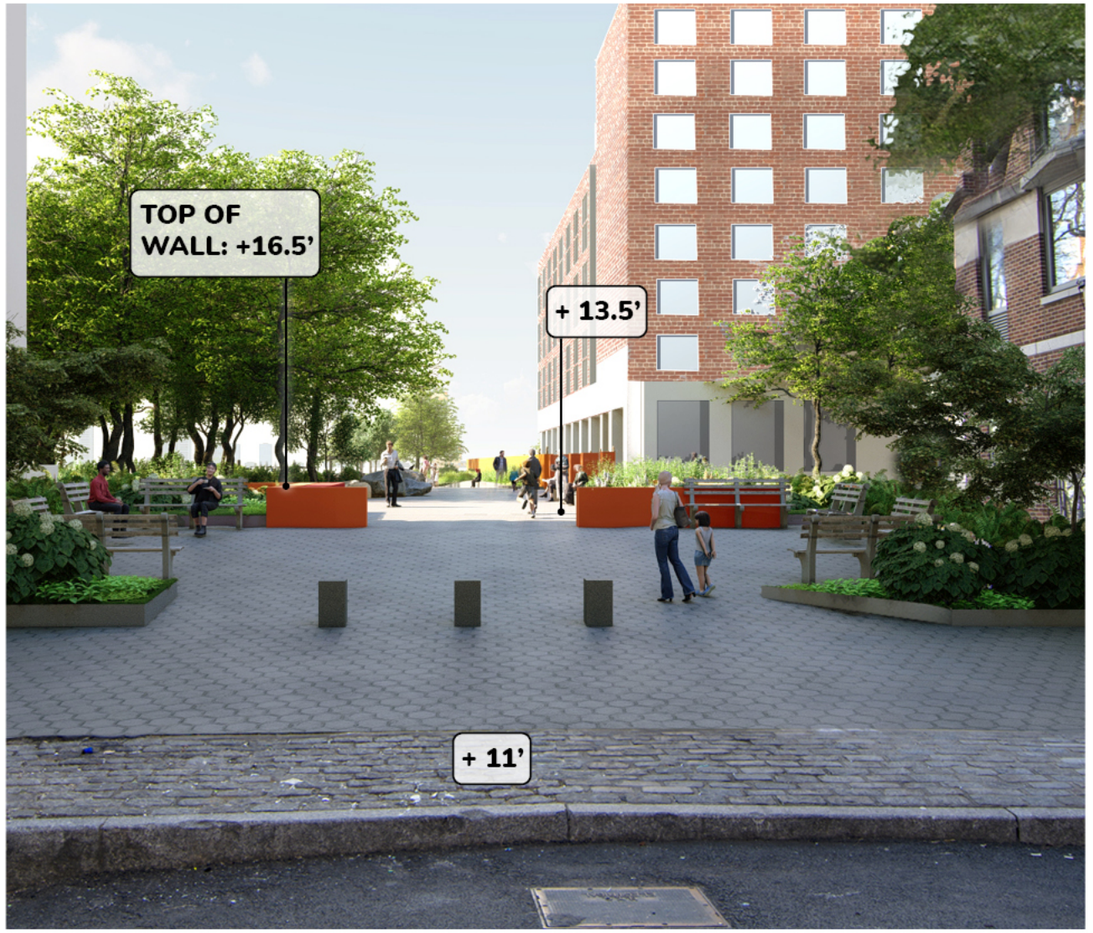


# Option 2: Swing Gate

## From Park

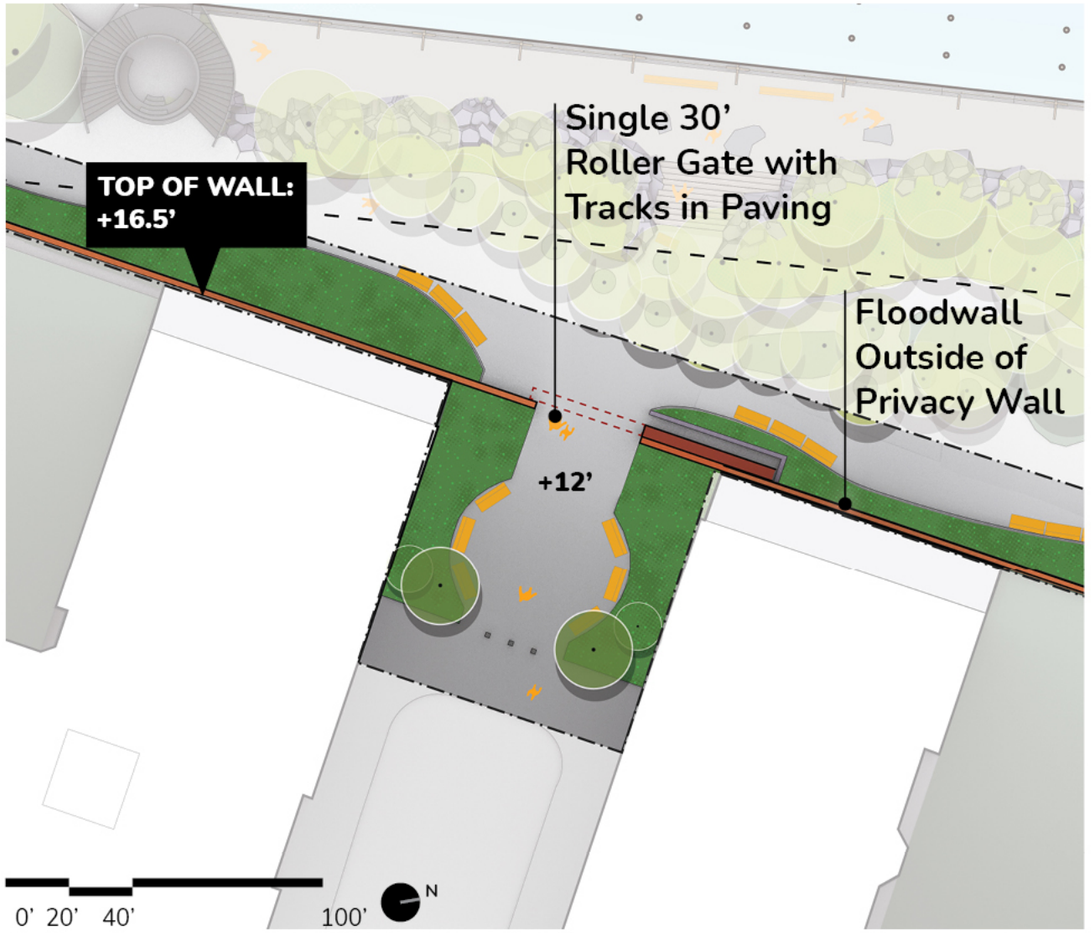



## From Street

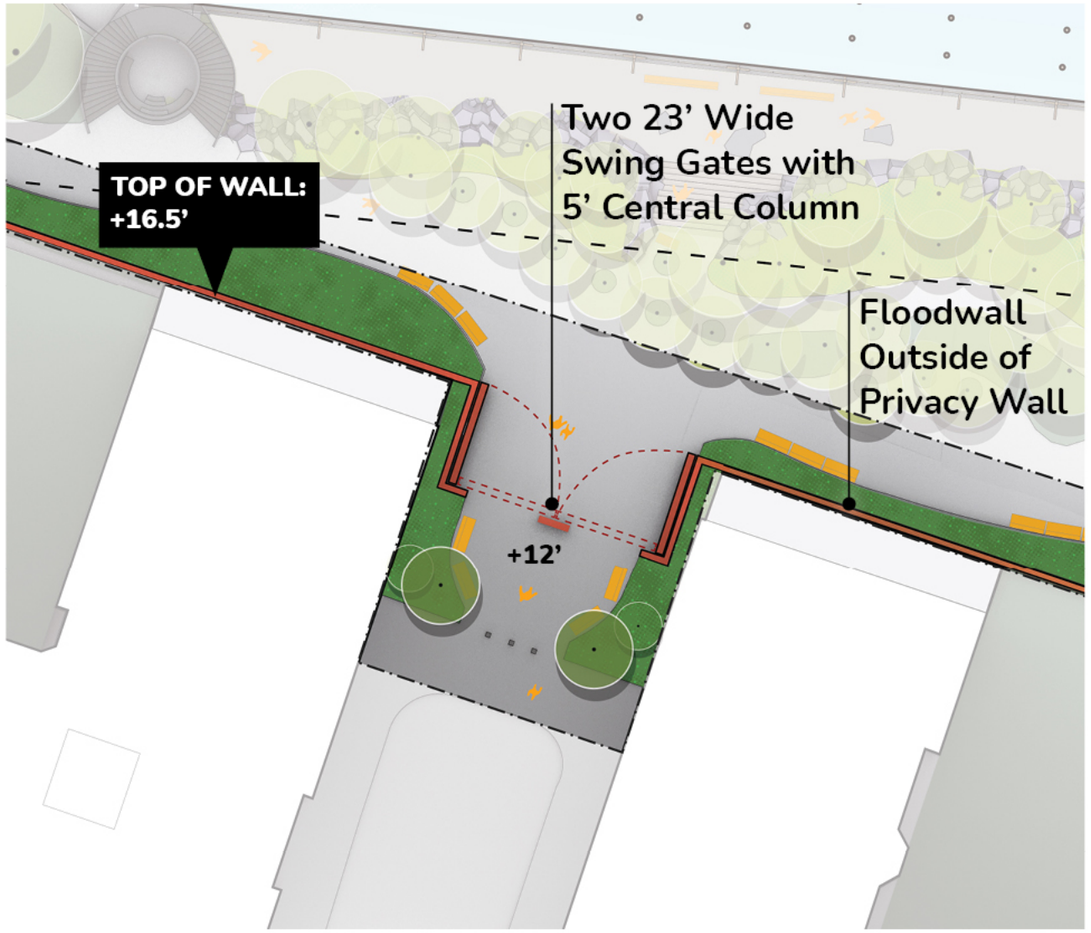


# 2nd Place

## 1: Single Roller




## 2: Double Swing Gate




LEGEND

- FLOOD BARRIER SYSTEM (WALL)
- FLOOD BARRIER SYSTEM (DEPLOYABLE)
- EXISTING RELIEVING PLATFORM
- PLATFORM REPLACEMENT
- EXISTING TREES
- NEW TREES
- AREAS OF SIGNIFICANT IMPACT

# Existing View: 2nd Place

## From Park



## From Street



# Option 1: Single Roller Gate

## From Park




## From Street



# Option 2: Double Swing Gate

## From Park

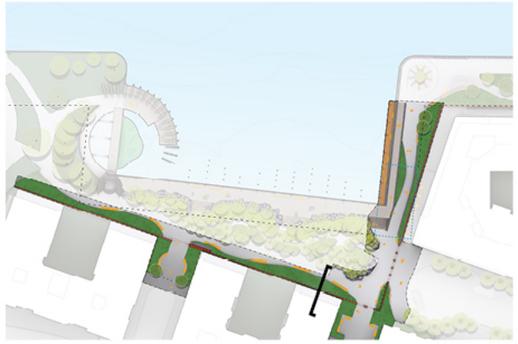


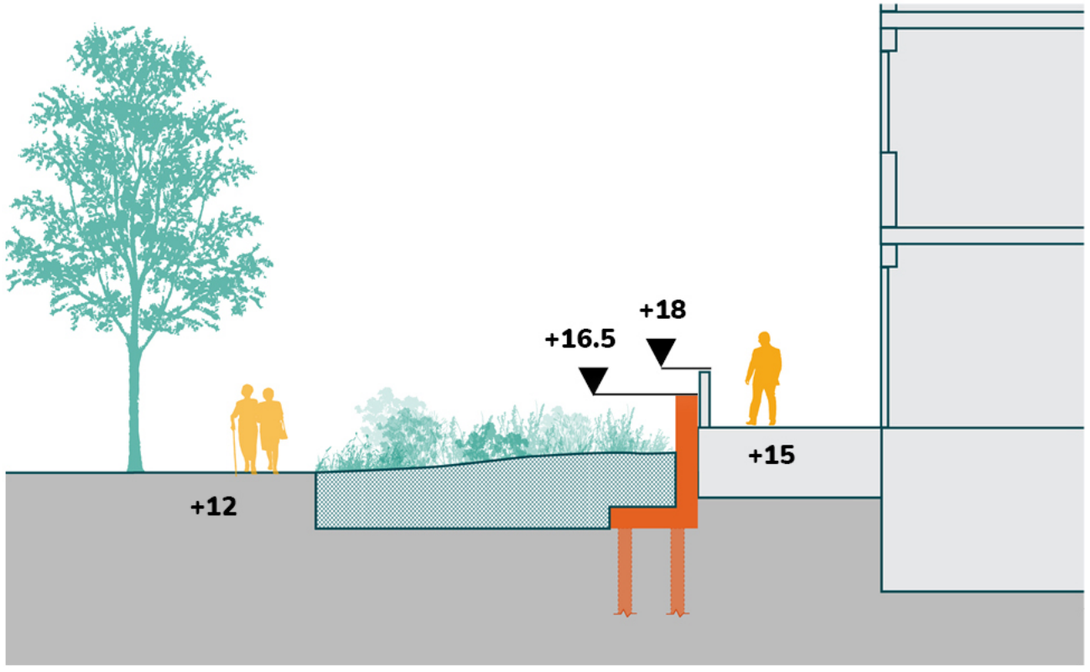

## From Street



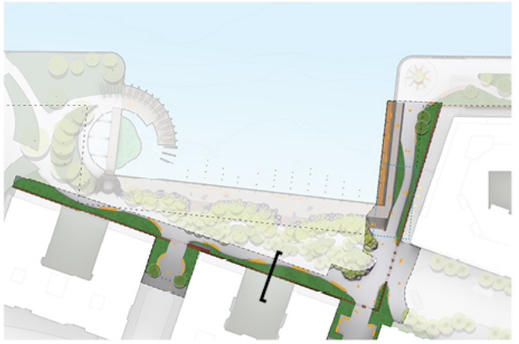
# Flood Barrier at Riverwatch Residences

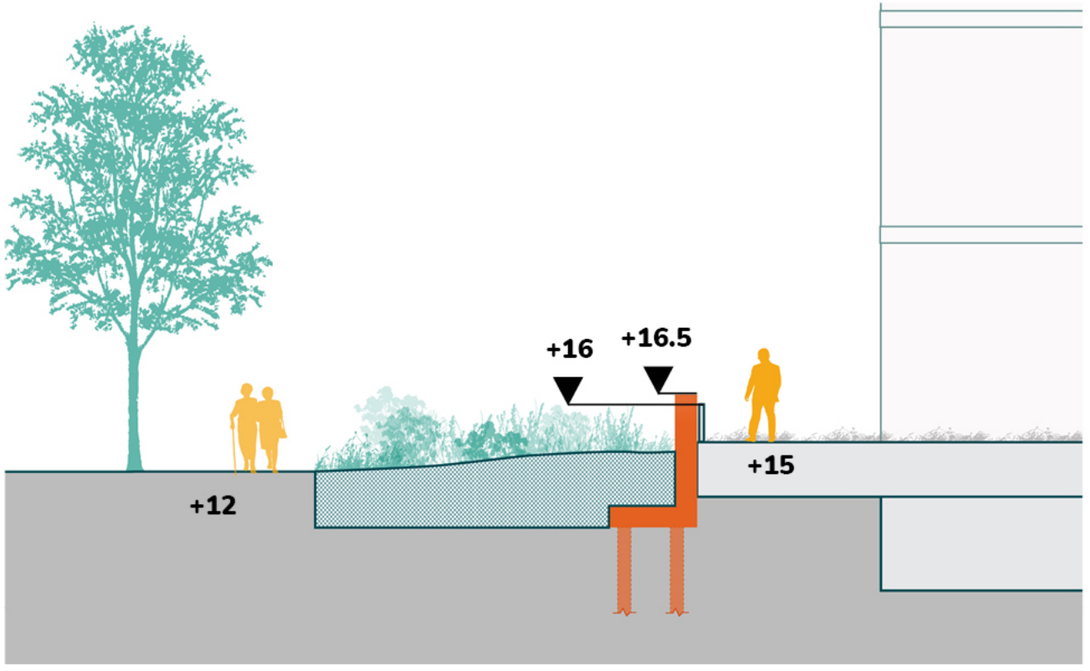
## Section at Private Terrace






## Section at Shared Courtyard





# Flood Barrier at Riverwatch and South Cove Plaza

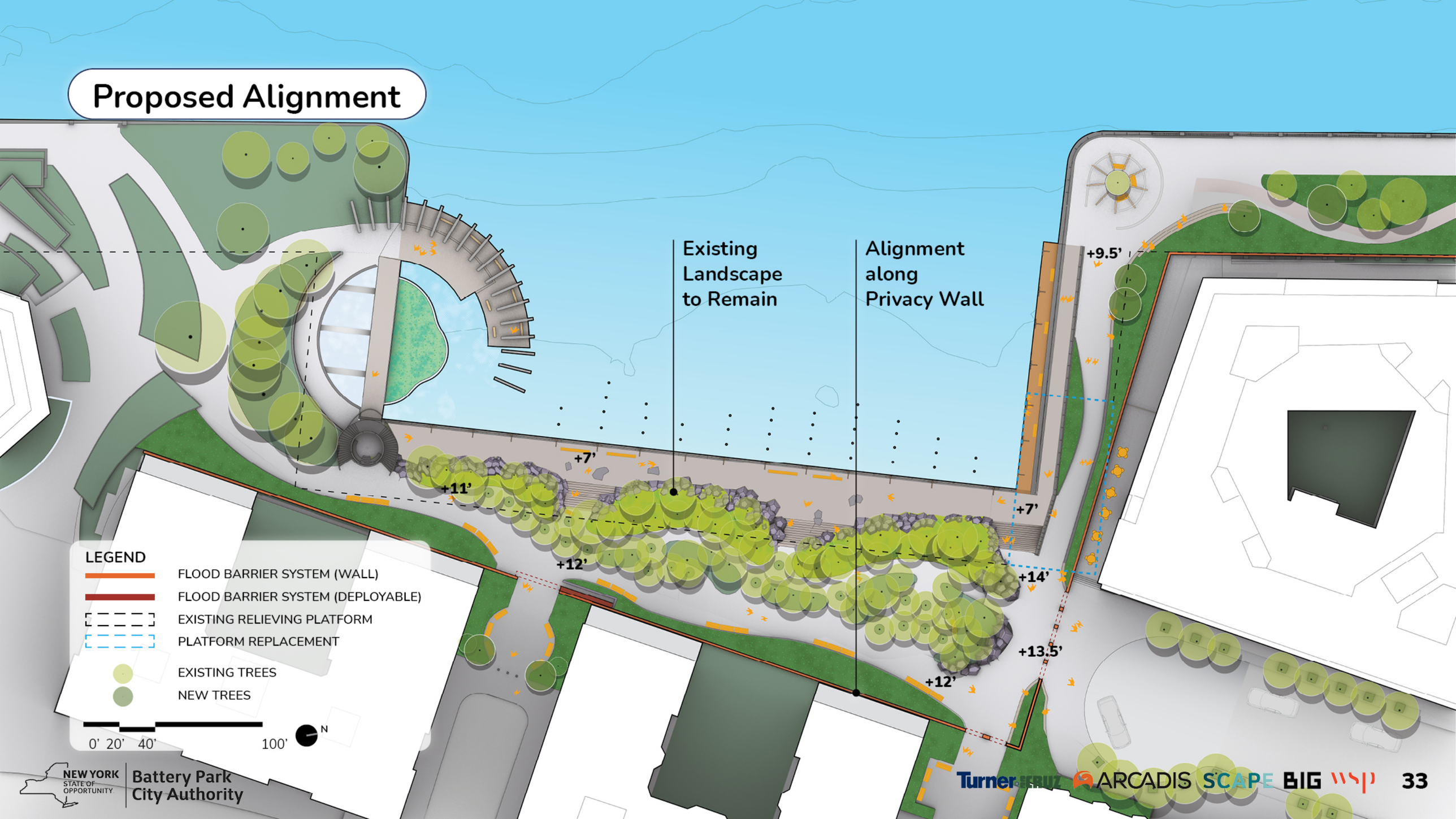
## Existing




## Proposed



# Proposed Alignment



# Existing East Edge



# Existing View of East Edge



# Existing View of North Edge




NEW YORK
STATE OF
OPPORTUNITY.
Battery Park
City Authority
Turner
DE CRUZ
ARCADIS
SCAPE
BIG
WSP