NEW YORK STATE | Battery Park City Authority

Battery Park City Resiliency Update:

Gateway Plaza

MAY 29, 2025

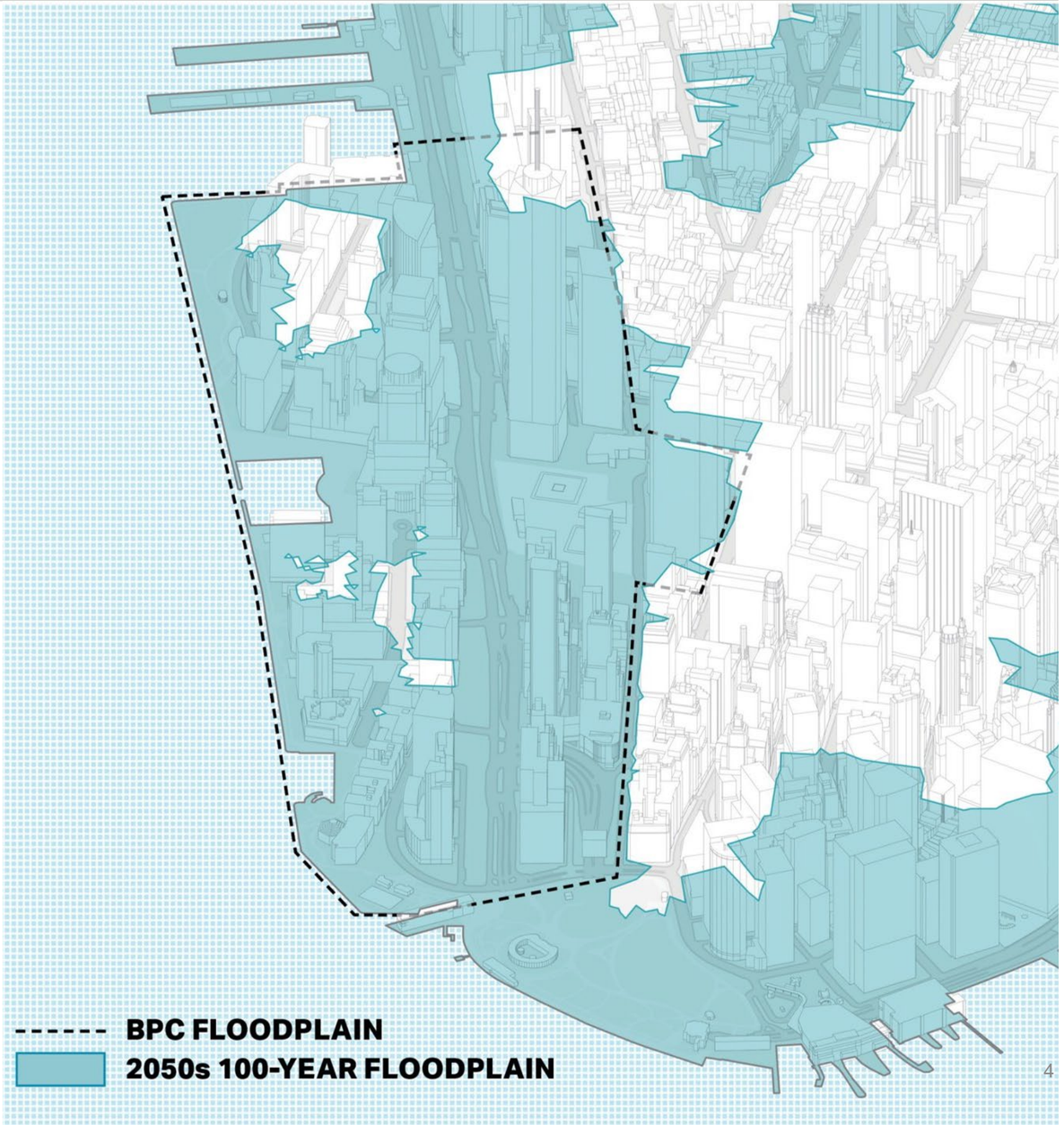
Agenda

1. Background Information
2. Gateway Plaza Specific Information
3. Mitigation Strategies
4. Next Steps

1 Background Information

Why We Are Here

- Superstorm Sandy resulted in **44 fatalities** and billions in property damage in New York City
- 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**
- **BPCA has a responsibility to do our part to protect Lower Manhattan** and create a stronger, more resilient community



Why We Are Here: 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.
- **Increased Native Plantings** to better support birds and pollinators with new planted areas that shorten existing gaps in habitat corridors.
- **Improved In-Water Habitats:** Approximately 1,200 linear feet of reconstructed bulkhead designed to provide environments that support marine life.

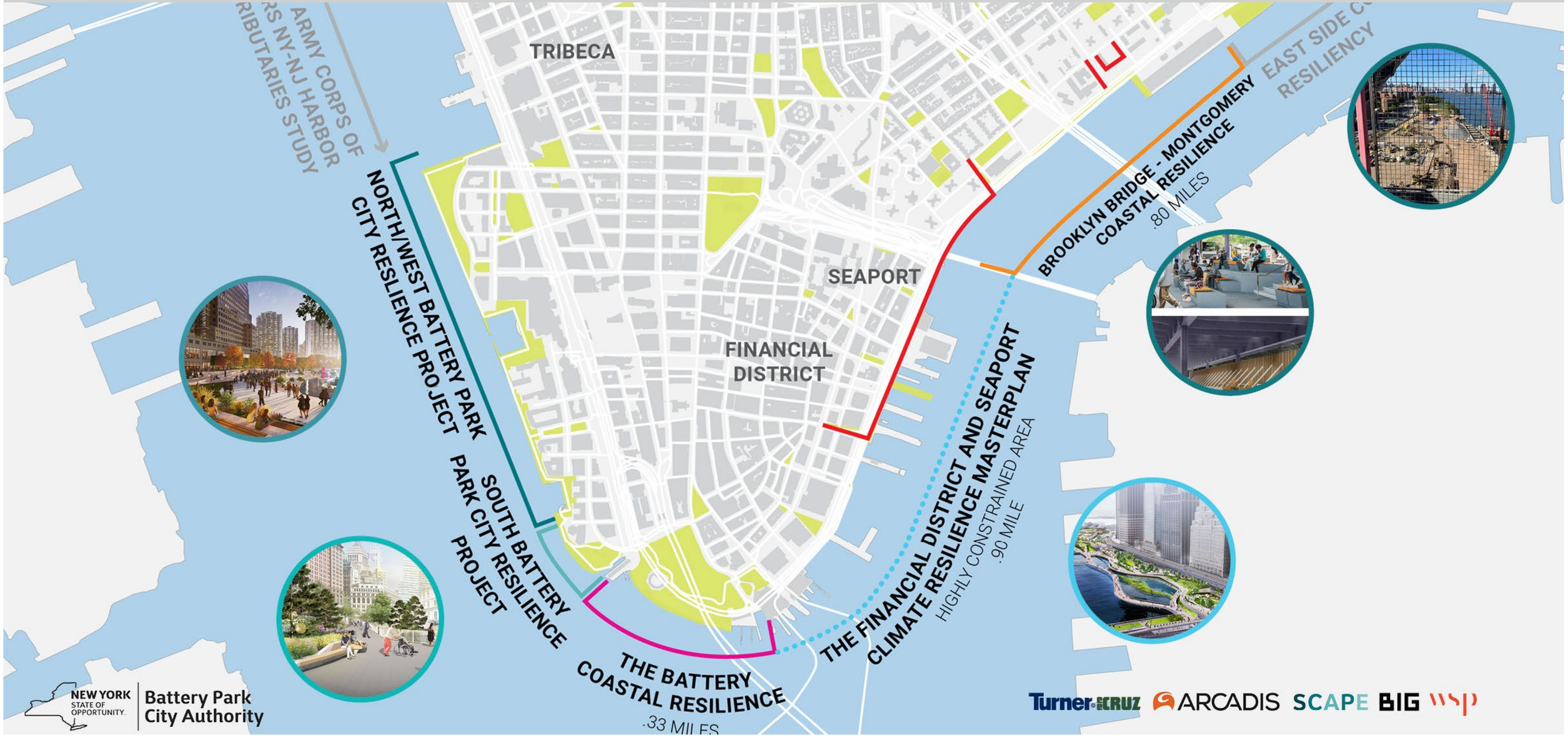
Blue lampposts along the esplanade illustrate the elevation of storm surge for a projected 2050’s 100-year storm, including 2.5 feet of sea level rise. This one at Rector Place is approximately 10.5 feet above the Esplanade

Why We Are Here: Risks of Inaction

- Each future flood event without protection in place will require **extensive clean up and repairs**, involving **construction noise and impacts**
- **Insurance prices** may continue to increase, and property may become uninsurable
- If property is uninsured, **mortgages and financing may no longer be available**
- Without insurance or financing available, **property values may decrease** and BPC will become a less desirable place to live
- Without landscaping improvements, **our environment and tree canopy will not be updated to become more diversified** (age and species) **and sustainable** (resistant to disease)
- Due to climate change, our current environment will continue to become **more vulnerable to environmental stressors such as drought, saturation, and salinity**

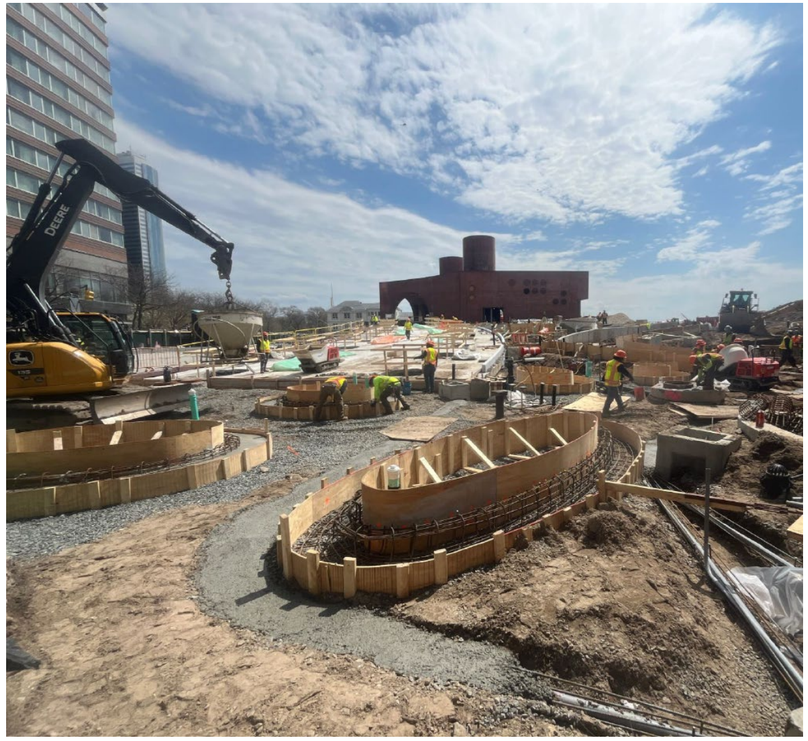
Photo from a high-tide event in January 2023

Why We Are Here: Lower Manhattan Coastal Resiliency (LMCR)



South Battery Park City Resiliency Project: Milestones

- **Construction Start:** Summer 2023
- **Wagner Park Opening:** Summer 2025
- **Pavilion Classroom/Restaurant, Pier A Plaza and Battery Opening**: Fall/Winter 2025/26



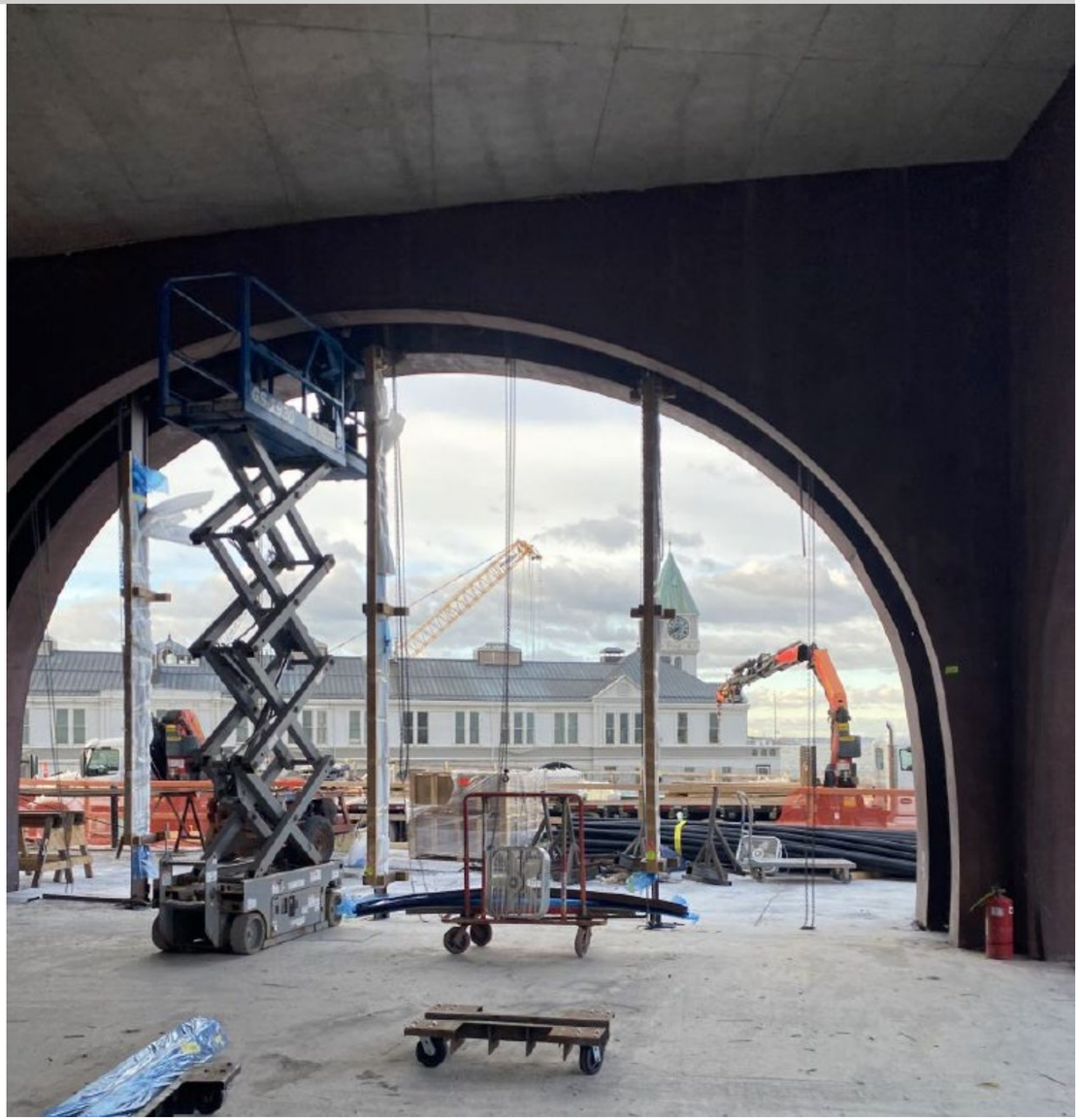
Planter installation

Arrival of first trees

Flood Barrier System construction

South Battery Park City Resiliency Project: Lessons Learned

- **Continue to Engage Stakeholders**: Museum of Jewish Heritage, South Cove Plaza, The Battery
- Maintain a **Community Construction Liaison** to field questions and concerns
- Continue to maintain a thorough **Construction Complaint Log** to ensure accountability
  - Minimize nighttime work
  - Make frequent updates about construction work
  - Provide information about schedule and closures on an ongoing basis



NWBPCR Community Engagement Highlights

- **7 Large Public Meetings**
  - August 4, 2021
  - December 16, 2021
  - June 29, 2022
  - September 19, 2022
  - June 26, 2023
  - November 30, 2023
  - June 20, 2024
- **7 “Site Walks”**
- **6 CB1 Presentations**
- **4 Reach-Specific Workshops**
- **Building-Specific Meetings**
- Dozens of smaller meetings with stakeholders throughout
- Meeting materials available at bpca.ny.gov

North/West Battery Park City Resiliency Project: Project Team

CLIENT TEAM:

CLIENT:

NEW YORK STATE | 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

NWBPCR: Construction Objectives

- **Limit disruption** and complete the project **as quickly as possible**
  - Avoid delay in achieving flood protection
  - Shorten the overall duration of construction impacts to the community
  - Contain project costs by avoiding escalation costs
- **Sequence construction** to accelerate protection of highest risk areas and continuous stretches of space that can be reopened soonest.
- **Begin construction** of N/W ***after*** Wagner Park has reopened
- **Provide meaningful open spaces** throughout construction.
- **Communicate consistently** with the community throughout construction.

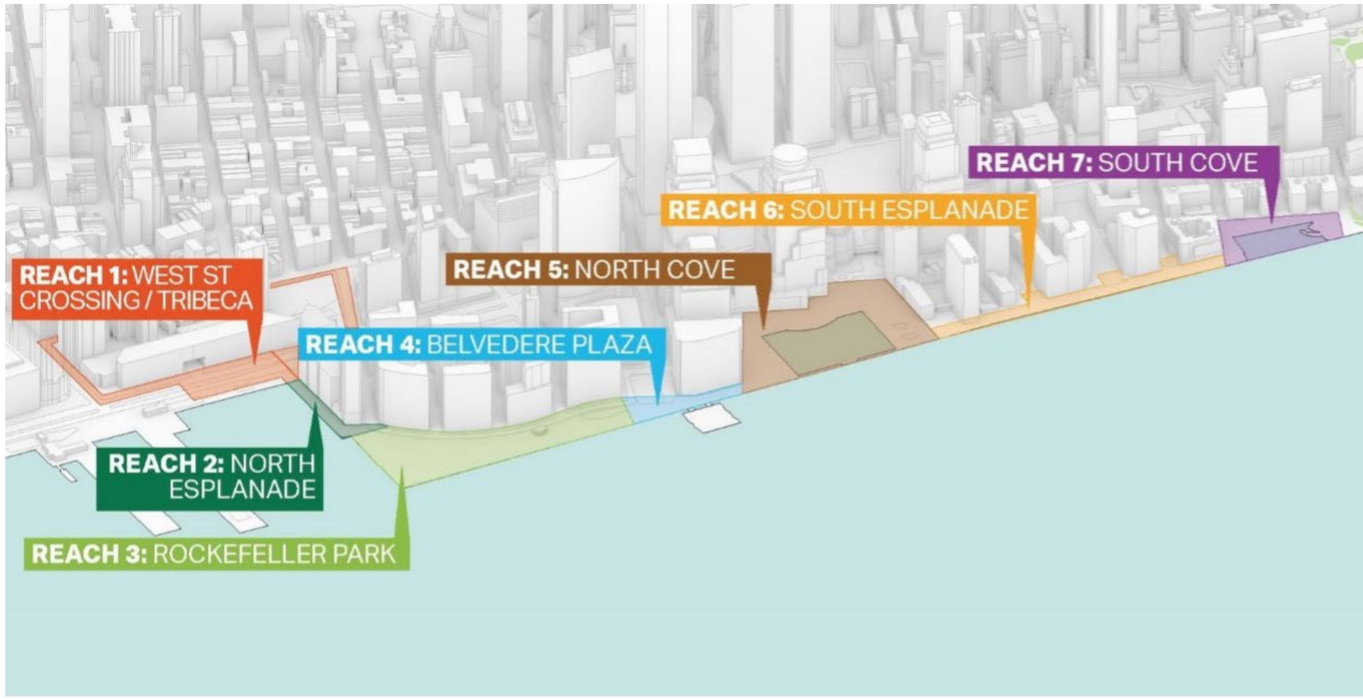
NWBPCR: Timeline

Construction anticipated to begin Fall 2025 and finish in Fall 2030

- This timeline depends on agency approvals and construction logistics (ongoing)

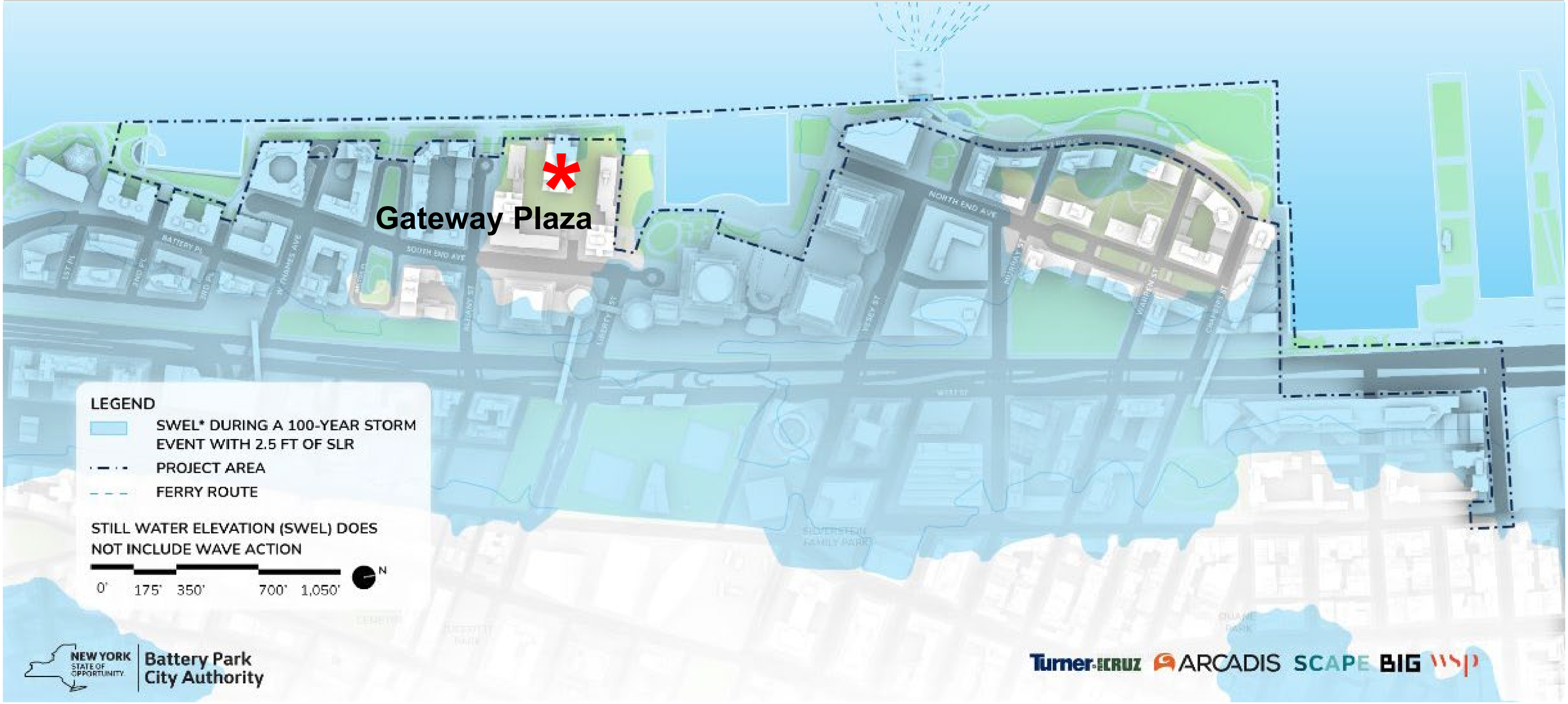
Approximate Start Dates and Durations

- Phase 1: Fall 2025 (6 months)
- West St Crossing/Tribeca: (Reach 1): Winter 2026 (49 months)
- North Esplanade (Reach 2): Winter 2026 (15 months)
- Rockefeller Park (Reach 3): Winter 2028 (29 months)
- Belvedere Plaza (Reach 4): Fall 2027 (31 months)
- **North Cove (Reach 5): Winter 2026 (57 months)**
- **South Esplanade (Reach 6): Fall 2026 (41 months)**
- South Cove (Reach 7): Winter 2026 (24 months)



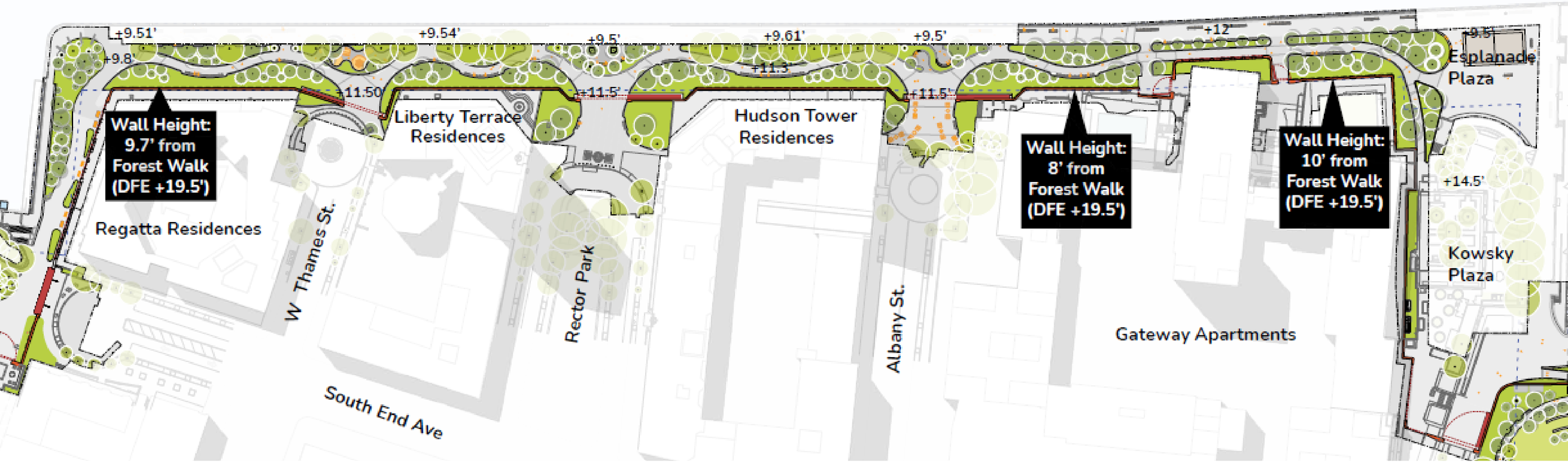
2 Gateway Plaza Specific Information

NWBPCR: Future Flood Risk



NWBPCR: Alignment

South Esplanade Plan: Proposed

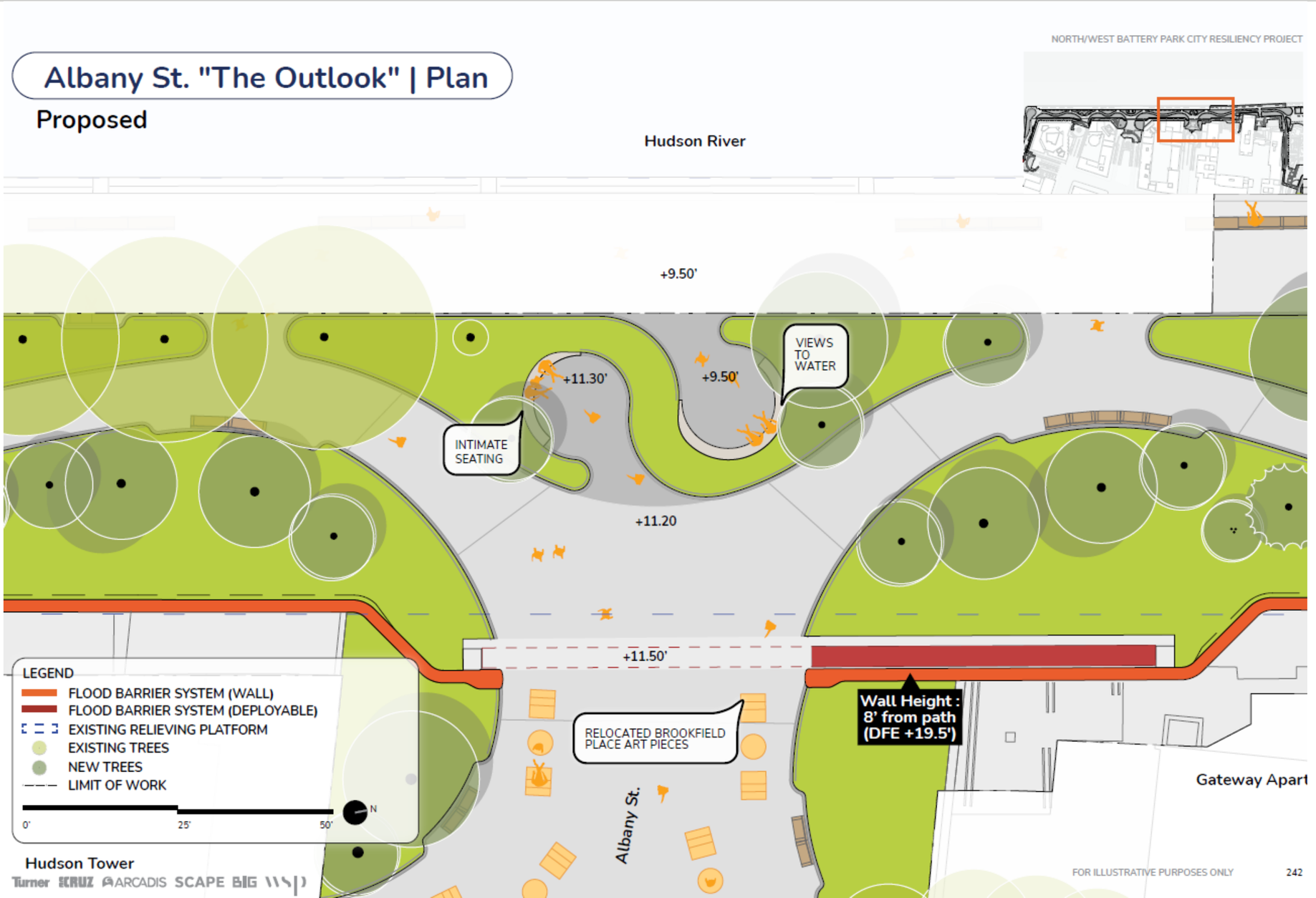


- **Existing Privacy wall at North Building:** 20.6’
  - **Proposed:** 19.5’ (11 inches lower)
- **Existing Privacy wall at South Building:** 18.2’
  - **Proposed:** 19.5’ (16 inches higher)
- **Proposed Flood Wall:** 8’ above grade to North and South, 4’ at Esplanade

South Esplanade Axon: Proposed

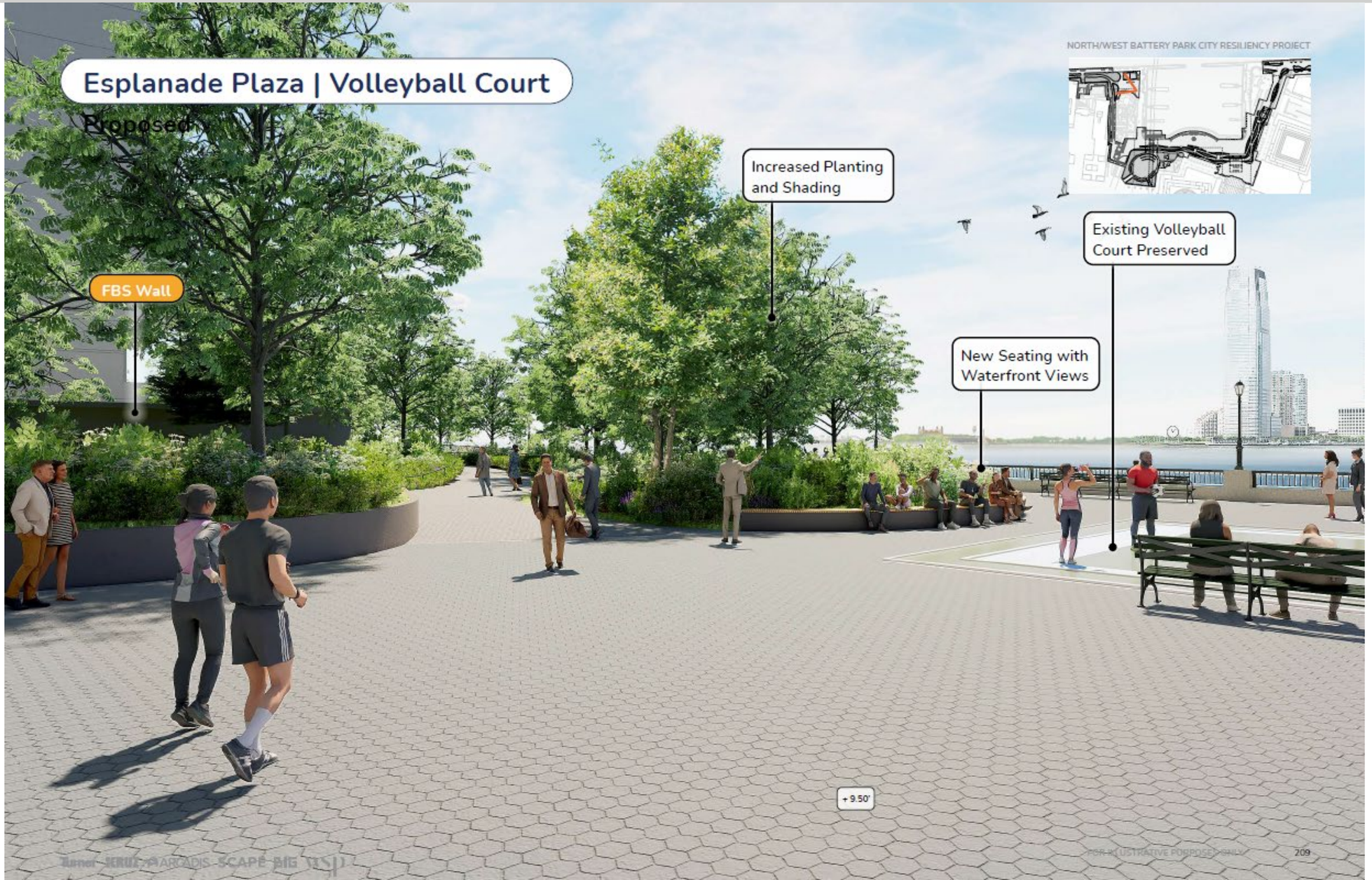
Kowsky Plaza Plan: Proposed

Albany Street End Plan

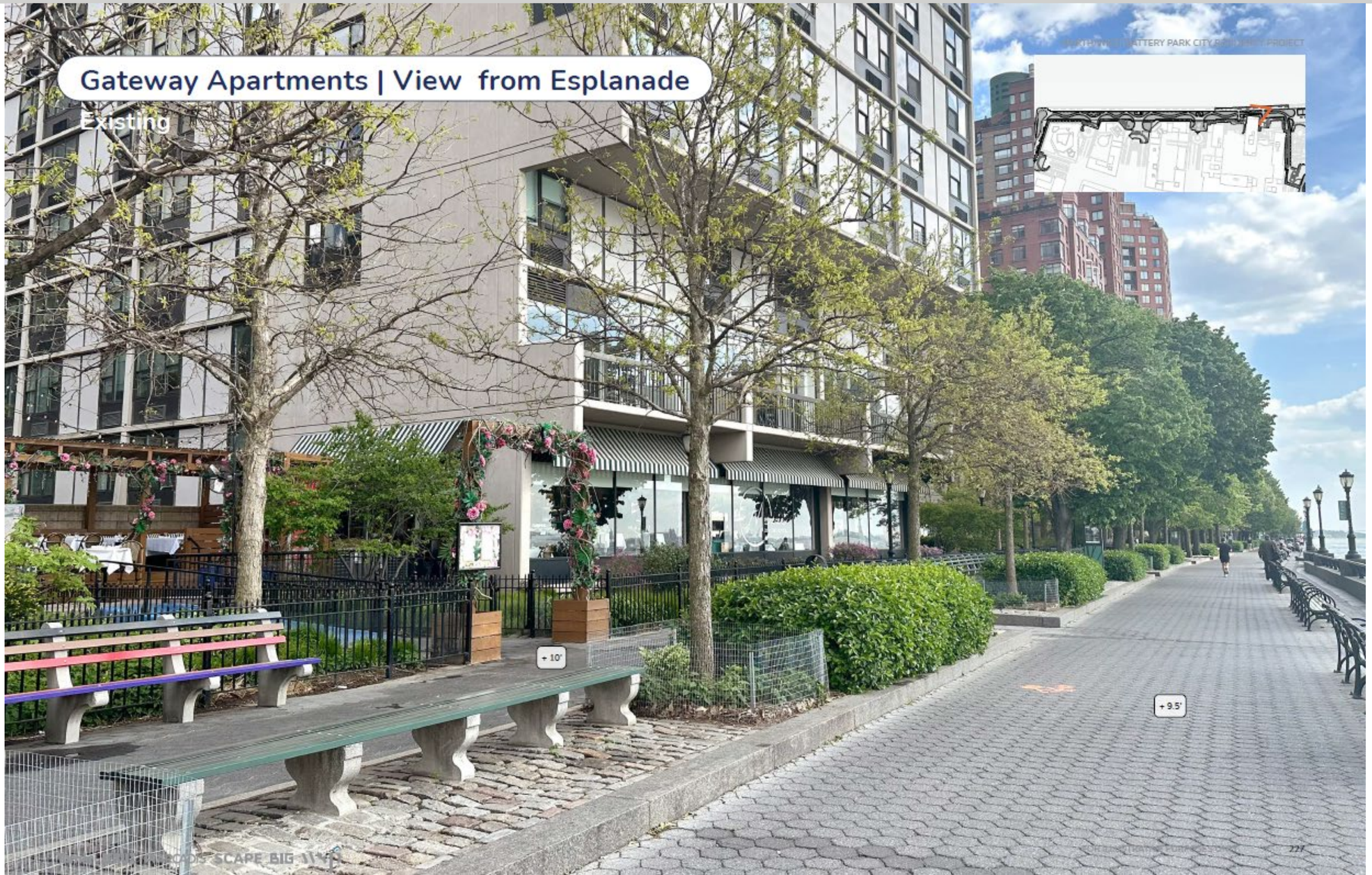


Esplanade Plaza: Existing

Esplanade Plaza: Proposed

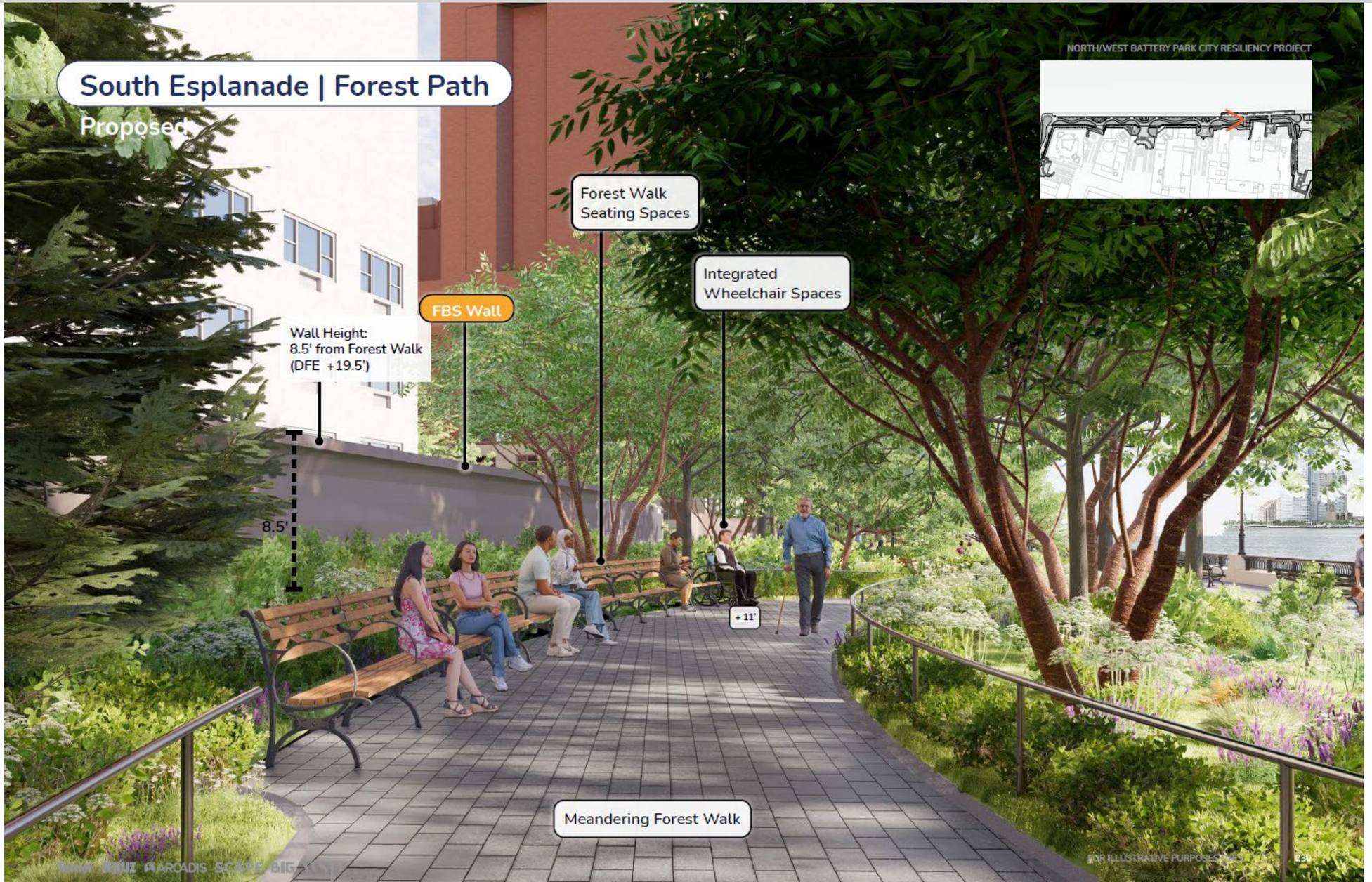


View of Gateway Plaza: Existing



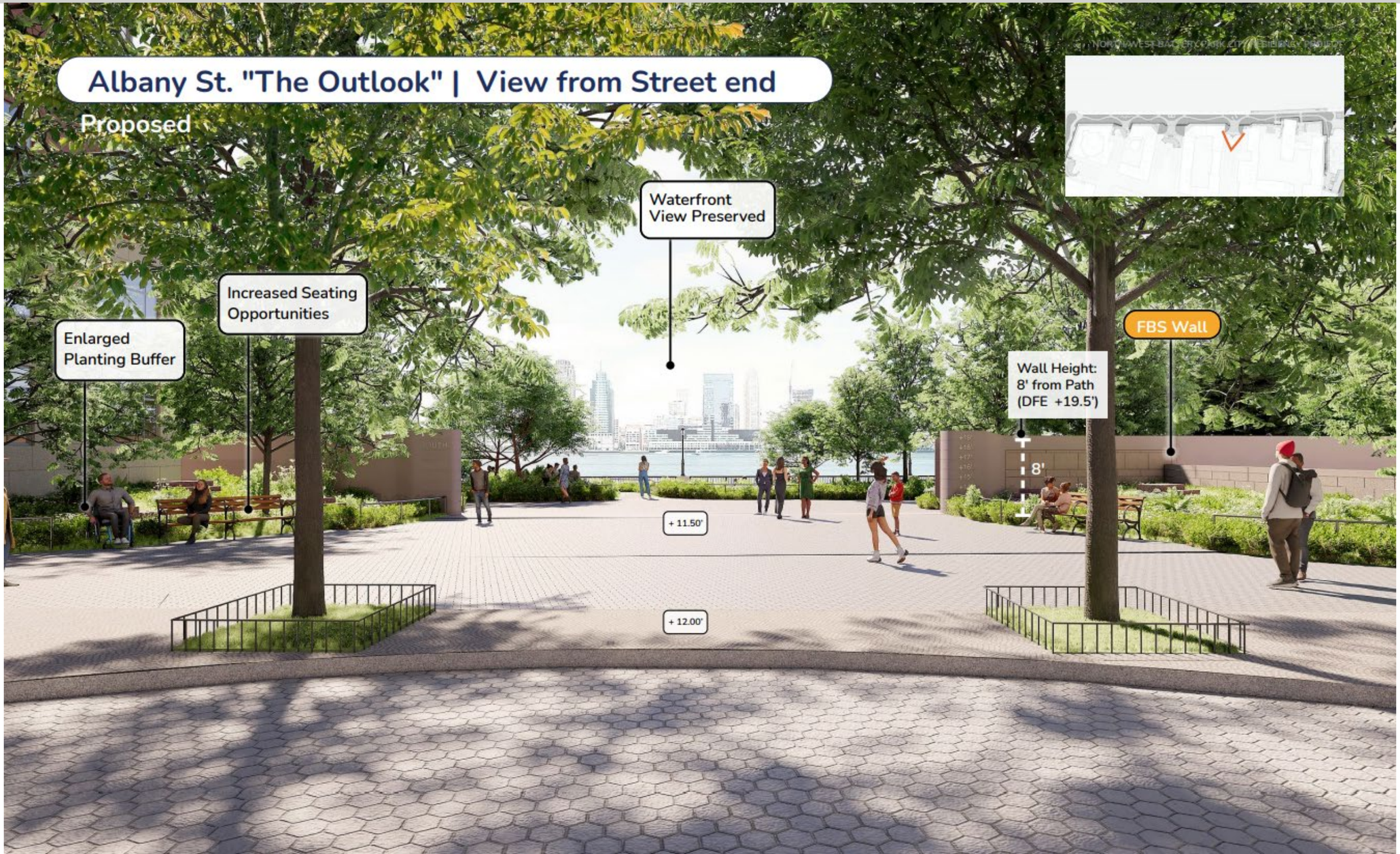
Looking South along Esplanade: Existing

Looking South along Esplanade: Proposed

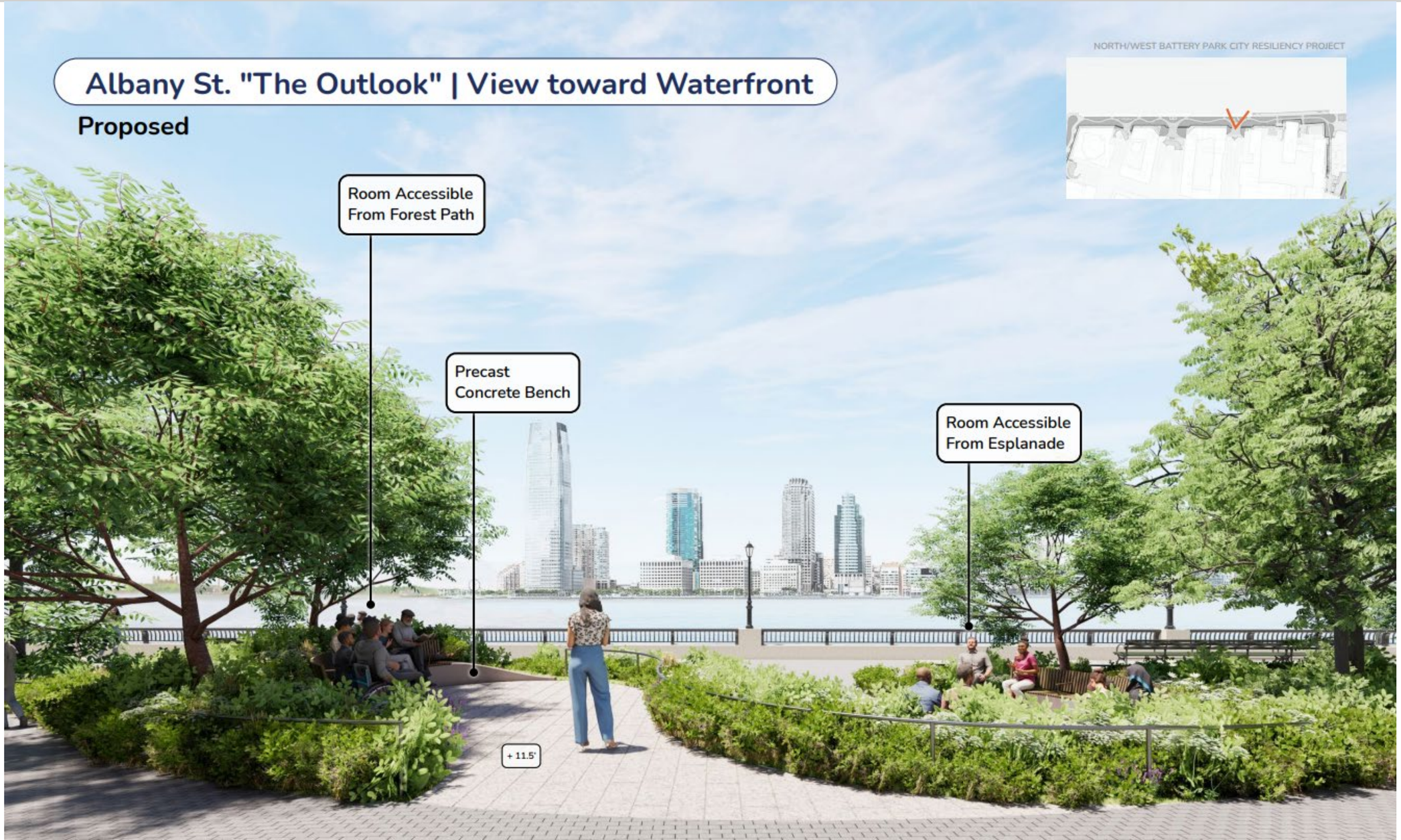


Albany Street End: Existing

Albany Street End: Proposed

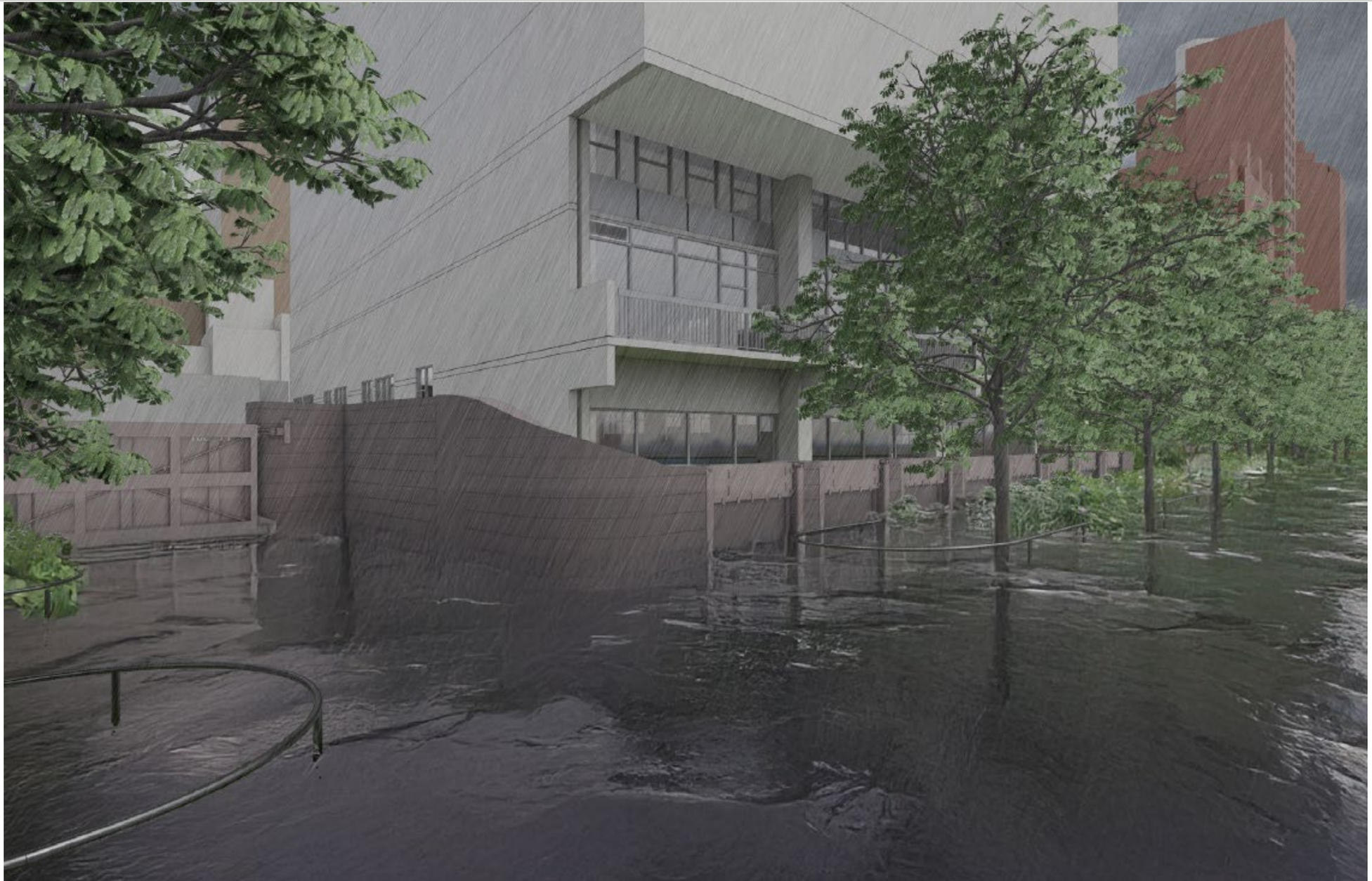


Albany Street End



View of Gateway Plaza: Proposed

View of Gateway Plaza: Proposed Flood Condition



View from inside Gateway Plaza

View from inside Gateway Plaza: Proposed Flood Condition

View of Albany Street End

View of Albany Street End: Proposed Flood Condition

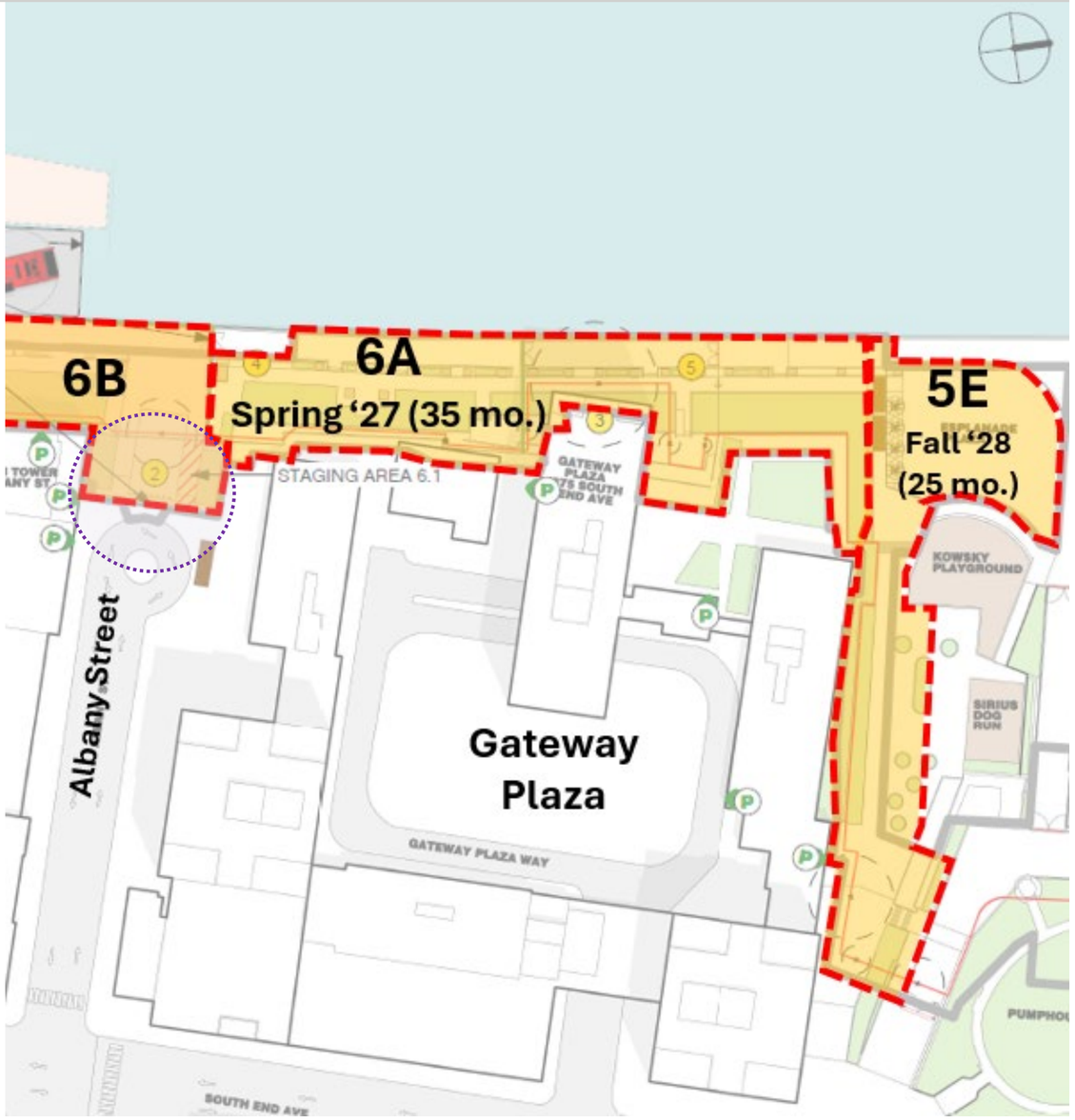
View of Albany Street End from Esplanade

View of Albany Street End from Esplanade: Proposed Flood Condition

Gateway Plaza

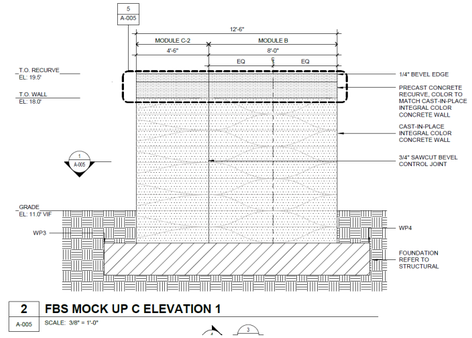
- **Albany Street Wall Mockup Timeline:** Begin late May 2025 (3 months)

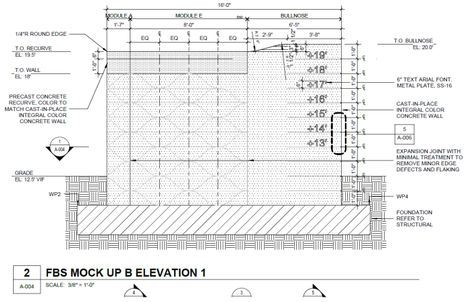
- **Flood Barrier System Construction Timeline**
  - **43 months total**
  - **Phase 6A** Begin Spring 2027 (35 months)
  - **Phase 5E** Begin Fall 2028 (25 months)

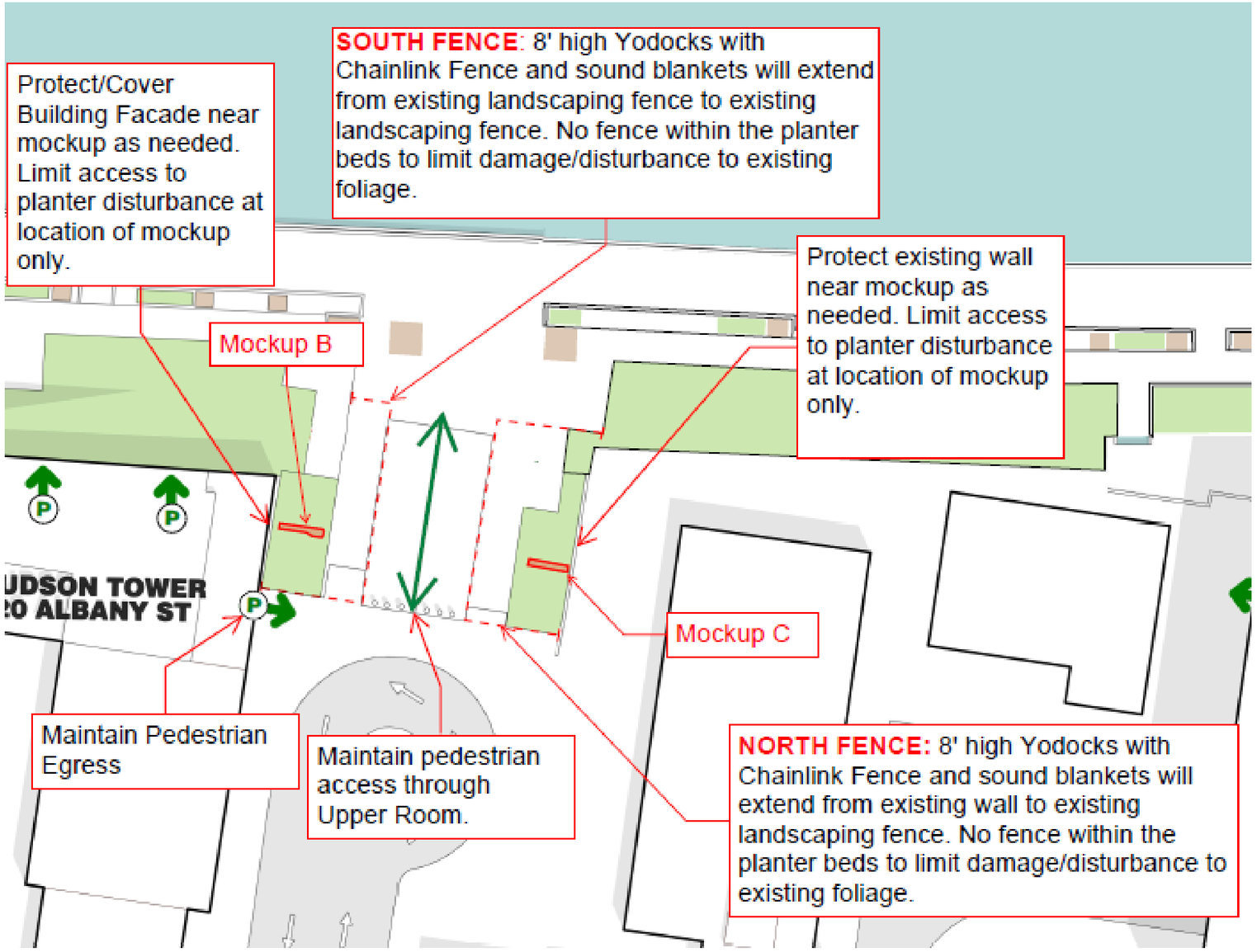


Albany Street End Wall Mockups

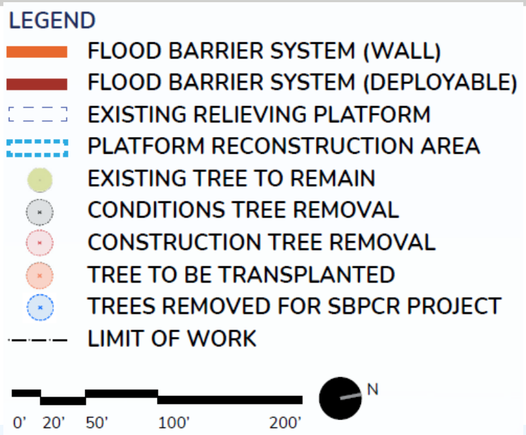
- 2 of 3 mockups (other is at 3rd Place street end at South End Ave)
- Work Scheduled for **May through August 2025**
- Work will involve installation of 8’ high perimeter fence, minor hand excavation, installation of formwork, and pouring the wall mockup sections
- Mockup will remain until NWBPCR construction is finished
- https://bpca.ny.gov/community/bpc-new-look-flood-barrier-system-mockups/

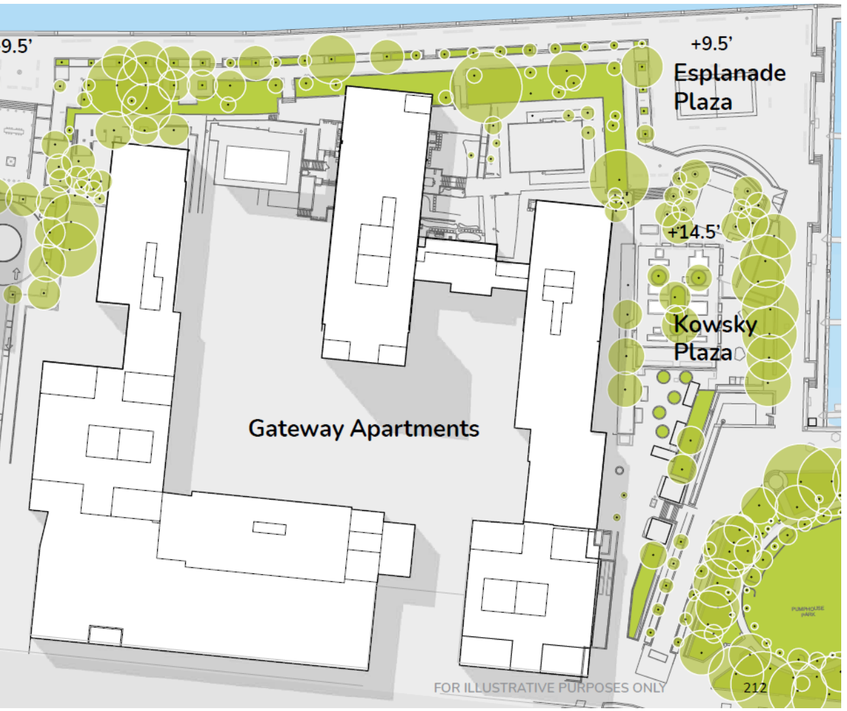




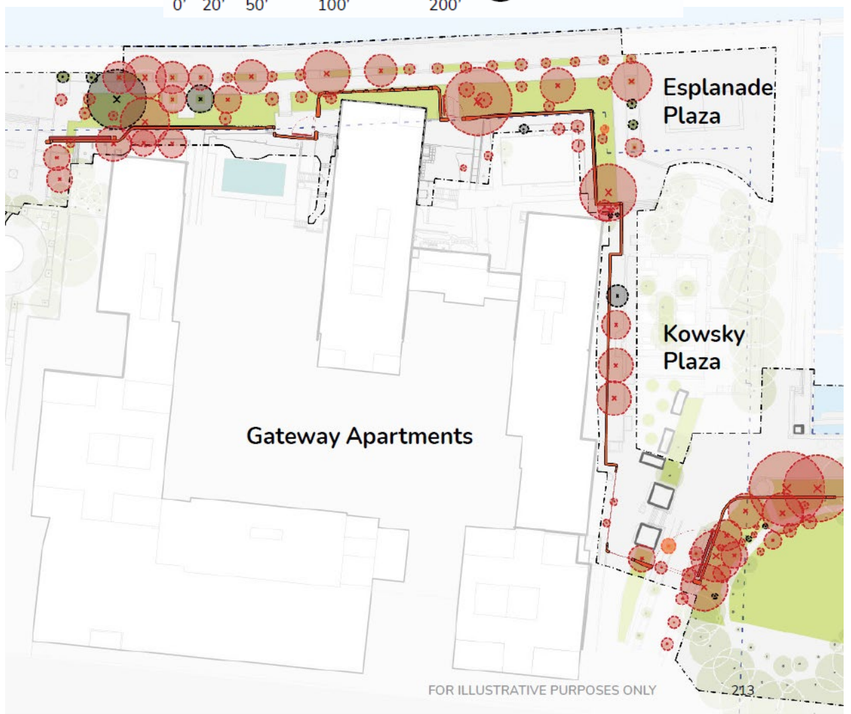


Gateway Plaza: Trees

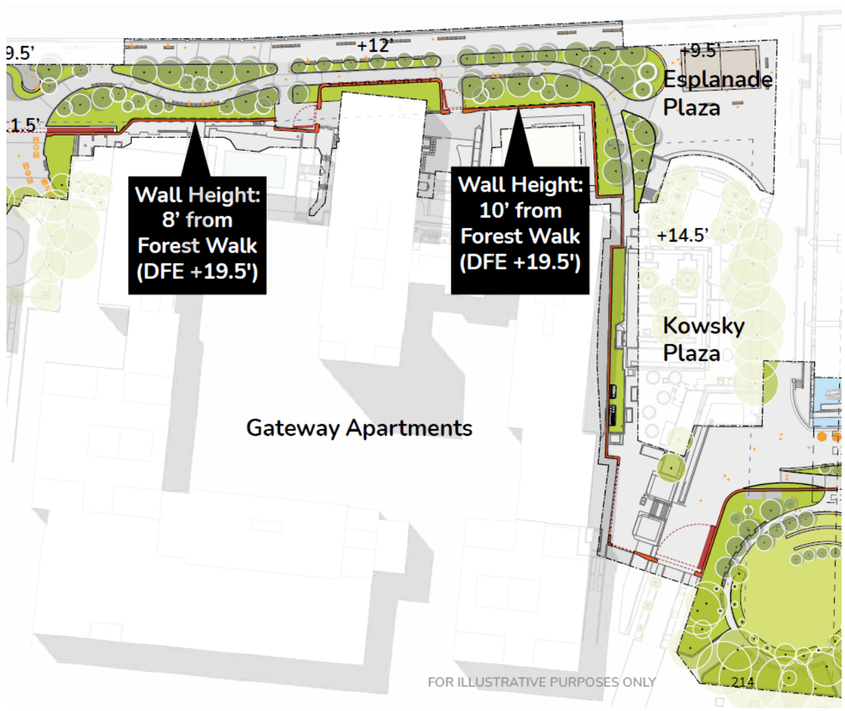




Existing Trees



Modified Trees



Proposed Trees

3 Mitigation Strategies

Gateway Plaza: Noise

NYC City Noise Code

- Exterior noise levels will remain within the limits allowed by the NYC Department of Building and Department of Environmental Protection

Construction will include numerous construction noise control measures, including measures that go **beyond the requirements of the NYC Noise Control Code**, such as:

- Using quieter methods like drilled-shaft piles or vibratory-driven sheeting instead of impact pile driving;
- Limiting the use of the most noise-intensive equipment (e.g., vacuum excavators, hoe rams, jackhammers);
- Using grid power rather than diesel generators wherever possible;
- Configuring sites to minimize or avoid use of vehicle back-up alarms;
- Installing noise barriers with sound-absorbing blankets around the site.

Table 19-1
Noise Levels of Common Sources

Sound Source	SPL (dB(A))
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Source: CEQR 2021 Technical Manual
(https://www.nyc.gov/assets/oec/technical-manual/19_Noise_2021.pdf)

Gateway Plaza: Vibration

- There may be noticeable vibration levels (i.e. vibration levels exceeding 75 VdB) within 250 feet of construction but only for limited periods of time

- Vibration levels at buildings adjacent to pile installation locations **not expected to exceed Peak Particle Velocity (PPV), or 0.5 inches/second, the threshold used by the Department of Buildings (DOB) and Landmark Preservation Commission (LPC)**

Gateway Plaza: Hazardous Materials / Dust / Air Monitoring

Hazardous Materials:

- Construction activities will **comply with the NYCDEP-approved Remedial Action Plan (RAP)**, which includes a Community Air Monitoring Plan and a Construction Health and Safety Plan.

Dust Suppression strategies to be used:

- Spraying water on exposed soil and open areas, covering exposed soil with secured tarps
- Extra precautions during dry or windy conditions

Air Monitoring:

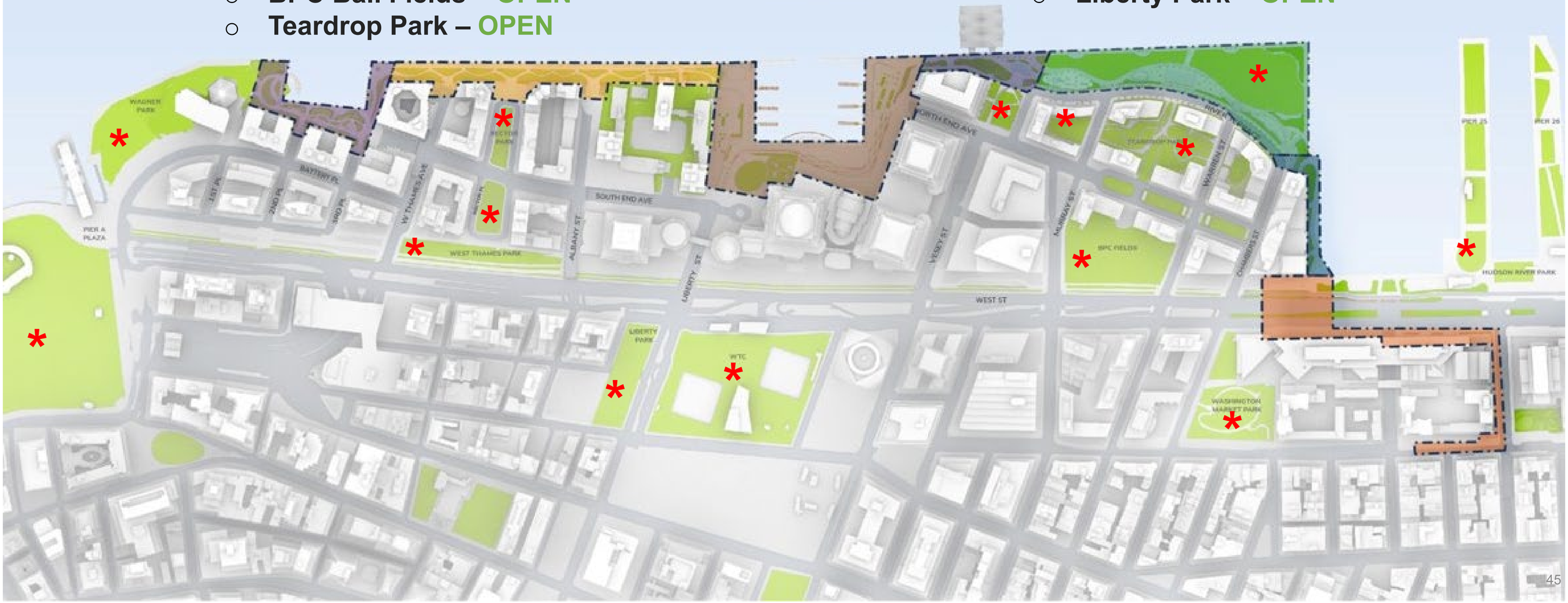
- **Air monitors will be installed around the site during construction**
- Real-time alerts will help us respond quickly if air quality limits are exceeded
- Monthly community air monitoring reports will be published

Open Space During Construction

- Wagner Park – OPEN
- Rector Park – OPEN
- West Thames Park – OPEN
- Rockefeller Park North Lawn – OPEN
- BPC Ball Fields – OPEN
- Teardrop Park – OPEN

Also Open:

- The Battery – OPEN
- Hudson River Park – OPEN
- Washington Market Park – OPEN*
- Liberty Park – OPEN



4 Next Steps

Next Steps

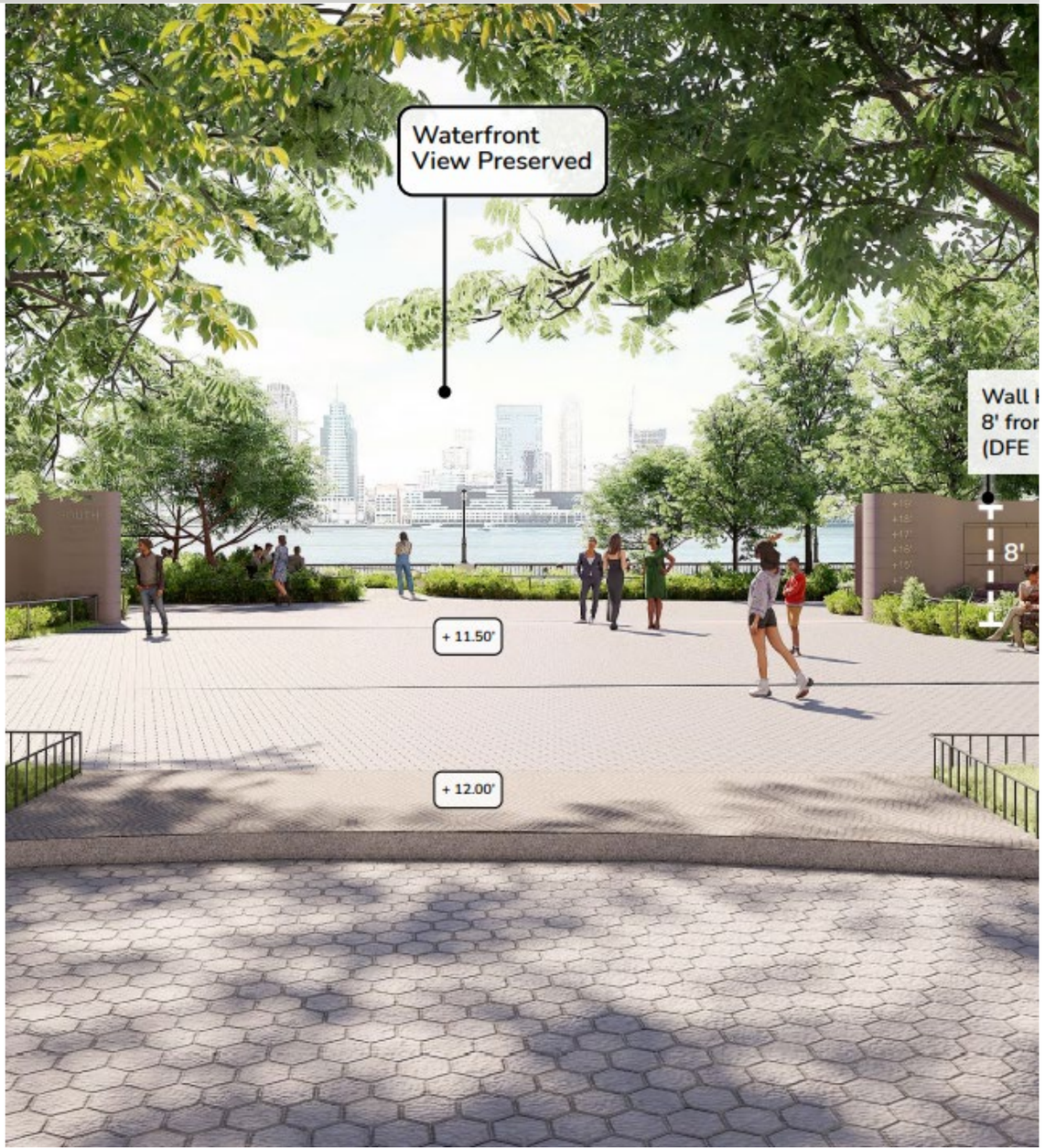
1. BPCA's goal is to **inform the community about on-going plans** and troubleshoot any items of concern

2. **Neighborhood Improvement Projects** to enhance public space during construction beginning in Fall 2025

3. **Community Construction Liaison: Michael Ryan**

4. **Next Gateway Touchpoint**
   - Summer 2025

5. **Next Community Touchpoint**
   - Community Meeting in Fall 2025




Q&A