Appendix A
Final Scope of Work (FSOW)

North/West Battery Park City Resiliency Project

Final Scope of Work to Prepare a

Draft Environmental Impact Statement

August 28, 2024

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Draft Environmental Impact Statement

August 28, 2024

SEQR No.: 22BPC001M

SEQR Lead Agency: **Battery Park City Authority**

Agency Contact:
Gwen Dawson
Senior Vice President,
Design and Construction
Battery Park City Authority
200 Liberty Street, 24th floor
New York, NY 10281

Preparers:
AKRF, Inc.
440 Park Avenue South,
New York, NY 10016

With the Assistance of:

AECOM
125 Broad Street, Floor 15
New York, NY 10004

Matrix New World
26 Columbia Turnpike
Florham Park, NJ 07932

1 Introduction

1.1 Overview

The Battery Park City Authority (BPCA), as Lead Agency, has determined that implementing the proposed North/West Battery Park City Resiliency Project (referred to herein as the "NWBPCR Project" or "Proposed Project") requires a number of discretionary actions and may have significant impacts on the environment. Therefore, in accordance with the requirements of 6 NYCRR Part 617 implementing regulations to Article 8 of the State Environmental Quality Review Act (SEQR), BPCA will prepare for public review a Draft Environmental Impact Statement (DEIS) that will disclose potential environmental impacts from the Proposed Project, propose mitigation that may address those impacts, and evaluate alternatives.

This document is the Final Scope of Work for preparing the DEIS. This Final Scope of Work sets forth the proposed content of the DEIS and provides a summary description of the Proposed Project; a description of alternatives to be evaluated, including the No Action Alternative; and the methodologies for assessing environmental impacts based on SEQR and 2021 *City Environmental Quality Review (CEQR) Technical Manual* guidelines. A Draft Scope of Work (DSOW) for the DEIS preparation was released on October 19, 2022, and as part of the scoping process a public scoping meeting was held on November 16, 2022 and the period for submitting written comments was open between October 19, 2022 and December 31, 2022. Attachment 1 to this Final Scope of Work provides the responses to comments on the DSOW. Modifications between the DSOW and this FSOW are related to:

- Responses to comments made at the public scoping meeting on November 16, 2022;
- Adjustment of the projected project start and completion years from 2024 to 2027 in the DSOW to 2025 and 2030 in this FSOW;
- Elimination of the alternative flood barrier system alignment along Chambers Street and finalizing the North Moore Street alignment;
- Selection of a location for the proposed pump station and related infrastructure improvements to address interior drainage needs during a storm event;
- Based on a review of project construction data and Level 1 and 2 transportation screening assessments coordinated with NYCDOT and NYSDOT, it was determined that the temporary construction impacts of the proposed project on transportation systems (traffic operations and sidewalks) are to be addressed in the DEIS both quantitatively (locations of intersection and sidewalk modeling where CEQR thresholds are exceeded and there is the potential for impacts) and qualitatively (locations where modeling is not required). It was also determined that no detailed assessments of transit systems (buses and subways) are warranted; therefore, the temporary effects on these elements will be addressed qualitatively in the DEIS.
- Text and figure updates to address the current (August 2024) project design alignment that include in Reach 1 locating the flood barrier system gate crossing at Route 9A to the south from Harrison Street to align more with northern limits of BPC and the siting of interior drainage improvements along Route 9A (including the pump station site), in Reach 5 design advancement of the cooling water tunnel gates in Reach 5 at North Cove; in Reach 7 aligning the flood barrier system along the perimeter wall which avoids modifying the South Cove in-water installations and landscaping, and other minor refinements in the Project Area to reflect advancement of the project design.

1.2 Background and Summary Description of the Proposed Project

Climate change-induced sea level rise accompanied by more frequent, intense storm events and storm surges are a significant risk to coastal communities, and in 2012 Superstorm Sandy accentuated the

impacts of these types of events in the New York City area. In anticipation of the need for coastal protection against future severe storms and sea level rise, the NWBPCR Project has been proposed by BPCA to be designed in coordination with a broader coastal flood risk management system for Lower Manhattan (see **Figure 1**) that includes several separate and distinct projects, specifically the South Battery Park City Coastal Resiliency Project (SBPCR Project), the Battery Coastal Resilience Project, Financial District and Seaport Master Plan, the Seaport Coastal Resilience Project, and the Brooklyn Bridge-Montgomery Coastal Resilience Project that collectively will support the overall Lower Manhattan Coastal Resiliency (LMCR) Strategy and reduce vulnerability to coastal floods (see **Figure 2**).

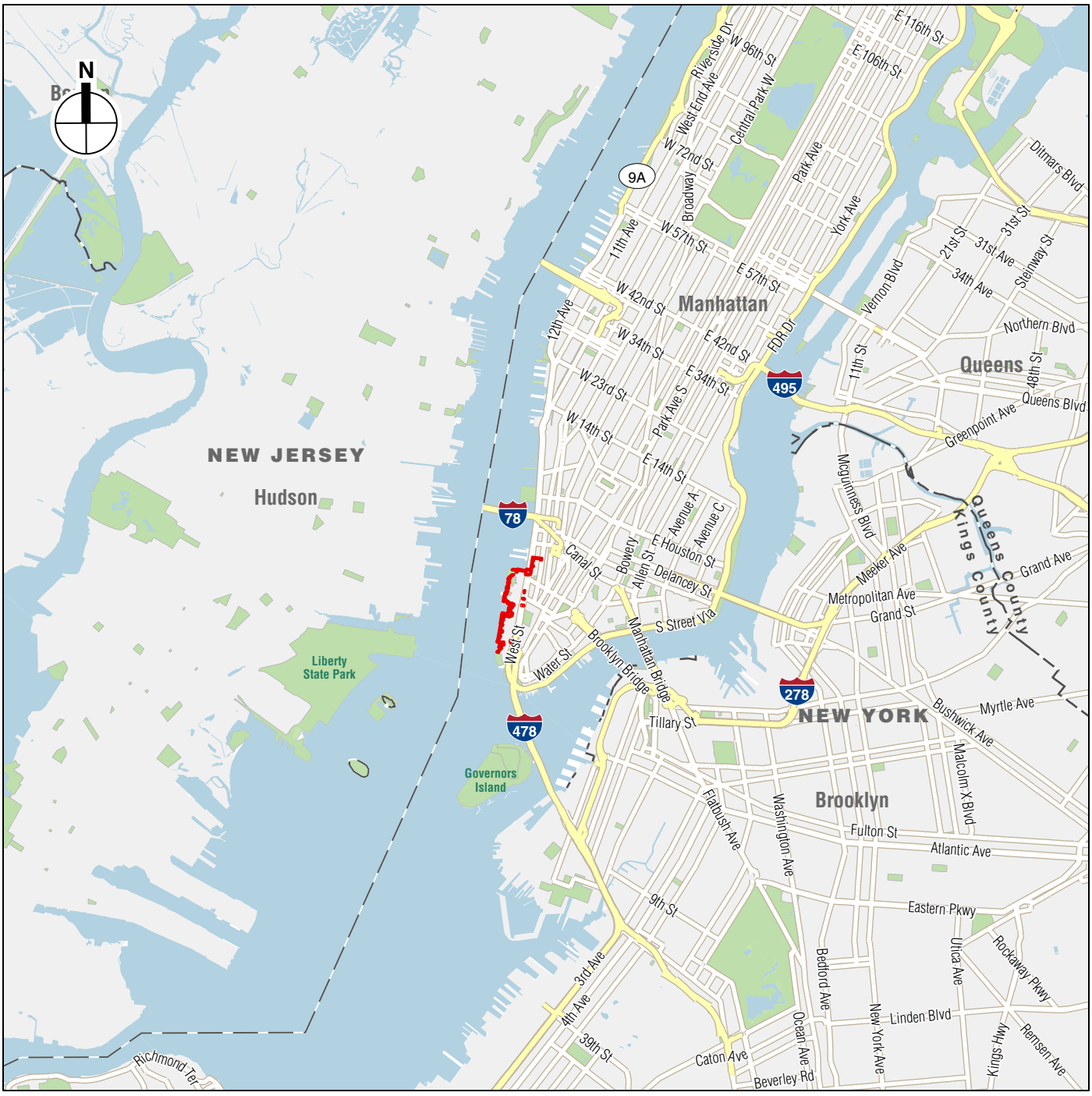
The NWBPCR Project Area (Project Area), defined herein as the area in which direct physical disturbance is necessary to implement the project, extends from South Cove in Battery Park City's (BPC) south neighborhood (where it would connect with the SBPCR Project at 1st Place) northward to the BPC North Esplanade with an alignment continuing east across Route 9A/ ~~(~~West Street~~)~~ then north along the east side of Route 9A to ~~either at Chambers Street or further north at~~ North Moore Street where it turns ~~and continuing~~ east to terminate at an upland limit on Greenwich Street (see **Figure 3**). The NWBPCR Study Area (Study Area), which extends beyond the Project Area, varies by technical analysis area, but is generally within 400 feet of the Project Area (see **Figure 3**). Foundations for the flood barrier system are anticipated to extend 50 to 90 feet below the ground surface, pending final geotechnical investigation and final foundation design.

The NWBPCR Project is being designed to provide flood risk reduction for the proposed protected area for 2050s 100-year storm events, inclusive of rainfall, coastal surge, and predicted sea level rise (see **Figures 4 and 5**). It is one of three resiliency projects having been undertaken by BPCA to address flood risk reduction within the 92-acre Battery Park City property. The other two projects are the Battery Park City Ball Fields and Community Center Resiliency Project and the SBPCR Project (see **Figure 6**). The proposed flood barrier system is also being designed to provide protection against 100-year storm events inclusive of the 90th percentile projection for sea level rise for the 2050s, with adaptability for future conditions considered as well (see **Figure 6**).

The proposed flood barrier system would include passive structures (e.g., above-grade concrete walls, below-grade concealed walls, etc.) with deployable structures at vehicle and pedestrian crossings (see **Figures 7 and 8**). As described in this scope, the term "flood barrier system" is used to identify this potential combination of flood barrier measures. In describing the location of the proposed flood barrier system protection measures, the term "flood barrier alignment" is used. In addition, to protect against interior flooding, improvements are proposed to the City's drainage infrastructure, including the isolation of the existing underground sewer components and a pump station at a location between the Hudson River Greenway and Stuyvesant High School. The proposed flood barrier alignment also spans the Port Authority Trans-Hudson (PATH) tunnels beneath the Project Area (in Reach 5); the Port Authority of New York and New Jersey has separately implemented measures to provide flood protection for its assets. For more information on the proposed flood barrier system, its alignment and associated improvements, see Section 3.1 and **Figure 9**.

Battery Park City was planned and developed according to a Master Plan adopted in 1979 and is partially situated on filled land created by construction of the World Trade Center during the late 1960s and the early 1970s. A key feature is its waterfront esplanade and open spaces to the west (or riverside) of the developed structures.[1]

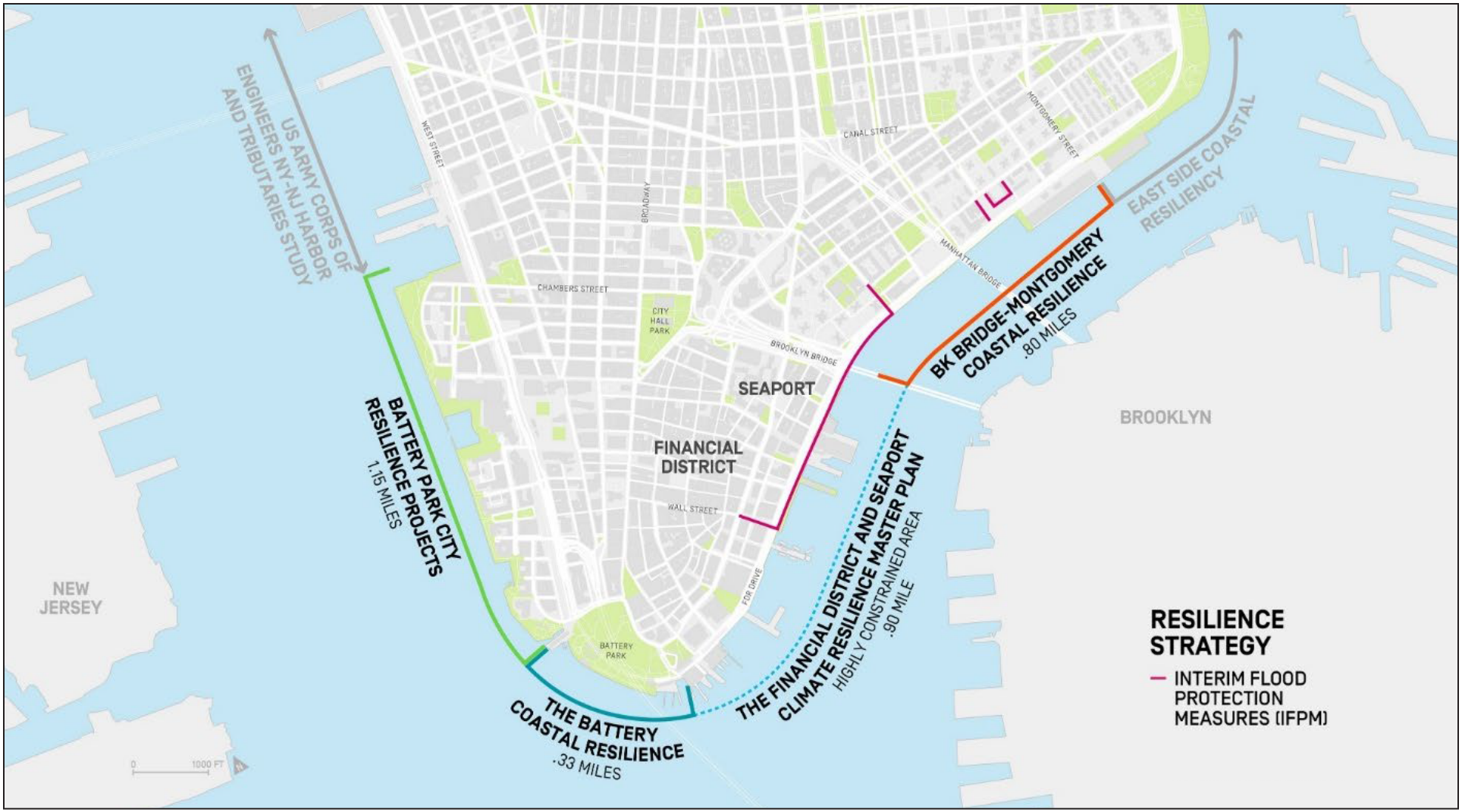
[1] https://bpca.ny.gov/places/parks/



Regional Location

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 1

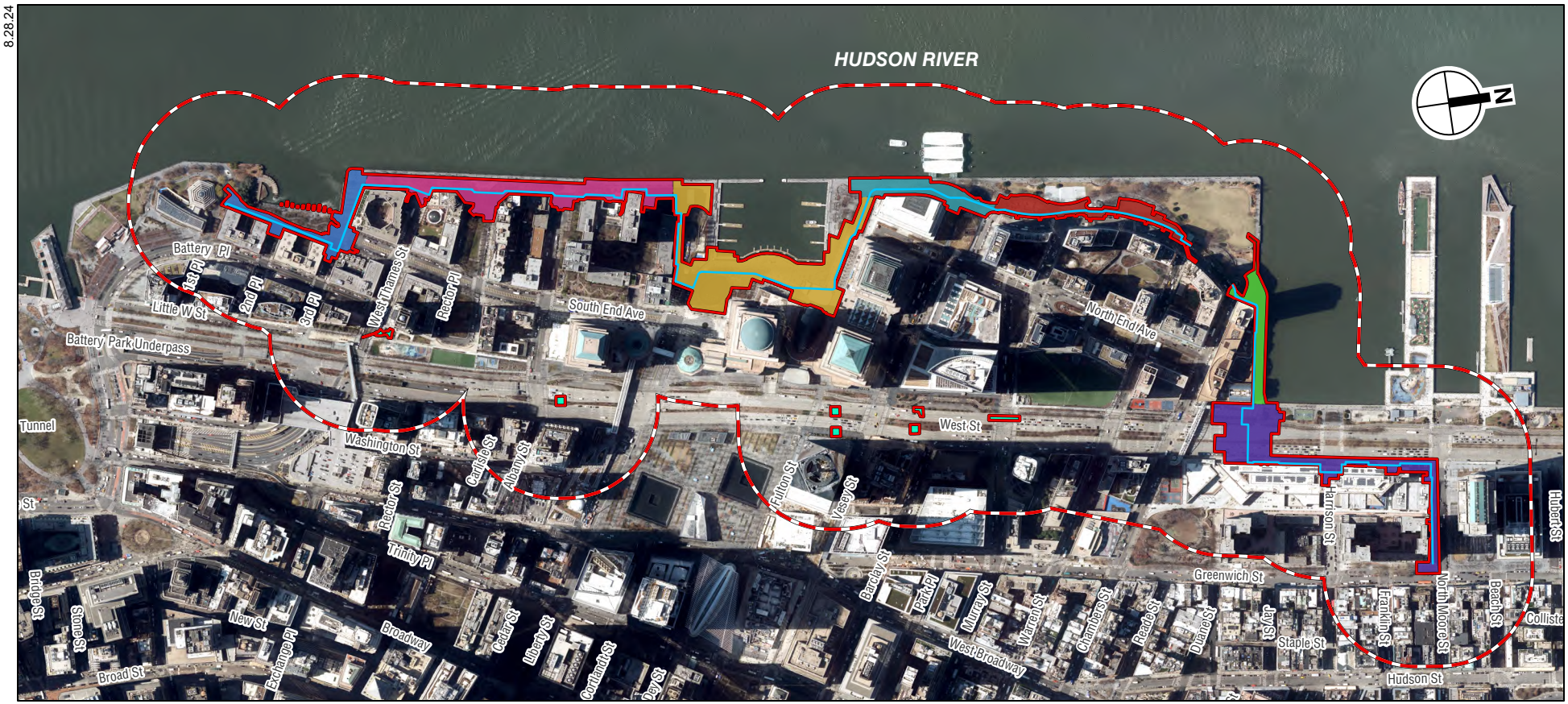


Lower Manhattan Resiliency Projects

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 2

8.28.24

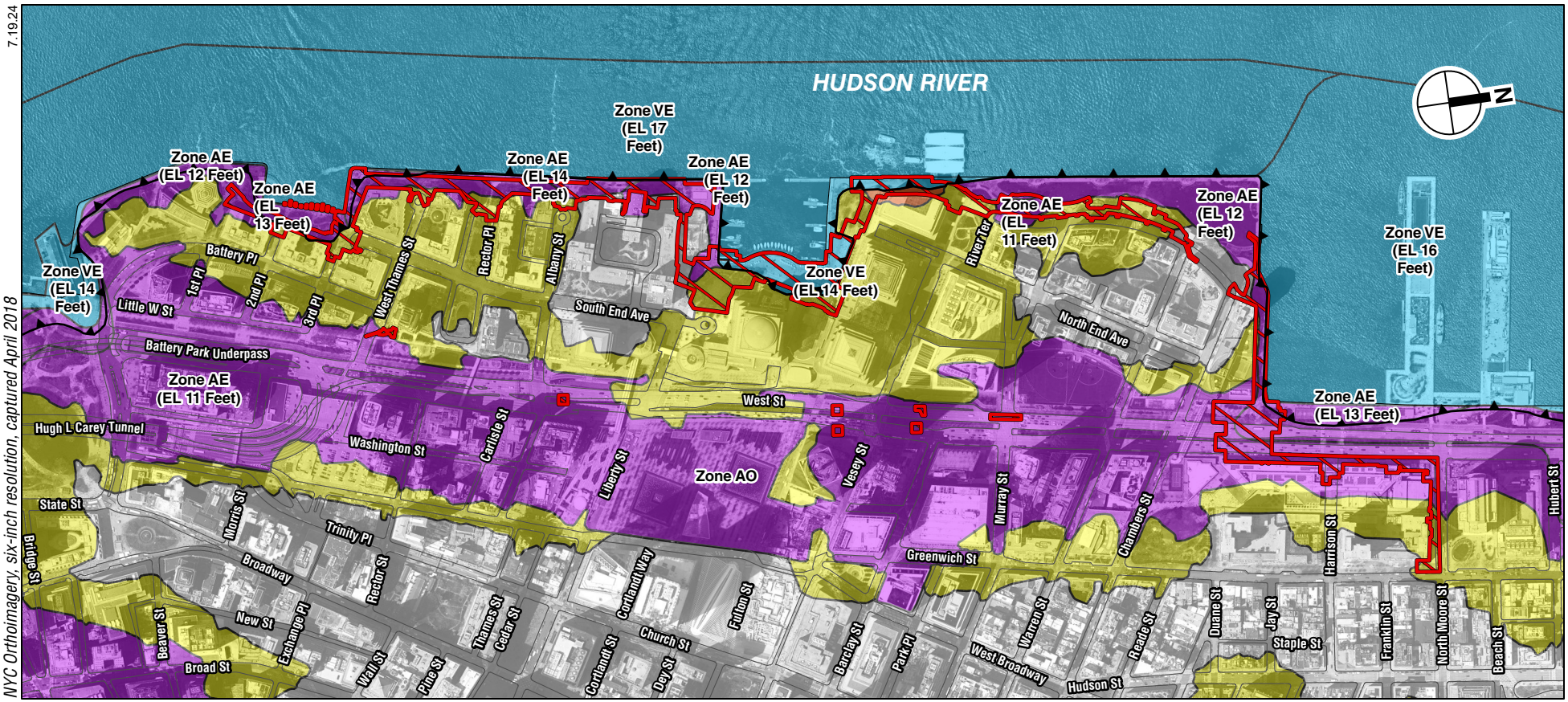


- Project Area
- Study Area (400-foot perimeter)
- Flood Barrier System
- Reach 1 - North Moore Street and West Street
- Reach 2 - North Esplanade
- Reach 3 - Rockefeller Park and Playground
- Reach 4 - Lily Pond and Ferry Terminal
- Reach 5 - North Cove
- Reach 6 - South Esplanade
- Reach 7 - South Cove
- Interior Drainage Elements

Project Area and Reaches

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 3



7.19.24

Data sources: FEMA, January 2015 / NYS GIS Program Office; NYC Orthoimagery, six-inch resolution, captured April 2018

- *Project Area*
- *1% Annual Chance of Flooding - Zone AE*
- *1% Annual Chance of Flooding - Zone AO*
- *1% Annual Chance of Flooding - Zone VE*
- *0.2% Annual Chance of Flooding*
- *Limit of Moderate Wave Action*

FEMA Preliminary FIRM 2015

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 4

7.19.24



Project Area

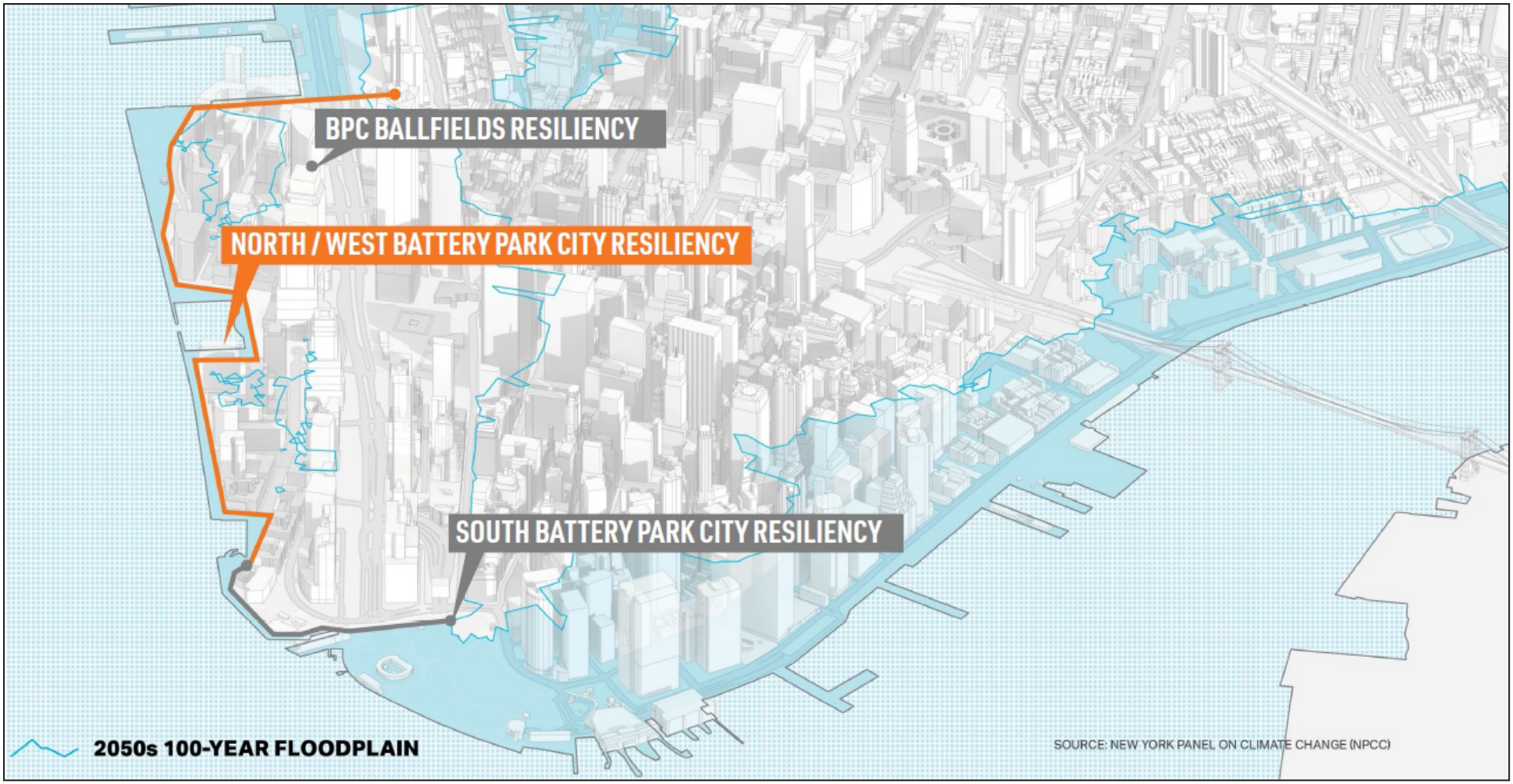
SBPCRP Project Area

Protected Area

Protected Area Aerial Map

NORTH/WEST BATTERY PARK CITY RESILIENCY

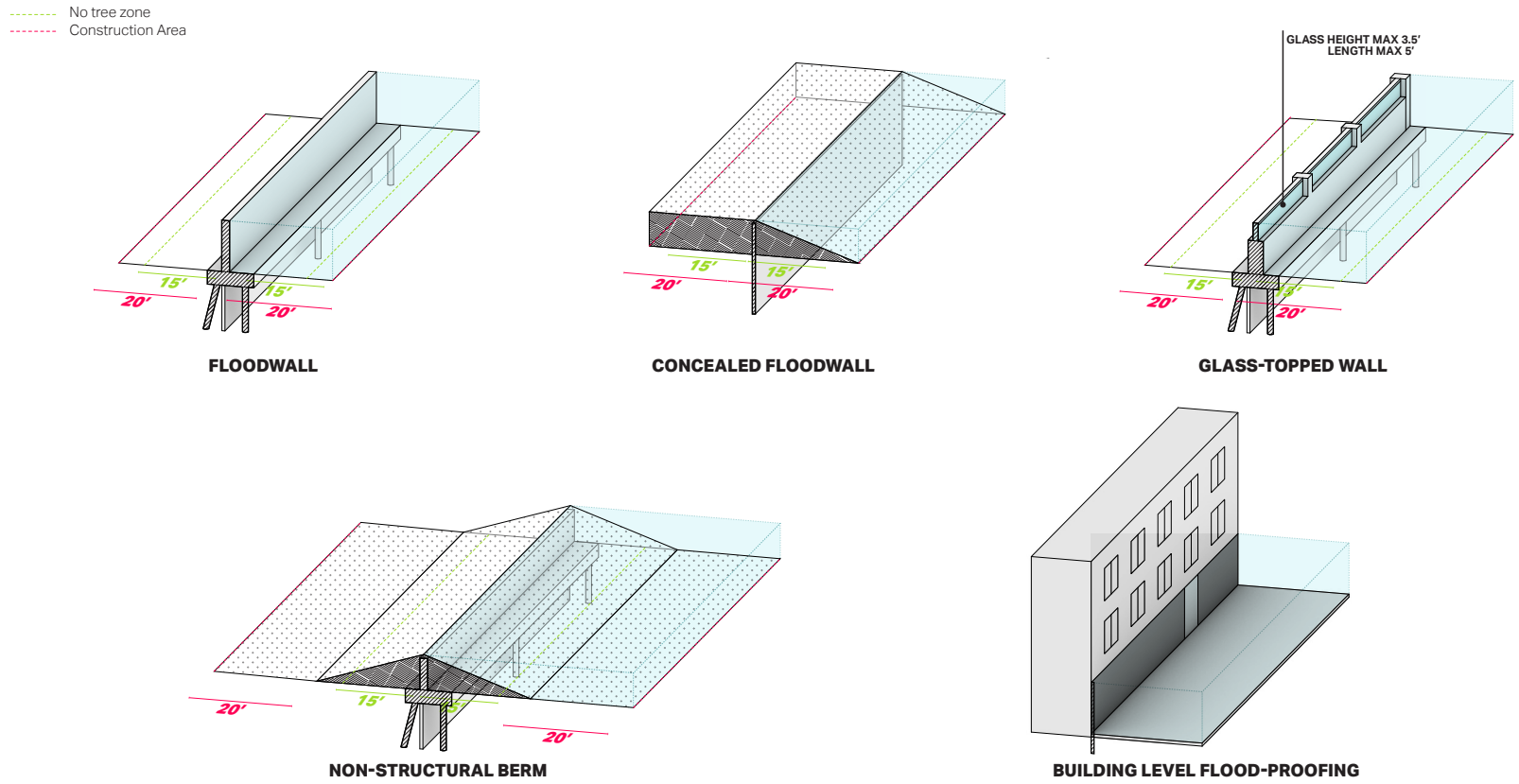
Figure 5



Battery Park City Resiliency Projects

NORTH/WEST BATTERY PARK CITY RESILIENCY

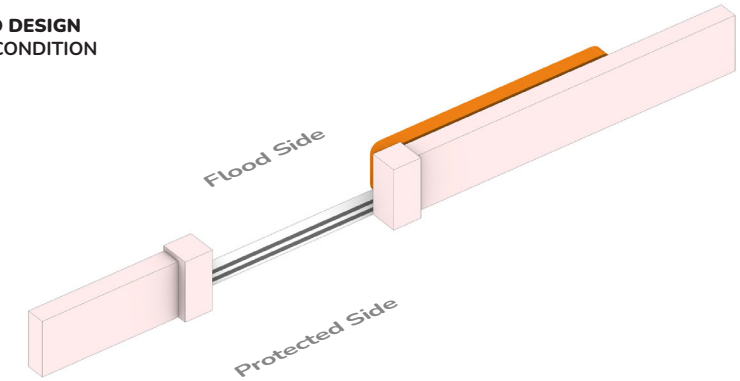
Figure 6



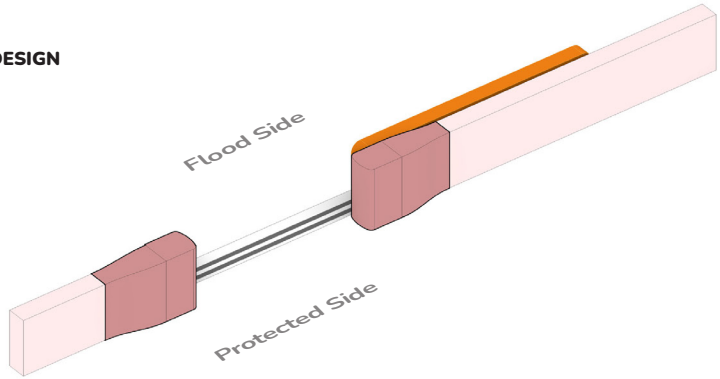
Flood Protection System: Passive Treatments (Illustrative)

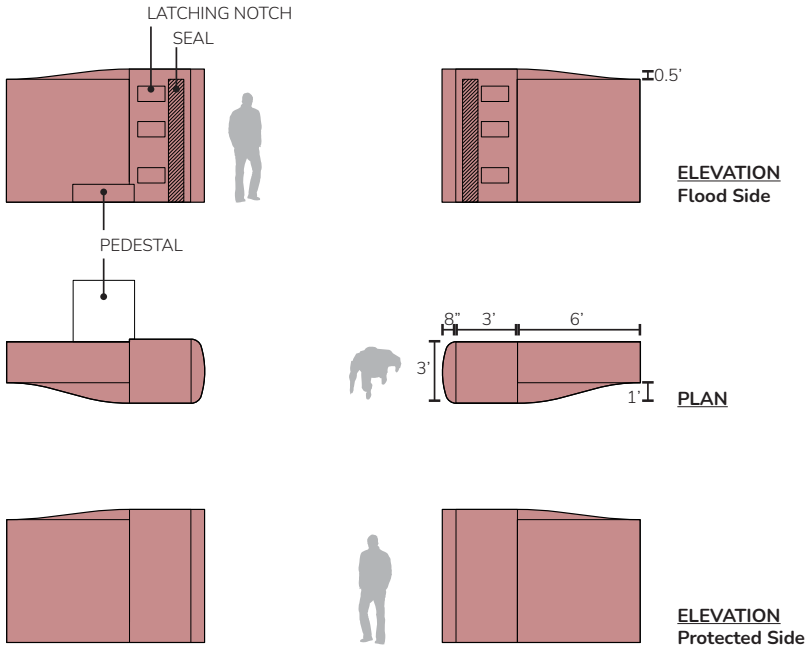


STANDARD DESIGN
BASELINE CONDITION



PROPOSED DESIGN
BULLNOSE

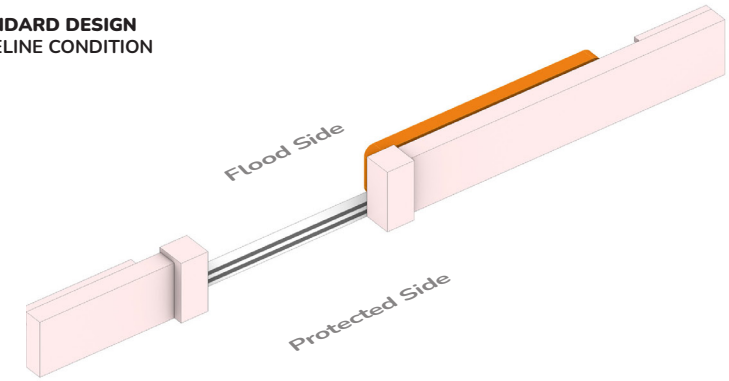




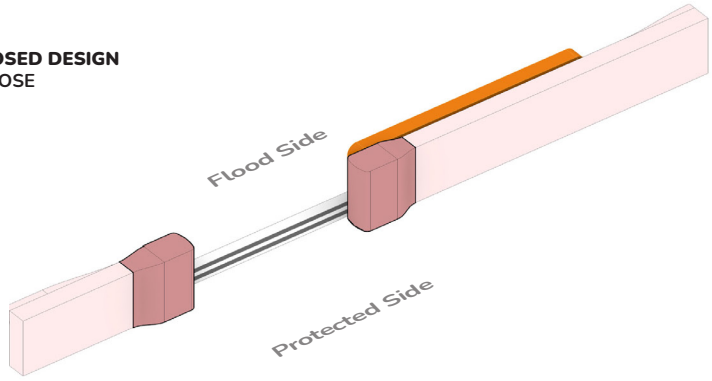
Flood Protection System: Deployable Elements - Roller Gate Typology 1

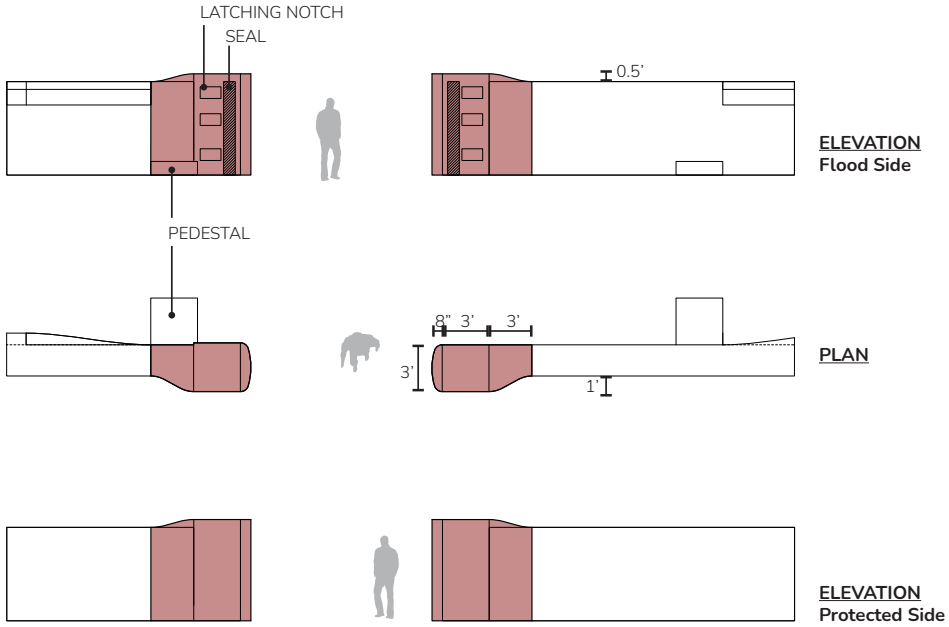


STANDARD DESIGN
BASELINE CONDITION



PROPOSED DESIGN
BULLNOSE





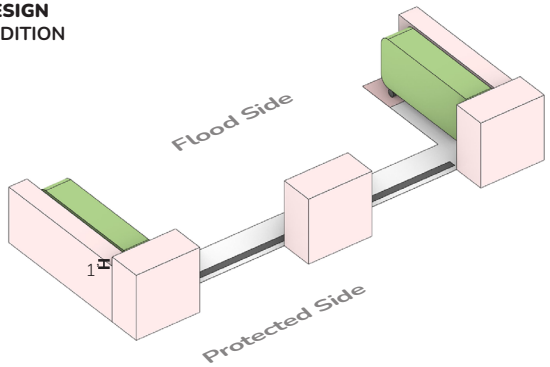
Flood Protection System: Deployable Elements - Roller Gate Typology 3

NORTH/WEST BATTERY PARK CITY RESILIENCY

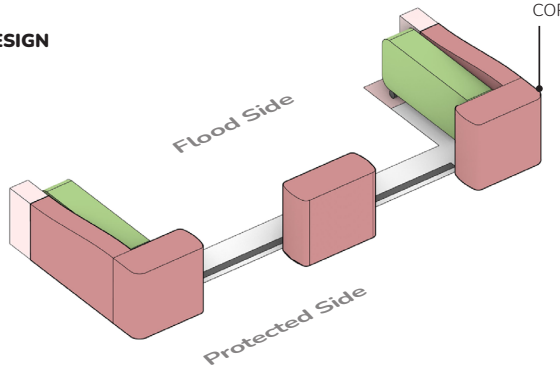
Figure 8b

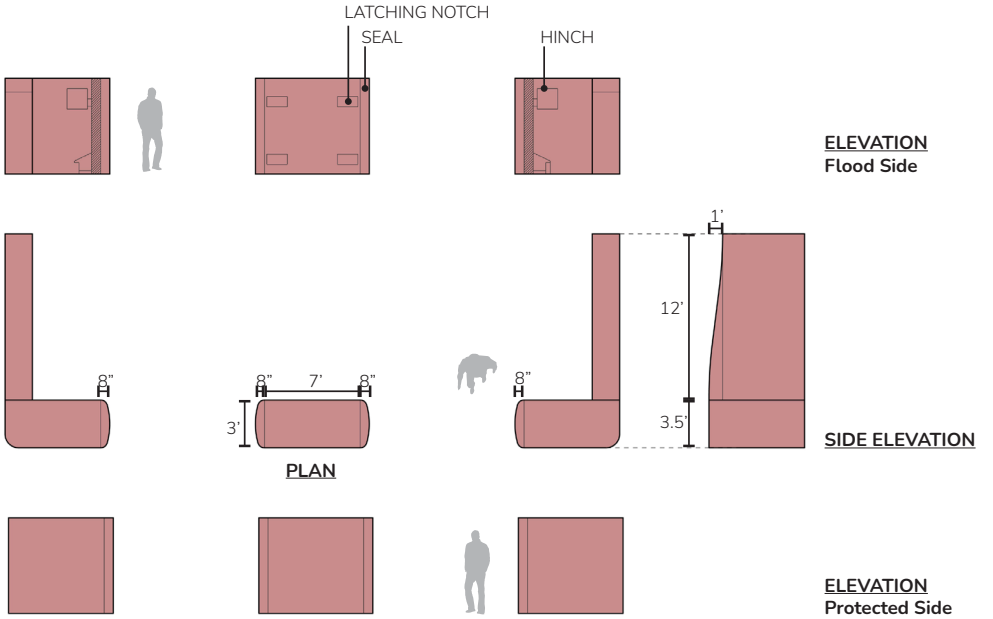


STANDARD DESIGN
BASELINE CONDITION



PROPOSED DESIGN
BULLNOSE

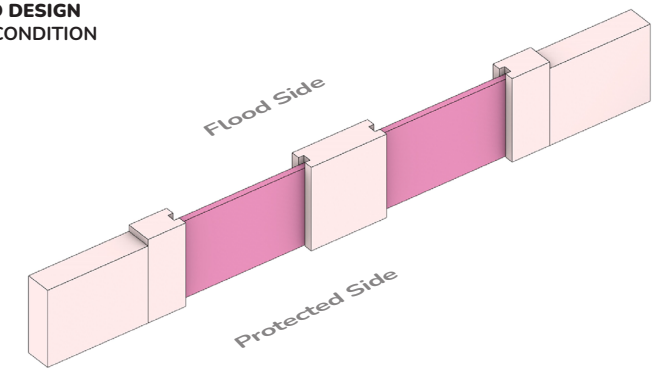




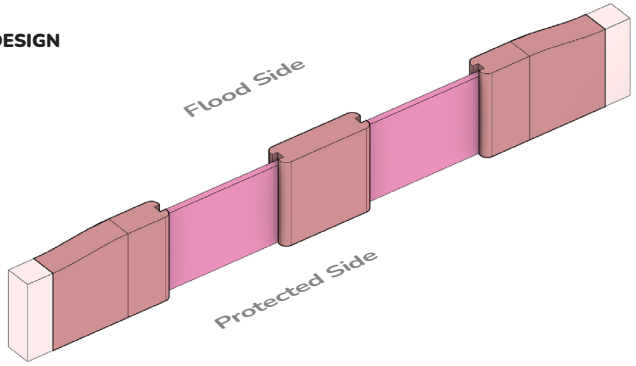
Flood Protection System: Deployable Elements - Swing Gate Typology 2

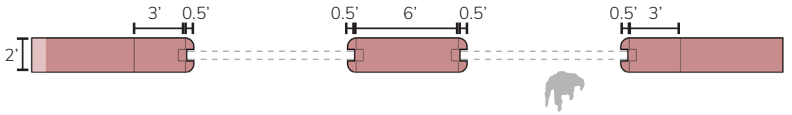


STANDARD DESIGN
BASELINE CONDITION

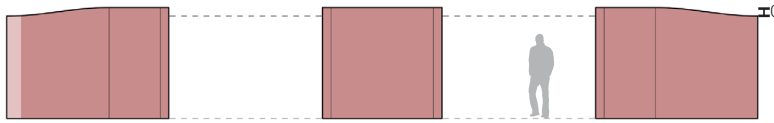


PROPOSED DESIGN
BULLNOSE



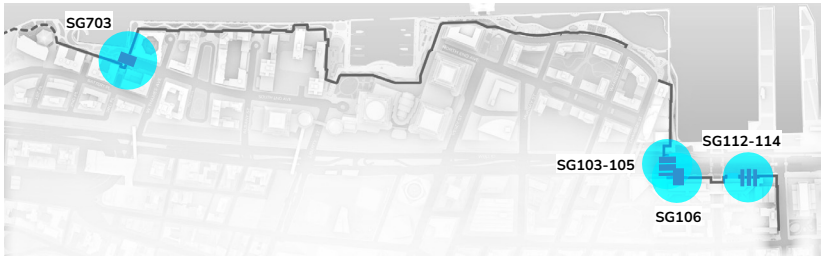


PLAN

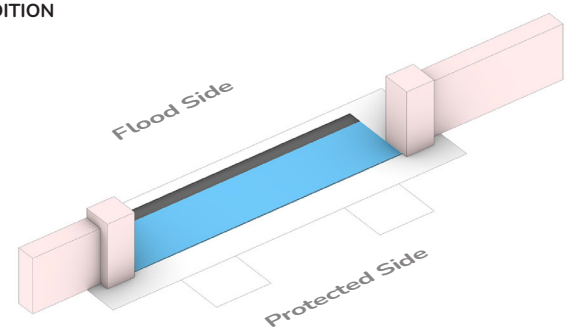


ELEVATION
Protected Side

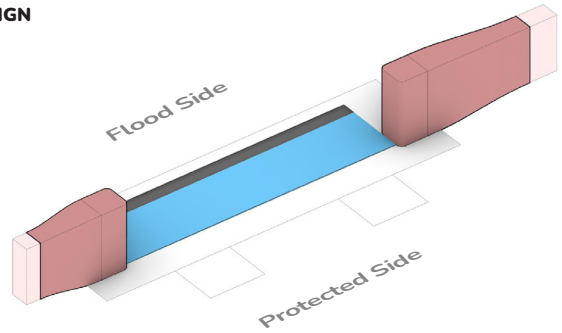
Flood Protection System: Deployable Elements - Stop Log Typology 1

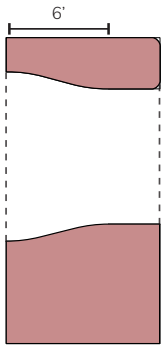


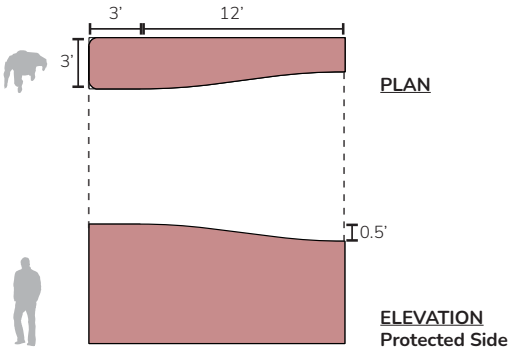
STANDARD DESIGN
BASELINE CONDITION



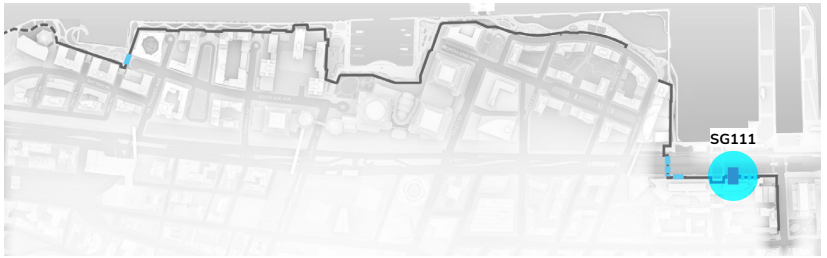
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BULLNOSE



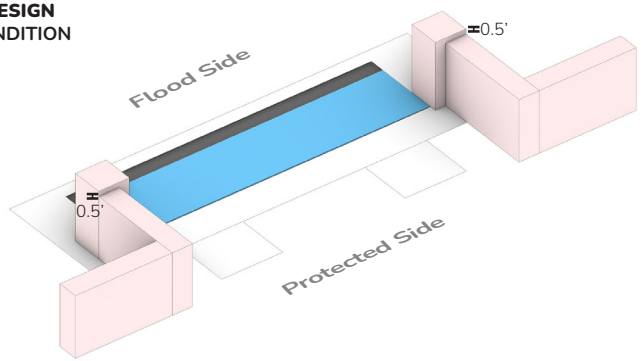




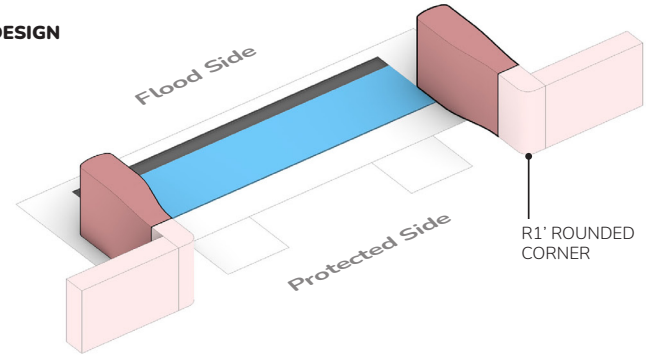
Flood Protection System: Deployable Elements - Flip-Up Gate Typology 1

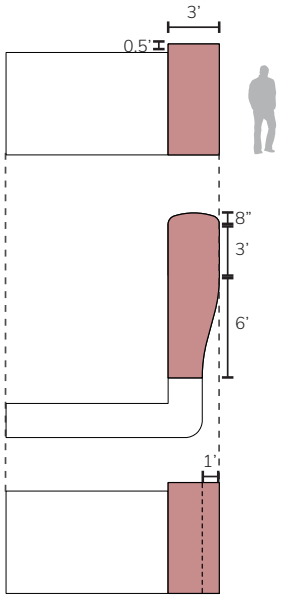


STANDARD DESIGN
BASELINE CONDITION

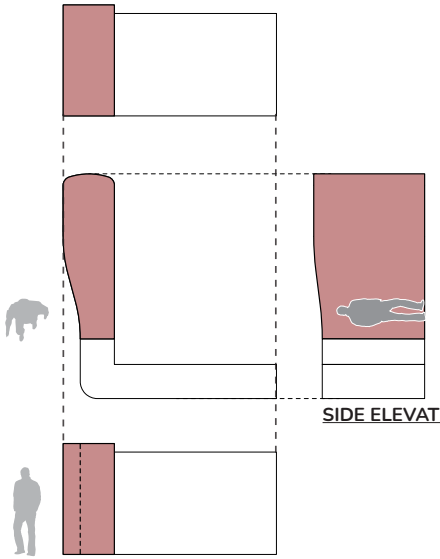


PROPOSED DESIGN
BULLNOSE





PLAN



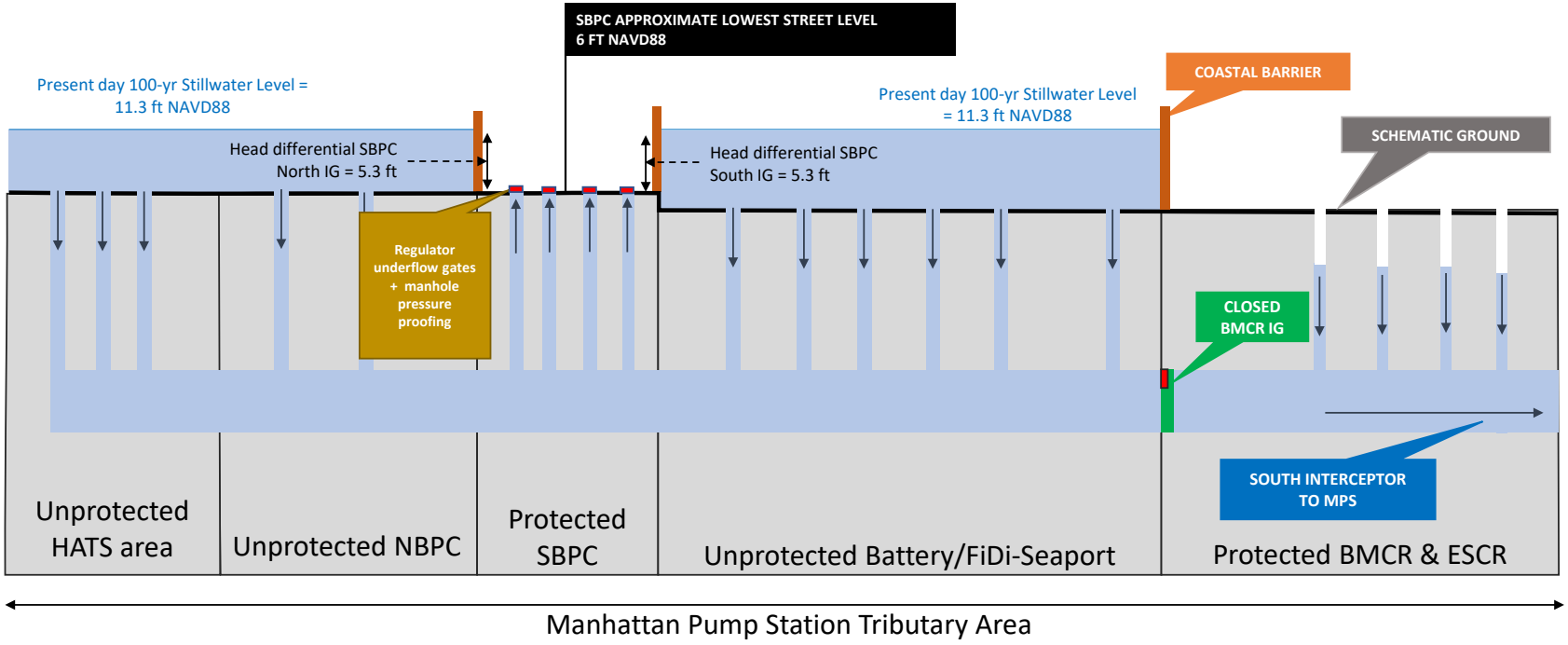
ELEVATION
Flood Side

SIDE ELEVATION

ELEVATION
Protected Side

Flood Protection System: Deployable Elements - Flip-Up Gate Typology 2

CONCEPTUAL NEAR-SURFACE ISOLATION



***Requires assessment of existing conditions and intervention on multiple regulators and interceptor manholes.**

Drainage Management System Improvements
Near Surface Isolation System

Rockefeller Park in the north neighborhood of BPC provides the majority of BPC's recreational lawn with a large playground, plantings and gardens, several public art pieces, and a sheltered pavilion. This park is named in honor of Governor Nelson A. Rockefeller who signed the Battery Park City Authority Act in 1968 establishing Battery Park City for generations of New Yorkers and visitors. Rockefeller Park opened in 1992 and was designed by the architecture firm Carr, Lynch, Hack, and Sandell and landscape architects Oehme Van Sweden and Donna Walcavage.

The Battery Park City Esplanade was designed by landscape architecture firm Hanna Olin and opened in phases between 1986 and 1996. It runs the entire length of Battery Park City's Hudson River waterfront from Wagner Park in the south to Stuyvesant High School in the north. The esplanade provides expansive views of the Hudson River and New York Harbor, the Statue of Liberty, Ellis Island, and the New Jersey waterfront. There are also landscaped parks and gardens inland from the esplanade with memorials, sculptures, and public art installations.

Belvedere Plaza was designed by the architecture firm Mitchell Giurgola, the landscape architecture firm Child Associates, and the artist Martin Puryear. It opened in 1995 and is a semicircular redoubt.

North Cove was designed by the artists Scott Burton and Siah Armajani, the architect Cesar Pelli, and the landscape architect M. Paul Friedberg. It includes the North Cove Marina, which provides public access to the waterfront with views of the Hudson, as well as a marina with recreational, commercial, and public boat slips.

South Cove is the result of a collaboration between the artist Mary Miss, the landscape architect Susan Child, and the architect Stan Ecksut. South Cove opened in 1988 and incorporates natural materials, plantings, and constructed elements to create a public open space at the water's edge.

1.3 Purpose and Need

As stated above, climate change-induced sea level rise with the prediction of more frequent, intense storm events and storm surges poses a significant risk to coastal communities and in 2012, Superstorm Sandy accentuated the impacts of these types of events in the New York City area. Many coastal communities like Lower Manhattan face the significant challenge of identifying how to address these types of impacts to create more resilient places to live and work, while simultaneously prioritizing design strategies that improve the quality of life and livability in city spaces. Innovative design strategies are required to implement multi-purpose resilient systems that also maintain and enhance development and open space goals of coastal communities.

The NWBPCR Project's primary goal is coastal storm flood risk reduction within and inland of Battery Park City. To achieve this goal, a flood barrier alignment is proposed between South Cove in the south neighborhood (where it would connect with the SBPCR Project) and the North Esplanade in the north neighborhood. Since provision of coastal storm surge protection requires connecting to higher ground inland, the ~~proposed~~ alignment is proposed to extend inland~~would continue~~ across Route 9A/ ~~(~~West Street~~) either at Chambers Street or further north~~ at North Moore Street where it ~~and~~ continues east before terminating at an upland limit on Greenwich Street (see **Figure 3**). It is proposed to achieve the goal of coastal storm risk reduction by implementing flood barrier measures integrated into the public realm meeting the design criteria for a 2050s 100-year storm event, inclusive of increased intensity and frequency of rainfall, coastal surge, and predicted sea level rise (corresponding to the 90th percentile projection for the 2050s). It is the objective of the NWBPCR Project, once installed, to be accredited by the Federal Emergency Management Agency (FEMA). Accreditation requires a FEMA review of as-built plans and verification that the flood barrier system meets all pertinent requirements and achieves acceptable risk reduction in practice. FEMA accreditation will remove the project area from the current

flood zone. As a result, owners in the area who have a federally backed mortgage would no longer be required to obtain flood insurance.

In summary, the principal purposes of the NWBPCR Project are to:

- Provide a reliable coastal flood barrier system to provide risk reduction to property, residents and assets within the vicinity of Battery Park City that addresses the design storm event;
- Preserve, enhance, and protect to the maximum extent practicable and integrate to the proposed design the open space and waterfront cultural resources of Battery Park City;
- Preserve and enhance the character, accessibility, including universal access, and design aesthetic of the community and its interface with the BPC waterfront and access to coastal view sheds, particularly views of the Hudson River, the New York Harbor, and the Statue of Liberty; and
- Avoid or minimize disruption to existing below and above-ground infrastructure (i.e., water and sewer infrastructure, tunnels, utilities, etc.) from both construction impacts and flood events.

Specific objectives of the NWBPCR Project are to:

- Provide a reliable and adaptable coastal flood barrier system that minimizes risk and the need for operational interventions by relying on passive flood control rather than mechanical “deployable” flood barrier systems to the extent practicable;
- Minimize urban heat island effect and enhance outdoor occupant thermal safety to the extent practicable;
- Construct and operate the project in an environmentally responsible manner; and
- Utilize cost-effective low-impact solutions to maximize capital investment over the lifespan of the NWBPCR Project.

2 State Environmental Quality Review Act (SEQR) Process

The SEQR process provides for the consideration of environmental impacts in the early planning stages of the approval, funding, or permitting process for proposed actions. By incorporating a systematic interdisciplinary approach to environmental review, impacts can be identified and avoided or minimized to reduce the potential for significant adverse impacts to the environment to the maximum extent practicable. All discretionary decisions of a state, regional, or local agency to approve, fund, or directly undertake an action that may affect the environment are subject to review under SEQR. It is the intent of SEQR that protection and enhancement of the environment and community resources be balanced with social and economic factors in the decision-making process. As the Proposed Project is being developed by a State Authority, BPCA will serve as the Lead Agency in this process and will prepare the EIS using analysis guidelines established in the New York City Environmental Quality Review ("CEQR") *Technical Manual*.

2.1 Classification and Lead Agency Designation

In accordance with 6 NYCRR Part 617, the Proposed Project has been classified as a Type ~~1~~I action, as section 617.4(b)(10) includes "any Unlisted action, that exceeds 25 percent of any threshold in this section, occurring wholly or partially within or substantially contiguous to any publicly owned or operated parkland, recreation area or designated open space, including any site on the Register of National Natural Landmarks pursuant to 36 CFR part 62." One such threshold for a Type I action is the physical alteration of 10 acres of land. Under section 617.4(b)(10), the Type I threshold would be met if there is an Unlisted action proposed within or directly adjacent to a publicly owned parkland or open space that would result in physical alteration of 25 percent of that threshold, or disturbance of 2.5 acres. As the NWBPCR Project would result in the physical alteration of more than 2.5 acres of land wholly or partially within or substantially contiguous to any publicly owned or operated parkland, this threshold is met. On February 18, 2022, BPCA initiated a Coordinated Review of the Proposed Project to request Lead Agency designation and to solicit comments from all Involved and Interested Agencies.

2.2 Purpose of the Scoping Process

To ensure that the DEIS addresses all potentially significant environmental impacts identified by the Lead Agency in Parts 2 and 3 of the Environmental Assessment Form (EAF) and the Positive Declaration, and pursuant to 6 NYCRR Part 617.8(a) of the implementing regulations of SEQR, a formal scoping process has been initiated with the release of this Draft Scope of Work to establish a framework for preparing the DEIS and identifying potentially significant adverse impacts. To that end, this Draft Scoping Document has been prepared pursuant to 6 NYCRR 617.8(b) to outline the topics and analysis methodologies to determine those potential significant environmental impacts and has eight objectives:

1) focus the DEIS on the potentially significant adverse environmental impacts;
2) identify the relevant environmental impacts;
3) eliminate irrelevant impacts or issues;
4) identify the extent and quality of information needed;
5) list available sources of information;
6) specify methods or models to be used to generate new information;
7) identify the range of reasonable alternatives to be discussed; and,
8) specify possible measures for mitigation of potential impacts.

2.3 Regulatory Permitting, Approvals, and Coordination

Implementation of the Proposed Project would require federal, state, and local approvals involving the following agencies:

Federal

- U.S. Army Corps of Engineers (USACE) – Permits or authorizations for activities in Waters of the United States (Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act).
- As part of the USACE permitting process, coordination with the U.S. Environmental Protection Agency (USEPA), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) – Advisory agencies to the federal permitting process focusing on activities that affect wetlands, water quality, protected plant and wildlife species, and essential fish habitat.
- U.S. Coast Guard (USCG) – Coordination and authorization, as needed (e.g., temporary siting of construction barges).
- Federal Emergency Management Agency (FEMA) – Letter of Map Revision (LOMR) revising the current Flood Insurance Rate Maps (FIRM) to show changes based on the flood barrier design and construction.

State of New York

- New York State Department of Environmental Conservation (NYSDEC) – Permits related to activities in tidal wetlands or adjacent areas (Article 25) ~~or protection of waters (Article 15) including the underwater land adjacent to the north esplanade~~, Water Quality Certification (Section 401); permits related to the State Pollutant Discharge Elimination System (SPDES) program; and approvals related to the import of fill material requiring Beneficial Use Determination.
- New York State Department of State (NYSDOS) – Coastal Zone Consistency Determination.
- New York State Office of Parks, Recreation and Historic Preservation (OPRHP) /New York State Historic Preservation Office (SHPO) – Consultation on federal and state review process pursuant to Section 106 of the National Historic Preservation Act (NHPA) and/or Section 14.09 of the State Historic Preservation Act (SHPA) with respect to designated and protected properties on the State and National Registers of Historic Places and properties determined eligible for such listing.
- New York State Department of Transportation (NYSDOT) – Design coordination as needed, and issuance of Highway Use and Occupancy Permit and construction permits for work within the NYSDOT-owned right-of-way (ROW) within Route 9A/ ~~(~~West Street~~)~~.
- Dormitory Authority of the State of New York (DASNY) – Coordination for proposed work with the potential for effects to the Borough of Manhattan Community College (BMCC).
- New York State Office of General Services (NYSOGS) Bureau of Land Management – Coordination on ~~temporary relocation of ferry terminal~~ Joint Application for USACE and NYSDEC permits, and an easement for the Reach 2 esplanade extension.

Hudson River Park Trust (HRPT) – Design coordination for work within and along the Park, at the southern boundary of the HRPT jurisdiction adjacent to BPCA's North Esplanade property. Construction work permits from HRPT for work within the HRPT's boundary, and access rights from HRPT or the State for any permanent structures within Hudson River Park.

City of New York

- New York City Department of Environmental Protection (NYCDEP) – Review of design for the plan for stormwater management and project elements that may require modification of the City sewer system.
- New York City Department of Transportation (NYCDOT) – Coordination/review for flood barrier elements, bike lane, lighting, and other work in NYCDOT ROW, including a revocable consent for flood barrier elements in the public ROW.
- New York City Department of City Planning (NYCDCP) – Consistency determination under the Waterfront Revitalization Program and Uniform Land Use Review Procedure (ULURP) actions, as needed.
- New York City Landmarks Preservation Commission (NYCLPC) – Advisory agency for activities on or near sites of potential historical or archaeological significance.
- New York City Transit (NYCT) and the Metropolitan Transit Authority (MTA) – For any temporary relocation of bus routes/stops in the Project Area during construction. As currently proposed, no NYCT bus stops or routes are anticipated to be affected, and one MTA bus stop (at North Moore and 9A/West Street) would be temporarily relocated during construction.
- New York City Police Department (NYPD) –Review by counterterrorism unit for conformance with security requirements.
- New York City Fire Department (FDNY) – Plan review and coordination on access requirements and impact to FDNY facilities (e.g., fire hydrants) and conduits.
- New York City Department of Parks and Recreation (NYC Parks) – Permit~~s~~ for street tree pruning and removal, construction near street tree~~s.~~
- New York City Department of Buildings (DOB) –~~–~~Design review and approval of the ~~for elements of~~ flood barrier system
- New York City Department of Small Business Services (SBS) – Review of design, plan approval, and work permit for project elements on SBS-managed property and review and approval of waterfront construction permits.
- ~~New York City Department of Citywide Administrative Services (NYC DCAS) – Review and coordination related to proposed work adjacent to DCAS property.~~
- New York City Public Design Commission (PDC) – Design review of project elements within City street rights-of-way and City-owned property.
- New York City Department of Education (NYCDOE)/School Construction Authority (SCA) – Coordination and review of project elements that relate to Stuyvesant High School.

Regional Agencies

Port Authority of New York and New Jersey (PANYNJ) – Approval for alignment crossings over the PATH tunnels and phasing of construction work related to pedestrian access to/from the Battery Park City ~~potential coordination for temporary terminal relocation of the BPC~~ Ferry Terminal.

3 Description of the Proposed Project

3.1 Overview of the Proposed Project

The Proposed Project is located in Lower Manhattan, and includes the proposed installation of a flood barrier system within Battery Park City along the Hudson River waterfront between 1st Place on the south and the BPC North Esplanade on the north; the flood barrier alignment then continues across Route 9A/ ~~(~~West Street~~)~~ and extends north along the east side of Route 9A where it crosses Harrison Street and continues north to North Moore Street where it turns east and terminates at Greenwich Street ~~either at Chambers Street or further north at North Moore Street, and continues east before terminating at an upland limit on Greenwich Street~~ (see **Figure 3**). In addition to the flood barrier systems, interior drainage improvements include ~~would be included, such as~~ a near surface isolation (NSI) systems along Route 9A ~~-~~/~~(~~West Street~~)~~ and a below-grade pump~~ing~~ station is proposed just east of Stuyvesant High School. Additionally, six tide gates are proposed along the flood barrier alignment on Chambers Street, Albany Street, Rector Street, south of the Irish Hunger Memorial at Vesey Street, near Rector Park, and near Stuyvesant Plaza immediately east of Stuyvesant High School (see **Figure 9**).

For analysis purposes the Project Area has been organized into seven reaches, which are, from north to south (see **Figure 3**):

- Reach 1 – Route 9A ~~(West Street) Crossing~~/Tribeca;
- Reach 2 – North Esplanade;
- Reach 3 – North Neighborhood/Rockefeller Park;
- Reach 4 – Ferry Terminal~~Belvedere Plaza~~;
- Reach 5 – Brookfield Place~~North Cove~~;
- Reach 6 – South Esplanade; and
- Reach 7 – South Neighborhood~~Cove~~

A description of existing conditions, key features, and flood barrier considerations in each reach is as follows.

Reach 1 – Route 9A (West Street) Crossing/Tribeca

Reach 1 consists of the "tie-back" to the inland flood barrier limits which are outside of BPCA property. The inland extent of Reach 1 therefore extends to approximately the intersection of Greenwich Street and ~~either~~ North Moore Street in Tribeca. ~~or Chambers Street. The inland extent is subject to final design.~~ Reach 1 also includes a gate crossing of Route 9A/ ~~(~~West Street~~)~~ that allows the barrier system to continue inland along the east side of Route 9A and the south side of North Moore Street. In addition to the Hudson River Greenway and Route 9A /~~(W~~est Street~~)~~, key uses along this reach include the Borough of Manhattan Community College (BMCC), Independence Plaza, ~~Washington Market Park~~ and Hudson River Park.

Reach 1 is approximately 1,700 linear feet and totals approximately 2.0 acres.

Reach 2 –North Esplanade

Reach 2 is comprised of the BPC North Esplanade ~~north segment~~ west to ~~between the intersection of Chambers Street and~~ River Terrace~~, and the Hudson River Greenway and Route 9A (West Street)~~. The BPC North Esplanade in this reach is a primary pedestrian, bicycle, and emergency and maintenance vehicular access corridor to Rockefeller Park and Battery Park City. Along the east boundary of this segment are

access and egress points connecting the esplanade with Stuyvesant High School and the Tribeca Pointe Apartments.

Reach 2 is approximately 485 linear feet in length and totals approximately 0.7 acres in size.

Reach 3 – North Neighborhood/Rockefeller Park

Reach 3 is aligned along River Terrace on the east side of ~~includes~~ Rockefeller Park, which at approximately 8 acres is the largest contiguous open space in Battery Park City and contains the majority of the open lawns in the BPC park system. Rockefeller Park also includes the Rockefeller Park Playground, basketball courts, restrooms, and artwork.

Reach 3 includes the BPC waterfront from the North Esplanade south to the southern end of Rockefeller Park's South Meadow and is bounded to the east by River Terrace. There are several residential buildings adjacent to this Reach, including Tribeca Park, The Solaire, River & Warren, and Riverhouse.

Reach 3 is approximately 1,~~700~~ 200 linear feet in length and totals approximately 6.5 acres in size.

Reach 4 – ~~Belvedere Plaza~~Ferry Terminal

Reach 4 includes approximately 500 linear feet of the Battery Park City Esplanade and adjacent Belvedere Park and Plaza, south of Rockefeller Park's South Meadow. Features in this reach include the Lily Pond, the Battery Park City Ferry Terminal access, the commercial office building at 300 Vesey Street and the open spaces surrounding the Irish Hunger Memorial.

Reach 4 is approximately 500 linear feet in length and totals approximately 1.4 acres in size.

Reach 5 – ~~North Cove~~Brookfield Place

Reach 5 includes the North Cove Marina and the fronting waterfront esplanade open spaces that together are collectively referred to as Waterfront Plaza. Waterfront Plaza includes multiple distinct active and passive use areas situated within the terraced plaza fronting the marina. The plaza provides access to Brookfield Place, is directly adjacent to the Winter Garden and is the location for seasonal temporary programming. Permanent programming in the area includes outdoor dining, the Sirius Dog Run, Kowsky Playground, and the NYC Police Memorial.

Reach 5 is approximately 8.7 acres and extends approximately 1,630 linear feet along the waterfront spanning the marina entrance.

Reach 6 – South Esplanade

Reach 6 includes the Battery Park City South Esplanade between Esplanade Plaza at the southern terminus of Liberty Street to the northwest corner of 21 South End Avenue (The Regatta Building). Three streets intersect with the Battery Park City Esplanade in Reach 6: Albany Street, Rector Place, and West Thames Street. Along this Reach are several residential buildings, including Gateway Plaza, Hudson Tower, Liberty House, Liberty Terrace, and The Regatta Building. The limits of work in this Reach include the areas landward of the Esplanade at these intersections, including several public art installations.

Reach 6 is approximately 1,500 linear feet in length and totals approximately 2.8 acres in size.

Reach 7 – South ~~Cove~~Neighborhood

Reach 7 begins at the southwest corner of The Regatta Building (21 South End Avenue) and is aligned east and south along the upland interior perimeter walkways inland from the cove to a connection with the SBPCR at the 1st Place right-of-way corridor. The reach includes South Cove along the and adjacent upland esplanade and a tie-in to the South Battery Park City Resiliency Project at 1st Place. This reach begins at

the southwest corner of The Regatta Building at 21 South End Avenue and extends south along the water's edge to the 1st Place right-of-way corridor. There are several residential buildings along this Reach, including Cove Club, River Watch, and South Cove Plaza.

Reach 7 is approximately 950 linear feet in length and totals approximately 2.7 acres in size.

3.2 Proposed Design Elements

This section describes the key design elements of the Proposed Project including the flood barrier elements and interior drainage improvement measures. Once all the approvals are issued, construction is expected to begin in ~~2024~~ 2025 and be completed in ~~2027~~2030. **Figures 7 and 8** provide illustrations of the types of flood barrier measures proposed, which are described in greater detail below.

Design Flood Elevation

The Preliminary Design Flood Elevation (DFE) varies across the project segments. The DFE is highly sensitive to surface water conditions and wave effects. Ranges of DFEs at different points in the Project Area are shown on **Figure 10** and have been finalized as part of the coastal modeling and design processes and will be described in the DEIS. The required Heights of Intervention (HOIs) also vary across the Project's flood barrier alignment. The HOI for a project location will be determined by subtracting the elevation of the proposed grade from the proposed DFE.

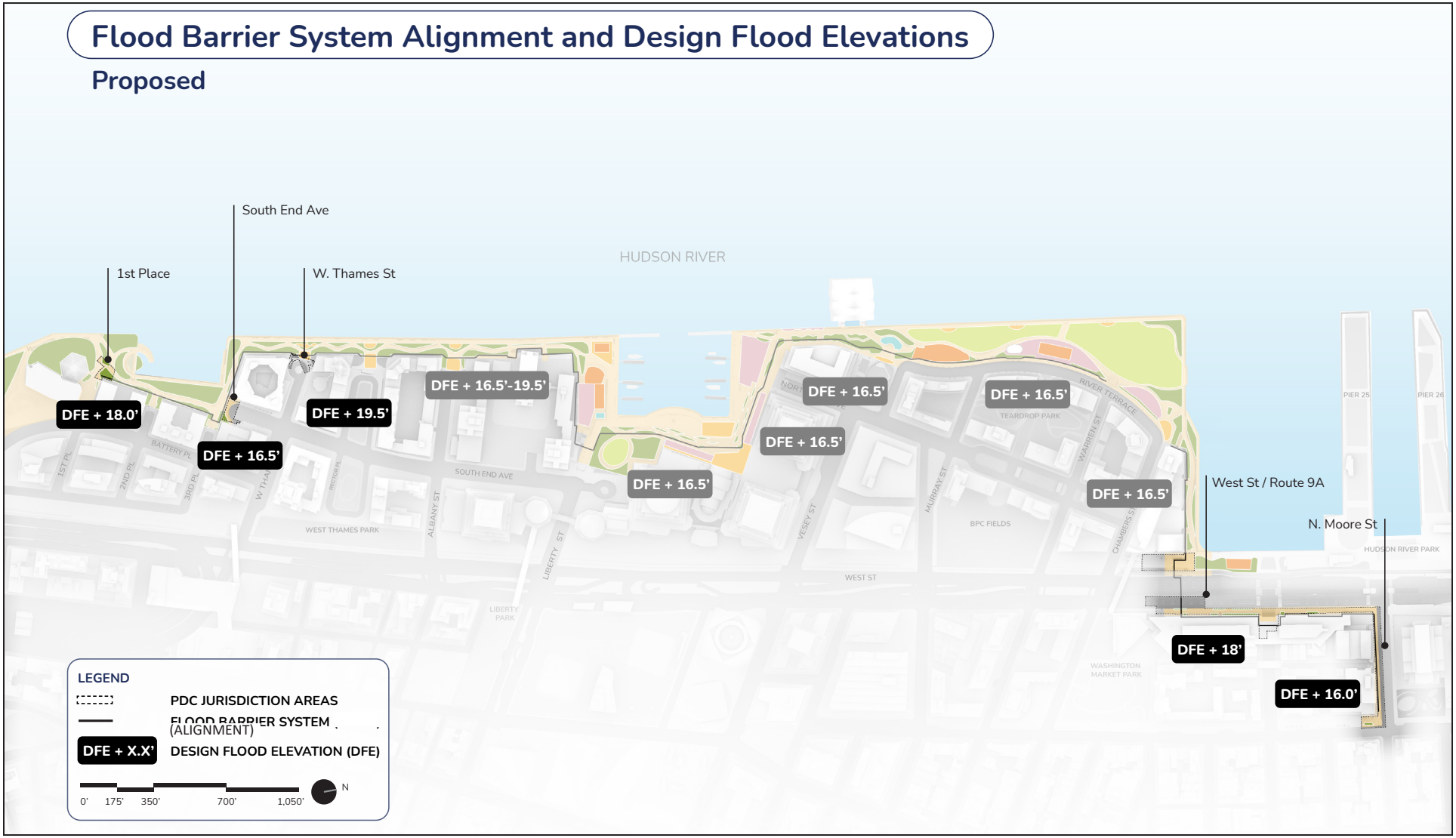
Flood Barrier Elements

The Proposed Project consists of passive floodwalls and deployable flood barrier elements like floodgates, both of which have above- and below-grade (foundational) elements. Illustrations of passive floodwall components are provided in **Figure 7**. The proposed deployable flood barrier include flip-up-gates, roller gates, swing gates, and stop logs. **Figure 8** provides illustrations of these deployable elements proposed for the project. Deployable systems involve either manual deployment in a storm event, which requires approximately minimum 8 feet of clearance, or mechanical deployment (e.g., the Route 9A/West Street gate crossing) which requires approximately 35 feet of clearance.

Based on USACE guidance for flood walls (EP 1110-2-18, "Engineering and Design Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures, Department of the Army, Corps of Engineers [USACE], May 1, 2019), which are accepted by FEMA as part of the flood protection system accreditation process, a 15 foot (minimum) clear zone is to be provided on both sides of a flood barrier structure for the purposes of avoiding damage from tree limbs and roots and to provide a clear zone for inspections and repairs. The Proposed Project design detailed described in this DEIS reflects adherence to the USACE Guidance. As part of the final design process, the BPCA in coordination with its design team will continue to review the proposed designs with the objective of maximizing tree replacement and finding locations along the project corridor where it may be acceptable to FEMA through its variance procedures to plant trees and enhance environmental values without compromising the flood barrier system functionality, safety or the necessary maintenance, inspection and repair of the proposed flood barrier. Also being explored are opportunities within Battery Park City for additional tree replacement plantings along public street corridors and open spaces.

Piles to support the foundation for the flood barrier system are anticipated to extend to bedrock (50 to 90 feet below the ground surface) in several areas, pending final geotechnical investigation and final foundation design. Foundations for the flood barrier system would extend 2 to 15 feet below the ground surface depending on whether the section of the system is or is not pile supported. In addition, a seepage barrier under the flood barrier system would extend 15 to 20 feet below ground level. This barrier would consist of a low permeability soil mix to minimize flow under the barrier during storm surge conditions.

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Flood Barrier System Design
Flood Elevations (above NAVD88)

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 10

The Proposed Project is also considering in-water ecological enhancements on bulkhead segments and piles.

Interior Drainage Improvements

Interior drainage improvements are also proposed to prevent storm surge from unprotected areas from entering the Project Area through the sewer system and to handle runoff and combined drainage that may accumulate within the protected area during the storm event. As described below, the NSI system approach is proposed to manage storm surge through the existing interceptor sewer. A concept of the proposed interior drainage interceptor isolation method is provided in **Figure 9a.** A location for a pump station has also been proposed (see **Figure 9b**).

Near Surface Isolation System (NSI System)

Under this design approach, a NSI system is proposed to prevent storm surge from entering the protected area. The NSI system would consist of a slide gate within the existing regulator structures, M4, M5, and M6, which would then be closed in a flood event to prevent the storm surge from rising through the regulator's underflow connections to the interceptor line and flooding the streets. Access manholes to these regulator chambers would also be pressure proofed as necessary. Additionally, up to eight interceptor manholes along Route 9A/ ~~(~~West Street~~)~~ between Albany Street and Harrison Street would be pressure proofed and retrofitted with a cover that can be sealed shut and locked during a coastal flood event.

Pump Station

To prevent interior drainage flooding on the protected side of the flood barrier system, a pump station is proposed to be constructed in the northern section of the Protected Area. This facility, the majority of which is designed below grade, would pump drainage out of the Protected Area during the storm event. The proposed location of the pump station is below the pedestrian plaza adjacent to Stuyvesant High School, north of the intersection of Chambers Street and west of the Hudson River Greenway/Route 9A/West Street with an above grade structure to house the operating systems. Three design options within this proposed location are being explored in consultation with NYCDEP and will be analyzed in the DEIS. The options include the potential for siting the electrical power generator system on the roof of the adjacent high school structure.

Other Interior Drainage Improvements

Additional required interior drainage improvements include tide gates to be installed at three separate existing storm sewer system outfalls aligned parallel to or within:

- Chambers Street
- Albany Street
- Rector Street

Three tide gates are also proposed to be installed within combined sewer overflow (CSO) underground pipes, one near Rector Park, another just south of the Irish Hunger Memorial at Vesey Street, and the third near Stuyvesant Plaza immediately east of Stuyvesant High School. These gates would be installed in approximately 20-feet-by-20-feet chambers located within 300 feet of the existing discharge points.

Isolation of other wet or dry utilities crossing the proposed coastal barrier system would be implemented as necessary.

Other stormwater management techniques that may be considered and implemented as part of the Proposed Project include ~~temporary or permanent pump stations, storage, and~~ green infrastructure interventions.

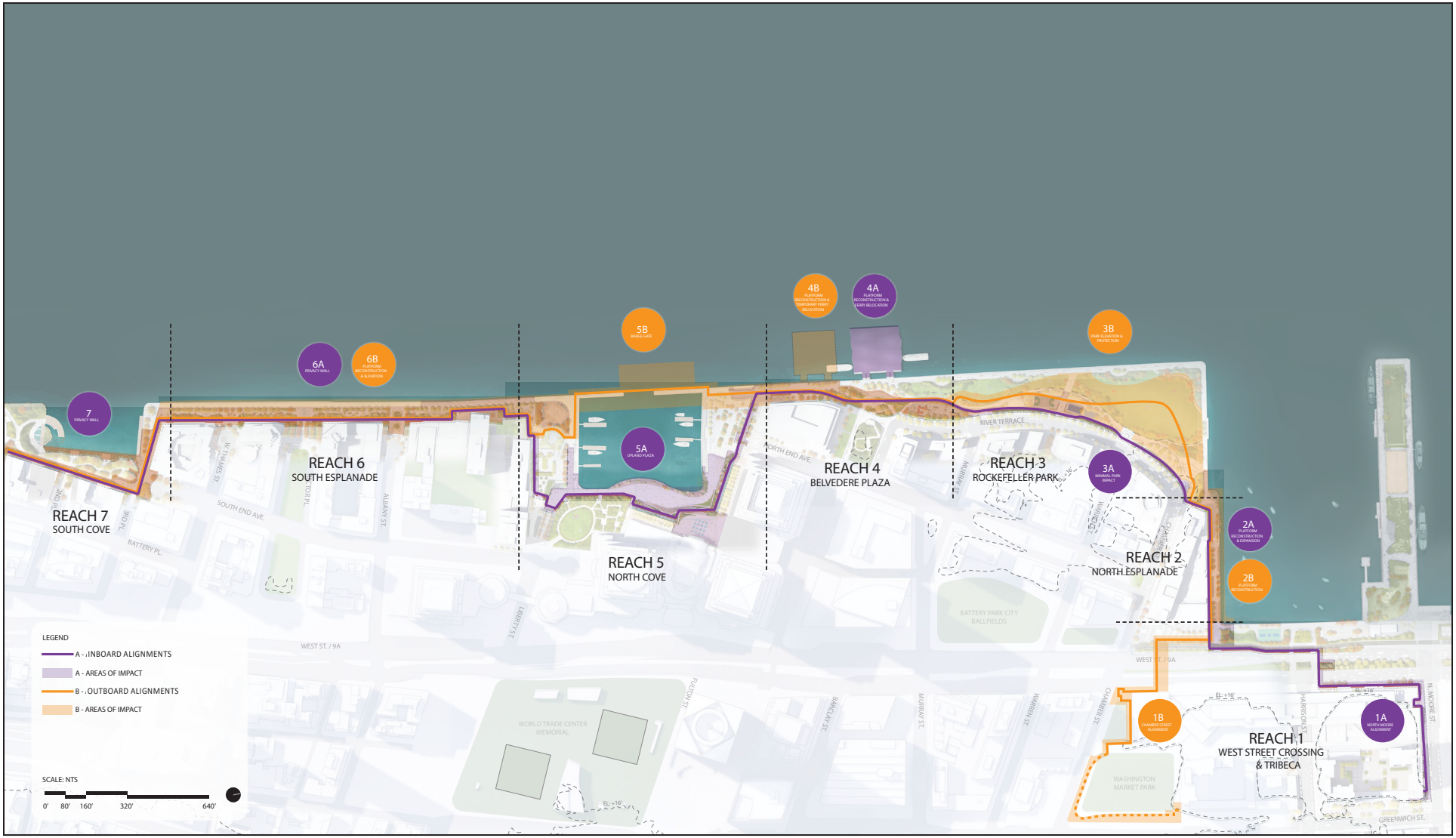
Development of the Proposed Project

Alternate Alignment Scenarios Considered

This section provides an overview of the alternative alignments that were considered and that led to developing the Proposed Project. The alternatives described below will be analyzed and compared with the Proposed Project in the DEIS's Alternatives chapter.

A number of flood protection alternative alignment approaches were considered in developing the Proposed Project guided by evaluations of inboard (i.e., upland) and outboard (i.e., waterfront), alignments that ultimately resulted in a hybrid of both approaches. The **Inboard Alignment** ~~Flood Protection (Alternative A)~~**Scenario** providing flood protection along the most upland location from the water's edge (see **Figure 11**). Under this design scenario, in Reaches 1 and 2, the alignment would be similar to the Proposed Project, with an upland "tie-back" to Greenwich Street in Reach 1 that extends west along North Moore Street, crossing Route 9A ~~(~~/West Street~~)~~ near Harrison Street; in Reach 2 along the North Esplanade, the Inboard Alignment assumes in-place reconstruction, without modification of the North Esplanade width. Turning southward, this alignment would generally follow~~s~~ the existing BPCA retaining wall that frames the interior edge of Rockefeller Park, thereby minimizing park modifications in Reach 3. In Reach 4, this alternative alignment would reconstruct the waterfront platform at the location of the ferry terminal, and in Reach 5~~. Within North Cove~~, this alternative ~~is~~ would be aligned along the upland terraces of the plaza where it would be~~is to be~~ integrated into~~with~~ the existing plaza platform and ~~also~~ crosses the two PATH tunnels, ~~which~~ require~~s~~ special subsurface bridging structures and valve ~~sluice~~ gates. Continuing along the South Esplanade, in Reach 6 this alignment would include~~s~~ replace~~s~~ the ~~in-place~~existing privacy walls with the goal of maximizing the preservation of existing trees~~,~~ and minimizing changes to the South E~~e~~splanade, to the extent feasible. In Reach 7~~South Cove~~, the system ~~is~~ would be integrated to the existing elevated sidewalks and privacy walls along the eastern edge of the open space at South C~~c~~ove. Overall, the Inboard Alignment Scenario~~The alternative~~ would generally minimize~~s~~ regulatory approvals when compared with outboard alternatives. This would result~~s~~ ~~resulting~~ in a lower cost and shorter construction period ~~as compared to the Outboard Alignment~~ (see description~~bed~~ below) with less modification of existing open spaces and urban design features and a lesser impact on existing view corridors; however, this alternative alignment would also provide~~s~~ the least protection of the existing waterfront against the design storm~~open spaces~~.

The **Outboard Alignment Flood Protection Scenario**~~(Alternative B)~~ ~~provides~~ would locate the flood barrier system primarily along~~protection nearer~~ the water's edge (with the exception of Reach 1), ~~the result of which~~which would increase the~~s~~ area of disturbance and modification of ~~and increases modifications to~~ existing open spaces (see **Figure ~~12~~11**). In Reach 1, this alignment ~~would include a similar~~ would ~~"~~tie~~s~~-back" near Greenwich Street~~,~~ and then extend~~s~~ west~~follows an alignment~~ along Chambers Street, crossing Route 9A/ ~~(~~West Street~~)~~ between Greenwich and Harrison Streets. This alignment would therefore not provide coastal flood protection for block~~sareas~~ south of North Moore ~~(e.g., Independence Plaza, BMCC)~~ or Harrison Streets, which are included in the above-described Inboard Alternative scenario. ~~Under this alignment~~In Reach 2, the Battery Park City North Esplanade ~~is~~ would ~~to~~ be reconstructed and expanded, thereby providing additional public space for pedestrian, vehicular, and bicycle access~~travel~~. Continuing southward to Reach 3, the Outboard Alignment would extend~~sflood barrier systems are aligned~~ through the center of Rockefeller Park, with the flood protection wall installed beneath a raised and reconstructed park. ~~Within Belvedere Plaza~~At Ferry Terminal in Reach 4, ~~the flood protection~~this alignment would require~~s~~ reconstruction~~g~~ of the waterfront platform with a temporary relocation of the ferry terminal. In ~~North Cove~~Reach 5, the flood barrier system alignment under this alternative ~~is~~ would be outboard~~,~~ ~~extending~~ along the marina breakwater with a barge gate system that ~~is~~ would be deployed at the marina entrance during a storm event~~to be deployed at the entrance~~. In Reach 6, the~~This~~ alignment would be ~~is~~



Alternative Alignments

Figure 11

co-located with a reconstructed and raised Esplanade structure ~~also crosses the two PATH tunnels with special subsurface bridging structures and sluice gates. In the South Esplanade, the flood protection is co-located with a reconstructed and partially raised esplanade structure. As with the Inboard Alignment, o~~Only one alignment ~~was considered for Reach 7 (due to this reach's geographical constraints), for the South Cove~~ comprised of elevated sidewalks and privacy walls along the eastern edge of the cove ~~was~~ considered for Reach 7.

This alternative would generally increase the area of BPCA assets receiving protection including open space resources and public art installations; however, it would also require~~s~~ more in-water work and would increase~~s~~ the duration of temporary closure of public open space during construction. It would also result in more permanent alterations to existing open space resources. While this alternative would also be expected to have greater costs and construction duration, upon completion, it could increase the opportunity for new public space programming, amenities and accessways. This alignment would also eliminate the need for deployable structures in some reaches with the opportunity to provide in-water ecological features.

Details on the alignment development process and alternatives considered in developing the Proposed Project will be provided in the DEIS and evaluated for a comparison of impacts with the Proposed Project in the alternatives chapter ~~(see also Section 4.7.11)~~.

Proposed Project (Preferred Alternative)

The Proposed Project, which is also referred to as the Preferred Alternative, is described below and is a combination of key elements designed as an integrated and interconnected flood barrier system comprised of floodwalls and flood gates. ~~of structures of the above Inboard and Outboard Approaches on a reach-by-reach basis, comprising alignments 1A or 1B, 2B, 3A, 4B, 5A, 6A, and 7A~~ (see **Figure ~~13~~3**).

Provided below is a summary description of the Preferred Alternative; the DEIS will contain additional text and graphics with a more detailed description of the design objectives of the Preferred Alternative in each reach.

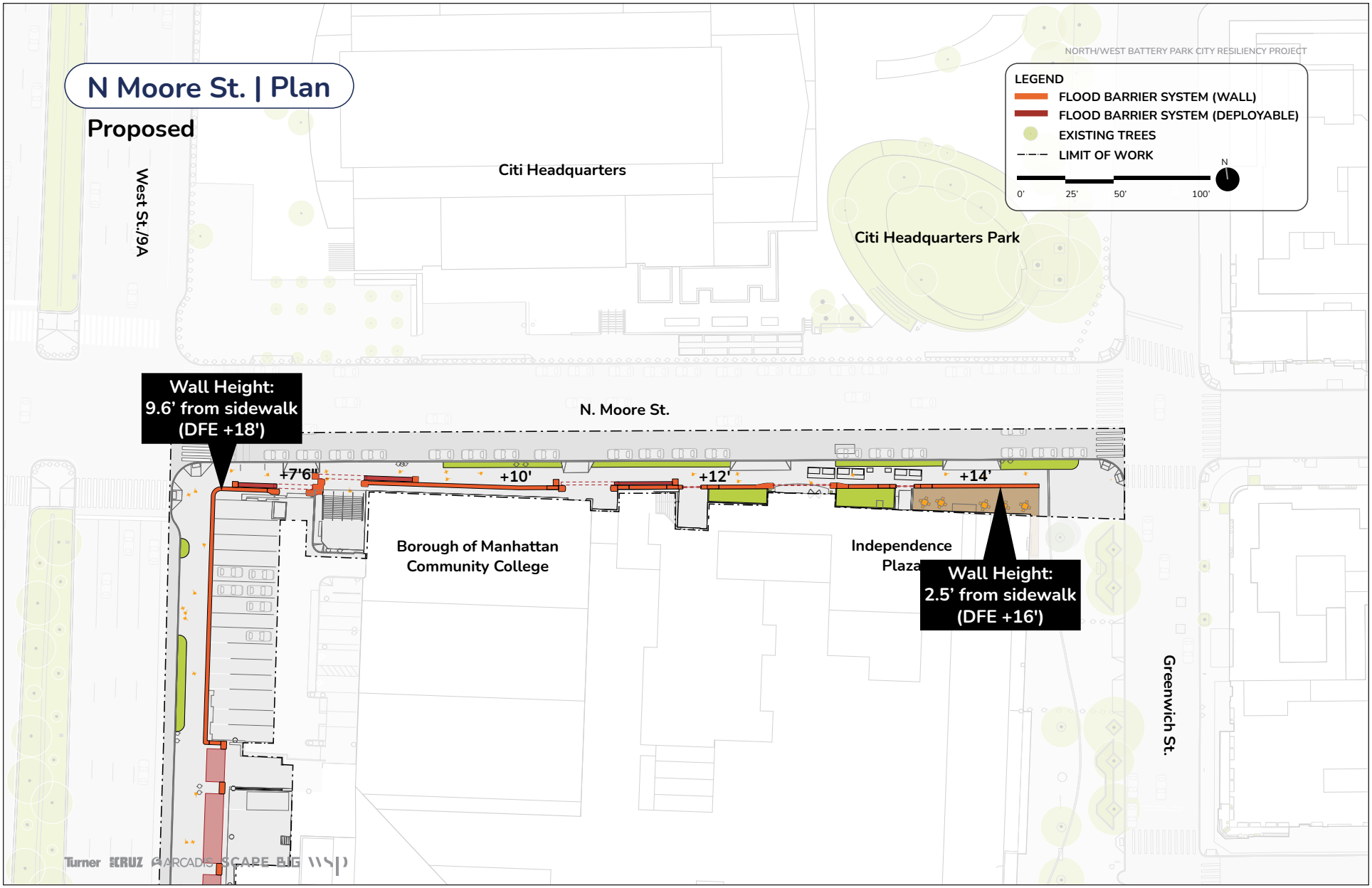
Reach 1 – Route 9A ~~(West Street) Crossing~~/Tribeca ~~(1A or 1B)~~

Reach 1 fronts along ~~would include~~ multiple lots and ~~different~~ property owners and is the only reach in the Project Area that extends east of BPCA property, across Route 9A /~~(~~West Street~~)~~ (see **Figures 12a and 12b**). In this reach, ~~two alternatives are under consideration and a preferred alternative will be selected as the design progresses. The~~ the flood barrier system concept ~~is~~ would be comprised of a combination of passive and deployable structures and would "tie-back" to higher ground at ~~Greenwich Street via an alignment along either~~ the corner of North Moore Street and Greenwich ~~or Chambers~~ Street. ~~Both~~ The alignment~~s~~ would cross Route 9A/ ~~(~~West Street~~)~~ and be located adjacent to public and private properties, requiring a number of gates to maintain access.

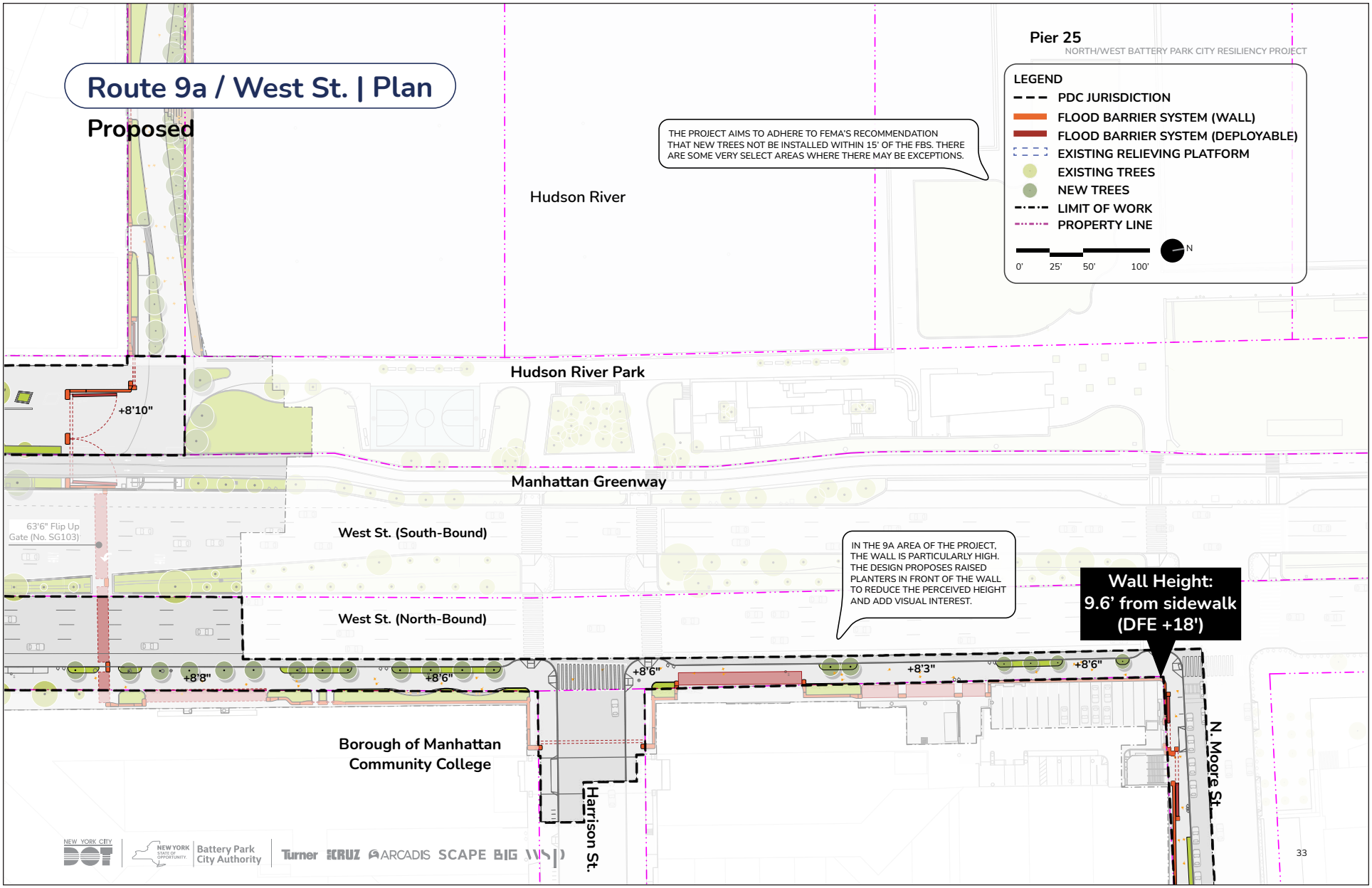
Reach 2 – ~~Battery Park City~~ North Esplanade ~~(2B)~~

In this reach, a passive flood protection structure is proposed to be concealed within a terraced garden landscape treatment (see **Figure 13**), while a reconstructed relieving platform extension would increase the opportunity to screen the passive ~~structure~~structure, and the platform would be rebuilt at elevation +12.0 feet. Northward expansion of the platform would also improve pedestrian circulation and emergency vehicular access by creating a widened shared pathway, with additional room for landscape improvements. Under this alternative the northern platform would extend into the Hudson River Park beyond existing BPCA property boundaries.

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Reach 1 Proposed Site Plan



Reach 1 Proposed Site Plan



Reach 2 Proposed Site Plan

Figure 13

Reach 3 – North Neighborhood/Rockefeller Park ~~(3A)~~

In Rockefeller Park, the proposed flood barrier ~~is~~ would be comprised of a passive structure aligned furthest from the waterfront, and closer to River Terrace (see **Figure 14a and 14b**). This inboard approach would require~~s~~ both a passive structure with deployable systems at park entrances and pedestrian crossings ~~and wave attenuation measures within the existing park~~. Under the Proposed Project, the open lawn would remain mostly undisturbed and waterfront views would be preserved; installation would require some tree clearing and replacement along River Terrace and design modification of certain park elements. ~~In addition to the barrier, wave mitigation measures will be explored and if feasible sited on the eastern perimeter of the lawn edge.~~

Reach 4 – ~~Belvedere Plaza~~Ferry Terminal ~~(4B)~~

The approach in this reach would include a newly elevated platform with flood defense components integrated into the design (see **Figure 15a and 15b**). ~~Under the Proposed Project, the plaza and esplanade west of the Irish Hunger Memorial would be split into two different levels, with the area surrounding and inclusive of the playground elevated and protected from storm surge and the lily pond replaced. While this approach would temporarily relocate t~~The ferry terminal ~~roughly 170 feet to the north, it would ultimately be moved back to its original location~~would remain open and in its current location during nd after construction, thereby resulting in no net long-term change in the current related noise or foot traffic impacts conditions in the vicinity of the residential buildings and playground north of the current location.

Reach 5 – ~~North Cove (5A)~~Brookfield Place

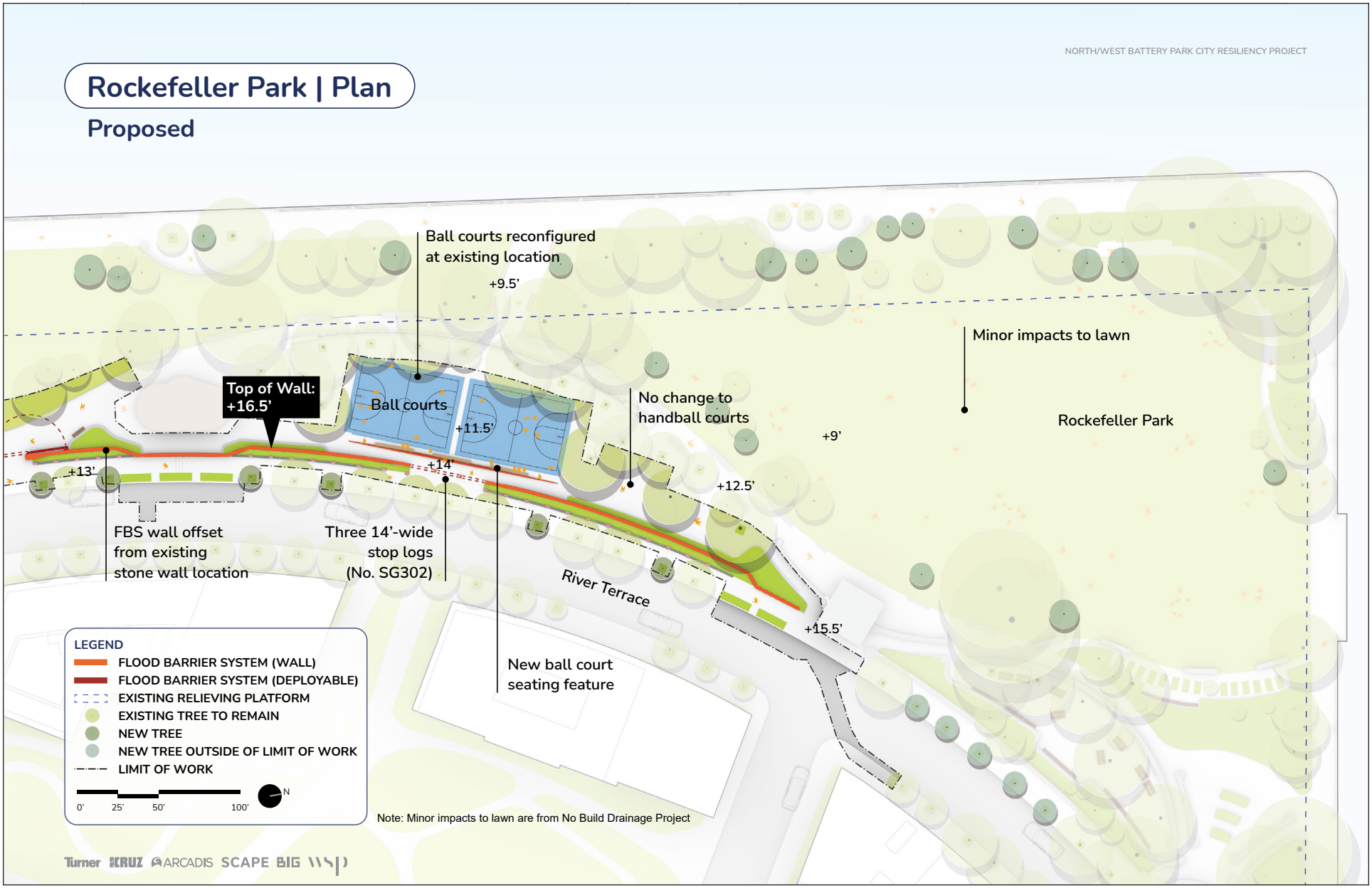
~~In~~At ~~North Cove~~Brookfield Place, flood protection would be provided by a passive structure integrated into terraced planting, located inland from the waterfront (see **Figure 16**). This approach would require~~s~~ both a passive structure and deployable structures for access between upper and lower levels. Where the alignment crosses the two PATH tunnels, special bridging structures below the plaza deck would be required. The bridging structures would incorporate valve ~~sluice~~ gates that would be operated from the surface to regulate the open water over and adjacent to the PATH tunnels. The preferred alternative would minimize the regulatory delays from in-water work and reduce the flood protection height by taking advantage of natural wave attenuation that occurs as storm waves move inland. Although this alignment would result~~s~~ in greater plaza construction and disruption, it would also allow~~s~~ for the possibility of enhanced programming opportunities and would incorporate~~s~~ waterfront universal access adjacent to Brookfield Place.

Reach 6 – South Esplanade ~~(6A)~~

Along the South Esplanade, a passive structure is proposed following the existing masonry privacy wall at the inland edge of the planting area of the esplanade, furthest from the water's edge (see **Figure 17**). This inboard approach would likely not affect the existing relieving platform, except where existing buildings are located over the relieving platform, and deployable structures would be needed at intersection locations. Roller gates are proposed at the street ends leading to the Esplanade to maintain both pedestrian and emergency vehicle access.

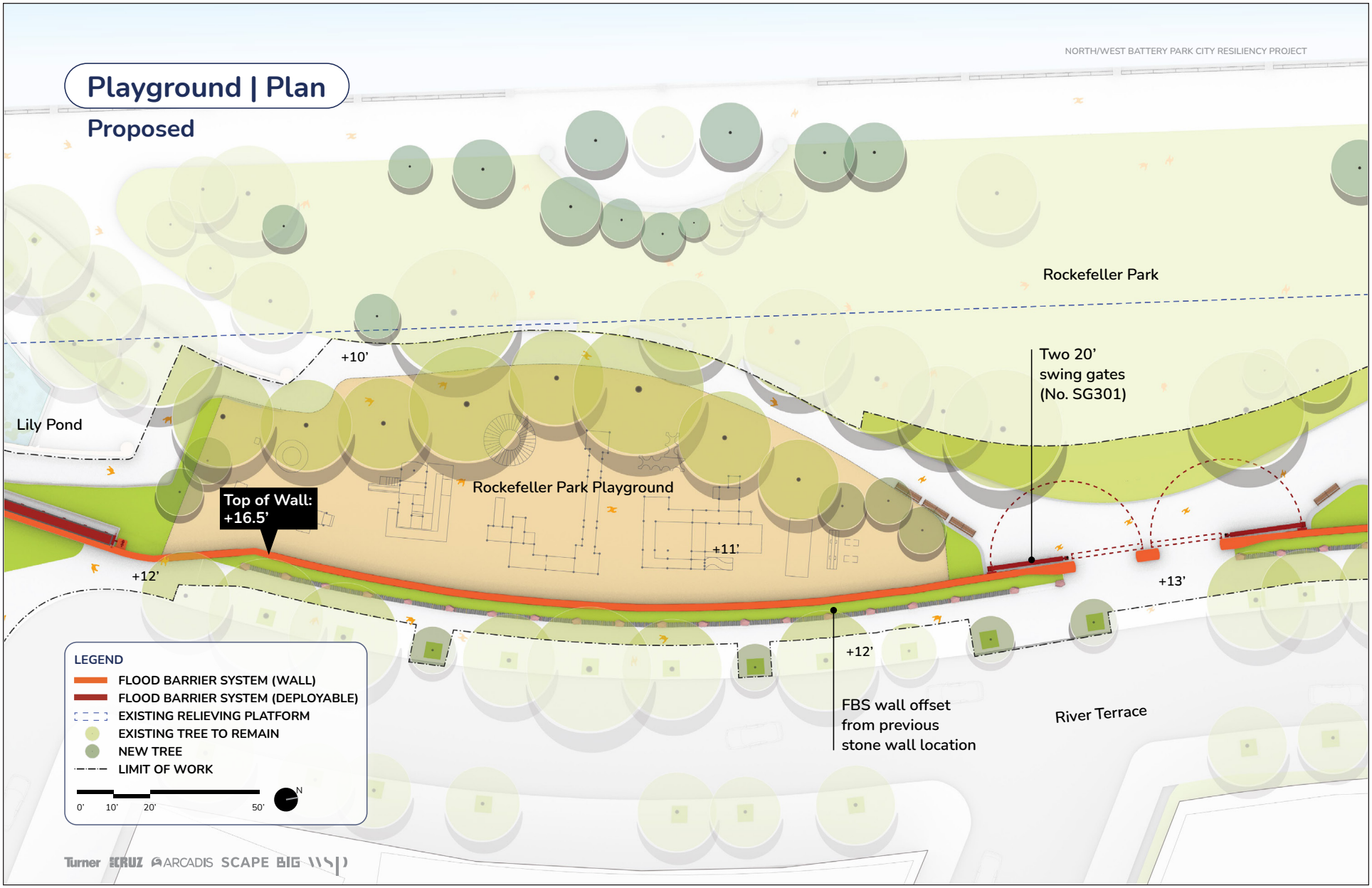
Reach 7 – South Neighborhood~~Cove (7A)~~

In South Cove, a passive structure is proposed along the existing masonry privacy walls adjacent to the existing buildings and courtyards, inland from the water's edge (see **Figure 18**). This inboard design would also require~~s~~ deployable structures for pedestrian access to buildings and intersections. ~~A section of the relieving platform near the northwest corner of South Cove may be rebuilt to facilitate the installation of the floodwall.~~ The design of the waterfront edge will be refined concurrent with development of the DEIS.



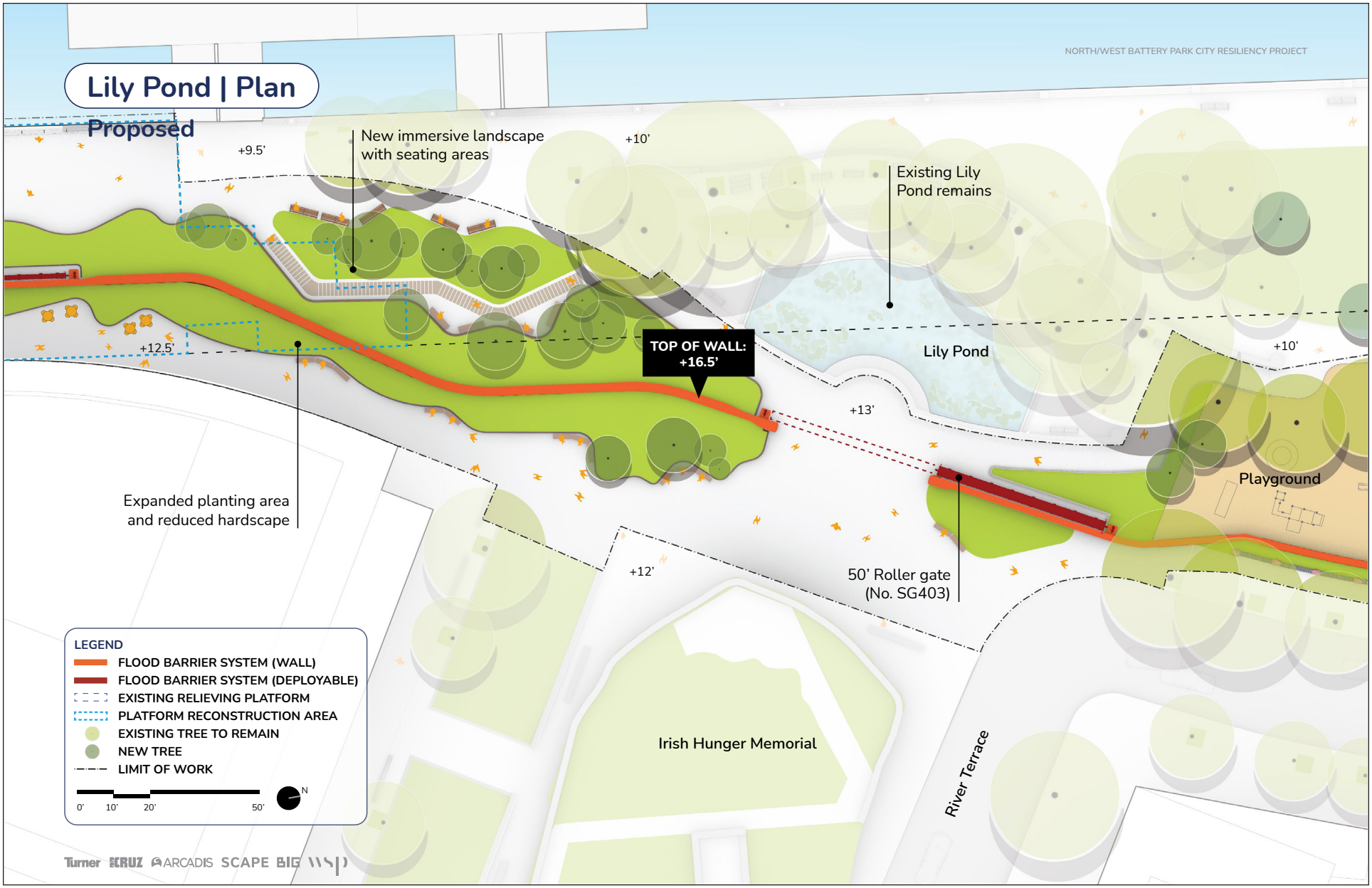
Reach 3 Proposed Site Plan

Figure 14a



Reach 3 Proposed Site Plan

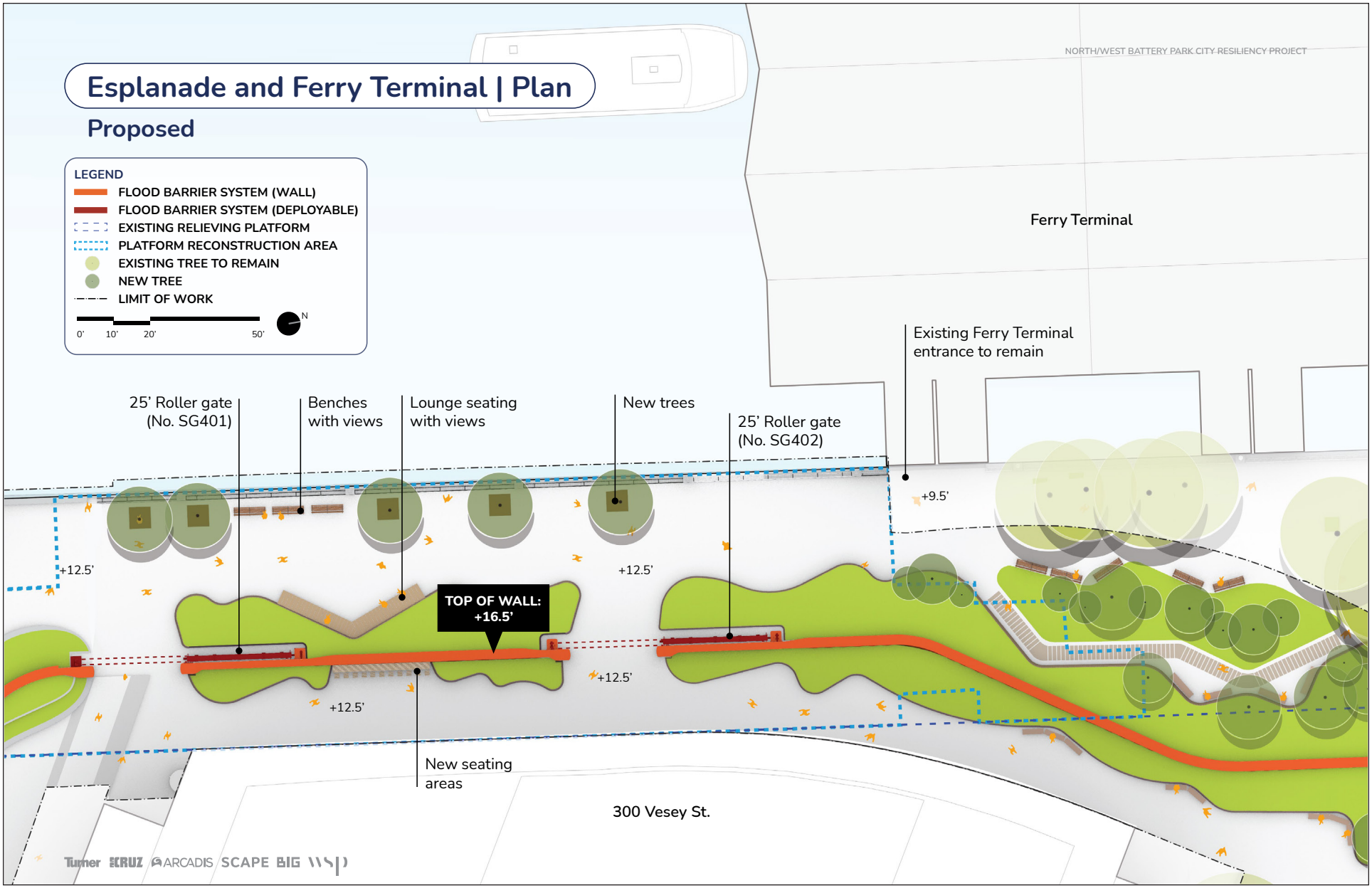
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Reach 4 Proposed Site Plan

Figure 15a

8.28.24



Reach 4 Proposed Site Plan

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 15b



Reach 5 Proposed Site Plan

Figure 16

Reach 6 | Plan

Proposed

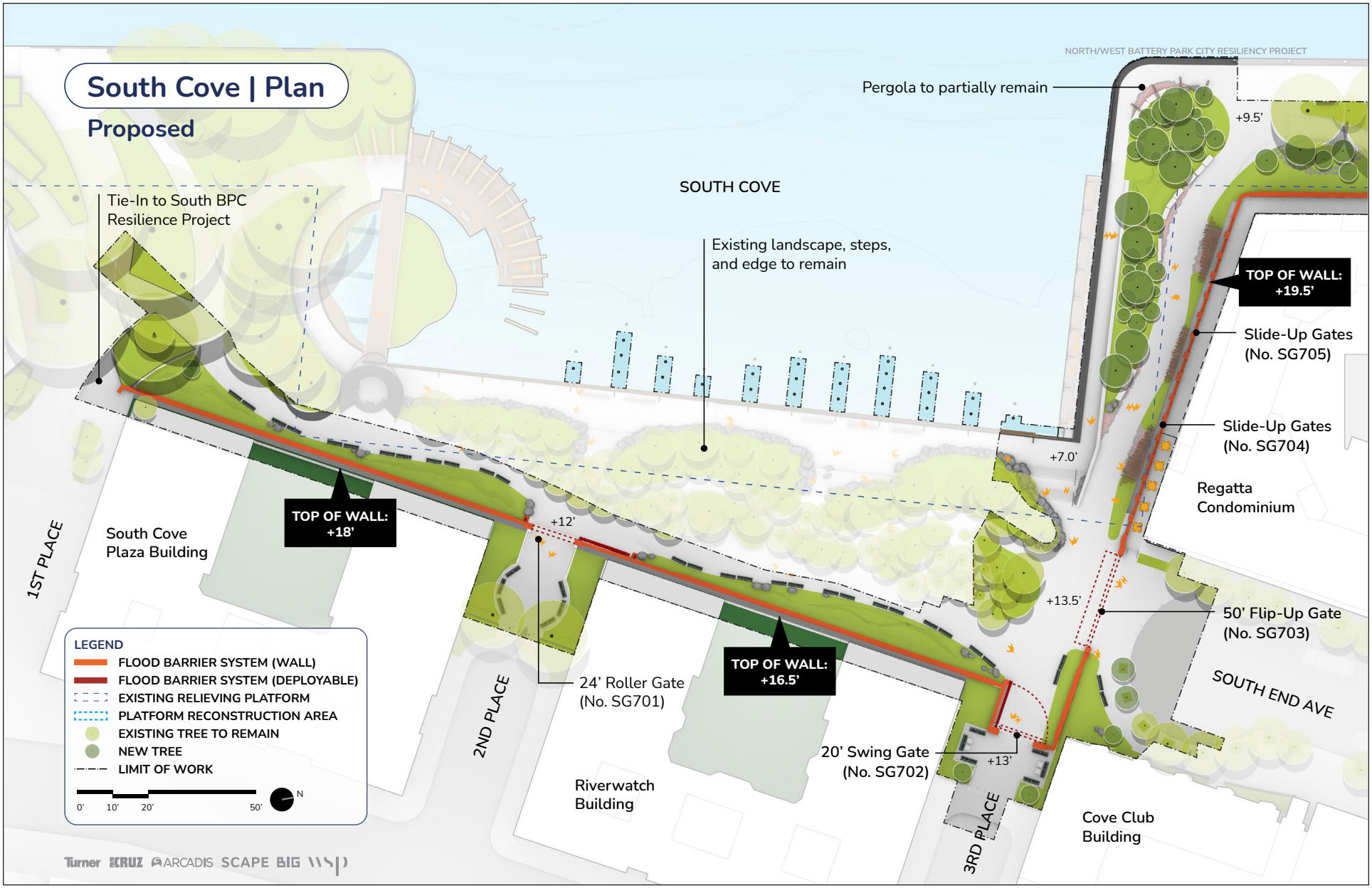
NORTH/WEST BATTERY PARK CITY RESILIENCY PROJECT



Reach 6 Proposed Site Plan

Figure 17

8.28.24



Reach 7 Proposed Site Plan

4 Content of the Draft Environmental Impact Statement

4.1 Cover Sheet and Table of Contents

The cover sheet will identify all required information contained in applicable SEQR regulations in 6 NYCRR 617.9(b)(3), including a summary description of the Proposed Project, its location, contact information for the Lead Agency and DEIS preparers, the date of acceptance of the DEIS by the Lead Agency, and the date by which comments must be submitted. The table of contents will follow the cover sheet.

4.2 Executive Summary

The executive summary will provide a brief overview of the DEIS content including a summary of the Proposed Project, the most pertinent information from the technical impact analyses, the significant impacts, mitigation, and alternatives considered.

4.3 Description of the Proposed Project

This section will describe the Proposed Project, including the following elements:

- Project location and setting;
- Project description (including proposed elements, changes to site, acreage developed, etc.);
- Purpose and objectives;
- Public needs and benefits;
- Required public actions and approvals; and
- SEQR process and chronology.

This description will also address all aspects of site development with graphics (site plans, renderings, photographs, cross sections, and maps), such as:

- Site layout and design;
- Architectural design of the passive structure design elements in the context of the site and the buildings in the surrounding areas;
- Landscaping, lighting, and signage;
- On-site traffic, pedestrian, and bicycling circulation;
- Utilities and stormwater management facilities;
- Site access;
- Specific uses to be included in the Proposed Project; and
- Regulatory compliance, including zoning, permitting, and other approvals needed.

4.4 ~~Reasonable Alternatives to the Proposed Project~~

~~Pursuant to 6 NYCRR Part 617, the DEIS must contain a description and evaluation of reasonable alternatives to the Proposed Project. Because of the unique characteristics of the Project Area, the Proposed Project was divided into seven reaches for the purposes of evaluating alternatives. The alternatives that will be analyzed in the Alternatives chapter are summarized below (further detail is provided in Section 4.7.11, "Alternatives"):~~

~~No Action Alternative~~

~~This section will include an evaluation of the potential impacts that would result by the build year if the Proposed Project was not undertaken. The No Action Alternative will assume no new comprehensive coastal flood protection system is implemented in the Proposed Project area. In the absence of this system, the existing area would therefore remain at risk to coastal flooding during extreme tidal surges.~~

~~The build year for the Proposed Project is 2027, and accordingly, the No Action Alternative therefore assumes that projects planned or currently under construction in the Project Area or Study Areas are completed by the 2027 analysis year (i.e., the No Action projects). The DEIS will include a description of the future without the Proposed Project for each analysis area, that will include other projects currently under construction or planned within the Study Area. The DEIS will include a map and list of the projects expected to be completed through the 2027 analysis year.~~

~~Alternative Alignments~~

~~Inboard Alignment Flood Protection (Alternative A)~~

~~The Inboard Alignment Flood Protection (Alternative A) objective was to provide flood protection along the most upland location from the water's edge (see Figure 12). This alignment would include an upland "tie-back" near Greenwich Street, then follow along North Moore Street, then crossing Route 9A (West Street). In the next reach, the BPC North Esplanade, the design proposes in-place reconstruction, without modification of width. Turning southward this alignment generally follows the existing BPCA retaining wall that frames the interior edge of Rockefeller Park, thereby minimizing park modifications. Along the Belvedere Plaza reach, this alignment reconstructs the waterfront platform at the location of the ferry terminal. Within North Cove, this alternative is aligned along the upland terraces of the plaza to be integrated with the existing plaza platform and also crosses the two PATH tunnels, which requires special subsurface bridging structures and sluice gates. Continuing along the South Esplanade this alignment replaces the in-place privacy walls with the goal of maximizing the preservation of existing trees, and minimizing changes to the esplanade, to the extent feasible. In South Cove, the system is integrated to the existing elevated sidewalks and privacy walls along the eastern edge of the cove. The alternative generally minimizes regulatory approvals resulting in a lower cost and construction period as compared to the Outboard Alignment (described below) with less modification of existing open spaces and urban design features and a lesser impact on existing view corridors; however, this alignment also provides the least protection of the existing waterfront open spaces.~~

~~Outboard Alignment Flood Protection (Alternative B)~~

~~The Outboard Alignment Flood Protection (Alternative B) provides flood protection nearer the water's edge and increases modifications to existing open spaces (see **Figure 12**). In Reach 1, this alignment would include a similar "tie-back" near Greenwich Street, then follows an alignment along Chambers Street, crossing Route 9A (West Street) between Greenwich and Harrison Streets. This alignment would not provide coastal flood protection for areas south of North Moore or Harrison Streets which are included in the Inboard Alternative. Under this alignment, the Battery Park City North Esplanade is reconstructed and expanded, providing additional public space for pedestrian and bicycle travel. Continuing southward, the flood barrier systems are aligned through the center of Rockefeller Park, with the flood protection wall installed beneath a raised and reconstructed park. Within Belvedere Plaza, the flood protection requires reconstructing the~~

~~waterfront platform with a temporary relocation of the ferry terminal. In North Cove, the flood barrier system is outboard, extending along the marina breakwater with a barge gate to be deployed at the entrance. This alignment also crosses the two PATH tunnels with special subsurface bridging structures and sluice gates. In the South Esplanade, the flood protection is co-located with a reconstructed and partially raised esplanade structure. As with the Inboard Alignment, only one alignment was considered for Reach 7 (due to this reach's geographical constraints), for the South Cove comprised of elevated sidewalks and privacy walls along the eastern edge of the cove.~~

4.5 Analysis Framework

The Lead Agency is required to take a "hard look" at the environmental impacts of proposed actions and, to the maximum extent practicable, avoid or mitigate potentially significant adverse impacts on the environment, consistent with social, economic, and other essential considerations. An EIS is a comprehensive document used to systematically consider environmental effects, evaluate reasonable alternatives, and identify and mitigate, to the maximum extent practicable, any potentially significant adverse environmental impacts. The EIS provides a means for the lead and involved agencies to consider environmental factors and choose among alternatives in their decision-making processes related to a Proposed Project.

The framework for the DEIS analysis will be to compare the future conditions with the project (the Proposed Project) to the future conditions without the project (No Action Alternative).

No Action Condition

This section will include an evaluation of the potential impacts that would result by the build year if the Proposed Project was not undertaken. Under SEQR, the potential impacts of the Proposed Project are measured as the increment of impact over the No Action Alternative, which is the future condition without the Proposed Project and assumes that no new comprehensive flood barrier system is installed along the Project Area. The build year for the Proposed Project is ~~2027~~2030, and accordingly, the No Action Condition therefore assumes that projects planned or currently under construction in the Project Area or Study Areas are completed by the ~~2027~~ 2030 analysis year (i.e., the No Action projects). The DEIS will include a description of the future without the Proposed Project for each analysis area, and will include a map and list of the projects expected to be completed through the ~~2027~~ 2030 analysis year.

The No Action Condition will assume no new comprehensive flood barrier system is implemented in the Proposed Project area. In the absence of this system, the existing area would therefore remain at risk from storm surges and severe weather events. An independent project within Battery Park City that would move forward in the No Action Condition is comprised of targeted drainage improvements in Rockefeller Park. The project includes repair and replacement of inlets coupled with the replacement of broken pipes, where needed. These improvements would have very limited and targeted areas of disturbance and are expected to be completed in 2025.

Proposed Project

The Proposed Project is a comprehensive flood barrier system located in Lower Manhattan, aligned along the Hudson River waterfront between 1st Place on the south and the BPC North Esplanade on the north, then crossing Route 9A/~~(~~West Street~~)~~ where it turns north and then east along the south side of North Moore Street to Greenwich Street ~~via an alignment on either North Moore Street or Chambers Street~~. The proposed flood barrier system would be comprised primarily of passive structures (e.g., above-grade concrete walls, below-grade concealed walls, and supporting foundations) with deployable elements at vehicle and pedestrian crossings. In addition to the flood barrier system the Proposed Project includes

protections against interior flooding with improvements to the City's drainage infrastructure that include: isolating the existing underground sewer systems elements in the protection area, NSI upgrades along West Street; upgrading existing tide gates and installing new tide gates along the flood barrier alignment, and a pump station is proposed to be sited in Stuyvesant Plaza immediately east of Stuyvesant High School. As described in this scope, the term "flood barrier alignment" is used to identify this combination of flood barrier system measures. The proposed flood barrier alignment will span the PATH tunnels that run beneath the Project Area; the Port Authority of New York and New Jersey has separately implemented measures to provide flood protection for its assets.

4.6 Scope of Work for the EIS

This section describes the framework for the DEIS technical analyses through the 2030 ~~2027~~ analysis year. The DEIS will document the affected environment and environmental impacts for future conditions both with and without the Proposed Project for the following technical resources: land use, zoning and public policy, open space, historic and cultural resources, urban design and visual resources, natural resources, hazardous materials, water and sewer infrastructure, transportation, greenhouse gas emissions (GHG), and construction with a focus on impacts related to open space, transportation, air quality noise and neighborhood character. Both the long term (operational) and short term (construction) impacts will be evaluated for each of these technical areas.

Of the technical analyses that may typically be considered in an environmental review the following technical disciplines have been screened out and will not require detailed analysis in the DEIS: socioeconomic conditions, community facilities and services, ~~operational open space,~~ shadows, solid waste and sanitation services, energy, operational air quality, noise and vibration impacts, and public health. The following summarizes why each of those technical resources did not meet the criteria for a detailed analysis.

Socioeconomic Conditions

According to the *CEQR Technical Manual*, there are six guidelines for determining whether a socioeconomic assessment is required. They are related to the following:

- Displacement of residential population;
- Displacement of more than 100 employees;
- Business displacements;
- New development that is markedly different from existing land uses;
- New or improved retail development; or
- Effects on a specific industry.

As the Proposed Project requires no residential, employee or business displacements, includes no retail development, does not create land uses markedly different from existing conditions and does not affect a specific industry, no further socioeconomic assessment is required.

Community Facilities and Services

As the Proposed Project would not physically impact or displace any community resources, nor result in any increases in resident population, nor have any impact on public schools, healthcare facilities, publicly funded group early childhood programs, libraries or local police and fire facilities, no detailed assessment of community facilities is required.

~~Open Space~~

~~As the Proposed Project would not result in an increase in population that would change the utilization of the existing open spaces in the Study Area, nor would it physically alter the size of the existing open spaces, there would be no potential for significant adverse impacts on open space resources and no detailed assessment of open spaces is required.~~

Shadows

As the Proposed Project would not result in structures over 50 feet in height, nor any structures adjacent to a sunlight sensitive resource, there would be no potential for significant adverse impacts from shadows and a detailed assessment is not required.

Solid Waste and Sanitation Services

According to the *CEQR Technical Manual*, further analysis would be conducted if the project:

- Exceeds 50 tons per week or more of solid waste generation;
- Involves the construction, operation, or closing of any type of regulated solid waste management facility, New York City Department of Sanitation (DSNY) district garage, or borough repair shop; or
- Involves a change to the public or private waste collection.

As operation of the Proposed Project does not meet any of these criteria, no further assessment is required.

Energy

As the Proposed Project would not result in an increased energy usage nor would it have the potential to effect existing energy systems, there would be no potential for significant adverse impacts related to energy and no detailed assessment of energy is required.

Air Quality

Since there will be no mobile sources (e.g., traffic) or stationary sources (e.g., fossil-fuel fired heating, ventilation, and air conditioning systems) generated by the Proposed Project, no further assessment of operational air quality impacts is required.

Noise and Vibration

Since the operation of the Proposed Project would not result in the introduction of any new stationary or mobile sources of noise, and consequently would not have the potential to impact nearby sensitive receptors in the vicinity of the Study Area, no further assessment of operational noise and vibration impacts are required.

Public Health

According to the *CEQR Technical Manual*, assessment of public health impacts would be required if there are significant unmitigated adverse impacts associated with the Proposed Project. Long term operation of the NWBPCR Project would not have any unmitigated air quality, noise, hazardous materials, or natural resource impacts, therefore, no further assessment is required.

4.7 Affected Environment and Environmental Impacts

Land Use, Zoning, and Public Policy

This section will examine the potential for the Proposed Project to impact land use, zoning, and public policy. As recommended by the *CEQR Technical Manual*, a 400-foot Study Area from the proposed flood barrier system will be used for the analysis (see **Figures 19 and 20**). The analysis will describe land uses, zoning regulations, and applicable policies in the Study Area and then assess the potential land use impacts and compliance with zoning regulations and policies. This analysis will also address any impacts or potential conflicts with public parkland.

The primary land uses along the Proposed Project are the waterfront open spaces and residential uses of Battery Park City, the Hudson River Greenway and Route 9A /West Street corridor and residential, retail, commercial, and institutional uses. According to the *CEQR Technical Manual*, the appropriate study area for land use and zoning is guided by the type and size of a Proposed Project, the location and context of the area that potentially affected by the project, and other factors, such as natural and man-made geographic boundaries. Land uses in the Study Area will be determined through a review of New York City Department of City Planning (NYCDCP) Primary Land Use Tax Lot Output (PLUTO) data (20v7) and confirmed through field work.

The New York City Zoning Resolution (ZR) defines through text and maps the use, density and bulk of developments in the City. The zoning text describes the zoning districts and the regulations governing land uses and developments, while the maps show the boundaries of those districts. Zoning designations in the Study Area will be determined through a review of NYCDCP's Zoning Maps 12a (effective date December 15, 2021) and 12b (effective date March 20, 2013) and through a review of the City's online Zoning Resolution (as updated through January 6, 2021).

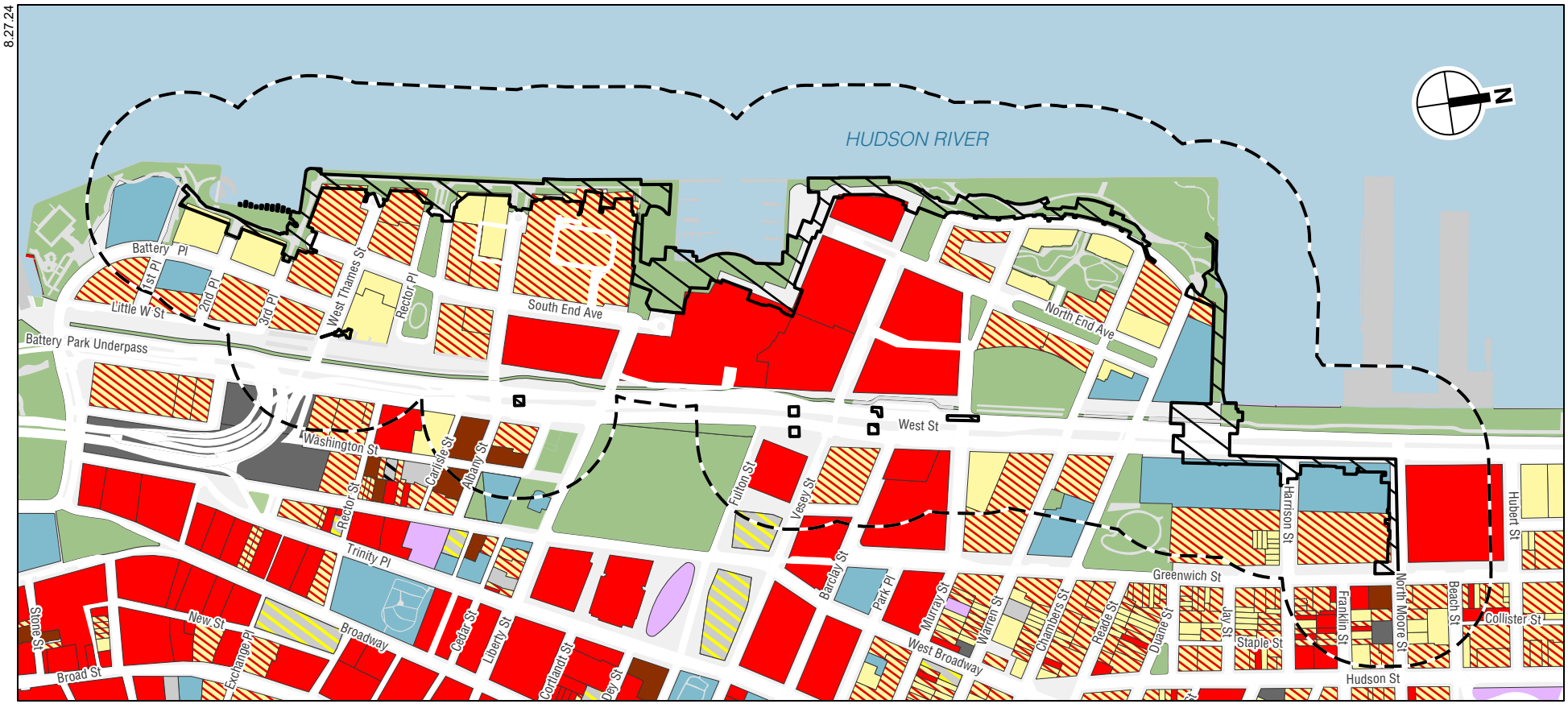
Various public policies can affect the allowable land uses on a project site. Officially adopted and promulgated public policies also describe the intended use applicable to an area or particular sites in the City. Some public policies have regulatory status, while others describe general goals that can help define the existing and future context of the land use and zoning of an area. Policies may also change over time to reflect the evolving needs of the City, as determined by appointed and elected officials and the public.

The Project Area is located in the City's Coastal Zone. Actions subject to CEQR and in the Coastal Zone must be assessed for their consistency with the City's Waterfront Revitalization Program (WRP). Adopted under the federal Coastal Zone Management Act of 1972, the WRP is administered by the City Planning Commission acting as City Coastal Commission. Currently the City of New York has developed a 10-policy program that is used for projects that require City actions only. It is intended that this analysis will be used to support the Federal and State permits necessary for the project. The City's Coastal Assessment Form (CAF) and the Federal consistency form will be completed for the Proposed Project. The DEIS will include an analysis of the No Action and Proposed Project's impact of land use, zoning, and public policies.

Open Space

This section will examine the potential for the Proposed Project to impact open space directly or indirectly in the study area by reducing or changing open space. According to the CEQR Technical Manual, open space is defined as "publicly or privately owned land that is publicly accessible and available for leisure, play, or sport, or is set aside for the protection and/or enhancement of the natural environment." Public open space is available "to the public on a constant and regular basis, including for designated daily periods." Examples of public open space in the study area include, but are not limited to, City parks, Battery Park City Esplanade and adjacent parks, the Battery, and waterfront piers. Private open space is

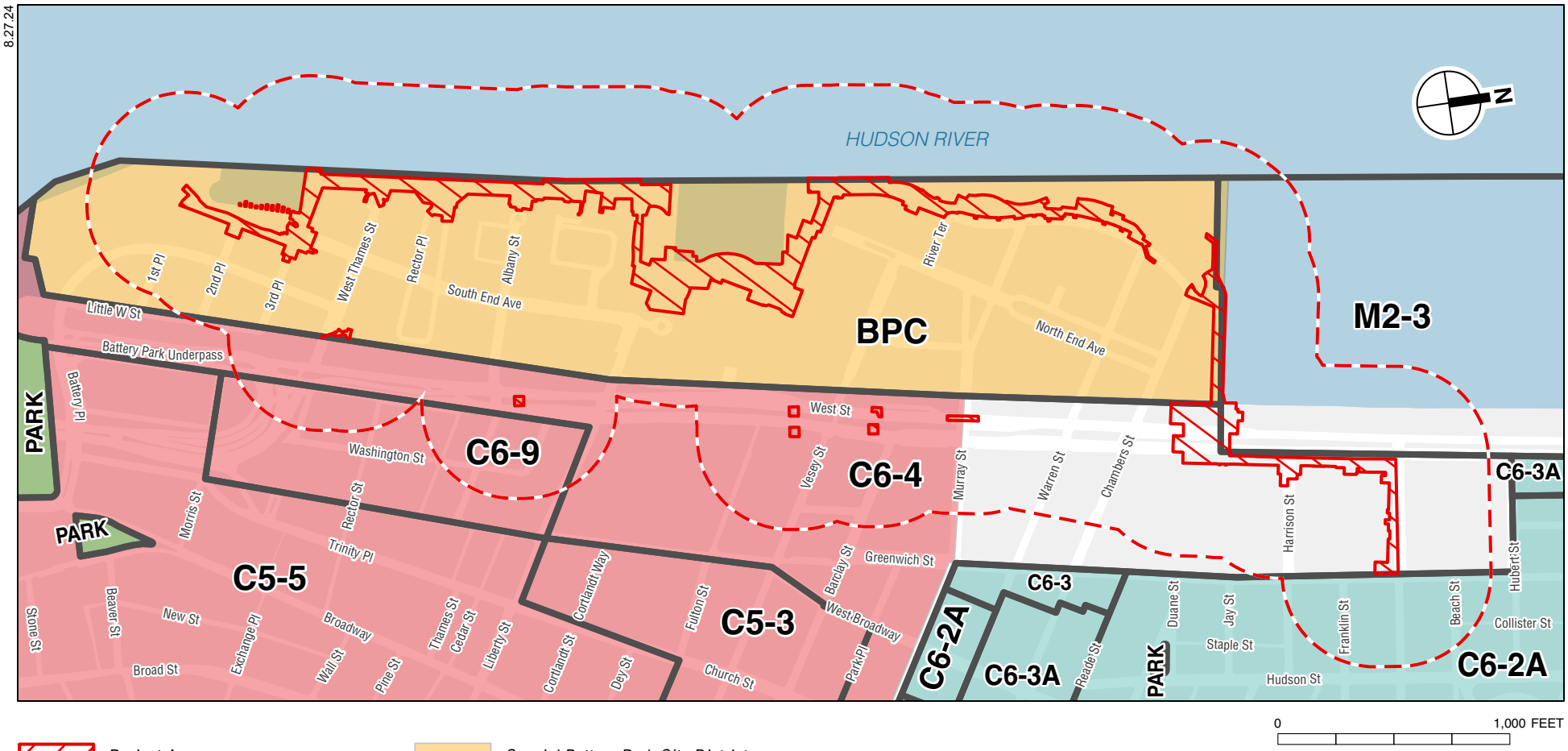
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- Project Area
- Land Use Study Area (400-ft perimeter)
- Commercial and Office Buildings
- Hotels
- Open Space and Outdoor Recreation
- Parking Facilities
- Public Facilities and Institutions
- Residential
- Residential with Commercial Below
- Transportation and Utility
- Under Construction
- Vacant Building
- Vacant Land

Existing Land Use

8.27.24



Project Area

Land Use Study Area (400-ft perimeter)

Zoning District Boundary

Park Boundary

Special Battery Park City District

Special Lower Manhattan District

Special Tribeca Mixed Use District

Existing Zoning

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 20

"not publicly accessible or is available only to limited users and is not available to the public on a regular or constant basis."

Direct effects include those in which a project reduces or limits access to open space. In addition, a direct effect could occur "if the facilities within an open space would be so changed that the open space no longer serves the same user population." Indirect effects could result from projects that generate residential or commercial population, and that additional population "overtaxes the capacity of existing open space so that their service provided to existing and future populations in the area would be substantially or noticeably diminished."

The purpose of the assessment is to determine if the Proposed Project would have a direct effect on open space. The assessment would analyze if the Proposed Project would result in a physical loss of public open space either by encroaching or displacing open space; change the use of an open space so that it can no longer serve the same user population; limit public access to an open space; or caused increased noise, air pollutants, odor or shadows on public open space that would affect its function, usability or enjoyment, on a permanent or temporary basis. In accordance with the CEQR Technical Manual, because the Proposed Project is not introducing a new residential or worker population, the analysis evaluates the open space resources within a quarter-mile radius of the Project Area (see **Figure 21**).

Historic and Cultural Resources

This section will examine the potential for the Proposed Project to impact historical and cultural resources (including both archaeological and architectural resources). The historical and cultural resources analysis will be prepared in accordance with SEQR and Section 14.09 of the New York State Historic Preservation Act of 1980 (SHPA) (Section 14.09). In addition, because a federal permit will be sought from the USACE for in-water or over-water work, the project must also comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA). The USACE Section 106 review will be limited to the effects of the in-water or over-water work, while the Section 14.09 review will consider the entirety of the Proposed Project.

Section 14.09 of the SHPA was established as a counterpart to the NHPA and declares historic preservation to be the public policy of, and in the public interest of, the state. The SHPA created the State Register, the official list of resources significant in the history, architecture, archaeology or culture of the state, its communities, or the nation. The NHPA requires State agencies to consult with the commissioner of OPRHP if it appears that any project which is being planned may or will cause any change, beneficial or adverse, in the quality of any historic, architectural, archaeological, or cultural property that is listed on the State or National Registers of Historic Places (S/NR) or that is determined by the commissioner to be eligible for S/NR-listing. It requires State agencies, to the fullest extent practicable, consistent with other provisions of the law, to avoid or mitigate adverse impacts to such properties, to fully explore all feasible and prudent alternatives and to give due consideration to feasible and prudent plans which would avoid or mitigate adverse impacts to such property. It establishes agency preservation officers for the purpose of implementing these provisions.

A required step in the Section 106 process is the identification of the Area of Potential Effect (APE). Section 106 defines the APE as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist" (36 CFR § 800.16[d]). The federal APE is influenced by the scale and nature of an undertaking and may vary for different kinds of effects caused by the undertaking. Archaeological and historic architectural APEs have been delineated to take into account potential direct effects of the Proposed Project on archaeological resources, and potential direct and indirect effects of the proposed flood barrier system on historic architectural resources. In the Section 106 process, consultation will be undertaken with OPRHP acting in

7.19.24



Open Space Study Area and Resources

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 21

its capacity as the federal State Historic Preservation Office (SHPO). As written in a letter dated November 22, 2022, OPRHP concurred with the scope of work for the assessment of historic and cultural resources described in the DSOW.

Archaeological Resources

The potential for impacts on archaeological resources include direct effects that may result from subsurface disturbance during construction or activities required to prepare for the start of construction. The Archaeological APE will comprise both the horizontal APE—e.g., the footprint of proposed ground disturbance—and the vertical APE, e.g., the depth to which the proposed ground disturbance is anticipated to extend beneath the ground surface.

The Proposed Project would include alterations to ROW areas along North Moore Street, Harrison Street, and Route 9A–/(West Street), the Hudson River Greenway, the North Esplanade, Rockefeller Park, Belvedere Plaza, North Cove, the South Esplanade, and South Cove, namely through installation of drainage improvements, utility relocations, and foundation installation for the flood barrier system. The Proposed Action would create varying levels of subsurface disturbance. As part of the DEIS analysis, coordination with NYC Landmarks Preservation Commission (NYCLPC) and SHPO will be initiated. If requested by NYCLPC and/or SHPO, a Phase 1A Archaeological Documentary Study will be prepared to determine the potential effects on archaeological resources under the Proposed Project. The Phase 1A Archaeological Documentary Study will document the APE's occupation and development histories from the time of indigenous occupation through the present. The study will also include an assessment of historical and modern disturbance to identify areas of potential archaeological sensitivity where further archaeological analysis (e.g., Phase 1B archaeological testing) may be required. A Phase 1A Archaeological Documentary Study will be prepared in coordination with NYCLPC and SHPO and its conclusions will be summarized in the DEIS.

Architectural Resources

The historic architectural resources analysis will include all areas where the Proposed Project may result in changes to land or structures and their uses, including the area of ground disturbance and locations from which elements of the Proposed Project may be visible from historic structures. In accordance with *CEQR Technical Manual* guidelines, the APE for architectural resources has been defined as the area within 400-feet of the Project Area (see **Figure 22**). This APE accounts for both potential direct effects of the proposed flood barrier alignment and interior drainage improvements, described above, and indirect visual and contextual effects, and it includes views toward the historic Statue of Liberty, Ellis Island, Hudson River, and New York Harbor. Direct physical effects to an architectural resources may result demolition, alteration, or damage from construction, and indirect effects are effects such as the introduction of visual, audible, or atmospheric elements that may alter the characteristics of a historic property that qualify it for inclusion in the National Register in a manner that diminishes the integrity of the property's historic features. The DEIS will include an analysis of the incremental impacts of the Proposed Project over the No Action Alternative.

Urban Design and Visual Resources

This section of the DEIS will examine the potential for the Proposed Project to impact urban design and visual resources. Based on *CEQR Technical Manual* guidance, a Study Area for urban design and visual resources has been established for the area where the Proposed Project would most likely be visible and affect the pedestrian experience and the viewsheds of aesthetic and visual resources (see **Figure 2423**). Due to the dense urban environment of Lower Manhattan, the Project Area is generally not visible from long distances. This analysis will address the urban design and visual resources of the Study Area for existing conditions, the No Action Alternative, and the future with the Proposed Project. To prepare this

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Project Area/Archaeology Area of Potential Effect

Architectural Resources Area of Potential Effect (400-foot perimeter)

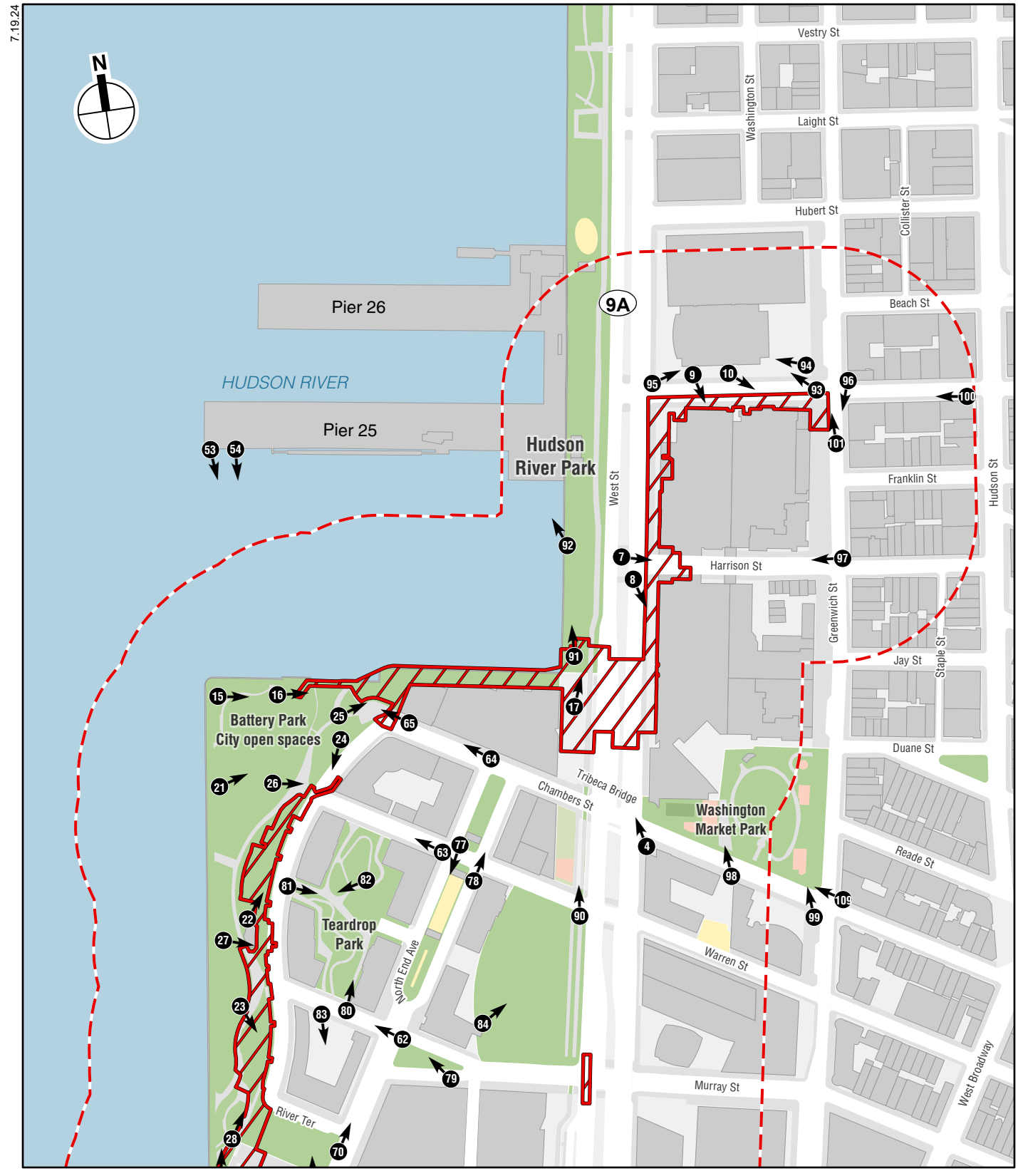
Architectural Resoures

1. *Shearwater (S/NR)*
2. *South Cove (S/NR-eligible)*
3. *Hudson River Bulkhead (S/NR-eligible)*
4. *Tribeca West Historic District (NYCL, S/NR-eligible)*
5. *Harrison Street Houses (NYCL)*
6. *Lamppost 89 (NYCL)*
7. *New York World Telegram Building (S/NR-eligible)*
8. *Barclay-Vesey Building (NYCL, S/NR)*
9. *World Trade Center Site (S/NR-eligible)*
10. *90 West Street (NYCL, S/NR)*
11. *Lamppost 79 (NYCL)*
12. *New York Evening Post Building (S/NR)*
13. *120 Greenwich Street (S/NR-eligible)*
14. *40 Rector Street (S/NR-eligible)*
15. *Lamppost 80 (NYCL, S/NR-eligible)*
16. *St. George's Syrian R. C. Church (NYCL, S/NR-eligible)*
17. *Frasch Building (S/NR-eligible)*
18. *Robert F. Wagner, Jr. Park (S/NR-eligible)*

Historic Resources - Area of Potential Effect

NORTH/WEST BATTERY PARK CITY RESILIENCY

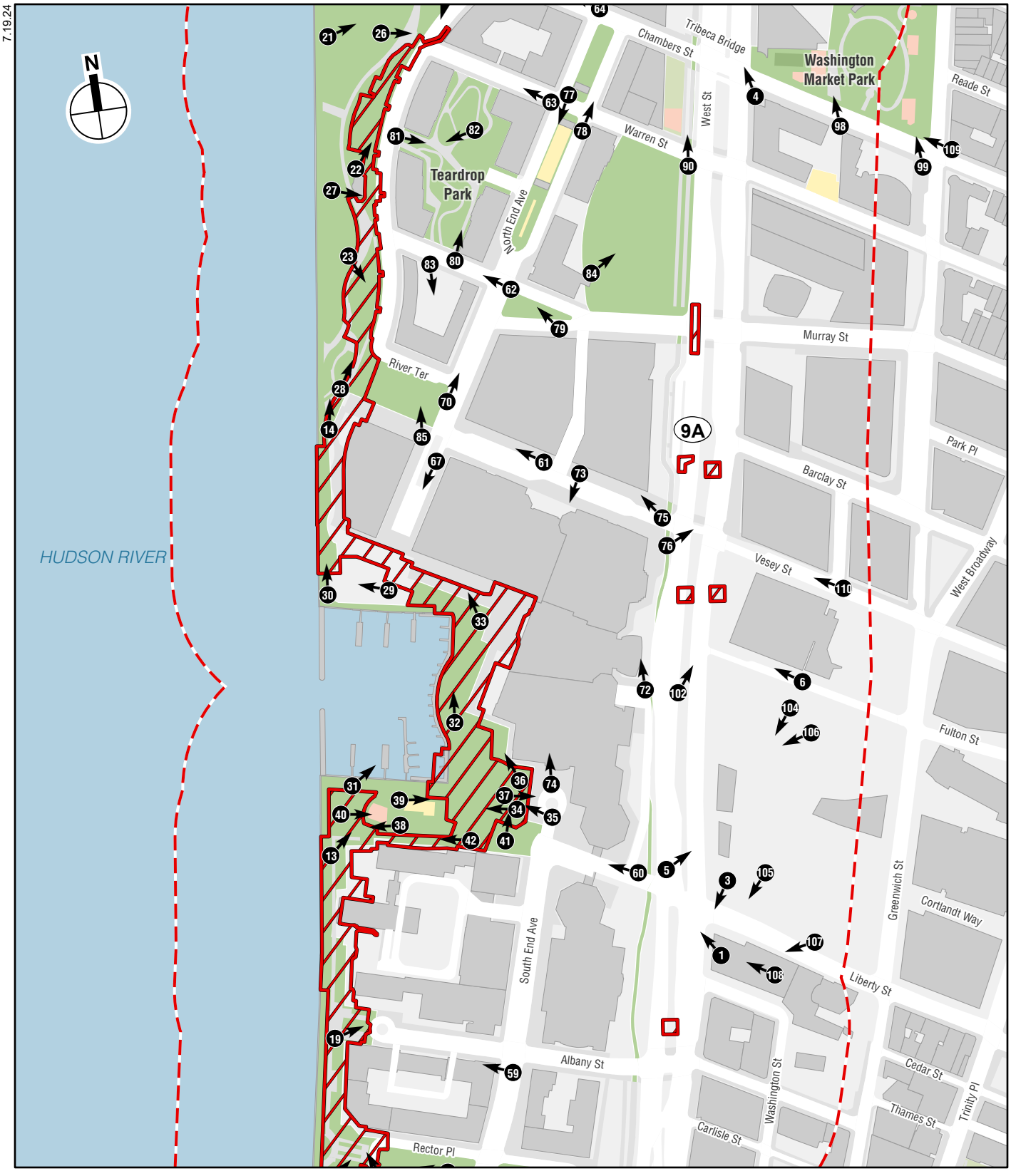
Figure 22



Urban Design and Visual Resources
Study area and View Locations (Existing Conditions)

NORTH/WEST BATTERY PARK CITY RESILIENCY

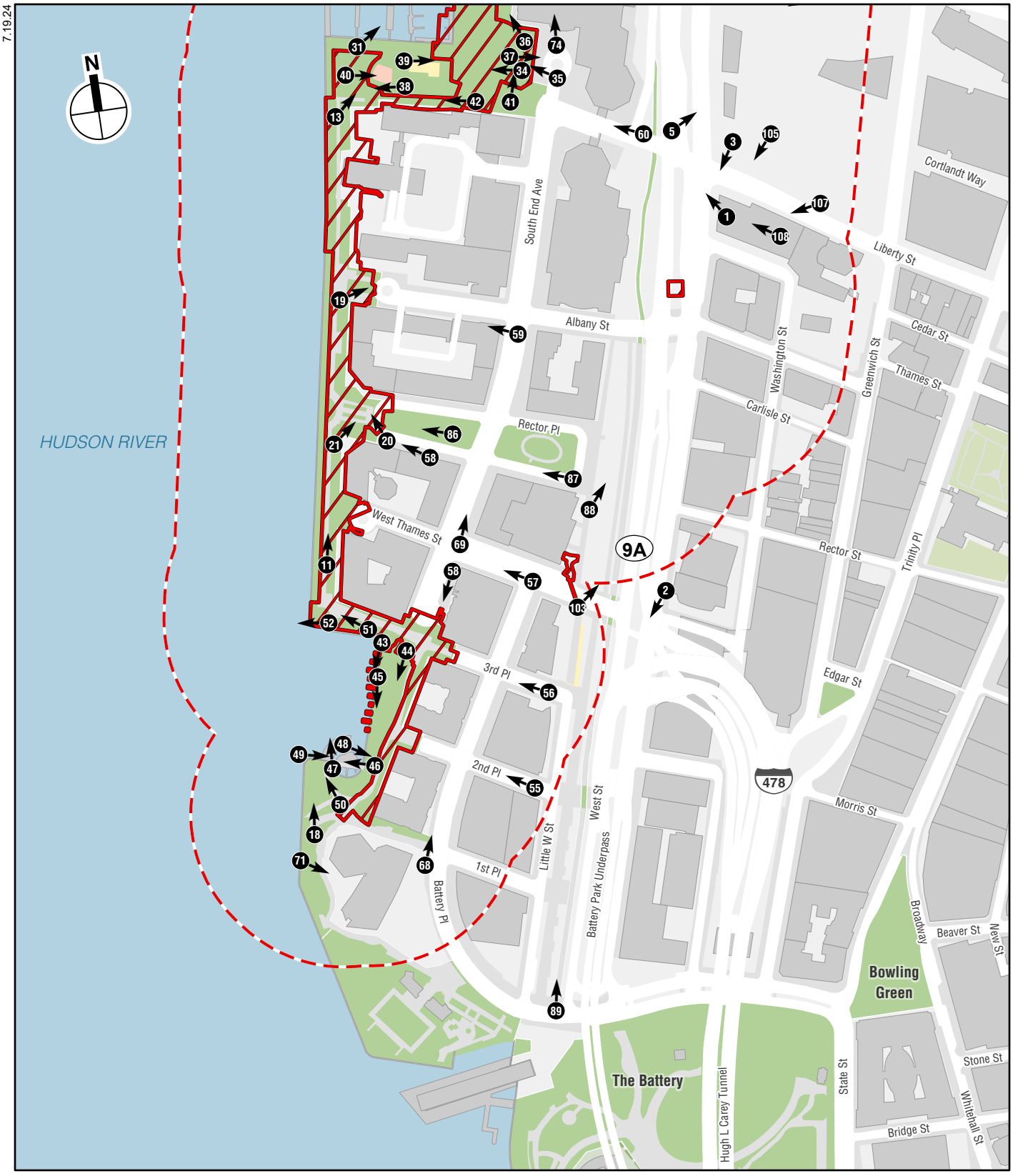
Figure 23a



Urban Design and Visual Resources
Study area and View Locations (Existing Conditions)

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 23b



Urban Design and Visual Resources
Study area and View Locations (Existing Conditions)

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 23c

analysis, information will be collected through field visits and the identification of visually sensitive locations and viewer groups. The duration of view impacts will be assessed to determine any potential effects.

In compliance with NYSDEC's *Assessing and Mitigating Visual Impacts* guidance (DEP-00-2, issued July 31, 2000, revised December 13, 2019), aesthetic resources will be identified, and a visual assessment will be conducted. Utilizing visual modeling techniques, the conditions that would be present for the Proposed Project will be assessed as to their relative visual effects from specific viewpoints and distances. This modeling will be conducted to provide some indication as to whether any specific viewpoint might be associated with obvious positive or negative visual effects.

In assessing the significance of a visual resource impact, key considerations include "whether the project obstructs important visual resources and whether such obstruction would be permanent, seasonal, or temporary; how many viewers would be affected; whether the view is unique or do similar views exist; or whether it can be seen from many other locations." According to the *CEQR Technical Manual*, a detailed analysis would be required if the preliminary assessment shows that changes to the pedestrian environment could be significant and adverse, which would be determined as follows:

- When the project partially or totally blocks a view corridor or a natural or built visual resource, and that resource is rare in the area or considered a defining feature of the neighborhood; or
- When the project changes urban design elements so that the context of a natural or built visual resource is altered.

The DEIS will include a description of the No Action and the incremental impacts of Proposed Project on urban design and visual resources.

Natural Resources

The assessment of Natural Resources includes ground water, soils, geologic features, natural and human-created aquatic and terrestrial habitats, and wildlife habitats (see **Figure 24**).

The natural resources assessment will characterize the existing terrestrial and aquatic resources including the following: terrestrial ecological communities and the wildlife species that use them, water quality, aquatic habitat and aquatic organisms of Upper New York Bay, wetlands, and threatened or endangered terrestrial and aquatic organisms. The DEIS will include an analysis of Natural Resources for the No Action Alternative and the incremental effects of the Proposed Project on natural resources. It will also include a description of anticipated compensatory mitigation (i.e., Saw Mill Creek Wetland Mitigation Bank credits) and the potential incorporation of in-water ecological enhancements within the Proposed Project area.

Hazardous Materials

The section of the DEIS will describe the potential for environmental concerns related to the disturbance of any contaminated or hazardous materials during construction. To understand the potential for the presence of contaminated or hazardous materials along the Proposed Project area, a Phase I Environmental Site Assessment (ESA) and a Phase II Limited Site Investigation (SI) are proposed. These proposed evaluations include the proposed flood barrier alignment and interior drainage components. The Phase I ESA will be conducted in accordance with the scope and limitations of ASTM Standard Practice Designation E 1527-13 for ESAs. Figures 25, 26 and 27 also show the approximate locations of soil and groundwater testing along the Proposed Project area proposed as part of the SI Work Plan. Based on the findings of the site investigations, remedial action plans (RAP) and construction health and safety plans (CHASP) will be recommended as needed. These locations may be adjusted based on Phase I ESA findings, and the SI Work Plan will be submitted to the Lead Agency for review and approval prior to conducting

8.27.24



Project Site

Study Area (400-foot perimeter)

Natural Resources Study Area

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 24

7.26.24



Legend

- North Alignment
- West Alignment
- Approximate Extents of Existing Platform

Environmental Boring Samples

- Completed Soil
- Completed Soil & Groundwater

Geotechnical Boring Samples

- Soil
- Soil & Groundwater

Notes:

1. Displayed geotechnical borings are limited to those from which Matrix proposed to collect environmental samples.
2. Environmental samples were collected from geotechnical borings where soil with evidence of contamination was encountered within proposed construction depth.
3. Locations and names of geotechnical borings were provided by AECOM.
4. Platform area layout is approximated based on historical drawings and design estimates provided by AECOM.

0 200 400 600 800 Feet

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Engineering Progress

Matrix New World Engineering, Land Surveying and Landscape Architecture, P.C.
333 W 39th Street, Suite 202
New York, New York 10018
WBE
STATE OF NEW YORK CERTIFICATE OF AUTHORIZATION No. 17-082661

Tel: 973-240-1800
Fax: 973-240-1818
www.matrixneworld.com

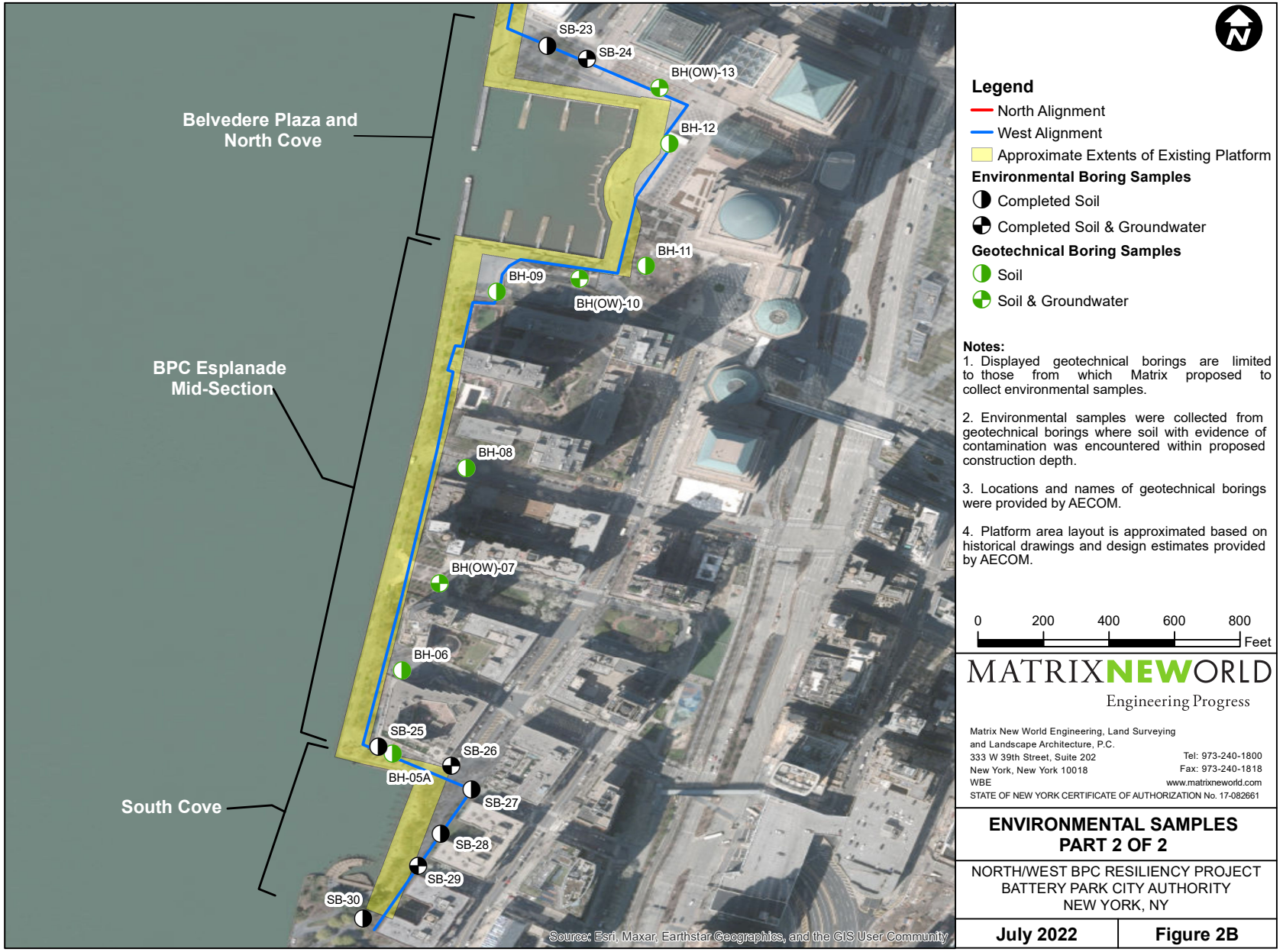
ENVIRONMENTAL SAMPLES PART 1 OF 2

NORTH/WEST BPC RESILIENCY PROJECT
BATTERY PARK CITY AUTHORITY
NEW YORK, NY

July 2022 | **Figure 2A**

Soil and Groundwater Testing Locations - Part 1 of 2

7.26.24



Soil and Groundwater Testing Locations - Part 2 of 2

the SI. The DEIS will include an assessment of the incremental changes between the No Action and the Proposed Project to determine impacts related to contaminated and hazardous materials.

Water and Sewer Infrastructure

This section will assess the potential for the Proposed Project to impact the water and sewer infrastructure in the Study Area. It will include an overview of the sewer and water service areas where the project is located, as well as the potential for the Proposed Project's impact on the physical components of these sewer and water systems (see **Figures 27 and 28**). Since the Proposed Project is located within an area of the City that is served by both a combined sewer system and a Municipal Separate Storm Sewer System (MS4), the potential for effects on stormwater drainage will also be discussed. The *CEQR Technical Manual* indicates significant effects on water and sewer infrastructure would be expected when an action results in physical changes to the infrastructure or in situations where an action will increase demands for these services or affects treatment capacities. As the Proposed Project would not generate increased water or sewer demands, the focus of this analysis will be on the proposed changes to the drainage infrastructure. The DEIS will therefore include an analysis of the No Action Alternative and the incremental impacts of the Proposed Project on water and sewer infrastructure.

Transportation

This section of the DEIS will examine the potential for significant adverse impacts on traffic, transit, pedestrians, and parking of the completed Proposed Project (see "Construction" for the examination of potential significant adverse transportation impacts of the Proposed Project during construction). In its post-construction, fully operational phase, the Proposed Project is not expected to generate increased vehicular, transit, or pedestrian volumes, or a parking demand that would warrant detailed analyses according to *CEQR Technical Manual* guidance (see **Figure 29**). Therefore, similar to water and sewer infrastructure this assessment will focus on determining whether the Proposed Project has the potential to adversely and significantly affect a specific element in the transportation system with the introduction of the proposed flood barrier system.

Using *CEQR Technical Manual* guidance, this section of the DEIS will determine if the introduction of the proposed flood barrier structure into existing pedestrian elements and shared pedestrian and bicycle facilities in the Project Area would have the potential for significant adverse transportation impacts. It is not anticipated the proposed flood barrier structure would reduce traffic capacity, displace any on-street parking, or reduce the width of the two-way bikeway along Route 9A/West Street. As part of this assessment, user data will be collected, and analyses of potential impacts will be performed where the Proposed Project would narrow pedestrian and bicycle pathways. This will be conducted for pedestrian elements at several locations in Reach 1 including North Moore and Harrison Streets and along Route 9A/West Street. These assessments will also be conducted for shared pedestrian and bicycle facilities that would be narrowed by the Proposed Project in Reaches 4 through 7 including in the vicinity of the Lily Pond, Pumphouse Park, Gateway Plaza, and the street ends at West Thames and Albany Streets as well as in the vicinity of South Cove. The Proposed Project is not anticipated to narrow pedestrian and bicycle shared facilities in Reaches 2 and 3. Based on these detailed analyses, it will be determined if the Proposed Project would have the potential to result in any significant adverse impacts on pedestrian elements or shared pedestrian and bicycle facilities.

~~It will be determined if more detailed transportation analyses will be required for the construction phase of the Proposed Project (see Section 4.7.10).~~

8.27.24



0 2,000 FEET

SW Sewer Outfalls

CSO Outfalls

Major Combined Sewers

Interceptor

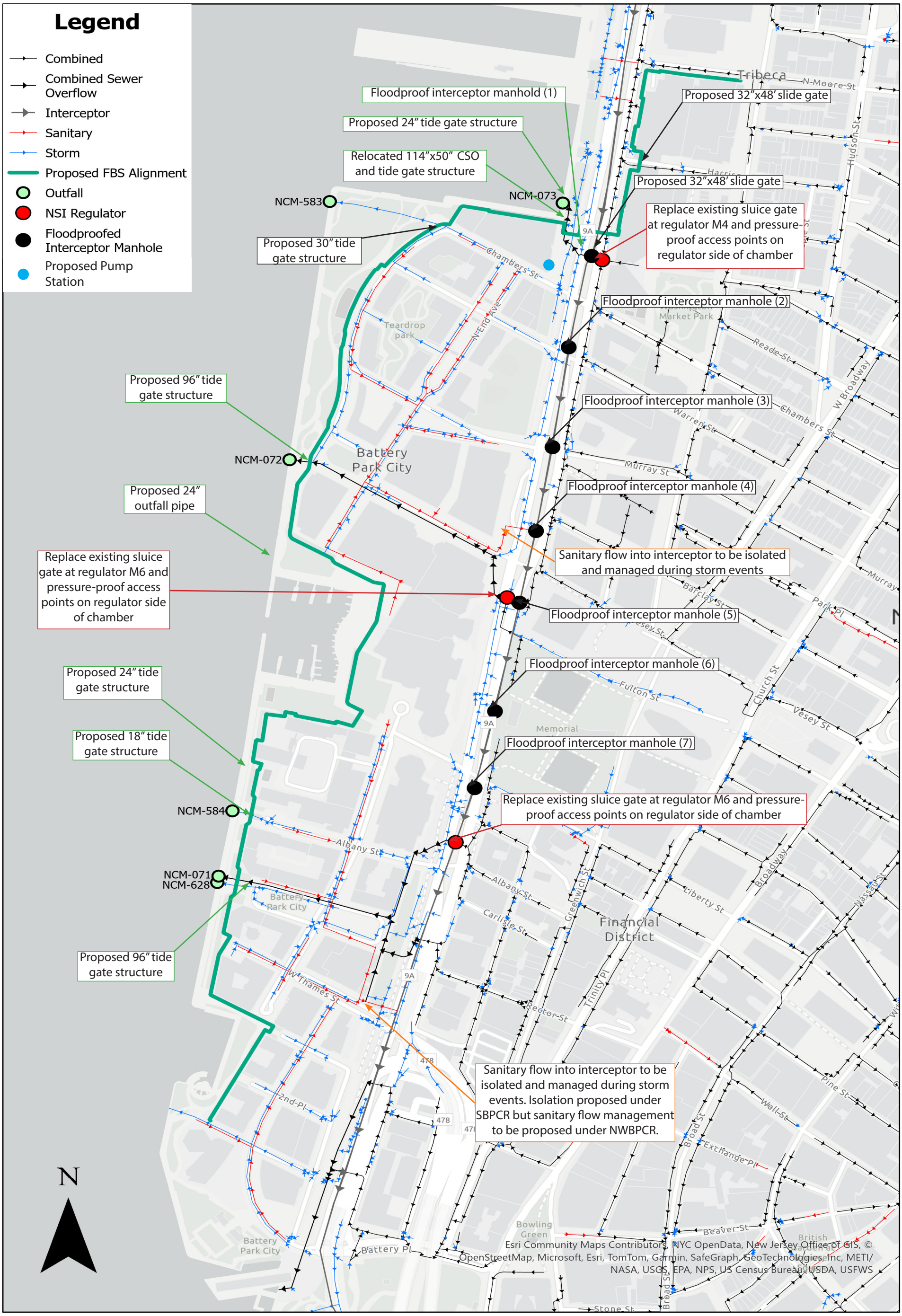
NWBPC Flood Protection Alignment

Existing Sewer Infrastructure

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 27

8.28.24



Proposed Sewer System Improvements

6.14.24



◎ *Corner*

●●●●●●● *Sidewalk*

0 400 FEET

Pedestrian Analysis Locations

Greenhouse Gas Emissions and Climate Change

According to the *CEQR Technical Manual*, although the contribution of a Proposed Project's Greenhouse Gas (GHG) emissions to global GHG emissions is likely to be considered insignificant when measured against the scale and magnitude of global climate, it should still be analyzed to determine a project's consistency with the City's citywide GHG reduction goal "of reducing citywide GHG emissions by 30 percent below 2005 levels by 2030." The Proposed Project does not include construction of a building totaling the 350,000 square foot threshold requiring further GHG analysis. Therefore, the GHG consistency assessment will be qualitatively performed in the DEIS.

Neighborhood Character

This section will examine the potential for the Proposed Project to impact the neighborhood character. Under the CEQR guidance, neighborhood character assessments consider how elements of the environment combine to create the context and feeling of a neighborhood and how a Proposed Project may affect that context and feeling. To determine a Proposed Project's effects on neighborhood character, the elements that contribute to a neighborhood's context and feeling are considered together. As defined by the *CEQR Technical Manual*, neighborhood character is a mixture of the various elements that give a neighborhood its distinct "personality." These elements may include a neighborhood's land use, urban design, visual resources, historic resources, socioeconomics, transportation, and/or noise.

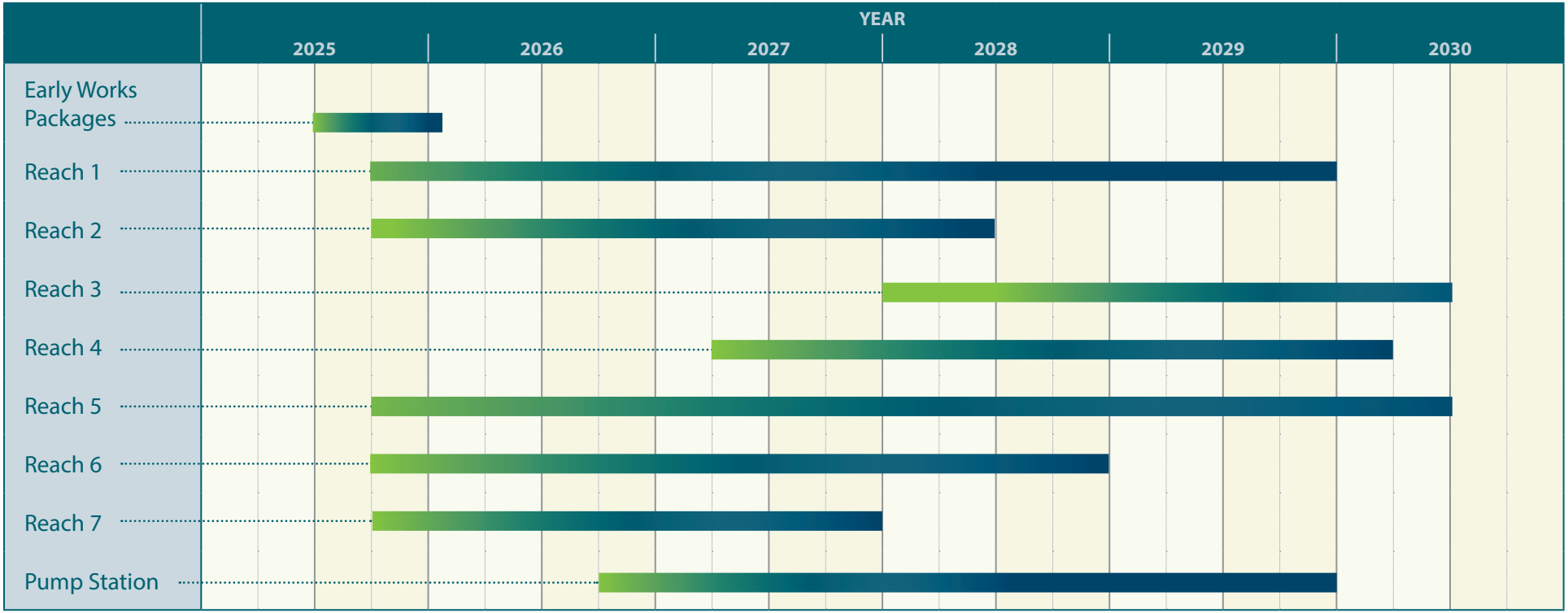
An assessment of neighborhood character is generally recommended when a Proposed Project has the potential to result in significant adverse impacts in any, or moderate effects on several, of the following technical areas that define a neighborhood's character: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; transportation; and noise. A "moderate" effect is generally defined as an effect considered reasonably close to the significant adverse impact threshold for a particular technical analysis area. When considered together, there are elements that may have the potential to significantly affect neighborhood character.

Since many of the relevant components of neighborhood character are examined in other sections of this DEIS, this section will be a summary of those analyses. The DEIS will describe the No Action Alternative and the incremental effects of the Proposed Project on neighborhood character.

Construction

An assessment of the construction activities and impacts on the following resources will be conducted including a screening assessment of open space, natural resources, hazardous materials, transportation systems, air quality, and noise. Since the Project Area includes a publicly accessible esplanade and parkland at the water's edge, the construction analysis will focus on the temporary loss of open space and the natural environment of the Hudson River, including short-term impacts to recreational facilities, trees and vegetation, water quality, wetlands, and landscaping. In addition, since the Proposed Project is in a dense urban setting, temporary impacts on traffic and pedestrian circulation, air and noise emissions, and other temporary community disruptions will be assessed.

A preliminary assessment is conducted when construction activities are anticipated to be long-term, (more than two years) or when short term construction activities would directly impact a technical resource. The Proposed Project is anticipated to have a 60 month, approximately 5-year construction schedule (see **Figure 30**). For the purposes of advancing the project and reducing potential conflicts and interferences with the flood barrier system installation, several construction subtasks that are referred to as Early Works Packages (EWPs) would be initiated at the beginning of the construction period.



NOTE: Construction activities related to the infrastructure improvement elements would occur throughout the construction period. Source: Turner-EE Cruz JV

Preliminary Construction Schedule

As the construction period would exceed 2 years, a preliminary construction assessment will be conducted. The preliminary assessment is anticipated to identify the need for a detailed assessment for construction-related open space, transportation, air quality and noise and vibration impacts. The detailed assessment methodology is summarized in the following sections.

Open Space

This section will examine the potential for the Proposed Project to impact open space directly or indirectly in the Study Area throughout construction by reducing or changing open space. According to the *CEQR Technical Manual*, open space is defined as "publicly or privately owned land that is publicly accessible and available for leisure, play, or sport, or is set aside for the protection and/or enhancement of the natural environment." Public open space is available "to the public on a constant and regular basis, including for designated daily periods." Examples of public open space in the Open Space Study Area include, but are not limited to, Rockefeller Park, the Battery Park City Esplanade, North and South Coves, Teardrop Park, and Hudson River Park.

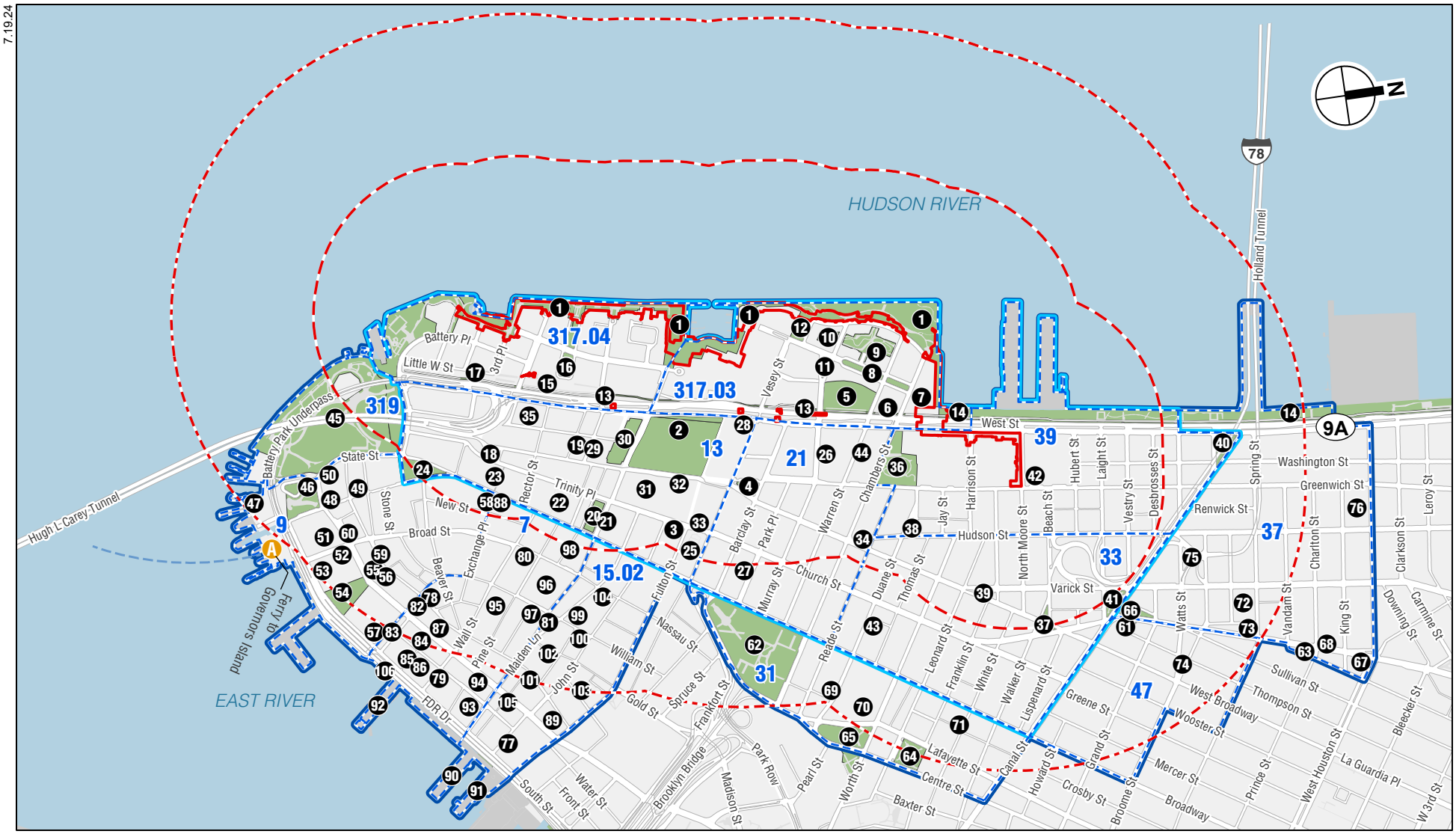
Construction activities could impact the open spaces in Battery Park City and potentially along the Hudson River Greenway, including the temporary closure or relocation of park spaces and/or temporary closure or relocation of access points to the park. Both a quarter-mile and half-mile study area were considered for the construction open space assessment (see **Figure 31**). The open space analysis will project the extent and timing of open space closure during construction and consider the construction-related noise and air pollutant emissions on the quality of the open space resources. Subject to determining the extent and duration of open space closure, the open space analysis will also assess how open space ratios for the open space Study Area could be affected during the construction period in comparison to the No Action Alternative.

Transportation

The transportation assessment will consider the Proposed Project's anticipated temporary effects on the surrounding roadways, transit services, pedestrians, and cyclists during construction, and will identify the increase in vehicle trips from construction workers and trucks. The assessment will focus not only on the immediate areas surrounding the Project Area, but also on the corridors that connect with the Project Area and construction staging locations (see **Figures 32 through 34**). Following the *CEQR Technical Manual*, a tiered transportation screening assessment will be performed.

As a first step, a screening assessment will be performed to determine whether 50 or more vehicular trips or 200 or more pedestrian/transit trips during a peak hour are expected to be generated by construction workers and trucks in an initial screening ("Level 1"). Should any Level 1 thresholds be exceeded, assignment of vehicle and pedestrian trips through intersections and to transit nodes will be conducted to determine if detailed analysis may be warranted according to those thresholds ("Level 2"). Based on a review of project construction data and Level 1 and 2 screening assessment reviews coordinated with NYCDOT and NYSDOT since the release of the DSOW, it was determined that the temporary impacts of the proposed project on transportation systems (e.g., traffic operations and sidewalks) will be addressed in the DEIS both quantitatively (i.e., modeling at intersection and sidewalk locations where CEQR thresholds are exceeded and there is the potential for impacts) and qualitatively (locations where impacts are not expected). Both these impact analyses and any required mitigation of impacts will be described in the DEIS. Based on a review of the screening assessment data it was determined that no detailed assessment of transit systems (e.g., buses and subways) is necessary; therefore, the temporary effects of these elements will be addressed qualitatively in the DEIS. The DEIS will also include a description of the methodology used in the traffic and pedestrian impact assessments to analyze the 60-month construction schedule with a project completion in 2030.

7.19.24



Project Area
1/4-mile Perimeter
1/2-mile Perimeter
Non-residential Study Area
Residential Study Area
102.01 Census Tract Boundary
1 Open Space Resources

0 1,000 FEET

Open Space Study Area and Resources

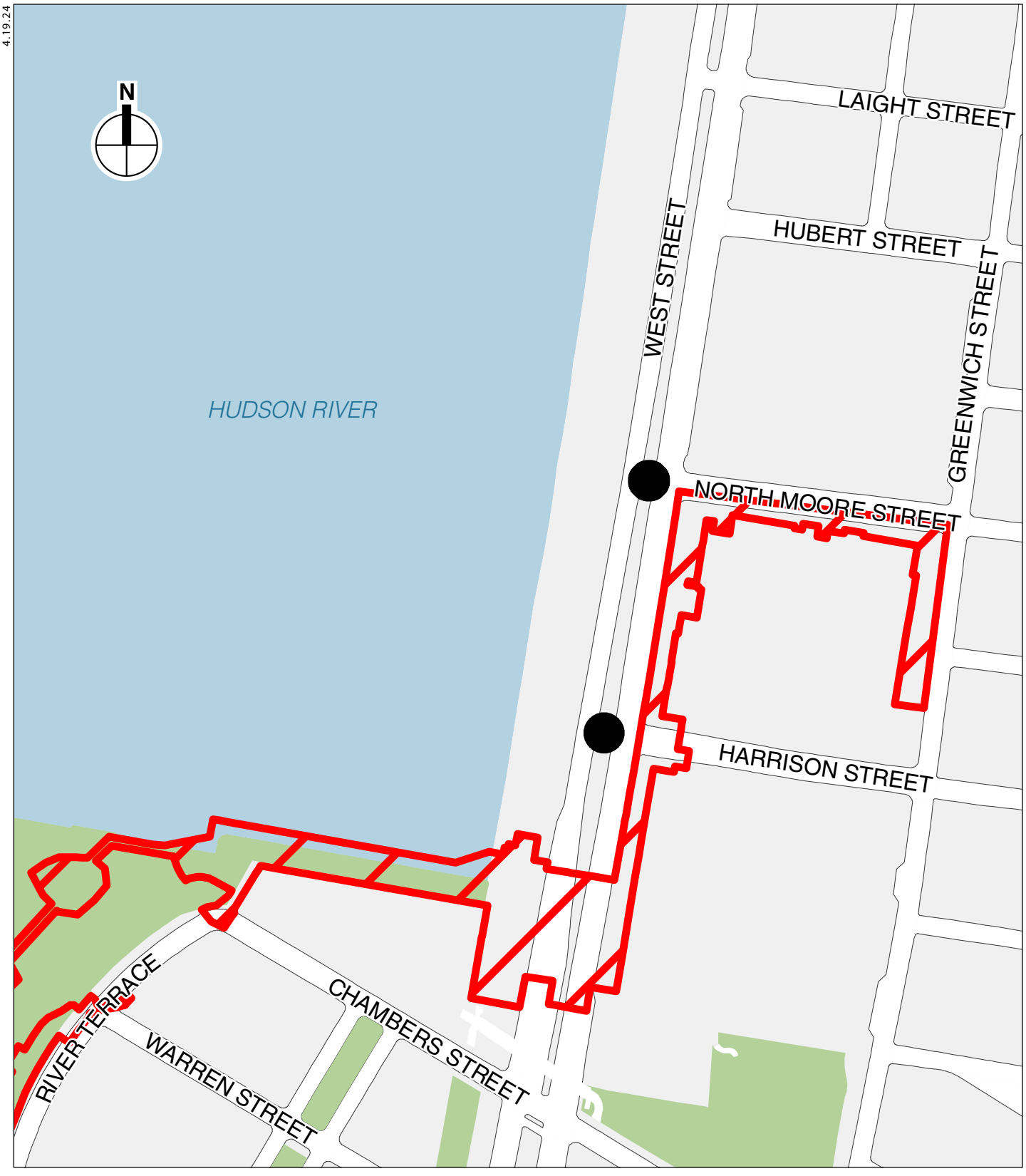
NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 31

4.18.24



Peak Construction Traffic Analysis Locations



MPT Traffic Analysis Locations

8.28.24



◎ *Corner*

Crosswalk

Sidewalk

MPT Pedestrian Analysis Locations

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 34

The requirements of Maintenance and Protection of Traffic (MPT) plans such as removing a moving lane or narrowing a travel lane/pedestrian/bicycle pathway and pedestrian and cyclist diversions caused by closed sidewalks or open spaces during construction will also be described and analyzed. The MPT plans will identify any short-term lane closures and other measures such as temporary consolidation and/or relocation of bus stops and parking regulation changes that may be needed during construction. Using *CEQR Technical Manual* guidance, this section of the DEIS will determine if the introduction of the MPT plan requirements for the proposed flood barrier structure and construction worker and truck activity would have the potential for significant adverse transportation impacts. It is not anticipated the construction of the Proposed Project would reduce the width of the two-way bikeway along Route 9A/West Street or increase transit activity to levels that will warrant detailed analyses. It is anticipated that the construction of the Proposed Project would temporarily reduce traffic capacity, displace on-street parking, and increase vehicular activity and parking demand to levels that will warrant detailed traffic and parking analyses. While it is not anticipated that construction worker pedestrian trips would increase to levels warranting detailed pedestrian analysis, it is anticipated that pedestrian analysis will be warranted where sidewalks are closed or narrowed temporarily from the requirements of MPT plans. Additionally, for pedestrians and cyclists that would be diverted due to closed open spaces, it is anticipated that qualitative analyses of those effects will be described. Based on these analyses, it will be concluded if the Proposed Project would have the potential to result in any significant adverse impacts on transportation during construction.

Air Quality and Greenhouse Gases

Construction of the Proposed Project is expected to take more than two years, and the major tasks are expected in close proximity to one another such that there is the potential for air quality impacts to nearby sensitive receptors. Therefore, a quantitative air quality impact assessment will be conducted.

On-site construction activities are considered stationary source activities. Because these activities would occur over multiple years between ~~2024~~ 2025 and ~~2027~~2030, the reasonable worst-case periods for the pollutants of concern (Particulate Matter (PM), Carbon Monoxide (CO), Nitrogen Dioxide (NO_2) will be determined throughout the duration of construction on an 'annual average' and a 'peak day' basis for $PM_{2.5}$. PM is regulated in two size categories: particles with an aerodynamic diameter of less than or equal to 2.5 micrometers ($PM_{2.5}$) and particles with an aerodynamic diameter of less than or equal to 10 micrometers (PM_{10}, which includes $PM_{2.5}$). $PM_{2.5}$ could reach the lower regions of the respiratory tract, delivering with it other compounds that adsorb to the surfaces of the particles, and is also extremely persistent in the atmosphere.

$PM_{2.5}$ was selected for determining the worst-case periods, because the ratio of predicted $PM_{2.5}$ incremental concentrations due to construction activities is higher than for other pollutants. Therefore, estimates of $PM_{2.5}$ emissions throughout the construction years will be used for determining the worst-case periods for the analysis of all pollutants.

The types and number of units of construction equipment will be identified based on the construction activity schedule and utilization data established for the Proposed Project established with the design team. Emission factors for NO_x, CO, PM_{10}, and $PM_{2.5}$ from on-site construction engines from both nonroad equipment and trucks will be estimated using the latest EPA's Motor Vehicle Emission Simulator (Version MOVES3) associated with New York County model input parameters provided by the NYSDEC. Fugitive dust emissions from construction operations (e.g., excavation, grading, and transferring of excavated materials into dump trucks) will be estimated based on EPA procedures provided in AP-42 Sections 13.2.1 and 13.2.2.

The refined dispersion model (the EPA/AMS AERMOD dispersion model) will be used to predict the reasonable worst-case condition of PM, CO, and NO_2 concentrations during the construction period at the sensitive receptors located within the 400-foot radius impact area of the main construction sites located within the Project Area. Overall GHG emissions associated with the construction will be used to assess the consistency with the City's GHG reduction goals.

The highest predicted concentrations will be compared with the applicable New York City *de minimis* criteria and the National Ambient Air Quality Standards (NAAQS).

If the worst-case results show exceedances, the next level of annual and/or short-term period activities would be considered in the modeling in order to determine the duration and magnitude of potential impacts.

Noise

Noise effects from construction activities will be evaluated using the CadnaA model, a computerized model developed by DataKustik for noise prediction and assessment. The CadnaA model is based on the acoustic propagation standards promulgated in International Standard ISO 9613-2 and is a state-of-the-art tool for noise analysis that is recommended for construction noise level prediction by the *CEQR Technical Manual*. The construction noise assessment will also include a monitoring program to document and develop baseline noise levels at the closest noise-sensitive receptors.

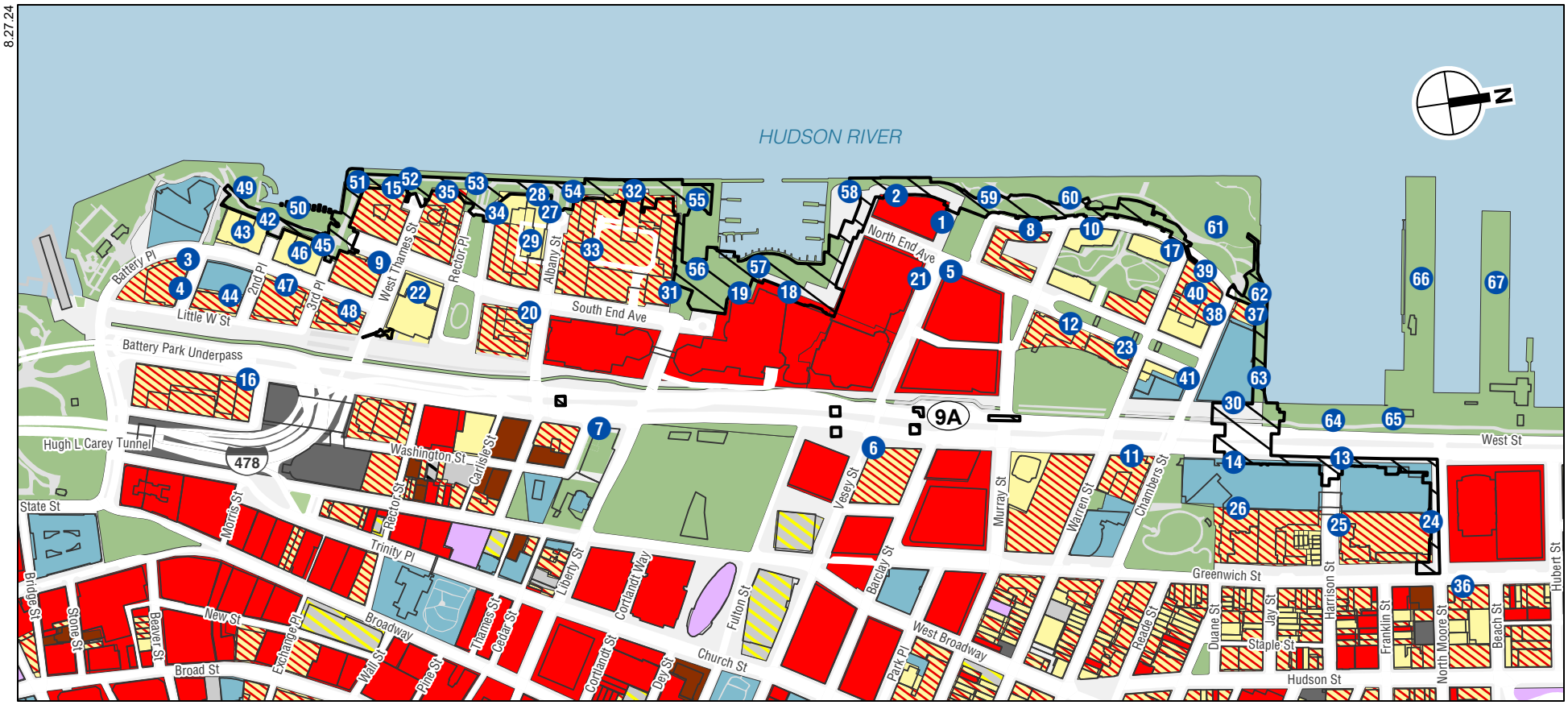
~~Construction noise will be assessed using the prediction methods outlined in the Federal Highway Administration's (FHWA) Highway Construction Noise Handbook and codified in the FHWA Roadway Construction Noise Model (RCNM). The *CEQR Technical Manual* guidelines utilize the same construction equipment reference noise levels as the FHWA RCNM. These references include maximum noise emission levels (L_{max}) and equipment usage factors, which are then used to predict $L_{eq(1)}$ noise levels at a given distance.~~

As set forth in Chapter 22 of the *CEQR Technical Manual*, an assessment of noise from construction activities is warranted for the following reasons:

- Duration of the Proposed Project is expected to last longer than two years; and,
- Several noise-sensitive receptors are located near the proposed construction activities.

The Proposed Project is scheduled to be constructed in stages that are longer than two years. Additionally, all of the major tasks are expected to occur in proximity to sensitive receptors. Therefore, a quantitative construction noise assessment will be conducted in accordance with the *CEQR Technical Manual,* Chapters 19 and 22, as well as the Rules of New York City Chapter 28. Existing ambient noise levels will be measured to serve as a baseline for predicted noise levels during construction. **Figure 35** shows the ~~preliminary proposed~~ noise survey locations selected to provide additional coverage of noise-sensitive land uses that may experience construction noise. In accordance with *CEQR Technical Manual* Chapter 19, Section 410, operational noise criteria of 3-5 dBA over the No Action noise level will be applied as a screening threshold for construction noise at noise-sensitive receptors. If construction of the Proposed Project would not result in any exceedances of the screening thresholds at a given receptor, then that receptor would not have the potential to experience a construction noise impact. At receptors where noise level increments due to construction would exceed these thresholds, the duration and intensity of the predicted construction noise will be considered further in order to identify the potential significance of the predicted construction noise impacts, as is consistent with the guidance in the *CEQR Technical Manual* Chapter 22, Section 310. This evaluation will also consider nighttime period and construction activities that may be necessary between 6:00 PM and 7:00 AM, which will be examined separately, as necessary given the particular sensitivity of residential receptors to noise during this period.

8.27.24



Project Area
Commercial and Office Buildings
Hotels
Open Space and Outdoor Recreation
Parking Facilities
Public Facilities and Institutions
Residential
Residential with Commercial Below
Transportation and Utility
Under Construction
Vacant Building
Vacant Land
Noise Analysis Locations

Noise Measurement and Receptor Locations

NORTH/WEST BATTERY PARK CITY RESILIENCY

Figure 35

Vibration

Construction activities have the potential to result in vibration levels that may result in structural or architectural damage, and/or annoyance or interference with vibration-sensitive activities. A construction vibration assessment will be performed. This assessment will determine critical distances at which various pieces of equipment may cause damage or annoyance to nearby buildings based on the type of equipment, the building construction, and applicable vibration level criteria. Should it be necessary for certain construction equipment to be located closer to a building than its critical distance, vibration mitigation options will be proposed. Structures that are considered to be historic are of particular concern for damage from vibration; as such, any historic structure within 90 feet of below-grade construction activity may be subject to vibration monitoring and not-to-exceed vibration level thresholds.

Alternatives

The purpose of the SEQR EIS Alternatives analysis is to examine reasonable and feasible options that avoid or reduce project-related significant adverse impacts, while achieving the goals and objectives. The alternatives are usually defined once the full extent of the Proposed Project's impacts have been identified. However, the alternatives analyzed must include a No Action Alternative, as required by Section 617, as well as a No Unmitigated Impact Alternative, if unmitigated impacts are identified as part of the DEIS analysis. Two additional alternatives have been identified for analysis, the Inboard Alignment Flood Protection Alternative (Alternative A) and the Outboard Alignment Flood Protection Alternative (Alternative B), described further below.

No Action Alternative

The DEIS will analyze projected changes in future conditions through the ~~2027~~ 2030 analysis year assuming the proposed flood barrier system is not installed with conditions under the proposed project. The No Action alternative includes BPCA's Rockefeller Park drainage project which consists of upgrades, repairs and maintenance to the existing drainage system.

Design Alternatives

The DEIS will include a description of alternatives and present their benefits and challenges. The discussion of alternatives will also present the various pump station locations that have been considered as part of the design process

Inboard Alignment Flood Protection

As described above, the Inboard Alignment's (Alternative A) design objective was to provide flood protection along the most upland location from the water's edge. The DEIS will include a description of this alignment alternative.

Outboard Alignment Flood Protection Alternative

As described above, the Outboard Alignment (Alternative B) would provide flood protection nearer the water's edge and increases modifications to existing open spaces. The DEIS will include a description of this alternative and an initial assessment of its impacts and benefits as compared with the Proposed Project to determine whether this alternative warrants a detailed analysis; if so, such detailed analysis will be presented in the DEIS.

Pump Station Alternatives

The DEIS will include a discussion of the three locations that were considered for potential siting of the pump station, including the BPCA ballfields, the schoolyard of PS/IS 289; and the area east of and adjacent to Stuyvesant High School.

No Unmitigated Impact Alternative

The No Unmitigated Impact Alternative analysis will examine alternatives that may eliminate unmitigated significant adverse impacts that are identified through the DEIS impact analyses.

This analysis will compare the impacts of these alternatives with the impacts under the Proposed Project and the attainment of the goals and objectives identified in the Project's purpose and need.

Unavoidable Adverse Impacts

This section will describe those impacts, if any, that could not be avoided and could not be practicably mitigated.

Growth Inducing Aspects of the Proposed Project

This section will focus on whether the Proposed Project has the potential to induce new development within the surrounding area.

Irreversible and Irretrievable Commitments of Resources

This section will focus on those resources, such as energy and construction materials, that would be irretrievably committed if the Proposed Project is built.

Mitigation

If based on the analysis of the DEIS the Proposed Project is expected to result in a significant adverse impact in any of the above-described technical areas, potential measures to minimize the impacts will be identified and assessed in the DEIS mitigation chapter. If any impacts cannot be mitigated, they will be identified in the DEIS as unavoidable adverse impacts.

5 Additional DEIS Contents

The SEQR regulations (6 NYCRR 617.9) establish the elements that must be contained in a DEIS. In addition to those discussed above, the following elements will be included in the DEIS.

5.1 List of Preparers

A list of the authors responsible for the preparation of the DEIS document and analysis will be included in this section.

5.2 References

The complete list of the reference documents used to prepare the technical sections and perform the analysis will be included in this section.

5.3 List of Acronyms

A list of acronyms referenced in the DEIS will be included in this section.

5.4 Appendices

Appendices will include all technical reports, project-related correspondence and relevant forms and other documentation as appropriate.

Attachment 1
Comments on Draft Scoping Document and Responses

North/West Battery Park City Resiliency Project

Response to Comments on the Draft Scope of Work

Battery Park City Authority

August 2024

NWBPC – Draft Scope of Work: Response to Comments

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NWBPC – Draft Scope of Work: Response to Comments

1 Introduction

This appendix to the Final Scope of Work (FSOW) summarizes and responds to comments received during the public review and comment period for the Draft Scope of Work (DSOW) issued on October 19, 2022, to prepare the Draft Environmental Impact Statement (DEIS) for the North/West Battery Park City Resiliency project (the "Proposed Project" or the "NWBPCR Project"), as put forth by the Battery Park City Authority ("BPCA," or "the Authority").

As part of that public scoping process, a public scoping meeting was held on November 16, 2022 and the period for submitting written comments on the Proposed Project remained open from October 19, 2022 through December 31, 2022.

Section 1.1 lists the organizations and individuals that provided comments on the DSOW. Section 2.0 provides a summary of each comment and a response. Comments are organized by environmental impact statement (EIS) subject area, and parallel the chapter structure of the DSOW. Where more than one commenter expressed similar views, those comments have been grouped and addressed together. Commenters who expressed general support or opposition, but did not otherwise provide substantive comments on the DSOW, are listed in Sections 6 and 7. All written comments and a transcript of the verbal comments made at the public scoping meeting are provided in Attachment A, "Comments Received on the Draft Scope of Work."

1.1 List of Organizations and Individuals Who Commented on the Draft Scope of Work

1.1.1 Agencies

1. Shakil Ahmed, Director, Department of Transportation, Traffic Engineering and Planning, letter dated October 25, 2022 (Ahmed_023)
2. Gina Santucci, Environmental Review Coordinator, NYC Landmarks Preservation Commission, letter dated November 29, 2022 (Santucci_001)

1.1.2 Community Board

3. Manhattan Community Board 1, letter dated December 21, 2022 (CB1_024)

1.1.3 Businesses and Organizations

4. Rashi Puri, AVP of Real Estate and Planning, Hudson River Park Trust, letter dated December 28, 2022 (Puri_025)
5. Battery Park City Neighborhood Association (BPCNA), letter dated December 29, 2022 (BPCNA_026)
6. Riverhouse Board of Managers, email dated December 20, 2022 (Riverhouse_022)

1.1.4 General Public

7. Gianna Abruzzo, electronic comments received November 16, 2022 (Abruzzo_009)
8. Lola Addo, oral testimony delivered (Addo_040) and oral testimony notes received November 16, 2022 (Addo_017)
9. Viviana Addo, oral testimony delivered November 16, 2022 (Addo_044)
10. Ming Alterman, email dated December 15, 2022 (Alterman_020)
11. Natalie Alterman, email dated December 15, 2022 (Alterman_021)
12. Marlow Aronesty, oral testimony delivered November 16, 2022 (Aronesty_045)
13. Klejda Bega, oral testimony delivered November 16, 2022 (Bega_038) and email dated December 2, 2022 (Bega_003)
14. Lloyd Bishop, electronic comments received October 24, 2022 (Bishop_006)
15. Alice Blank, oral testimony delivered November 16, 2022 (Blank_028)
16. Wendy Chapman, oral testimony delivered November 16, 2022 (Chapman_032)
17. Justine Cuccia, oral testimony delivered November 16, 2022 (Cuccia_029)
18. Brian Cushman, oral testimony delivered November 16, 2022 (Cushman_030)
19. Britni Erez, oral testimony delivered November 16, 2022 (Erez_033)
20. Matthew Fenton, oral testimony delivered November 16, 2022 (Fenton_031)
21. Ludovica Ferme, electronic comments received November 16, 2022 (Ferme_011)
22. Miles Grant, oral testimony delivered November 16, 2022 (Grant_039)
23. Brigitta Gundersen, electronic comments received October 28, 2022 (Gundersen_007)
24. Alexa Harkeom, oral testimony notes received November 16, 2022 (Harkeom_016)
25. Martin Heilweil, oral testimony delivered November 16, 2022 (Heilweil_035) and email dated December 2, 2022 (Heilweil_004)
26. Trevor Houston, email dated December 12, 2022 (Houston_019)
27. Stephanie Juliao, electronic comments received November 16, 2022 (Juliao_012)
28. Lucy Kuhn, oral testimony delivered November 16, 2022 (Kuhn_036)
29. Terese Loeb Kreuzer, oral testimony delivered November 16, 2022 (Loeb Kreuzer_042)
30. Jennifer Mason, email dated January 2, 2023 (Mason_027)
31. Kelly McGowan, oral testimony delivered November 16, 2022 (McGowan_046)
32. Tammy Meltzer, oral testimony delivered November 16, 2022 (Meltzer_034)
33. Cynthia Murphy, oral testimony notes received November 16, 2022 (Murphy_013)

34. Noa, oral testimony notes received November 16, 2022 (Noa_014)
35. Jon Pepper, email dated December 2, 2022 (Pepper_002)
36. Emily Propp, oral testimony notes received November 16, 2022 (Propp_015) and oral testimony delivered November 16, 2022 (Propp_041)
37. Pooi Stewart, electronic comments received October 23, 2022 (Stewart_005)
38. Anais Tekervan, oral testimony delivered November 16, 2022 (Tekervan_037)
39. Marya Triandafellos, electronic comments received November 16, 2022 (Triandafellos_010)
40. Yvette Yasui, electronic comments received November 15, 2022 (Yasui_008) and oral testimony delivered November 16, 2022 (Yasui_043)
41. Jay Zhan, email dated November 7, 2022 (Zhan_018)

2 Project Description

2.1 Purpose and Need

2.1.1 General Comments on Purpose and Need

Comment 2-1: How can the NWBPCR Project Area extend into Tribeca across Route 9A either at Chambers Street or further north at North Moore Street and continue to Greenwich Street when you have no authority over that area? (Pepper_002)

Response 2-1: The alignment of the Proposed Project in the area identified as Reach 1 is entirely within public right of way that is under the jurisdiction of the New York City Department of Transportation (NYCDOT) and the New York State Department of Transportation (NYSDOT). BPCA is coordinating with these agencies on the design and implementation of the proposed flood barrier system. A full description of the land ownership along the project corridor and agency coordination will be provided in the DEIS.

Comment 2-2: It is BPCNA's position that this project should address preventing as well as protecting against climate risk. In terms of protection, consideration should be given to storm surge (less frequent), increased rainfall (more frequent), reducing heat index (most deadly) and the loss of nature, biodiversity and green infrastructure, which increases exposure to climate risks. We should add more nature trees and grass (BPCNA_026, Bega_038_)

Response 2-2: As described in the FSOW, the Purpose and Need of the Proposed Project includes providing a reliable coastal flood barrier system to increase protection and reduce flood risk from storm events inclusive of increased intensity and frequency of rainfall, coastal surge, and predicted sea level rise. Additionally, the principal design goals of the Project include reducing urban heat island effect and

preserving and enhancing the open spaces and waterfront resources of Battery Park City. The Proposed Project would reduce contributions to urban heat through an abundant use of planting and, where hardscape is needed, a reliance on high-albedo and pervious materials. The proposed design will increase the total planting coverage over what exists today by an approximately 30% percent increase, throughout the Project Area. The DEIS will include a description of the project components and how they have been designed to address storm surge, increased rainfall intensity, the urban heat index, natural features and trees.

Comment 2-3: We should look to maximize opportunities to preserve green infrastructure and add green infrastructure/biodiversity to help prevent climate risks. (BPCNA_026)

Response 2-3: Green infrastructure has been incorporated into the Proposed Project to address rainfall events; these proposed systems will be described in the project description and infrastructure chapters.

Comment 2-4: The public is pleased to see that between September 2021 when the Progressive Design Build RFP process was started and when it went out for proposals in 2022 that an additional goal had been added: "Minimizing Impacts and Preserving the Character of Battery Park City – Design and construct the Project in a manner that (i) minimizes impacts and disruptions to the community during construction, and (ii) preserves the character of Battery Park City by minimizing to the extent feasible, while still meeting the primary resiliency objectives of the Project, the nature and extent of material modifications to the existing integral design features and primary infrastructure elements of the community." (BPCNA_026)

Response 2-4: Comment noted.

Comment 2-5: The BPCNA recommends that design principles for this project must have:

- Minimal impact to existing design and preservation of the character of the park and neighborhood
- Minimal disruption to existing parks and green spaces
- Utilization of existing structures
- Nature-based resiliency solutions and prioritization of green over concrete
- Provide protection from all climate risks and be accretive to the neighborhood as judged by residents, not the Authority, AECOM, Arch Street Communications or other non-resident bodies
- Use of resiliency to increase active green spaces
- Preservation of mature trees
- Prioritization of community needs and feedback in all designs and design principles (BPCNA_026)

Response 2-5: To develop a design that integrates community input, since release of the DSOW and in response to this and other related comments, an extensive community design outreach and engagement process began in early 2023 and continued through June 2024 with multiple interactive community design and outreach sessions. It is an objective of the Proposed Project to provide flood protection by preserving, enhancing and protecting to the maximum extent practicable the open spaces and waterfront cultural resources of Battery Park City and to utilize, where feasible, existing structures, such as the built street right of way, as well as the existing grades and elevations, such as the elevated River Terrace. As part of the design and engagement process, it was also determined that with the objective of minimizing adverse impacts on open space, reprogramming or expanding active open spaces as part of the proposed project is not feasible; however, where possible, enhancements in current spaces have been incorporated into the design (e.g., enhancing active play areas in North Park) and will be described in the DEIS. Given the urban context along the proposed alignment, nature-based resiliency solutions could not be prioritized; however, the project does have the objective of minimizing impacts on natural features. Additional details on the proposed design and how it meets these objectives will be provided in the DEIS.

Comment 2-6: Resiliency projects cannot and should not just be about protecting from climate risks, but it should be about preventing climate change and contributing to biodiversity. Biodiversity and nature is widely recognized to be critical components of any sustainability strategy and hence should be part of this one. In line with recommendations from the Task Force on Nature-Related Financial Disclosures (TNFD) and the Corporate Sustainability Reporting Directive (CSRD), the DEIS scoping must include details on the impact of each Alternative on biodiversity, nature, existing green infrastructure, and the local ecosystem. True alternatives by reach must be developed with meaningful consideration and explanation given to the impact on biodiversity, nature, and the local ecosystem. Each alternative should be rated against one another and the community must be meaningfully engaged to understand the trade-offs and provide meaningful, informed feedback. Furthermore, this project should look at the outcomes of COP15 and what (hopefully) gets developed as part of the "post-2020 global biodiversity framework" (GBF) to see how these projects can be accretive to the planet rather than so destructive. (BPCNA_026)

Response 2-6: The DEIS will include an analysis of the Proposed Project's potential impacts to natural resources, including anticipated compensatory wetland mitigation (i.e., Saw Mill Creek Wetland Mitigation Bank credits) and the potential incorporation of in-water ecological enhancements within the Proposed Project area.

Comment 2-7: It is why we stand consistently to defend our parks, green spaces, and trees. Frankly, many in the community are more worried about the impact on our green spaces than the impact of climate risk. (BPCNA_026)

Response 2-7: As stated above, the DEIS Project Description chapter will provide details on the objectives and design principles for the Proposed Project, including maximizing the preservation of open spaces and waterfront cultural resources. An assessment of the Proposed Project's potential for impacts on open space and natural resources will be provided in the DEIS for both the construction and operational (post construction) periods.

Comment 2-8: An effective program against climate change requires a thoughtful synthesis of key principles including, but not limited to: (i) resiliency; (ii) sustainability which includes nature based approaches minimizing disruption of existing green infrastructure, preservation of the character of the community and preventing climate change through zero carbon emission goals; (iii) embedding the ability to adapt to science's constantly evolving understanding for the facts and models underlying the projections, protections and prevention of climate change; and (iv) meaningful collaboration between the government, subject matter experts and community stakeholders. (BPCNA_026)

Response 2-8: As stated above, the project purpose as presented in the DEIS Project Description chapter will provide additional details on the underlying principles of the project design including protection against projected sea level rise, rain events and green infrastructure.

Comment 2-9: What's interesting is that none of the Authority's projects seems to focus on this eastern boundary with the exception of the ballfields. It's also no wonder why in 2013, then-Mayor Bloomberg created a plan for "Seaport City." This plan was touted as using the model of Battery Park City that was designed to withstand major flooding, and the City would work with local communities, businesses, and property owners to explore opportunities for a new neighborhood. (BPCNA_026)

The goal of this project is to provide flood protection to Battery Park City, not all of Lower Manhattan. As the Authority is expecting Battery Park City residents and businesses to pay for this project (either in its entirety or the majority), we expect that the scope will be limited to the area that Battery Park City residents. (BPCNA_026)

Response 2-9: The relationship of the multiple projects proposed to provide comprehensive flood protection for Lower Manhattan and the role of the BPCA Northwest Resiliency Project in that flood protection will be provided in the DEIS Project Description chapter.

Comment 2-10: Who is tasked with this "resiliency project"? Does the group/organization/company have a peer-reviewed resiliency expert? (Yasui_008)

National Policy, as set by President Biden, is to prioritize Nature- Based Solutions. FEMA, too, has published guidelines on using nature to help address climate risks. In a report published in 2021, FEMA recommended that waterfront parks be used to help a neighborhood be more resilient especially those that were built with resiliency in mind like Wagner Park was and Rockefeller. Hence, using nature - based solutions are not only what the Battery Park City community has been advocating for, but also will contribute to reduced flood insurance rates for residents. (BPCNA_026)

Response 2-10: The design team includes experts in resiliency design (Arcadis), urban design (BIG) and landscape architecture (SCAPE). Nature-based solutions (e.g., coastal dunes) are a resiliency approach that may be appropriate in other settings, but such systems require more land area than is available for this project and would be inconsistent with other resiliency projects underway in Lower Manhattan.

Comment 2-11: I think another thing that we've asked for many times in the community board; one, is a real hard look with the U.S. Army Corps of Engineers (USACE), NYSDOT, we had to impart trust in you all to really—and the Mayor's Office of Climate Change, as to really work closely together in understanding this project. This is critical, particularly along the west side. You know, we really have an opportunity here to be provided to us, if we just really – I really feel strongly that we should take advantage of that. And so I would really underline the need to have that kind of meeting. Perhaps someone linked in with USACE with relation to this before we trust. (Blank_028)

Response 2-11: Since the release of the DSOW in October 2022, the project team has been coordinating with USACE and NYSDOT, as well as the New York State Department of Environmental Conservation, New York City Department of Transportation (NYCDOT), the New York City Department of Environmental Protection, the New York City Department of City Planning (NYCDCP) and many other agencies that are either involved or interested in the proposed design and environmental analyses. In addition, BPCA has been providing updates to and seeking the input of Community Board 1 and the public on a regular basis throughout the design and engagement process. The DEIS Project Description chapter will provide a summary description of the project outreach.

2.1.2 Design Flood Elevation Modeling and Flood Risk

Comment 2-12: Given the significant variances and inaccuracies of climate change modeling, do you have any data to support the accuracy of models you are using to estimate "climate change-induced sea level rise"? The models that have predicted massive

rises in sea level over the past 10 years have exaggerated the impact by 90 percent, yet you continue to cite worst-case scenarios for the future as if this time they'll come true. (Pepper_002)

Response 2-12: Several commentors on the DSOW expressed questions about the basis of the proposed design and the related assumptions about storms and sea level rise. The DEIS will describe the model used, assumed storms and wave action, storm frequency, projections of sea level rise, flood risk probability assumptions, and how the proposed project incorporates those modeling results into the design.

Comment 2-13: Since your project is designed to protect against "100-year storms" in 2050 and beyond, is there any reason other than promised payments to contractors that we should not wait to prove the accuracy of your modeling before proceeding with a massively expensive and disruptive project? 2050 is, at this writing, 28 years away. Yet this must be done immediately? Why? (Pepper_002)

Do you have any data to support the claim that we will experience "more frequent, intense storm events and storm surges (that) are a significant risk to coastal communities"? Or is this a guess? (Recently, scientists have predicted fewer major storms with higher intensity, yet this, too, is merely a prediction.) (Pepper_002)

We have been shown very little data as to what has guided your decisions. Moreover, the founding assumptions for your data, such as the predicted 100-year storm surge and sea level rises are already outdated and/or incorrect (as we have shown for the Wagner Park project, and for which I will provide further evidence below). Unless there is complete data transparency, we cannot properly evaluate all the alternatives. (Bega_003)

One particular design question is whether wave action and flooding attenuation measure could reduce the Design Flood Elevation (DFE) of the flood barrier, resulting in a more modest flood barrier height. (CB1_024)

The statement that "in 2012 Superstorm Sandy accentuated the impacts of these types of events in the New York City area" is misleading in relation to Battery Park City, which was designed for resiliency. As you well know, damage from Sandy in our neighborhood was minimal. And what little damage did occur was not due to water breaching the seawall in Rockefeller Park, the marina, along the esplanade, or around the duck pond—all of which are threatened by your new designs. (Pepper_002)

Haven't the areas cited as damaged in Sandy—the ballfields and community center—already been fortified with barriers that would prevent future flooding? What else are you trying to protect? (Pepper_002)

Please identify in your Scope of Work the actual places where water entered our neighborhood during Sandy and how your designs would prevent such recurrence in the future. (Pepper_002)

In the wake of Sandy, many buildings, including the one I live in, have developed deployable barrier systems that are relatively inexpensive but easy to put in place to protect property. You've stated these are inferior for some reason but have not explained why other than the possibility of "human error," yet there seems there is a high exposure to human error in your plans, especially when it comes to a hazy rationale based on unproven models. (Pepper_002)

Moreover, we would like to see what your models predict for the flood line that goes around the park along River Terrace and for the scenario in which we do nothing. How sensitive are these models to changing the storm surge by 2 feet (which is by how much FEMA overestimated the 100-year storm prediction, based on the NYC appeal)? How sensitive are they to changing the predicted sea level rise by 0.5-1 feet (which is roughly by how much the 2050 sea level rise predictions have changed)? Only when we know the answers to these questions do we have a complete picture. (Bega_003)

Given the large uncertainties that are inherent in the field of climate modeling, we have to be prudent and flexible. If not, we end up in the situation where in one extreme we built all this unnecessarily, and in the other extreme we built all this, but it turned out to be insufficient. (Bega_003)

In support of my points above I include a quote from the NOAA website, where they explain why their 2022 sea level rise predictions are lower from their 2017 ones: "The 2022 scenarios build upon new research and modeling since the 2017 report, and leverage output from the Intergovernmental Panel on Climate Change's Sixth Assessment Report (AR6), which was released in 2021. Since 2017, improved observations and modeling help us get a clearer picture of how and when sea level is changing both globally and regionally. In short, the science and the scenarios are not static and will continue to evolve and change through time. The scenarios in the 2022 Technical Report are lower in the near-term decades than they were in the 2017 Technical Report because there is improved understanding of Antarctic and Greenland ice sheet dynamics." The scientists' predictions have clearly changed. Why does the Authority insist on not updating their project assumptions accordingly? (Bega_003)

Lastly, I would like to quote from Dr. Hannah Nissan and her colleagues of International Research Institute for Climate and Society, Earth Institute at Columbia University 2019 paper: "Climate model projections are able to capture many aspects of the climate system and so can be relied upon to guide mitigation plans and broad adaptation strategies, but the use of these models to guide local,

practical adaptation actions is unwarranted. Climate models are unable to represent future conditions at the degree of spatial, temporal, and probabilistic precision with which projections are often provided, which gives a false impression of confidence to users of climate change information." We should follow their warning and be prudent, cautious and humble in all our resiliency projects before we destroy our beautiful parks and nature. (BPCNA, 026, Bega_003)

Owners can identify and manage their own risk. (Heilweil_004)

This goes to risk, this was not global warming, this was a storm surge, this was the spring tide. I want to subtract climatology from the discussion, this was a storm surge. Now, we can spend all that money against another 35 years, the oceans haven't risen in 35 years, that I know about. (Heilweil_035)

I was here during Sandy, as I'm assuming a lot of the older Battery Park City residents were. We all saw what happened, which is the water, for example here, came up to the playground and then it receded, the park did exactly what it was supposed to do. It's a park, it's nature, and it protected us from flooding. In fact, everything now including the current White House is going towards nature-based solutions; not destroying anything, not -- nothing -- concrete walls, not coming back in ten years and doing it all again, but looking at what you -- we have and adding to what we have. (Bega_038)

Response 2-13: As stated above, the Project Description chapter of the DEIS will describe the models used, assumed storms and wave action, storm frequency, projections of sea level rise, flood risk probability assumptions and how the Proposed Project integrates that modeling into the proposed flood protection system design. As described in that report, the modeling analysis will include the current built and hydrogeologic conditions along the project area.

Comment 2-14: The Trust has requested that coastal modeling studies be performed to inform both BPCA and the Trust on whether the proposed resiliency infrastructure could impact the Park negatively, such as during a flooding or storm surge event. The modeling should show the effects of storm surge water hitting the flood barrier system and whether water flowing back into the Park would result in standing water, a worsening flooding situation in the Park, or impact damage as compared to the No Action Alternative. The results of such modeling studies should be included in the DEIS. (Puri_025)

Response 2-14: As described above, the Project Description chapter of the DEIS will describe the coastal modeling used to determine the design parameters for the Proposed Project and will compare modeling scenarios both without (No Action) and with

the Proposed Project which will include an assessment of any impacts on HRPT property.

Comment 2-15: I don't see that the plans that have been made available to us to account for flooding from the sky which is rain and flooding in the street. (Yasui_043)

Response 2-15: The DEIS will include a description of the design assumptions and project elements that will address rain related flooding and interior drainage needs within the area proposed to be protected from coastal flooding.

2.1.3 Project Costs and Financing

Comment 2-16: Could you publish somewhere the overall budget for this phase of the project and the all-in budget for all resiliency? (Fenton_031)

The Authority commissioned by Parsons Transportation Group, Inc. published on February 19, 2016 (see Exhibit 3), estimated that providing resiliency for all Battery Park City should cost less than $200M. (BPCNA_026)

The Authority must provide the public with a study or documentation that justifies the increase in costs and a justification for how they set the Northwest project budget at approximately $650M budget. Included in this is a clear and transparent rationale on why it deviates from the 2016 Parsons Transportation Group, Inc. study that was previously commissioned by the Authority and the estimates shared with the public even as recently as 2020. (BPCNA_026)

The community board, in regard to Wagner Park, issued a resolution on September 26, 2017 that talked about how the funding strategy will cause significant adverse impacts on the residents of Battery Park City. It is noted that the Authority's plan to issue more bonds to fund projects is of grave concern to the stakeholders in BPC, both residential and commercial owners and renters, as incurring more debt can result in increases in and curtail relief negotiations on the Ground Rent and Pilot payments—at a time when stakeholders are looking for Ground Rent and Pilot RELIEF—making BPC even more unaffordable to current owners and renters and driving neighbors out of their homes. Some residents cannot afford to keep homes in Battery Park City because the costs keep going up, which is directly influenced by the amount of debt the Authority is issuing in bonds. The bigger, more expensive and from the contractor's perspective more profitable projects that the Authority embarks on, will become impossible to do anything but increase the Ground Rent that residents pay to be able to pay back the increasing amount of debt owed. Residents have told the Authority that people are being forced to leave their homes due to the increased debt burden. (BPCNA_026)

Risk Management includes probabilities, unknowns, trade-offs, central to Environmental Impact Statements, cost/benefit of No Action (aka "the devil you know"), and various legal provenance, contra the many unknowns, "the devil you don't," and those very many cost / benefit unknowns. (Heilweil_004)

The public requests a dedicated place on the Authority's website where they post all applications for funding, provide a detailed analysis of all available sources of funds for application, details on which funds applied for, records of the applications and details on any decision to not apply (including rationale). In addition, the public requests specific roundtable meetings geared towards covering project funding and requests that this be a regular part of the updates to the Community Board 1 meetings. (BPCNA_026)

Please provide a cost/benefit analysis for this project. What do we get for nearly a billion dollars in expenses and years of disruption other than vague promises that it will somehow "improve the quality of life and livability" in a neighborhood that is second to none in those areas right now? And why are we in such a rush to proceed in addressing a threat identified as 32 years away? (Pepper_002)

Statements about rising seas and storm surges suggest your project as conceived as a grand solution to a problem that may not exist—at least as you have defined it. So please define it. Tell us what, exactly, you're fixing. (Pepper_002) Is there an incentive to design this resiliency project to be bigger, more expensive, and more drastic than simply providing protection from climate risks? Who benefits? (BPCNA_026)

According to FEMA, the discount rate for any project's cost -benefit analysis (CBA) needs to consider the Benefit-Cost Ratio (BCR). FEMA considers a project to be cost -effective depending on the BCR. The Authority needs to demonstrate in the DEIS how each reach meets the FEMA BCR requirement that would qualify it to receive Federal funds. Furthermore, in accordance with the Mayor's Office, any project over $50M requires a detailed cost- benefit analysis and the public would like to see all the details of this model published on the BPCA website. (CB1_024, BPCNA_026)

In addition to aligning on project boundaries, the Authority should also clearly define what risks are being addressed and thereafter solicit public comments. (BPCNA_026)

Response 2-16: Design costs on the NWBPCR Project are projected to be approximately $140 million. The all-in budget for the Proposed Project, including all construction and soft costs, has not been finalized, but is expected to be in excess of $1.5 billion. The budget for the South BPC Resiliency Project is $296 million.

Early cost approximations between 2016 and 2020 were provided based upon preliminary concepts and possibilities available at a time when the resiliency design criteria had not yet been established, area conditions had not yet been fully analyzed, and an actual project design had not yet been engineered. These preliminary estimates were focused on projected direct construction costs assuming an earlier start and shorter duration of construction and did not include a variety of indirect or soft costs such as escalation, technical fees, bonding, and contractor overhead and profit. The design and engineering process for the Proposed Project that was conducted following the selection of the Turner/EE Cruz progressive design-build team after a competitive procurement provided the information and analysis necessary for a better understanding of the full breadth of the required project components, the complexities associated with the design and construction, and certain additional project components and challenges that were not initially contemplated, such as a pumping station for interior drainage needs and an exceptionally complex system of bridging structures to span the PATH tunnels.

The Proposed Project will provide critical flood risk reduction to Battery Park City residents and property owners without the imposition of any related increases to their ground rents (which are contractual) or PILOT payments (which correspond to NYC real estate taxes, and are set by the City). Ground Rent and PILOT expenses for Battery Park City residents are neither driven by nor correlated with BPCA's capital expenditures or financing. The debt service for the BPCA bonds that will be issued to finance the project will be paid from BPCA revenues that otherwise would be received by BPCA and transmitted to the City of New York in accordance with longstanding requirements and practice.

The total costs for the NWBPCR Project are expected to be in excess of $1.5 billion. The Proposed Project is designed to provide critical flood protection and safety to residents and property within Battery Park City, without the imposition of any increases in rents or fees. The costs are anticipated to be paid through BPCA-issued bonds that will be repaid from BPCA revenues that otherwise would be received by BPCA and transmitted to the City of New York in accordance with longstanding requirements and practice. A benefit-cost analysis for BPCA's resiliency program is being performed.

BPCA recognizes the concerns regarding potential impacts on views from ground-floor apartments adjacent to the proposed flood barrier system that is part of the NWBPCR Project. Concerted efforts will be made to minimize any such long-term impacts, through both the design process and engagement with individual buildings.

However, the flood barrier system has been designed to protect the long-term investments and safety of all residents in Battery Park City – including the ground-

floor waterfront apartments that are particularly vulnerable to future flooding from storm surge. Concerns about potential undesired effects must be balanced against the substantial net economic and safety benefits to the community, including the removal of the neighborhood from FEMA's flood maps through the project's FEMA accreditation.

If building on non-BPCA property or future access to non-BPCA property for maintenance are found to be unavoidable, BPCA will seek appropriate easements to ensure ongoing protection and cooperation.

Comment 2-17: The bond obligations will have a direct impact on the strategy and justification for the Authority seeking certain levels of ground lease payments by residential lessees. This cycle of issuing bonds and evaluating "necessary" ground lease increases affects affordability, a serious and growing issue among the residential community as it impacts (i) direct costs of monthly rents and/ or maintenance fees; and (ii) viability of local small businesses that must pay increasing rents. It is notable that large businesses have negotiated commercial lease agreements that freeze their ground lease payments, thereby placing the burden on residents and smaller businesses. Projections show the commercial versus residential ground lease payments evolving from fifty-fifty distribution to a two-third to one-third distribution that disfavors residential ground leases. Alternative sources of funds must be considered in this project.

The Authority must also apply for additional sources of funding for this project and if they do not, explain why not. Many funds related to climate change are increasingly available. The public wants extra sources to help hold the Authority accountable in terms of not pursuing the most impactful, expensive designs that benefits the developer and destroys our parks. (BPCNA_026)

For example, the 2022 New York Environmental Bond Act. which provides $ 4.2 billion dollars for environmental improvements that preserve, enhance, and restore New York's natural resources. The Authority should absolutely apply for some funding from this. As the community, we want this project to be about preserving, enhancing, and restoring New York's natural resources (e.g., preserving our mature trees, adding more green spaces, using nature-based approaches) and hence believe that this will help keep the Authority in check and accountable as this project develops.

Federal Funds for Nature-Based Solutions Roadmap

An estimated $25 billion will be made available to support nature-based solutions to address climate risks. The Authority should absolutely apply for funds from the federal government. As the community, we want this project to be about preserving, enhancing, and restoring New York's natural resources (e.g.,

preserving our mature trees, adding more green spaces, using nature-based approaches) and hence believe that this will help keep the Authority in check and accountable as this project develops.

Federal Funds for Design

There are many options out there and many federally funded projects have had a design -focus. One such example was the BIG -U scoping was funded with some federal funds. Another example is the City of Boston's resiliency project which leverages nature-based solutions and good design to make the city more resilient. This project is also funded by federal dollars. It is unclear where the source of information comes from that says federally funded projects do not have community engagement focused on design and if that is the case, the source of this information should be presented to the public. If there is no application for funds, there is a 100% probability that there will be none granted. Applying for funds definitively increases that probability and are the expectation of the public. Furthermore, the residents and businesses in Battery Park City paying the bill should decide whether the Authority should seek federal funds or not. The Authority should be mindful as we move to design that the designs influence the likelihood of getting funding: https://www.eesi.org/files/FactSheet_Nature-Based_Solutions_Funding.pdf (BPCNA_026)

The Authority should also form public-private partnerships with the corporate entities who should help fund this project. (BPCNA_026)

If the Authority plans to issue sustainability bonds for this project, every reach of this project must be evaluated to ensure that the purpose of the development is for a sustainability purpose or because the Authority would like to develop or redevelop/ reimagine an area. (BPCNA_026)

Increasingly the Security Exchange Commission (SEC) has been investigating entities for their ESG and sustainability claims. The Battery Park City Authority has issued tranches of Environmental, Social and Governance (ESG) or "Sustainable" Bonds in 2019 to fund a series of projects such as the Wagner Park project and potentially this project. Future Sustainability Bonds are expected. To be able to allocate proceeds to this project and all Battery Park City "resiliency" projects, we request that a team of independent experts analyze these projects and what can be used to justify what is minimally required to achieve resiliency goals and only allocate funds from these bonds to that. That team should inform the Climate and ESG Task Force who are charged with developing initiatives to proactively identify ESG- related misconduct. (BPCNA_026)

As additional funding from state and federal sources are provided, then the Authority should think about opening up to other places and should be actively applying to the growing number of sources increasingly available. (BPCNA_026)

The State of New York, just with the permission to voters and activists, multi-billion-dollar issue took resiliency measures, if you live in Rockaway Beach or Breezy Point you're getting resiliency as part of your taxes. Here you're getting the same taxes, but you're also paying through your ground rent for resiliency measures. Any chance you could just give that money back and tap into the bond issued by the state or maybe not give the money back, keep it here in Battery Park City and use it for other purposes like affordability or just funding operations? (Fenton_031)

There's federal funding now, FEMAs models will have to be updated to—and analyzing—nature-based approaches should be used will need to be analyzed in federal funds and increasing green spaces rather than reducing them. Biden at COP27 just released a road map of using nature-based approaches. (Erez_033)

Response 2-17: It is anticipated that the project will be financed by BPCA's issuance of bonds. Though BPCA certainly has been and continues to be receptive to the possibility of viable alternative funding sources, applicable guidance related to the potential for award of federal funds for our resiliency projects suggests that the projects would be deemed ineligible for federal funding since, given that both a sufficient existing revenue stream and an existing finance structure exist to pay for the project, it would not be positioned to successfully compete for federal funding against projects for which funding alternatives are unavailable.

To be clear, pursuing the project using BPCA's financing capabilities enables the work to move forward at no additional cost to residents and property owners of Battery Park City. Put differently, not issuing these bonds – and not spending money to service that debt each year – would not reduce what Battery Park City residents pay in ground rent (which is contractual) or PILOT (which is determined by the New York City Department of Finance). Ground rent and PILOT are not determined by BPCA's debt load. Not issuing these bonds would simply mean that more money is passed from BPCA to the City of New York, rather than being spent in Battery Park City to protect Battery Park City and Lower Manhattan. BPCA has issued sustainability bonds in the past and is well-versed in the strictures associated with this type of bond financing. In the event that BPCA issues additional sustainability bonds to fund the project, all applicable requirements will again be met and all prescribed procedures adhered to.

Comment 2-18: Other open questions that have arisen are for ground-floor apartments, how will they be compensated if they essentially have a wall built around their apartment? (BPCNA_026)

If you're going to raise the privacy walls at those apartments on the esplanade even by a foot you're going to obliterate the views of a bunch of first floor apartments, both rental and condominium that have paid a premium for that

water view, and are now going to be staring at a brick wall, and it seems like you're going to be effectively confiscating a portion of the value of that property by doing that. Do you plan to compensate those folks? If not, how is this not government taking? And what's your strategy for walls that are going to arise from that period if you're not going to compensate them? (Fenton_031)

Response 2-18: BPCA recognizes the concerns regarding potential impacts on views from ground-floor apartments adjacent to the proposed flood barrier system (FBS) that is part of the NWBPCR Project. Concerted efforts will be made to minimize any such long-term impacts, through both the design process and engagement with individual buildings.

However, the FBS has been designed to protect the long-term investments and safety of all residents in Battery Park City – including the ground-floor waterfront apartments that are particularly vulnerable to future flooding from storm surge. While we acknowledge the potential for impacts, these concerns must be balanced against the substantial net economic and safety benefits to the community, including the removal of the neighborhood from FEMA's flood maps through the project's FEMA accreditation.

If building on non-BPCA property or future access to non-BPCA property for maintenance are found to be unavoidable, BPCA will seek appropriate easements to ensure ongoing protection and cooperation.

2.2 Flood Barrier System

Comment 2-19: We understand now that design is an input into the model and hence we should do this as we iterate on different designs and well before any flood alignment or designs are nearing any form of completion. In fact, this should be part of deciding where to place the flood alignment and to help inform designs. (BPCNA_026)

When might we see more details on the actual flood barriers? (Blank_028)

One of the things I want to know is how high the walls or protective barriers need to be in each reach, specifically in each reach? (Cuccia_029)

What is being done to protect against vertical water infiltration from below or then horizontally from waves or sea level rise that way? (Cuccia_029)

Response 2-19: The DEIS will include a comprehensive description of the proposed flood barrier system including its horizontal alignment and vertical height (which is comprised of both above grade walls and below grade foundational elements) as well as the design assumptions that account for floodwater elevations and wave effects.

Comment 2-20: More analysis with real consideration of alternatives needs to be done on any part of the project that proposes rebuilding a platform and this needs to be

shared with the public in an open and interactive Q&A format. Many of the platforms just went through an overhaul less than ten years ago. The re- creation of the platforms within a reach should be looked at in isolation from the Alternatives and could be applied to any Alternative. It is needed to make a decision on how a particular Alternative could be altered to reduce the impact and better adhere to the design principles above. (BPCNA_026)

Details on which platforms are expected to be rebuilt and why. We need pros and cons associated with different options that include rebuilding versus not. There needs to be a hard look at options that do not require the reconstruction of a platform. Part of the consideration must be comparing the alternatives in terms of noise, pollution, and vibrations. (BPCNA_026)

On many of the reaches, we need to think about not rebuilding a whole platform. (Erez_033)

If we have to rebuild the whole platform, there needs to be a really detailed explanation to the public of pros and cons and why, and I mean detailed, I want to see numbers, I want to see a technical explanation. We have a lot of technical expertise in this community; we don't need summaries, we need details on this. (Erez_033)

Response 2-20: The DEIS Project Description chapter will describe the purpose for the raised platform elements and the design intent and benefits. In addition, the Alternatives chapter will include a discussion of the design options that were evaluated by the design team, including platform replacement and reconstruction, as appropriate.

Comment 2-21: The Draft Scope does not address who will be responsible for deploying the deployable flood barriers and performing all the related maintenance. (Puri_025)

Response 2-21: The DEIS Project Description will include a section on operations and maintenance of the proposed flood barrier system and the operating agency, if that is confirmed. It is expected that the proposed interior drainage elements of the Proposed Project would be under the jurisdiction of and operated by DEP in accordance with the operations and maintenance requirements for their systems.

2.3 Drainage

Comment 2-22: Reach 1 – Route 9A (West Street) Crossing/Tribeca: Pooling of water that is trapped after the floodwaters recede is a post-construction concern. (CB1_024)

The two alternatives that have been proposed by the Authority for Reach 1 do not meet the community's design principles and not enough information has been provided for the community to make a meaningful determination of pros

and cons on the two alternatives. An option that blocks traffic during an emergency situation is not even a viable option.

		Reach 1
Design Principle	**Alternative 1**	**Alternative 2**
Minimal impact to existing design	Less Impact, but still do not understand the impact on green infrastructure	Significant impacts
Preservation of the character of the park and neighborhood	Insufficient information given for the public to meaningfully comment.	Significant impacts need to understand more and rationale for scope extent of this alignment
Minimal disruption to existing parks and green spaces	Insufficient information given for the public to meaningfully comment.	Insufficient information given for the public to comment.
Utilization of existing structures	Insufficient information given for the public to meaningfully comment. Not clear how many existing structures are being used and how.	Insufficient information given for the public to comment. Not clear how many existing structures are being used and how.
Use of Nature-based resiliency solutions	Insufficient information given for the public to meaningfully comment. Does not seem to be adding any nature.	Insufficient information given for the public to comment.
Prioritization of green over concrete	Insufficient information given for the public to meaningfully comment. Does not seem to be adding any green.	Insufficient information given for the public to comment.
Protection from climate risks (sea level rise)	This is the area at most risk, but still do not understand how this design addresses this versus another alternative	Insufficient information given for the public to comment. There is a lack of understanding on the elevations required especially as it moved to Tribeca.
Protection from climate risks (storm surge)		
Protection from climate risks (cloudburst flooding)		Insufficient information on how this is being addressed.
Protection from climate risks (heat index)	Insufficient information given for the public to meaningfully comment.	Insufficient information on how this is being addressed.
Accretive to the neighborhood as judged by residents, not the Authority, AECOM or other non-resident bodies	Do not think this design is accretive to the neighborhood	Do not think this design is accretive to the neighborhood
Use of resiliency to increase active green spaces	Insufficient information given for the public to meaningfully comment.	Does not seem to be adding any green.
Preservation of mature trees	Insufficient information given for the public to meaningfully comment. Need to understand more the impact on mature trees	Insufficient information on how this is being addressed.
Prioritization of community needs and feedback in all designs and design principles	The community keeps saying that blocking traffic in an emergency evacuation situation does not meet the needs so this option is not even a viable alternative	There is not enough information provided to the community to make an assessment or understand this option. Serious work is needed before the public can make meaningful comments.

(BPCNA_026)

Response 2-22: An interior drainage analysis and the design developed based on that analysis will be presented in the Project Description and Infrastructure chapters.

Based on the current site conditions along the project corridor and the highly developed Lower Manhattan shoreline and waterfront in general nature-based solutions (e.g., coastal dunes) require more land than is available and are therefore not implementable for the Proposed Project. Therefore, structured solutions integrated to the existing urban setting is proposed. As will be described in greater detail in the DEIS, the proposed design has been developed with a robust community engagement and outreach plan that was conducted in 2023 and 2024 that evaluated feasible options ad alignments for structural flood protection and drainage management in each reach. Structural elements were also considered which include an evaluation of which platforms needed to be reconstructed, either in part or in full, to support the installation of the proposed flood barrier system in each reach. In addition to providing flood protection, project objectives also include minimizing impacts to urban design, open space and trees, preserving neighborhood character, minimizing impacts to both in-water and upland natural resource features including trees to the maximum extent feasible. The comment suggests utilizing existing walls and structures to provide the flood protection to the extent feasible; however, this cannot be achieved given that project structures need to be designed provide a level of flood protection and structural reliability that addresses the design storm and meets the certification requirements of FEMA.

2.4 Reach Designs

2.4.1 General Comments

Comment 2-23: The December 7, 2022, Community Board 1 presentation was helpful in understanding [Reach 7], and it is good that it is using nature-based approaches by restoring the waters and seeking a design with minimal impact. We hope this approach will be applied in other places such as in Reaches 4 and 5 as well as Reach 2. (BPCNA_026)

Response 2-23: Comment noted.

Comment 2-24: It is good that the original designers are engaged and we hope that is the case across all reaches. We ask for the Olin group that built the Battery Park City Master Plan, esplanade and had a hand in Rockefeller also be engaged like the designers on this reach have been. The designers should also be part of the discussions with the public. (BPCNA_026)

Response 2-24: Battery Park City utilized a public procurement process for a progressive design build contracting approach for the project. A progressive design build approach involves a collaboration of contractor, designer and specialty consultants on each submitting team. It was a two-stage selection process commencing with a Request for Qualifications (RFQ) in September 2021. Nine teams submitted statements of qualifications in November 2021. A best value selection process was utilized to establish a short list of teams for receipt of the Request for Proposal (RFP). The RFP was released in January 2022, and three teams submitted proposals in May 2022. The best value procurement process continued to be evaluated during the months of June and July culminating in the selection of the Turner/Cruz joint venture, which included Arcadis as the lead designer and a number of other specialty design consultants. For clarity, the Olin Studio was not a member of the original teams that submitted a statement of qualifications, nor did they join one of the short-listed progressive design teams during the RFP process.

Comment 2-25: We need to minimize the impacts to the neighborhood. We already have enough seating that fits the neighborhood and has been uniquely designed to fit in the character of the neighborhood. The community has also been asking for a grass-based dog run. (BPCNA_026)

Response 2-25: The DEIS will include a comprehensive description of the elements of the Proposed projects, as well as the potential environmental impacts of the Proposed Project and measures undertaken to avoid, minimize or mitigate significant adverse environmental impacts.

Comment 2-26: There is not enough detail on the designs for what this critical flood alignment looks like for the public to be able to provide meaningful feedback on this alternative. As explained in the November 21, 2022 meeting, there is not enough information for the public to digest and understand. There needs to be significantly more details on how this flood alignment translates to a design. Before you pick an alignment, we need to see the impact on design. (BPCNA_026)

Response 2-26: As stated above, there has been extensive outreach on the design of the Proposed Project since the release of the DSOW in October 2022. The DEIS Project Description chapter will include a summary of such engagement efforts, as well as a full description of all the project design assumptions and the proposed flood barrier system alignment.

Comment 2-27: It is good that the design is using nature-based approaches by restoring the waters and seeking a design with minimal impact. We hope this will be applied in other places such as in Reach 4-5 as well as Reach 2. (BPCNA_026)

Response 2-27: The DEIS will include a discussion of the measures taken to avoid, minimize or mitigate significant adverse impacts to natural resources, including anticipated compensatory wetland mitigation (i.e., Saw Mill Creek Wetland Mitigation Bank credits) and the potential incorporation of in-water ecological enhancements within the Proposed Project area.

Comment 2-28: You don't cut down trees in the name of climate change, you plant trees in the name of climate change. You don't dig up parks to protect the parks, you don't kill them to protect them, you protect them through alternative means, right? (McGowan_046)

Response 2-28: The Proposed Project's goal is to provide coastal storm flood risk reduction within and inland of Battery Park City. To achieve this goal, some of the existing park areas and trees will require clearing, grading and relandscaping. It is an objective of the proposed design to minimize tree removal to that necessary to provide flood protection while evaluating the feasibility of transplanting trees, protecting trees from construction impacts, and planting replacement trees. The DEIS will include a comprehensive description of the proposed flood barrier system and the related tree clearing and replacement.

Comment 2-29: Can it be made clear or is it already in a web site or a document that I can access; who is the resiliency expert that is creating this scope of the plan for North Battery Park? (Yasui_043)

Response 2-29: BPCA has retained the services of Turner EE Cruz JV as the lead contractor of a Design Build Team and their lead designer and resiliency expert is Arcadis.

2.4.2 Reach 1—Route 9A (West Street) Crossing/Tribeca

Comment 2-30: Reach 1 – Route 9A (West Street) Crossing/Tribeca: Potential conversion of vehicular travel lane to protected bike lane is a post-construction concern. (CB1_024)

Response 2-30: The Proposed Project would not convert this travel lane to a bike lane.

Comment 2-31: Reach 1 needs to incorporate community feedback from the previous open houses in June and September 2022. The public does not understand Reach 1, the assumptions behind it, how it will look and the rationale of extending through Tribeca. More information needs to be provided to be able to provide meaningful feedback. The community has not been provided true alternatives as one of the reaches involves blocking escape routes during an emergency evacuation. (BPCNA_026)

Response 2-31: As stated above, there has been extensive community and agency outreach on the design of the Proposed Project since the release of the DSOW in October

2022. The DEIS Project Description chapter will include a summary of such engagement efforts, as well as a full description of all the project design assumptions and the proposed flood barrier system alignment.

Comment 2-32: As different alternatives for this reach are developed, explored, and analyzed, juxtaposing historical maps of the area on top can help inform how we should approach Reach 1. It appears the area in Tribeca north of Chambers that is being proposed to be walled off is a historic marsh area [map]. It was a waterway and it begs the question that if you put the "dry line" south of that point, what will happen to Tribeca in the instance of a flooding event. We would like to see the models and analysis that this solution would not result in more flooding in Tribeca. (BPCNA_026)

Response 2-32: The Project Description of the DEIS will describe the modeling factors and inputs used in developing the coastal flood barrier system including the hydraulic factors and assumptions underlying the proposed design. Since the release of the DSOW the Chambers Street alignment was dropped from further consideration in favor of the North Moore Street alignment which includes protection of the two blocks north of Chambers Street, up to North Moore Street and east to Greenwich Street which is a high-ground tie-back for the flood protection system.

Comment 2-33: The other piece I was wondering about is on the Reach 1 on the alternatives. I'm not clear on either of the alternative, why it's necessary to Washington Square Park. I did see the elevation of 16.5 feet in the middle of Washington Square Park. I don't understand that. I think there needs to be an additional alternative for that Reach 1, something that does not impede traffic, block traffic, in the middle of emergency, that doesn't make sense. (Erez_033)

Response 2-33: As described in the FSOW, based on subsequent BPCA review of the DSOW alternative aligned along Chambers it has been dropped from further consideration.

2.4.3 Reach 2—Battery Park City North Esplanade

Comment 2-34: Please include the following feedback on Reach 2 in the DEIS, which was shared at previous open houses:

- An option to remove the "AECOM" stairs
- Need an alternative to add salt marshes, a Pool+ outdoor pool and oyster beds
- Preservation of mature trees

  Adding flood protection with minimal disruption (BPCNA_026)

		Reach 2
Design Principle	**Alternative 1**	**Alternative 2**
Minimal impact to existing design	This element seems completely ignored in this reach and there needs to be meaningful consideration in developing an alternative that meets this design principle. It is not clear why expanding the platform is necessary.	Where is the alternative on this reach for meaningful consideration?
Preservation of the character of the park and neighborhood	There seems to be more impact that adversely impacts the unique character of the neighborhood when there surely is a less impactful alternative that exists.	
Minimal disruption to existing parks and green spaces	Need to see how the flood alignment along the school will work and designs before commenting	
Utilization of existing structures	Would like to see how we can better leverage existing structures	
Use of Nature-based resiliency solutions	Not clear how this is being addressed and how green infrastructure preservation is being prioritized. The public in the December 7, 2022 meeting asked for nature-based approaches to be prioritized. It appears in Reach 7 they are doing that (ironically the reach closest to BPCA board member Martha Gallo's residence) by adding wetlands and it is not clear why that cannot be done here as well.	
Prioritization of green over concrete		
Protection from climate risks (sea level rise)	Insufficient information given for the public to meaningfully comment.	
Protection from climate risks (storm surge)	Insufficient information given for the public to meaningfully comment.	
Protection from climate risks (cloudburst flooding)	Insufficient information given for the public to meaningfully comment.	
Protection from climate risks (heat index)	Insufficient information given for the public to meaningfully comment.	
Accretive to the neighborhood as judged by residents, not the Authority, AECOM or other non-resident bodies	This stretch seems to be maximum impact and many of the design elements incorporated go beyond flood protection such as the inclusion of AECOM stairs.	
Use of resiliency to increase active green spaces	Insufficient information given for the public to meaningfully comment.	

		Reach 2
Design Principle	**Alternative 1**	**Alternative 2**
Preservation of mature trees	Insufficient information given for the public to meaningfully comment.	
Prioritization of community needs and feedback in all designs and design principles	Insufficient information given for the public to meaningfully comment.	

(BPCNA_026)

Response 2-34: As described above, since the release of the DSOW in October 2022 design plans have evolved based on a robust community and agency engagement and outreach plan that was conducted throughout 2023 and into 2024 that evaluated feasible options and alignments for a flood barrier system and drainage management in each reach. Existing structural elements along the Proposed Project corridor were also considered which included an evaluation of the need for any platform reconstruction in Reaches 2 through 6, either in full or in part, necessary to support the installation of the proposed flood barrier system in each reach and as will be described in the DEIS this platform segment has been identified for reconstruction. This will involve the removal of the stairs; however, this will also require removal of all existing structures and trees. Any ecological restoration proposed in this reach or others will be described in the DEIS.

Comment 2-35: The DEIS should take into consideration how the existing deployable flood wall system for the Pier 26 building would tie into the proposed flood barrier system. The Trust can provide details of this existing structure so that the analysis can be included in the DEIS. (Puri_025)

Response 2-35: The Pier 26 building is north of the proposed BPCA project area, not adjacent to the Proposed Project, and given the distance between the Proposed Project and Pier 26, a connection with the Hudson River Park Trust (HRPT) deployable is not practical as part of this project. The location of the proposed deployable gate crossing of Route 9A was established in coordination with and based on input from HRPT.

Comment 2-36: Reach 2 also violates the community's design principles and requires a meaningful look at a true alternative. The current proposal looks to include new development of the platform. It is unclear why that is central to providing the neighborhood with flood protection or protection from other forms of climate risks. There needs to be more information disclosed in an interactive setting on why this platform needs to be extended. As expanding the platform will have increased adverse impacts to the environment, fish, and wildlife, please include a detailed analysis on those impacts and compare to the option of "keep as is." Please include an analysis on why nature -based solutions cannot be incorporated

in this reach with oysters, marshes and other blue-green infrastructure that can help mitigate the overtopping into Tribeca. The water inlet is an area where garbage piles and the public has been told is shallower water. If there are other goals for this reach, they should be clearly outlined to the public with pros and cons and served to the public for a decision. (BPCNA_026)

Response 2-36: A number of design alternatives for Reach 2 were considered, the end result of which, as will be described in the DEIS, is a proposed extension of the platform by 6 feet. This proposed widening would allow for future adaptability, offset the allocation of existing width along the esplanade to the proposed floodwall and allow for widening to improve function and separation of space along this segment of open space. A more detailed description of the Reach 2 design will be provided in the DEIS.

Comment 2-37: Reach 2 needs to incorporate the community feedback from the June and September 2022 open houses with alternatives that include an option with minimal impact to the neighborhood and neighborhood character. Does this option go above the needs for climate risk protection? (BPCNA_026)

Response 2-37: As will be described in the forthcoming DEIS, the design of Reach 2 incorporates the community feedback from 2022 through 2024 with the objective of minimizing impacts on neighborhood character and enhancing the waterfront esplanade functions in this reach.

2.4.4 Reach 3—Rockefeller Park

Comment 2-38: Community Board 1 asks the BPCA to consider the design options to potentially reduce the DFE through attenuation measures and to move the flood wall to the east of the existing playground in Reach 3, Rockefeller Park, to prevent the need to take it offline for the duration of floodwall construction. (CB1_024)

Response 2-38: As will be presented in the DEIS, the proposed design for Reach 3 would locate the proposed alignment to the east side of the playground and on the west side of the River Terrace, closely following the existing retaining wall (east of the playground). Alternatives that would allow the playground to remain in place during construction (but not open due to safety concerns) were considered, but would have greater impacts to trees, utilities, traffic and pedestrians, and as such, the alignment that would require the removal and reinstallation of the playground after flood wall construction was selected. In Rockefeller Park, the existing topography effectively reduces waves and additional wave attenuation is not needed.

Comment 2-39: How would the environmental -- the animals, how would the sea wall be affected if the wall would be moved up 150 feet closer? How does that affect ducks in the

pond, the birds that are in those streets because you're getting that kind of sound and vibration even closer to them? (Cushman_030)

Response 2-39: The DEIS will analyze the Proposed Project's potential impacts to natural resources, including avian wildlife. The Proposed Project would not relocate the Lily Pond.

Comment 2-40: Reach 3 – Rockefeller Park Post-Construction Concern: How will active recreation facilities fare after flooding and what would be necessary in terms of time, staff hours, and budget impact to return these areas to their normal state after a significant storm. (CB1_024)

Response 2-40: While it is not possible to predict the specific impacts of a given storm or the time and effort associated with the cleanup and restoration in response thereto, BPCA is committed to the restoration of all its open spaces in the event they are impacted by a storm.

Comment 2-41: Reach 3 – Rockefeller Park Post-Construction Concern: The regrading of swales and the impact on active recreation in the park. (CB1_024)

Response 2-41: An objective of the Proposed Project is to minimize impacts on Rockefeller Park, particularly the active recreation areas. However, green infrastructure practices to improve and upgrade stormwater management adjacent along River Terrace are proposed to enhance drainage and will be described in the DEIS. In addition, BPCA will be implementing as a separate capital project drainage improvements to Rockefeller Park.

Comment 2-42: Reach 3 – Rockefeller Park Post-Construction Concern: The efficacy of wave attenuation features at the water's edge. (CB1_024)

Response 2-42: The proposed design for Reach 3 will be presented in the DEIS. In Rockefeller Park, the existing topography effectively reduces waves and additional wave attenuation is not needed.

Comment 2-43: Minimal change to Rockefeller, please. (Abruzzo_009)

As Rockefeller Park is National Register-Eligible, 42 and there are options available for keeping the park intact and to cause minimal disruption, we should explore all alternatives that minimize the adverse impact to this critical part of our neighborhood. The flood line should consider Rockefeller Park as a cultural resource and should detail out ways to reduce any and all impacts to this park. Any modification to the park and playground and such should undergo an extensive review in partnership with the TCLF (BPCNA_026)

Response 2-43: While it has been determined through research performed for the DEIS and coordination with the New York State Office of Historic Preservation (SHPO) that Rockefeller Park is not eligible for listing on the National Register, it is a highly valued community space. The Proposed Project would locate the proposed flood barrier system along west side of River Terrace to minimize impacts to Rockefeller Park. The potential impacts on Rockefeller Park both during and after construction will be fully analyzed in the DEIS.

Comment 2-44: We are hopeful that Reach 3 as it pertains to Rockefeller Park will have minimal impact to the open green space, green infrastructure, and unique character of the neighborhood. (BPCNA_026)

Rockefeller Park is the heart and soul of the North. It is the community's backyard. During #PausetheSaws, you saw how much this community prioritizes this open green space. Every single effort, every single alternative needs to be meaningfully considered and carefully discussed with this community before even one tree is removed, one square foot of grass is reduced or any green space whatsoever is removed regardless of how material the Authority deems it. It cannot be overstated how much value the community (across all New York City) here places on the open green space of Rockefeller. (BPCNA_026)

The local elementary school now uses Rockefeller for its annual talent show – a tradition that started during COVID when the school could not host any events and was going to have to call off its talent show like it did during the surge. The PTA leadership banded together to ensure that this did not happen. (BPCNA_026)

Rockefeller Park has meant so much to me in the six years I have lived in Battery Park City. It has been a place to hang out with friends, bond with my family, and connect with nature. In spring, I enjoyed the newly grown grass and flowers, in summer I had picnics on the lawn, and in fall I played soccer. In winter, I waited for the Battery Park City Authority to open up the lawns again so I could enjoy the park.

Just last week, I had a picnic in the park with my friends for my birthday. While looking for the perfect place, I came across the part of the lawn where Governor Cuomo is now planning to place the monument. It is an amazing place, with tall trees that provided shade, beautiful green grass, and a view of the Hudson River. However, it was occupied by an outdoor soccer class. I was happy with another spot because I realized how happy the younger kids seemed.

Which brings me to my first point. Rockefeller park has provided many people with a place to relax, have fun, and get outside. Because of COVID-19, there are limited things we can do indoors. Being outside in Rockefeller is a great

opportunity to have fun with the limited number of things we can do during this pandemic.

The nature of Rockefeller is part of what makes it such a special place. The scenery is beautiful, with gorgeous flowers and blooms in the spring, vivid green leaves in summer, and stunning yellow and orange trees in the fall. If we can cut down trees to make a monument, we are depriving ourselves of those beautiful and full-grown trees. This is a big deal to me, because in spring and summer, it can get hot, and the shade we get from those trees is something many are thankful for. But not only do trees provide beauty and shade, they provide oxygen, which is something all living things need. If we take down trees, we will have to plant new ones, but they will take years to mature. It will take a while to restore what we once had and what citizens loved.

If we cut down some of the trees of Rockefeller, we are harming animals. Maybe birds and squirrels will lose their homes. Imagine if that happened to you.

I love our essential workers. They have helped so many people in so many ways. But I do not want people harming this amazing environment that has meant so much to me and everyone I know. Even essential workers enjoy nature like this.

I hope this will help make a difference because Rockefeller Park is a very special place. –Recent P.S. 89 Graduate."

Our kids climb the trees, play in the park, kick soccer balls, play little league, and it really is the gathering place of the community. (BPCNA_026)

The third piece is, on by Rockefeller. I don't know if it's Reach 3 or Reach 4, a different flood alignment that does not demolish the playground that was just rebuilt, allow the playground to flood as well as the duck pond that was just rebuilt, you know, the duck pond can flood. So we need adjustments on that model. (Erez_033)

Response 2-44: As will be described in detail in the DEIS, a principal design objective for Reach 3 and Rockefeller Park is to provide the necessary flood protection while minimizing modifications to the park and maintaining the character of the existing open space.

2.4.5 Reach 4—Belvedere Plaza

Comment 2-45: Reach 4 – Belvedere Plaza that was previewed depicted a water feature replacing what is known as the Lily Pond or Duck Pond, which evoked a significant negative response from much of the committee and community members present. (CB1_024)

Community Board 1 values the current design and use of the Lily Pond/Duck Pond in Reach 4 – Belvedere Plaza, and believes that this important community amenity can be preserved in the final design of the resiliency project. (CB1_024)

Reach 4: The following areas may be categorized as a construction-related and post-construction concern—The persistence of the Duck Pond/ Lily Pond as a habitat for local waterfowl and passive recreation by the public. (CB1_024)

Please find a way for the Duck Pond at Battery Park to be compatible with the need for a flood wall. The pond is a critical component of the neighborhood for families, students, wildlife, and more. It's a beautiful space, and we'd be so disappointed to see it go. (Alterman_020)

Please preserve the Duck Pond! It's such a meaningful part of our family's neighborhood and life. (Alterman_021)

I'm writing with concern about the Duck Pond located in Battery Park City. I've only learned recently that there are plans to eliminate the pond as part of the resiliency project. I am a long-time resident of the area and visit the pond very frequently and it would be incredibly heartbreaking to lose this. Please do not take away the duck pond. (Mason_027)

Response 2-45: As stated above, based on the design outreach performed with the community performed in 2023 and 2024, it is not proposed to modify the Lily Pond. The new design for Reach 4 will be fully described and analyzed in the DEIS.

Comment 2-46: Reach 4 – Belvedere Plaza: The following areas may be categorized as a post-construction concern—the maintenance of open green space within this reach in the final design. (CB1_024)

Response 2-46: The DEIS will provide a full description of the improvements proposed in Reach 4; it is not expected that the design proposed at Belvedere Plaza would substantively alter the size of the open green space within this reach and BPCA's maintenance requirements in this area.

Comment 2-47: There were a large number of attendees who opposed moving the ferry pier northward. (CB1_024)

Response 2-47: The Proposed Project would not relocate the ferry landing. The DEIS will provide a full description of the elements proposed in Reach 4 (i.e., in the vicinity of the ferry landing), and will analyze the potential environmental impacts resulting therefrom.

2.4.6 Reach 5—North Cove

Comment 2-48: Reach 5 – North Cove post-construction concern: Impacts of the flood wall on known bottlenecks/pinch points for pedestrian and bicycle circulation on the esplanade. (CB1_024)

Response 2-48: The design is currently holding a minimum 20'-0" of pedestrian clearance at all existing pedestrian/bicycle pinch points. This provides the necessary clearance along the project corridor, particularly at locations such as the Belvedere Plaza and Pump House Park. This clearance is an ongoing priority for the design team and will be described in the DEIS.

Comment 2-49: How does it look for a person who is in North End Avenue? How does it look for a person who is on River Terrace? (Bega_038)

Response 2-49: The visual impacts at North End Avenue will be described in the DEIS. The proposed wall structure has been designed to minimize visual impacts and will parallel the west side of River Terrace; the DEIS will include project elevations, visuals and a text description of the views along this corridor.

Comment 2-50: Reach 5 – North Cove post-construction concern: The light, sound, and circulation impacts of the plaza being reconfigured to be an event space need to be evaluated. (CB1_024)

Response 2-50: No new event venues are included in the Proposed Project.

Comment 2-51: Reach 5 – North Cove post-construction concern: Disruption impacts on the sailing club and whether any new dock configurations would preclude the offering of this service to the community. (CB1_024)

Response 2-51: No permanent modifications to the dock configurations are proposed in North Cove.

Comment 2-52: Also, removal of the duck pond would have a significant adverse impact on their ability to conduct hands- on learning. All these listed above leverage Battery Park City's green spaces so any reduction in green spaces would have a significant adverse impact on all these schools. (BPCNA_026)

Response 2-52: As stated above, it is not proposed to change the location of the Lily Pond/Duck Pond. Any modifications to the Battery Park City green spaces will be described in the DEIS for each reach.

Comment 2-53: Overall, for Reach 5, there only seems to be one true alternative provided. This reach needs a real alternative. The feedback during the 2021 workshops was clear in adding more green and trees and that feedback does not seem to be incorporated into this proposal. Examples are more trees and grass space, green on the jetties, and transforming Belvedere Plaza's sitting garden area into one large green space with the trees kept intact for people to enjoy nature, but also to create more of a sponge to sop up flood water. (BPCNA_026)

Response 2-53: As part of the design and outreach process with the community, the design team evaluated a number of strategies for integrating the proposed flood barrier system into Reach 5 while minimizing to the extent feasible impacts on open space area and functions and trees. The DEIS will include a full analysis of the potential for open space impacts from the Proposed Project, including in Reach 5.

2.4.7 Reach 6—South Esplanade

Comment 2-54: Reach 6 – South Esplanade: The following areas may be categorized as a construction-related and a post-construction concern—the potential for floodwalls or deployable measures to block air intake ducts or ventilation for buildings. (CB1_024)

Response 2-54: The flood barrier system at Reach 6 follows the existing privacy wall alignments. Building specific concerns with intake ducts or ventilation will be addressed where appropriate.

Comment 2-55: What are the considerations for Reach 6. That said, the understanding is this is an important area to improve the soil quality as it was one of the first areas created from the World Trade Center fill. (BPCNA_026)

Response 2-55: Soil quality in landscaped areas of BPC is higher quality soil not World Trade Center fill; however, in landscaped green spaces that are disturbed by construction, it is an objective of the Proposed Project to improve, where needed, both the landscaping and soil medium as part of the post construction restoration.

2.4.8 Reach 7—South Cove

Comment 2-56: For the Reach 7 design, please keep in mind the needs and views of the Battery Park Montessori school. This school will be significantly adversely impacted by this project and the impact to this school as well as Metro Kids should be included in the DEIS. Battery Park Montessori relies on the views to the river for their kids so any blockage of views to the river and nature from inside the school would have a significant adverse impact on the business and kids. PS 89 and others use the duck pond to study birds as part of the second-grade curriculum (as one example) and do science lessons. (BPCNA_026)

Response 2-56: As part of the design and engagement process with the community, the design team has evaluated a number of strategies to minimize visual impacts of the Proposed Project, including any potential impacts at the Regatta Building where the Montessori school is located. The result of that design coordination and input will be presented in the Project Description of the DEIS. The DEIS has evaluated the potential impacts of the Proposed Project at those locations.

2.5 Community Engagement

Comment 2-57: At a minimum, the Authority should retain neutral experts in the various fields to advise the local elected officials and community stakeholders including Community Board 1, local elected officials and BPCNA, the three groups who appear to be leading the engagement for the Project. This will help level the field and create meaningful engagement during presentations, instead of the current system that leaves lay people guessing at the processes utilized, factors considered and how the various sciences were applied and decisions made. (BPCNA_026)

Having a lot of family in Florida that has just impacted by the storms, fortunately not as badly as some, I am in support of resiliency and I want to echo that I hope Community Board 1 is a place where. I didn't see us on the list of agencies up there. I hope you consider us as an important agency because we want to engage, and as you know, we have a lot of opinions, and we don't always get everything we want, but we hope that we're also a place that we can comment and discuss. (Chapman_032)

My comments go back to what I've said before, is that I want more education, more engagement. There's about 35 people here tonight, and I don't know how many people are online. But I'm the crazy person and I've told people this, I literally go stand in the park and I ask people, you know, "do you know about resiliency? Do you know what's happening?" And most of the time they want to engage. (Chapman_032)

BPCNA recommends the formation of an advisory committee composed of Authority members, representatives of involved-contractors, neutral subject matter experts and community stakeholders. This will provide for a meaningful opportunity for the community to be heard and considered while, at the same time, respecting the law and its decision-making process that endows the lead agency, Battery Park City Authority, with the right and obligation to make the final decisions. This committee will, in practice and spirit, put into place a key principle of due process which endows a stakeholder in any legal process with a right to be meaningfully heard and considered. (BPCNA_026)

More signage and more engagement. (Chapman_032)

So those are just little comments coming from the community, I think it's because they don't know about it, and we could do a much better job, especially given this incredibly accelerated time frame. This is faster than what we did with the south and we need to have more engagement, not less. (Chapman_032)

This feels very similar to the other process where you guys present, we give comments and then it goes into a black box. We need a different engagement

model that is a back-and-forth; we ask questions, you answer, we ask questions, you answer, we ask questions, you answer. (Erez_033)

So we need a lot more community engagement, and I don't mean over meetings, I mean the quality of the meetings. We need them to be interactive, not people on a stage presenting and the public coming up making a comment. (Erez_033)

When we look at what's going through the South Battery Park City Resiliency Project, surveys started in 2016, you're breaking ground today. So the process was significantly longer. The process of public engagement on this project only started with the north, there was no engagement on the west. So the North Battery Park City Resiliency Project began in 2020, North Battery Park City. Kick-off meeting one was 2019. There were three kick-off meetings: one, two, and three, last meeting in 2020. (Meltzer_034)

This process is completely rushed. And the activation on the west side, it is completely unclear to me how you could push so fast, so far. (Meltzer_034)

We have interim measures that you have used that are going to put in place to safeguard us. Will we really take the time to make sure we're making public education and community engagement work right. (Meltzer_034)

We need to hear from you about the timing and the planning, and how you're going to engage the community. (Kuhn_036)

I'm also a very concerned citizen. I live in the neighborhood. I've lived here since 2008. I'm also a scientist. Like the previous speaker, I've been very involved in all of those projects that have been going on in Battery Park since last year. And by "involved" doesn't mean that I've been involved in the process entirely at all. In fact, I feel us, as Battery Park City residents, had not been involved. (Bega_038)

If it's not for all the pro forma meetings, pro forma presentations, these have all been one-way conversations. (Bega_038)

When we come to these meeting something is shown, we don't really understand who makes the decision, who has decided to pick this plan versus this other plan. (Bega_038)

So the first think I would like to ask here is better community engagement, not a one way engagement where we just come here, hear something, and then say some comments that may fall into a black hole and we never hear about the comments ever again. (Bega_038)

I'm a scientist and I still cannot understand any of these plans that are being shown because they're all from the bird's-eye view, they have very, very little detail unlike this here plan. (Bega_038)

There are official government-sponsored community boards that have opinions on this and that have thought about these issues for decades. There are also local community groups that are specifically -- have been created to deal with these specific issues, and I don't think that they have been engaged with even slightly. (Grant_039)

You can hold as many of these meetings as you want, but, you know, having just people say something, being written down somewhere and then maybe addressed in a report is not how you engage with a community and is not how you build something with a community, it's how you just show up and you do something. (Grant_039)

So again, there are very simple ways to actually engage with people who live here, and who are talking about these issues on a daily basis, and we probably know things that no amount of planning or writing documents or filling out forms will ever teach you, and it's easy to just show up to one of their meetings and talk and have an actual human interaction instead of whatever this is because this doesn't feel like anything. (Grant_039)

Our community is thirsty for information and we need to be included in the design and decision-making process. This cannot be a top-down exercise at the Authority because as mentioned above, there is complete and utter mistrust between the public and Authority – in essence, the public does not have confidence in the Authority as is obvious in the Spring 2022 release of “No Confidence” letters by the Battery Park City local non -profit organizations. (BPCNA_026)

Reach 3 has not had much of the community feedback from the previous open houses in June 2022 and September 2022 meaningfully incorporated. (BPCNA_026)

Please keep in mind the needs and views of the Battery Park Montessori school. This school will be significantly adversely impacted by this project and the impact to this school as well as Metro Kids should be included in the DEIS. (BPCNA_026)

Before the public is asked for feedback, well before any designs are finalized and decisions made, there needs to be a round table with the public, where experts are brought in that can answer detailed technical assumptions on the storm surge predictions, sea level rise predictions, wave runup models and their sensitivity to proposed flood barriers, cloudburst flooding predictions and heat index predictions. Include in this group the USACE. Unless there is complete data transparency, we cannot properly evaluate all the alternatives. (BPCNA_026)

The Battery Park City Neighborhood Association is willing and ready to help facilitate this discussion between the experts, Authority and public in any way

possible. We are also happy to take a supportive role or no role as long as this process sufficiently happens. (BPCNA_026)

Ultimately, if it falls in the camp of not being minimally required to address climate risk, *meaningful* community collaboration is essential. In such a situation, it is recommended that there be a clear choice where the community chooses an option. If not chosen, there must be clear reasons enunciated. (BPCNA_026)

To date, many in the community feel that we have been shown very little data as to what has guided the Authority's decisions and there is a complete lack of transparency. (BPCNA_026)

The documents I read last night in preparation for this contained an exhaustive list of all the comments and questions that have been asked at the last meeting, but no responses or answers to them. I guess I'm not asking the question. I assume that the next document will be different than not just log exhaustively ever question and comment, but contain answers. (Fenton_031)

What is the process if we don't like the proposal? Is there an opportunity to reject the proposed plans? (Propp_041)

Many of the reaches presented to date do not have alternatives that are acceptable and meet the design principles listed above. Some of the reaches contain elements and need adjustments (e.g., Reaches 3 and 4) and others miss the mark completely and we need to go back to the drawing board (e.g., Reach 1). This is critical information the public needs to make an informed decision on Alternatives. Without this critical information, the public does not have enough information to provide meaningful input on the Alternatives. (BPCNA_026)

As the trade -off is made on relying on passive barriers versus deployable barriers, the public wants to understand where decisions are being made that require changes to green infrastructure and neighborhood character (as defined by the residents in Battery Park City, not the Authority) because they have decided that a component of the project cannot use deployables. There should be a differentiation between manual deployable barriers versus mechanical or pop-up deployables. (BPCNA_026)

As this process develops, each alternative must be assessed formally through an DEIS and informally in terms of its design principles. True alternatives by reach must be developed with meaningful consideration given to each. Each alternative should be rated against the design principles and the community must be meaningfully engaged in agreeing to how these alternatives address these alternatives. (BPCNA_026) The DEIS scope should confirm that the proposed alternatives will fully meet the resiliency principles set forth by the City in the City Neighborhood Coastal Flood Protection Guidelines. (CB1_024)

An Advisory Committee should be formed and composed of Authority members, representatives of involved- contractors, community stakeholders and neutral subject matter experts. This has been requested and described throughout various sections of this document. For a project of this magnitude, it would provide a meaningful tool for there to be a meaningful opportunity for the community to be heard and considered. It will be a key element to ensure broad community support for a project that will impact the character of the community. Equally important, it will help set a precedent that will be admired and followed by communities throughout the world who are confronting similar challenges. Those projects were smaller but important. There is no logical reason for such a Committee to not be useful and important for a Project of this magnitude. We call on the Governor, Congressman- elect Daniel Goldman, Senator Kavanagh, Assemblyperson Fall and Councilman Marte to support the formation of an Advisory Committee and, if not, to state the reasons for their lack of support. We request that the Authority state whether it supports the formation of the Advisory Committee including provided the reasons underlying its position. (BPCNA_026)

This is critical information the public needs to make an informed decision on timing and Alternatives. Without this critical information, neither the government or the public can provide meaningful input or decisions on Alternatives and options. (BPCNA_026)

While Purpose and Need and Key Project Objectives are important, the published project purpose is incomplete and we would like to see each alternative assessed relative to the design principles that are aligned with the community. (BPCNA_026)

Response 2-57: Subsequent to the October 2022 scoping meeting, and as described above, the BPCA as Lead Agency, with the assistance of the PDB team, implemented a robust and comprehensive schedule of community engagement programs for the purposes of soliciting public input on the alignment and design of the proposed flood barrier system and the related improvements along the project corridor. The establishment of a project advisory committee was not pursued by BPCA in light of the many avenues that have been provided to community members and the public for the sharing of information and opinions; question and answer sessions; the presentation, explanation and discussion of technical and design data; the workshopping of planning and design concepts; and the communicating of feedback and concerns about the project and its implementation. A summary of these outreach efforts will be provided in the DEIS.

As described above, the DEIS Project Description chapter will expand upon and update the summary project description text provided in the DSOW and will also reflect the extensive outreach and design coordination with the public and

agencies that was performed between the release of the DSOW in October 2022 and the forthcoming publication of the DEIS.

The Project Description published in the DSOW outlines the project purpose and need as a flood protection project. The DEIS Project Description will provide a full description of the Proposed Project and how it addresses this purpose and need and will also include an analysis of Alternatives.

Comment 2-58: As noted by the Authority, the U.S. Army Corps of Engineers (USACE), analysis is ongoing and if an alternative such as 3A is selected, it would make this project redundant. (BPCNA_026)

Response 2-58: BPCA and its design and project teams are very familiar with the Harbors and Tributary Study (HATS), which is being studied independently by USACE. The HATS project would not eliminate the need for the Proposed Project.

Comment 2-59: A detailed tree analysis and plan (including a cost benefit analysis) should be completed well before each Alternative is finalized so the public can provide feedback, well before any designs are finalized and decisions made. This is critical information the public needs to make an informed decision on Alternatives and ultimately the flood alignment lines may change based on this information. Without this critical information, the public does not have enough information to provide meaningful input on the Alternatives. (BPCNA_026)

Response 2-59: The DEIS will include an assessment of the projected tree impacts of the Proposed Project, as well as the number of replacement trees.

Comment 2-60: It's difficult to be very helpful in terms of this process without better understanding the flood barrier system, what they're comprised of, and tonight's the first time I realized that the dotted line actually meant some kind of deployable feature. I think the better we could understand that, the better we could respond to the different scenarios that are in each reach, so that's one thing. (Blank_028)

Response 2-60: As described above, there has been extensive outreach on the Proposed Project since the release of the DSOW in October 2022. This outreach was led by BPCA with the assistance of the Design Build team. As requested in the comment, one of the objectives for the outreach was to provide the community more information on the design and engineering principles of the flood protection project and to establish a framework for incorporating community input to the design. The DEIS Project Description chapter will also include a full description of all the project design assumptions and elements.

3 State Environmental Quality Review Act (SEQR) Process

No comments were received on this section of the DSOW.

4 Description of the Proposed Project

4.1 General Comments

4.1.1 Open Space and Recreation Amenities

Comment 4-1: A detailed map (with dimensions) of green spaces (e.g., Rockefeller Park, Duck Pond, Playgrounds) should be provided on each Alternative. As part of that, it should indicate any planters versus active green spaces and where this green space is separated by sidewalks and other design elements that would impede on continuous play on the green spaces (think of a child being able to play soccer on the green space). This analysis should be completed well before each Alternative is presented to the public for feedback, well before any designs are finalized and decisions made. This is critical information the public needs to make an informed decision on Alternatives. Without this critical information, the public does not have enough information to provide meaningful input on the Alternatives. (BPCNA_026)

Response 4-1: Site plan maps and renderings of the green spaces will be provided in the DEIS, which will depict where sidewalks and other design elements are located.

Comment 4-2: We need a very simple picture of the Proposed Project with a simple layman's explanation of the project. (Murphy_013)

Response 4-2: The DEIS will include text and a series of graphics to provide a complete description of the Proposed Project.

Comment 4-3: There are also "old growth" issues in our extant and resilient and fully well-planned arboretum/garden of New York City, also previously presented to BPCA. (Heilweil_004)

Response 4-3: The DEIS will include a description of the existing open spaces in BPC and the impacts and modifications with the Proposed Project, including impacts on trees and landscaping.

4.1.2 Ferry Relocation

Comment 4-4: Moving the ferry terminal north appears to be counter to all of these principles as it will move noise pollution and physical (gas, exhaust, etc.) pollution closer to the Rockefeller playground and parks which children play, thereby diminishing the character and aesthetic of the community. While I am familiar with the rationale to move it (i.e., NYNJ Port Authority conditions to keep the marina

opening free and clear), as someone that has counted off the feet from the edge of the marine to the ferry terminal, there appears to be plenty of space to actually move the terminal south, thereby creating an interconnectedness with Brookfield Place and its transportation hub. This would integrate NJ, BPC, and all of NY's primary transit arteries together. Further, to prioritize a marina opening that is used for 6-8 months of the year, and is used by incredibly wealthy yacht owners over the health and safety of our children is quite reprehensible. (Houston_019)

A move south toward the marina is requested. (Riverhouse_022)

BPC prides itself as an environmentally friendly place to live and raise a family. Our building, and BPC in general, has a high proportion of families with young children and seniors. The proposal to move the ferry terminal north would be inconsistent with what BPC stands for. We request the project team to consider relocating the ferry dock south of its current location, rather than north, while its platform is rebuilt as part of the resiliency project. (Riverhouse_022)

The ferry terminal, it cannot move north at all. Right now, it's already a major disruption to the Two River Terrace, a residential building, and the playground, its present location. I'm going to ask you to find another spot for it or just close it down for the two years of construction. It is not possible to move it north. (Cuccia_029)

Please note that our residents do not have problems with all ferries. Those owned and operated by Goldman Sachs and NYC Ferry have not received complaints. (Riverhouse_022)

I know we've seen government projects go on for many more years than everyone thinks. So it's not temporary, it could be 5 years, who knows, 10 years. So to not do any kind of measurements -- even currently, the vibrations from the boats, to sea, from different levels, not just from street level, but actually in different heights along the building because frankly when the trees were not protecting it you'll see more vibrations and more sounds. (Cushman_030)

What about air pollution to the park, again, noise and vibration to the residential building that's literally -- I mean feet from this, what we're talking about -- to move it 150 -- just 150 feet forward. (Cushman_030)

It just seems like it makes sense to measure from the building at different points how that's going to affect, even currently, and then you have to almost guesstimate what it's going to look like getting even closer. I don't know that it could possibly be screened out with such an important project that's going to go on for years. (Cushman_030)

Response 4-4: Based on the input received during the community outreach process and the evaluation of project design options, as will be described in the DEIS, it has been

determined that the ferry operations will remain at the current location during and after construction of the Proposed Project.

4.2 Design Assumptions

4.2.1 Design Flood Elevation

Comment 4-5: Before we align on the solution to protect Battery Park City from climate change, we should first align on the risk posed to Battery Park City. As part of the DEIS, we request that you provide details on the exact locations where water entered during Sandy and caused damage beyond $100,000 and how your designs would prevent such recurrence in the future. (BPCNA_026)

Response 4-5: Superstorm Sandy has influenced the advancement of numerous coastal flood protection planning and design projects in the City and the region and it is the objective of the proposed project to provide protection against future storms based on coastal flooding projections that also incorporate future projections of sea level rise. As stated above, several commentors on the DSOW submitted questions about the basis of the proposed design and the related assumptions about storms and sea level rise. The DEIS will describe the model used, assumed storms and wave action, storm frequency, projections of sea level rise, flood risk probability assumptions, and will describe how the proposed project incorporates those modeling results into the design.

Comment 4-6: Considering the founding assumption for your data, such as the predicted 100-year storm surge and sea level rises are already outdated and/or incorrect, and that climate models are constantly changing, we should be prudent, cautious and humble in our resiliency projects. We should ensure we build projects that are not over the top and inflexible so that, as the science and data changes, these projects do not need to be "redone" completely. (BPCNA_026)

Should we really be spending nearly $1 billion dollars based on a FEMA model we all know is "scientifically invalid" and incorrect? Instead, we should adopt adaptive design principles and build a flexible and adaptable project, as recommended by New York City. We should expect that what we design will likely need to be adjusted in the medium term as science adjusts and we have new, better models. (BPCNA_026)

Please see the July 2022 BPCNA letter on the science and models being used (and since writing this letter, there have been even later predictions released that tell the same story). It details what we all know about this project's fundamental assumptions that they are scientifically invalid and exaggerated. (BPCNA_026)

The second thing I would like to ask is better models and better assumptions presented to the community in a clear manner as to why you are doing what you're doing, what are you basing it on? (Bega_038)

Response 4-6: The Project Description chapter of the DEIS will describe the coastal modeling report that has been prepared for the Proposed Project which includes projections of sea level rise, wave and storm event intensity, which are the primary factors underlying the proposed resiliency design. As will be described in the DEIS, the project is being designed to a hundred-year coastal storm return frequency with 30 inches of sea level rise, which is the 90th percentile sea level rise (due to climate change) through to the 2050s. This project is part of the City's Lower Manhattan Coastal Resiliency Program and that set of projects, which includes the BMCR, the BPCA's South Battery Park City Project, the Battery Coastal Resiliency Project, the FiDi Seaport Project, is being designed with at least an expectation of 30 inches of sea level rise. It is a project objective to maintain design consistency with those projects with the ability to adapt to future needs. The project is therefore designing to a 100-year return frequency and 30 inches of SLR, which is the 90th percentile SLR (with climate change) to the 2050s.

5 EIS Analysis Framework and Project Development

Comment 5-1: The DEIS should include an in-depth review of the existing condition and decision making used in the original design of the resiliency features and urban design in the BPC's 7 reaches. This review should include input from the original designers (architects, landscape architects and engineers) responsible for each reach of the original BPC plans. (CB1_024)

Response 5-1: Both the Project Description and Historic Resources chapters of the DEIS will include a description of the design history of Battery Park City and its open spaces.

Comment 5-2: The DEIS scope should demonstrate how the BPCNW alternatives are integrated and coordinated with all city, state and federal resiliency plans affecting the lower west side of Manhattan from Canal Street to the Battery. (CB1_024)

The DEIS scope should include an in-depth review of all proposed alternatives for resiliency features on the lower west side of Manhattan with all city, state and federal entities having jurisdiction over the west side of lower Manhattan including, BPCA, Hudson River Park Trust, USACE and City and State DOT. Specifically, the Mayor's Office of Environmental and Climate Justice has promised to provide a meeting where all entities will discuss the possible alternative resiliency plans for the median along Route 9A, introduced during the Rebuild by Design planning in 2013. (CB1_024)

Response 5-2: The Project Description chapter of the DEIS will include a description of the design coordination with city, state, and federal agencies. See Response 4-6 for a discussion of the coordination of the Proposed Project with the other planned resiliency projects in Lower Manhattan.

The DEIS Project Description will also include a planning background that will provide a description of resiliency alternatives under consideration for Lower Manhattan. The Mayor's Office of Environmental and Climate Justice has also been actively coordinating with BPCA in the environmental review process for the proposed project.

5.1 Reasonable Alternatives to the Proposed Project

Comment 5-3: The DEIS should include detailed alignment-based designs with complete, legible and accurate 3D representation of all alternatives, including the No Action Alternative. (CB1_024)

Response 5-3: The project description materials in the DEIS will include a discussion of alignment concepts with supporting graphics and elevations. A visual depicting flood conditions under the No Action condition will also be provided.

5.2 Analysis Framework

Comment 5-4: The project study area for the DEIS needs to be extended beyond the 400-foot radius to include Piers 25 and 26. (Puri_025)

Response 5-4: The Proposed Project does not have any design elements that would have adverse effects beyond the 400-foot limit, with the exception of the *CEQR Technical Manual* ½ mile open space and the construction transportation analysis, both of which are larger study areas. The 400-foot study area does include portions of Pier 25 and 26 and the larger open space study area includes both Piers as well.

Comment 5-5: The DEIS must fully examine the impacts of both alternatives 1A and 1B to Hudson River Park (see Draft Scope Section 3.2.4 and Figures 12, 14A and 14B), especially since 1B would minimize construction and operational impacts to the Park. (Puri_025)

Response 5-5: The DEIS will include an analysis of the potential for impacts on Hudson River Park during both construction and operation of the Proposed Project.

6 Scope of Work for the DEIS

6.1 SEQR/CEQR Categories that Screened Out

6.1.1 Community Facilities and Services

Comment 6-1: Section 3B (xi): Impact on Schools and Childcare Facilities The DEIS should include a detailed analysis on the impact of these projects on the following schools. They should go in and interview the staff and leadership of these schools as well as PTAs where applicable. This is a non-exhaustive list:

-Battery Park Montessori

-Big and Tiny

-Metro Kids

-Battery Park City NY Kids Club

-Battery Park Nursery

-The Learning Experience

-PS89

-IS289

-Stuyvesant

-PS276

-IS276 (BPCNA_026)

Response 6-1: The DEIS will include an analysis of the potential significant adverse impacts from construction and operation of the Proposed Project, including analyses of the potential for significant adverse impacts from construction on open space, transportation, air, and noise. The study areas for these analyses include the school facilities within the 400-foot study area, which include those listed above.

6.1.2 Shadows

Comment 6-2: The DEIS should assess whether shadows from any selected design could cause black ice in the winter (see Draft Scope Section 4.6.4) and the operational need for space for storage of ploughed snow along the bikeway. (Puri_025)

Response 6-2: The proposed design is a low wall with very limited added shadow that is not expected to exacerbate black ice conditions. It would also have no consequential effects on bikeway maintenance and snow removal operations that would require a separate analysis. Therefore, an analysis of shadows and black ice is not necessary for the DEIS.

6.1.3 Air Quality and Noise

Comment 6-3: When talking about environmental study I was really quite frankly shocked that—I think the gentleman made mention that some of the impact areas that have been screened out were air quality, noise, and vibration. (Cushman_030)

Response 6-3: These technical areas will be analyzed for potential impacts during the construction period. The Proposed Project would not generate any air or noise emissions or vibration during its operation and would not have the potential to result in noise or vibration impacts in its operational condition. However, the potential for construction of the Proposed Project to result in noise or vibration impacts will be studied in detail, including measurements of existing noise levels, predictions of noise and vibration levels resulting from construction of the Proposed Project, and evaluation of predicted noise and vibration levels according to *CEQR Technical Manual* impact criteria.

6.2 Land Use, Zoning, and Public Policy

Comment 6-4: EIS No build analysis, will the alternative resiliency project proposed by a group of citizens in conjunction with the architects of Wagner Park be considered? (Tekervan_037)

Response 6-4: The South Battery Park City Resiliency Project currently under construction at Wagner Park will be included as a No Build project.

6.3 Historic and Cultural Resources

Comment 6-5: The New York City Landmarks Preservation Commission (LPC) is also in receipt of the "Phase IA for the North/West Battery Park City Resiliency Project Portions of Block 142, Lots 25 and 50; Block 16, Lots 3, 12, 15, 20, 70, 100, 120, 125, 140, 150, 160, 210, 215, 225, 7501 (formerly Lot 90), 7502 (formerly Lot 95), 7505 (formerly Lot 65), 7509 (formerly Lot 45), and 7511 (formerly Lot 25); and Portions of Streetbeds of Greenwich, North Moore, Harrison, and Route 9A/West Streets, Manhattan, New York County, New York," prepared by AKRF, Inc., and dated November 2022. The LPC concurs with the sensitivity assessment and locations as noted in figure 12 as well as the recommendation that further archaeological work is needed. Please submit a Work Plan for LPC review and approval before such work occurs as per the Guidelines for Archaeological Work in New York City. In addition, please submit a paper copy of the report for the LPC archives. (Santucci_001)

Response 6-5: The above is reflected in the FSOW and the DEIS will also include a summary of the Phase 1A investigation and the steps that follow in the archaeological process.

6.4 Urban Design and Visual Resources

Comment 6-6: Reaches 1 and 2: Park patrons utilizing Piers 25 and 26 and the adjacent upland area would potentially be impacted by the visual/ aesthetic/ neighborhood character changes that would result from the placement of the new flood wall and potentially the loss of park/ open space, depending on their ultimate design. (Puri_025)

Response 6-6: Views south from Hudson River Park will be provided in the DEIS Urban Design and Visual Character chapter.

Comment 6-7: Reach 5 – North Cove post-construction concern: Visibility impacts of passive resiliency measures on Pump house park and seating areas. (CB1_024)

Response 6-7: The Pumphouse Park project area has been the subject of substantial design review and coordination with the community since the release of the DSOW in October 2022 and the proposed design resulting from that outreach will be described in the DEIS, as well as an analysis of the potential significant adverse impacts resulting from the Proposed Project, including visual impacts.

Comment 6-8: Reach 6 – South Esplanade: The following areas may be categorized as a post-construction concern—The impact on storm surge countermeasures on residential views and view corridors. (CB1_024)

Response 6-8: The South Esplanade project area has been the subject of substantial design review and coordination with the community since the release of the October 2022 DSOW and the proposed design resulting from that outreach will be described in the DEIS, as well as an analysis of the potential significant adverse impacts resulting from the Proposed Project, including visual impacts.

Comment 6-9: They should not take away all the trees. They should let them grow and let the animals live. The dogs should be able to run, the kids should be able to be able to play and parents should be able to picnic. My mom says that it is possible to save Wagner Park and protect our homes. If our park can be saved and our houses be protected from floods then you should at least try. Please will you try? (Harkeom_016)

Response 6-9: While tree impacts have been minimized to the extent possible, tree clearing will be required to implement the Proposed Project. All tree clearing projections, measures to protect trees near construction activities and the tree replacement plan will be described in the DEIS.

6.5 Open Space and Community Facilities

Comment 6-10: What will be the impact to Battery Park? (Addo_040) Throughout the open houses in June 2022 and September 2022, feedback was consistently given to preserve the playground that was just fully reconstructed (BPCNA_026)

These parks are world-class, they're used by tens of thousands of downtown residents every day, and they're used by hundreds of thousands of international residents and visitors every year, right? These are not the Battery Park City Authority's park, right? (McGowan_046)

Response 6-10: Impacts to the existing Battery Park City open spaces have been minimized to the extent possible; however, the modifications to the BPC open spaces that are necessary to implement the Proposed Project will be described in the DEIS, as well as the resulting significant adverse impacts.

6.5.1 Open Space

Comment 6-11: Areas within the study area that may be impacted as a place of impromptu or organized gathering include Rockefeller Park, Esplanade Plaza, the Hudson River Esplanade itself, Belvedere Plaza, the areas around North Cove (including plazas by Brookfield), and the South Cove area. A potential impact the study may include, but is not limited to, the number of people the public space can support when taking into account new or modified circulation pathways and trip generators. (CB1_024)

Changes in character of use of public areas and how design changes to the area could impact those current uses. For example, Esplanade plaza is a known public square, changes to common uses based on changes in surface material selection in new design, and changes in size and nature of open spaces. (CB1_024)

Impacts on use of public spaces outside Battery Park City, such as Hudson River Park, Washington Market Park, local bikeways, walkways and sidewalks need to be assessed. (CB1_024)

To the extent any reduction in Park area or substantial change to the design or character of the public open space is proposed a detailed assessment of open space should be provided in the DEIS. (Puri_025)

Response 6-11: As stated in the FSOW, the DEIS will include an assessment of both the potential construction period and operational impacts of the Proposed Project on open space.

Comment 6-12: If any existing moorings needed to be eliminated to accommodate construction or operation of Reach 2, an existing business that pays rent to help support Hudson River Park would be affected, resulting in an economic impact to the Park.

Thus, the DEIS should assess the potential for operational impacts at Piers 25 and 26, including with respect to socioeconomic conditions (Draft Scope Section 4.6.1), open space (Draft Scope Section 4.6.3), urban design and visual impacts (Draft Scope Section 4.7.3, Figure 24), neighborhood character (Draft Scope Section 4.7.9) and impacts to public parkland (Draft Scope, Section 4.7.1, Figure 22). (Puri_025)

Response 6-12: The Proposed Project is not expected to have any permanent impacts on the HRP mooring field, and therefore, an operational impact analysis on Piers 25 and 26 operations is not necessary. However, there would be temporary construction period impacts on recreational moorings in Hudson River Park, which will be described in the DEIS.

6.6 Natural Resources

Comment 6-13: Much of Battery Park City sits on a platform over the waters of the Hudson River, and the rationale as well as the implications of establishing a sub-surface flood wall to protect infrastructure that is between West Street and the pier line is not intuitive to the general public, especially considering that the elimination of below-pier habitat for sensitive organisms might be accommodated with new habitat alternatives in the final design. (CB1_024)

Response 6-13: The DEIS will evaluate potential impacts of the Proposed Project on aquatic habitats below the platform and the resources that may be using them, as well as to the aquatic resources of the lower Hudson River in general.

Comment 6-14: The study must include the impacts of nature on neighborhood resources as well as natural resources. Allowing land on the seaward side of the flood barrier system to flood and thus be subject to storm surge and wave action in the event of a significant storm. (CB1_024)

Response 6-14: The DEIS will evaluate the potential impacts of the Proposed Project on natural resources in Project Area, including the open space areas that would be susceptible to flooding after implementation of the Proposed Project.

Comment 6-15: Floodwater tolerance of existing mature trees within the areas designed for inundation during a significant storm should be addressed. (CB1_024)

Response 6-15: As the commenter noted, multiple existing mature trees will remain on the unprotected side by the flood barrier system. Strategies will be needed to minimize potential tree damage from flooding, such as ”flushing” soils, tree roots and landscaped areas with fresh water after a flood event, depending on the location and condition of the trees. Such strategies will be considered as part of the project's maintenance and operations recommendations.

Comment 6-16: The Draft Scope states that the flood wall system would require a 15-foot "no tree zone" as well as a 35-foot construction area (see Draft Scope Section 3.2.2 and Figures 7, 8). The DEIS should identify which Park trees and plants would need to be removed, and should also specify, if applicable, any Park areas that would need to be narrowed to achieve the required horizonal easements along the flood wall. (Puri_025)

It's the resiliency project that is going to apparently raise 114 huge trees, this doesn't make a lot of sense. (Tekervan_037) The wall in the median is the flood alignment and trees are depicted within 15 feet of this alignment. Trees are placed within 15 feet on top of the flood alignment. (BPCNA_026)

A tree-by-tree map (similar to the NYC tree mapping project) should be done on all trees in the project area and there should be details on type of tree, age of tree and the assumption on how much carbon the tree absorbs. In addition to details on the trees, there should be what the assumption is for that tree in the project (will it be moved, replaced, stay in place) and the cost -benefit assumption associated with that as outlined in Biden's COP27 Roadmap for Nature-Based Solutions. (BPCNA_026)

Please provide sources and details on the "15 foot" FEMA rule in regard to trees not being next to flood alignments. Please provide a detailed analysis on where it is followed and the impacts as well as where there is deviation with justification on why it is acceptable in certain places (like the renderings throughout Wagner Park published on the Authority's website which shows trees on top of and next to flood walls throughout the whole project. Furthermore, the results of this tree map should be shared with the NYC tree mapping project to be incorporated into their tool. (BPCNA_026)

Response 6-16: The DEIS will include a comprehensive description of the tree clearing and tree replacement with the Proposed Project. The DEIS will include an analysis of the potential impacts of the Proposed Project on terrestrial resources, including trees, within the Project Area. The results of the tree inventory conducted for the Project Area will be considered in the evaluation of the natural resources assessment and the number of trees that would need to be removed identified. As will be discussed in the DEIS, the tree inventory will inform the development of tree protection measures to be implemented to minimize impacts to trees that will remain in the Project Area. The DEIS will discuss compliance with the requirements of Chapter 5 of Title 56 of the Rules of the City of New York and Local Law 3 of 2010, and a tree clearing, protection, and replacement plan will be developed to address impacts to street trees within the City's jurisdiction. Maintaining trees and the carbon capture they provide along with other plants within the maintained gardens of Battery Park City and planning for the resilience of these resources is an important component of the Battery Park City

Sustainability Plan. The requirement to maintain a 15-foot Vegetation-Free Zone is found in the U.S. Army Corps of Engineers' "Engineering and Design Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankments, and Appurtenant Structures" dated May 1, 2019 (EP1110-2-18). Note that the extent of construction impacts will vary depending on the type of flood protection measures installed in each area, and the construction equipment required for said installation.

Based on USACE guidance for flood walls (EP 1110-2-18, "Engineering and Design Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures," Department of the Army, Corps of Engineers [USACE], May 1, 2019), which are accepted by FEMA as part of the flood protection system accreditation process, a 15 foot (minimum) clear zone is to be provided on both sides of a flood barrier structure for the purposes of avoiding damage from tree limbs and roots and to provide a clear zone for inspections and repairs. The Proposed Project design described in this DEIS reflects adherence to the USACE Guidance. As part of the final design process, BPCA in coordination with its design team will continue to review the proposed designs with the objective of maximizing tree replacement and finding locations along the project corridor where it may be acceptable to FEMA through its variance procedures to plant trees and enhance environmental values without compromising the flood barrier system functionality, safety or the necessary maintenance, inspection and repair of the proposed flood barrier. Also being explored are opportunities within BPC for additional tree replacement plantings along public street corridors and open spaces.

Comment 6-17: Construction of Reach 2 is proposed within the Hudson River in an area that is part of the Hudson River Park Estuarine Sanctuary pursuant to the Hudson River Park Act. The DEIS should include an assessment on any potential for construction of the project to affect fish habitat or natural resources (see Draft Scope Section 4.7.4 and Figure 25). (Puri_025)

Response 6-17: The DEIS will evaluate potential impacts of the Proposed Project on aquatic resources of the Hudson River Park Estuarine Sanctuary, as well as to the lower Hudson River in general, from the expansion of the overwater platform and other in-water components of the project.

Comment 6-18: What about the animals? What would be the impact to wildlife in the area? (Addo_017)

Response 6-18: The DEIS will evaluate potential impacts of the Proposed Project on wildlife and wildlife habitat in the Project Site, including any measures that would be incorporated into the Proposed Project to improve wildlife habitat.

Comment 6-19: This document acknowledges the adverse impacts to the monarch butterfly (page 12). As you know, the community's Alternative Design would have kept the critical monarch butterfly habitats intact. How are you accounting for the reduction in habitat from this project as well as what is proposed with Wagner Park? True alternatives by reach must be developed with meaningful consideration and explanation given to the impact on monarch butterflies and other animal species. Each alternative should be rated against one another and the community must be meaningfully engaged to understand the trade-offs and provide meaningful, informed feedback. (BPCNA_026)

Response 6-19: The DEIS will include an assessment of the potential for monarch butterflies to be impacted by the Proposed Project. Measures that would be incorporated into the Proposed Project to restore and improve potential monarch butterfly habitat in the Project Area will be included in the analysis, including any post-construction landscaping that would incorporate native wildflowers known to host the species.

Comment 6-20: The design for Wagner Park included trees placed within 15 feet of the flood alignment. Why is this possible for the South project but not for the North? (BPCNA_026)

Response 6-20: The 15-foot vegetation-free zone is established as a means to minimize the potential for plant root-related structural damage and to allow ease of access at the time of inspection and maintenance of the flood barrier system. The intent is to maintain the structural integrity required of the flood barrier system for FEMA certification. The planting strategy and species selection for the Proposed Project will consider these planting restrictions with aesthetic considerations for biodiversity, habitat, and shade cover. The SBPCR Project opted to include concrete planting subsurface boxes to retain/direct root growth from encroaching the flood barrier system.

6.7 Water and Sewer Infrastructure

Comment 6-21: The foundations required for the flood barrier system proposed in the Draft Scope are anticipated to extend 2 to 15 feet below the ground surface with a seepage barrier under this system extending 15 to 20 feet below ground level (see Draft Scope Section 3.2.2). The DEIS should assess the effect such installations would have on utilities serving the Park, including those under and adjacent to the Route 9A Bikeway, both during construction and operation of the flood barrier system. The Trust has previously shared as-built plans for this area with BPCA to assist with this analysis. (Puri_025)

Response 6-21: As discussed in the Draft Scope, the DEIS will include an assessment of the Proposed Project's potential to impact water and sewer infrastructure. In

particular, the DEIS will assess the Proposed Project's potential impact on the physical water and sewer utilities serving the upland area (i.e., water mains and combined, sanitary, and/or storm sewers), which includes utilities along and under Route 9A. The assessment will consider any modifications to existing utilities which may be necessary for the Proposed Project, as well as measures that will be implemented during construction of the Proposed Project to protect existing infrastructure.

Comment 6-22: The DEIS should identify any utility lines that would need to be relocated along with identification of their new locations, and should assess any associated impacts from their construction, maintenance, or operation to the extent they would be in or adjacent to Hudson River Park. (Puri_025)

Response 6-22: The DEIS will describe the utility relocations necessary to implement the proposed project.

Comment 6-23: The DEIS scope should confirm BPC and City sewer system and related storm water storage and processing has sufficient capacity for each alternative. (CB1_024)

Response 6-23: The DEIS Water and Sewer Infrastructure analysis will assess the potential for the Proposed Project to affect the capacity of the existing sewer system in the Study Area.

6.8 Transportation

Comment 6-24: Please ensure that State DOT be involved in review of this project and methodology as Route 9A is under state jurisdiction and any changes or construction on Route 9A will require review by State DOT. (Ahmed_023)

Response 6-24: Both the design of the Proposed Project and the environmental impact assessment methodologies and results have been reviewed with NYSDOT and that coordination will continue throughout the environmental and design review processes.

Comment 6-25: Expand the transportation study element of the DEIS to specifically cover impact on passenger ferries and potential last-mile freight deliveries to the existing ferry pier: If final design contemplates permanently moving the passenger ferry pier from its current location, then the impacts of affected passenger circulation, travel times, and the potential loss of use as a node for receiving last-mile parcel deliveries must be considered. (CB1_024)

Response 6-25: The existing ferry pier will not be relocated from its current location during construction or upon completion of the Proposed Project and access will be maintained during construction. Since there would be no change in ferry

operations or the location of the ferry pier during construction or upon completion of the Proposed Project and upland access will be maintained, the DEIS will not include an analysis of impacts to ferry operations.

Comment 6-26: Expand the transportation study element of the DEIS to specifically cover impacts along bikeway, including bottlenecks or hazards for cyclists and pedestrians traversing stored deployables in wet or freezing conditions. (CB1_024)

Response 6-26: The DEIS transportation analysis will examine the potential impacts of the Proposed Project on transportation operations, including impacts on the bikeway/walkway from proposed structures such as deployables. The Hudson River Greenway and all bike paths and esplanades in the study area will be evaluated for potential adverse transportation effects.

Comment 6-27: While the adjacent bikeway is not part of the Park property, the Trust helps maintain this area on behalf of NYSDOT. The Draft Scope should assess the potential for the flood barrier system to affect both maintenance and use of the bikeway. The DEIS should clearly articulate responsibility and should identify any temporary impacts on the Park or Bikeway that could be associated with such maintenance. (Puri_025)

Response 6-27: The DEIS will disclose any impacts of the Proposed Project on the operations and maintenance of the bikeway. The Hudson River Greenway will be evaluated for potential adverse transportation effects. Maintenance of the flood barrier is not anticipated to have the potential for long term adverse transportation effects on the Hudson River Greenway, but routine maintenance of gates will necessitate periodic closures where the flood protection barrier crosses it. These closures will consider peak periods of activity on the Hudson River Greenway and attempt to avoid peak utilization times.

Comment 6-28: The DEIS should consider whether any safety concerns could arise for bicycle riders due to reduced sightlines and lateral clearance zones. The State and City Departments of Transportation should of course also be consulted for such assessments. (Puri_025)

Response 6-28: The DEIS will address safety from several perspectives. Bicycle and pedestrian safety and operations will be evaluated where the flood protection barrier would narrow existing bicycle and pedestrian facilities.

Comment 6-29: Expand the transportation study element of the DEIS to specifically cover impact on evacuation when deployable water barriers are placed into service: The current illustrative design depicts the use of deployable barriers through various rights-of-way including Route 9A as well as active transportation paths like the West Side Greenway. These deployables could restrict access for emergency

services or similarly restrict efforts to evacuate from the area by land-based or waterborne means. (CB1_024)

Please provide a thorough analysis on the impact on emergency and evacuation routes by alternative, and most specifically for Reach 1. This should be presented before the public is asked to pick between alternatives and part of the decision-making process. This information should accompany, as all information, with opportunities for interactive Q&A. True alternatives by reach must be developed with meaningful consideration and explanation given to emergency evacuation routes. Each alternative should be rated against one another and the community must be meaningfully engaged to understand the trade-offs and provide meaningful, informed feedback. (BPCNA_026)

The environmental review document should provide detailed information on any proposed detour routes during emergency conditions when the system is in operation and when the system is being tested or maintained. (Ahmed_023)

Response 6-29: The DEIS will conduct detailed transportation analyses per the *CEQR Technical Manual* guidance on affected transportation systems. Non-recurring effects of the Proposed Project such as closures for maintenance purposes or storm event evacuation will be described qualitatively. Detour gate closures and the implementation of detour routes are a unique emergency circumstance that is not the subject of the DEIS impact analysis. BPCA will continue to coordinate with the City including the Office of Emergency Management and other agencies on emergency planning and operational protocols for the proposed deployable elements of the flood barrier system.

Comment 6-30: The document suggests that a pedestrian analysis may be needed to assess operational conditions in the event that the design reduces pedestrian space. At what point does the consultant anticipate knowing this information? This analysis, if warranted, will need to be reviewed and approved of by NYCDOT before it can be incorporated into the environmental review. Please note that additional data will need to be collected beyond the current data collection scope to accomplish this analysis. Any additional data collection and methodology will require review by NYCDOT. (Ahmed_023)

Response 6-30: The DEIS will include a detailed transportation analyses per *CEQR Technical Manual* guidance on affected transportation systems, taking into consideration the geometric effects of the construction activities as well as any geometric impacts from of the flood barrier system by narrowing transportation elements. NYCDOT will also be consulted on the impact analysis data collection methods and study area.

Based on a review of the Proposed Project designs, the requirements of the *CEQR Technical Manual* as they relate to the assessment of impacts on sidewalk systems, and a review with NYCDOT, it was determined that an analysis of potential impacts of the Proposed Project on pedestrian elements in Reach 1 was necessary and this assessment will therefore be included in the DEIS.

Comment 6-31: Expand the transportation study element of the DEIS to specifically cover circulation impacts within Battery Park City along the esplanade, including all modes of transportation that currently use the esplanade for recreational, fitness, or commercial purposes. (CB1_024)

Response 6-31: Project construction period effects on pedestrians and bicycles will be addressed in the DEIS, including the Hudson River Greenway and all bike paths and esplanades in the study area. Where the Proposed Project impacts the esplanade during construction it will be restored so that there are no permanent impacts that need to be analyzed. The DEIS will, however, include an assessment of potential temporary impacts on the esplanade and diversions/rerouting of pedestrians and cyclists during construction.

6.9 Greenhouse Gas Emissions and Climate Change

Comment 6-32: The DEIS scoping must include details on the GHG Inventory based on the GHG Protocol definitions for each alternative including the carbon impact during construction and afterwards. This should be shared with the public before the public is asked to comment on a particular alternative. Guidance from the Task Force on Climate-Related Financial Disclosures (TCFD) in terms of the GHG Inventory should be leveraged and each alternative should report the impacts in accordance with the Carbon Disclosure Project as they are the Industry standard. The BPCA should report the Scope 1, Scope 2 and Scope 3 impacts of the project and decisions should be made in the context of impacts on GHG impacts and impacts on Nature as it is outlined in the Task Force on the Nature- Related Financial Disclosures (TNFD). True alternatives by reach must be developed with meaningful consideration and explanation given to the impact on Greenhouse Gas Emissions and Nature. Each alternative should be rated against one another and the community must be meaningfully engaged to understand the trade-offs and provide meaningful, informed feedback. (BPCNA_026)

What is the total carbon footprint of your project? How does it change, depending on which alternative is selected? (Bega_003)

The DEIS scope should include an assessment of the greenhouse gas emissions of both the proposed demolition and construction proposed for each reach. The CB does not agree with the Scope's current assessment that the GHG emissions "is likely to be… insignificant." (CB1_024)

The DEIS scope should confirm that the proposed alternatives meet with the City's commitment to reducing greenhouse gas emissions as set forth in Executive Order No. 23, Clean Construction (9/22/22) (CB1_024)

Response 6-32: As stated above, the Proposed Project will have only minimal energy demands and related effects on greenhouse gas emissions during its operation, but an assessment of construction period emissions will be provided in the DEIS. The statement cited in the comment above was referring to the operational phase; the Proposed Project is primary a wall and gates with only minimal energy demands and related greenhouse gas emissions during its operation.

6.10 Neighborhood Character

Comment 6-33: Impacts on the quality of life for owners and users of private property. One example would be the impact on ground level restaurants where employees and patrons currently enjoy water views and/or outdoor seating. (CB1_024)

Response 6-33: The DEIS will include an assessment of the Proposed Project's potential impact on Neighborhood Character both during and after construction.

6.11 Construction

6.11.1 General Construction Comments

Comment 6-34: Reach 2 – North Esplanade: The following areas may be categorized as construction-related and post-construction concerns—impact of work on the availability and use of off-shore boat moorings; and impacts of Reach 2 work on boating facilities and other water uses immediately north of Battery Park City and in the North Cove Marina in Reach 5. (CB1_024)

Response 6-34: The DEIS will include an assessment of impacts of both the construction phase and post-construction operational phases of the Proposed Project on in-water recreation activities in both the waters of Hudson River Park and North Cove.

Comment 6-35: The study must include construction impacts pertaining to existing issues that will be exacerbated by the mobilization of heavy equipment, the movement of fill and debris, the temporary closures of rights-of-way and public spaces, and the huge influx of workers. (CB1_024)

Response 6-35: The DEIS will include a comprehensive assessment of the potential impacts of the Proposed Project during the construction period. A construction assessment will be conducted to evaluate the duration and severity of the disruption from the Proposed Project's construction activities. As described in the DSOW, the assessment will include a detailed analysis in the areas of open space, transportation, air quality, noise, and vibration.

Comment 6-36: Subsurface infrastructure and utilities may be impacted with possible cutoffs of telecommunications, electricity, steam, gas service, or water main service should major construction encounter inference from documented or undocumented utilities. (CB1_024)

Response 6-36: Every reasonable attempt will be made to detect, map and account for all utilities in the design phase. During construction, any utility work would be coordinated with Con Edison, DEP, or the appropriate private utility company to ensure that any service disruptions to customers in the nearby areas are kept to a minimum.

Comment 6-37: Reach 2-North Esplanade: The following area may be categorized as a construction-related concern: the disruption of local school and learning programs, particularly Stuyvesant High School and P.S. 89. (CB1_024)

Response 6-37: The DEIS will include detailed construction air quality and noise analyses to assess the potential for the Proposed Project's construction activities to result in air quality and noise impacts on nearby sensitive receptor locations, including Stuyvesant High School and P.S. 89. Given the proximity of the Proposed Project to Stuyvesant High School, the potential for construction period noise impacts on the school will be a fully analyzed in the DEIS.

Comment 6-38: The project study area proposed in the DSOW is limited to 400 feet around the resiliency structures and therefore does not include most of Piers 25 and 26 located in Hudson River Park (see, e.g., Draft Scope Figures 3, 24 and 28). Piers 25 and 26 are popular public open spaces, hosting children's and environmental programming, concessions, boating activities, sports, and other uses. The Trust anticipates that some construction and operational impacts that could affect such uses would occur, and thus requests that those two piers become part of the study area examined in the DEIS. The Trust also notes that the dock, sailing school and moorings known as the "Pier 25 Marina" occupy most of the water area between BPCA's North Esplanade (Reach 2) and Pier 25. Both construction and operation of the Proposed Project could impact these uses. (Puri_025 (Puri_025)

Response 6-38: Consistent with the guidance of the *CEQR Technical Manual*, the Proposed Project's Study Area is 400 feet around the project elements and the detailed construction air quality and noise analysis locations will include sensitive receptor locations to the south of Piers 25 and 26 closer to the work activities at locations where the potential construction air quality and noise impacts are expected to be of the highest magnitude. The analysis area for assessing operational open space impacts is ½ mile, which includes Piers 25 and 26. Visual impacts during the operational phase will also be addressed.

Comment 6-39: What mitigation is planned to compensate residents and businesses for the significant impact on our respective quality of life during the construction period? And if the response is none, how do you justify that? (Cuccia_029)

Response 6-39: The DEIS will include a comprehensive description of the Proposed Project's construction phases, as well as a comprehensive analysis of potential significant adverse construction impacts; efforts to be undertaken to eliminate, avoid or minimize those impacts will also be presented in the Mitigation chapter.

Comment 6-40: The timing and phasing of this project should be thoughtful about removing green spaces during warm weather months when kids most rely on this space. Instead, the plans should thoughtfully consider doing the most impactful areas where kids play during winter months. (BPCNA_026)

Response 6-40: The DEIS will include a description of the Proposed Project's construction timing and phasing and the related impacts on all open spaces and will also identify mitigation measures, as needed.

Comment 6-41: Similarly, construction around school buildings should be timed during the summer to minimize disruption to the academic year. The Authority has said that "there may be modest, scattered, and short -term closures of public spaces to accommodate necessary field investigations." The timing of these closures should be discussed with the community well in advance. This must be a two -way dialog where the community and Authority collectively agree on the best timing so as to minimize the adverse impacts specifically on children. (BPCNA_026)

Response 6-41: Construction phasing and the related impacts will be based on the proposed construction implementation and the impact assessment will examine the potential construction period impacts on community facilities such as Stuyvesant High School and other sensitive uses along the project corridor.

6.11.2 Construction - Open Space

Comment 6-42: Open Space will obviously be drastically reduced in the study area and the loss of community events and activations need to be studied. (CB1_024)

Reach 3 – Rockefeller Park: The following areas may be categorized as a construction-related concern: loss of the children's playground during certain phases of the project work. (CB1_024)

Response 6-42: Project phasing and the resulting impacts on open space during construction will be assessed in the DEIS, including impacts on the children's playground in Reach 3. As described in the DSOW, the DEIS will include a detailed analysis to examine the potential for the Proposed Project to impact open space directly or indirectly in the Study Area throughout construction by reducing or changing open space.

The open space analysis will project the extent and timing of open space closure during construction and consider the construction-related noise and air pollutant emissions on the quality of the open space resources.

Comment 6-43: The Trust conducts environmental education and programming on Pier 26 and that location should be part of the construction impact analysis as well. A new children's play area is now undergoing construction in the upland area near Pier 26 and that play area, which will open in 2023, would almost certainly be impacted by construction of the Proposed Project (in particular, the portion of the Proposed Project referred to as "Reach 1"). Additionally, the Trust is starting the design and engagement process for a new Estuarium in the upland area between Piers 25 and 26 opposite North Moore Street. While there is no fixed date, construction could start as soon as two years from now. Accordingly, the DEIS should consider the Proposed Project's construction impacts on this area, including with respect to identifying any new limits on the Trust's ability to stage construction of the Estuarium. The potential for cumulative impacts should also be considered in the event the BPCA's Proposed Project and the Estuarium were to undergo construction around the same time. (Puri_025)

Response 6-43: The DEIS will include an analysis of potential impacts of the Proposed Project on Piers 25 and 26 and will include an analysis of potential cumulative effects of simultaneous construction of the Estuarium.

6.11.3 Construction-Transportation

Comment 6-44: If the consultant is proposing any detours during the construction condition, please have the consultant provide proposed detour routes and times of day of the expected detour and specify proposed closures for lanes, sidewalks, crosswalks, etc. to include the length of time they will be in place and the time of day they will be active. The NYCDOT's Office of Construction Mitigation and Coordination (OCMC) may require additional traffic data collection depending on the proposed plan. (Ahmed_023)

Response 6-44: The DEIS will conduct detailed transportation analyses per *CEQR Technical Manual* guidance on transportation systems during construction. This will include road closures and impacts during peak periods of activity. Pedestrian elements such as sidewalks, street corners, and crosswalks that may be affected by narrowed widths or construction worker trip making activities will be also evaluated.

Comment 6-45: At all locations and in all times during the construction; before, during, and after, everything needs to be ADA accessible. And I'm not sure I read the scoping document correctly, but I thought there was some question about some ADA

access in places, I'm going to assume I read it wrong, but I just want to make it clear that everything needs to be ADA accessible. (Cuccia_029)

Response 6-45: It is expected that all pedestrian detour and diversion routes will need to be ADA compliant.

Comment 6-46: OCMC may only allow construction work along Route 9A during the overnight hours from the late evening to early morning. Currently, the construction analysis anticipates workers to arrive during normal working hours; however, the mode share currently proposed is likely not appropriate for overnight work as the majority of the construction workers will arrive via auto instead of public transport due to decreased frequency available at nighttime. If nightwork is proposed, please have the consultant reassess their proposed mode split and study intersection selection. (Ahmed_023)

Response 6-46: The DEIS will conduct detailed transportation analyses per *CEQR Technical Manual* guidance on transportation systems during construction. It will use r travel patterns of construction workers and temporal distributions to evaluate the potential for significant adverse effects during peak periods.

Comment 6-47: Truck trips related to the movement of building materials and demolished debris will create public safety issues, make impacts on sound and air quality, and disrupt established traffic patterns for commuters and commercial deliveries. (CB1_024)

Response 6-47: The DEIS will conduct detailed transportation analyses per *CEQR Technical Manual* guidance on transportation systems during construction and will examine truck routes and travel patterns of construction workers.

Comment 6-48: Workers for the project will largely need to commute into Battery Park City and the impacts from their transportation choices must be studied. (CB1_024)

Response 6-48: The DEIS will conduct detailed transportation analyses per *CEQR Technical Manual* guidance on transportation systems including construction worker mode choice and travel patterns during construction arrival and departure peak periods.

6.11.4 Construction-Air Quality

Comment 6-49: What about the other neighboring buildings? What about the damage due to noise and air pollution incurred by the residents? (Bega_003)

Response 6-49: As described in the DSOW and this FSOW, the DEIS will include detailed construction air quality and noise analyses to assess the potential for the

Proposed Project's construction activities to result in air quality and noise impacts on nearby sensitive receptor locations.

Comment 6-50: An increase in exposure to fine particulate matter, nitrogen dioxide, and nitric oxide – pollutants that exacerbate heart and respiratory disease – if the dock is moved closer to Riverhouse and the children's playground is also of great concern to our residents and needs to be evaluated. (Riverhouse_022)

Response 6-50: The DEIS will include a detailed analysis of the potential construction period impacts of the Proposed Project due to air emissions. As stated above it is not proposed to relocate the ferry terminal.

Comment 6-51: The DEIS should also assess whether dust or other pollutants from construction equipment has the potential to impact uses on Pier 25 temporarily. The noise and the pollution issues that will ensue from this project are highly concerning for me. (Tekervan_037). On Pier 25, noise and other disturbances from BPCA construction may temporarily affect uses such as the children's playground, mini golf concession, beach volleyball, and the historic vessel/restaurant concession Grand Banks depending on the methods of construction. Thus, Pier 25 should be included as a construction noise measurement location consistent with other locations where BPCA intends to take noise measurements as shown in the Draft Scope at Figure 28. Puri_025)

Response 6-51: The DEIS will include a detailed analysis of the potential construction period impacts of the Proposed Project due to air and noise emissions with a focus on the receptors nearest to the emission sources and areas of maximum impacts including Piers 25 and 26 (i.e., along and adjacent to the project construction corridor). As described in the DSOW, the potential for construction of the Proposed Project to result in noise or vibration impacts will be studied in detail, including measurements of existing noise levels, predictions of noise and vibration levels resulting from construction of the Proposed Project, and evaluation of predicted noise and vibration levels according to *CEQR Technical Manual* impact criteria. Also as described in the DSOW, measured existing noise levels may be applied (potentially with adjustments as appropriate) to provide additional coverage of noise-sensitive land uses that may experience construction noise, so the preliminary proposed noise survey locations shown in Figure 28 of the Draft Scope do not represent the only locations where potential construction noise impacts will be studied.

6.11.5 Construction Noise and Vibration

Comment 6-52: Section 3B (vii): Noise and Pollution. Similar to the vibrations, there needs to be details provided on the pollution and noise pollution expected across scenarios. Part of the meaningful consideration to scenarios must include analysis on the

noise and pollution. Of specific focus are reaches where they rebuild or expand the platform. There are a number of schools and childcare facilities close to the shoreline (Stuyvesant High School, PS89, IS289, Battery Park Montessori, etc.) and these stakeholders should be engaged early and often. True alternatives by reach must be developed with meaningful consideration and explanation given to the impact on noises and pollution. Each alternative should be rated against one another and the community must be meaningfully engaged to understand the trade-offs and provide meaningful, informed feedback. (BPCNA_026)

Response 6-52: As described in the DSOW, the potential for project construction to result in noise or vibration impacts will be studied in detail. This analysis will be based on monitoring and calculation of existing noise levels, predictions of noise and vibration levels resulting from construction of the Proposed Project, and evaluation of predicted noise and vibration levels according to *CEQR Technical Manual* impact criteria.

6.11.6 Ferry Relocation Analysis

Comment 6-53: Will the ferry environmental impact be added back to the final environmental impact between now and December? (Propp_041) The methodology used to measure the ferry noise needs to align with how the community is being disrupted in order to measure the true environmental impact. The impact of noise on residents in Riverhouse requires that data be collected inside apartments that directly face the dock without any obstructions to buffer the noise. Measuring the vibration, as well as the volume, inside apartments is also needed since vibrations are the most disruptive to the residents' quality of life. These measurements should include, but not be limited to rush hour (morning and night) since there is a significant difference between having four vessels at the dock with four more waiting, versus having only one at the dock and none waiting. The ferry noise is at its worst when a ferry engine is ramped up during docking and departing. We found the NY Waterway's vessels to be the particularly troublesome. (Riverhouse_022)

It would be appreciated if the Port Authority of New York and New Jersey, the owners of the BPC-Brookfield ferry dock, would require and enforce rules so that only quieter and less-polluting vessels are allowed to use their BPC dock, given its close proximity to residences and exercise areas where pollution can be the most harmful to health. However, given that some of the worst offending vessels continue to use the dock, the environmental impact study should use data from the worst noise and air pollution offenders during the past five years. (Riverhouse_022)

Reach 4 Belvedere Plaza: The following areas may be categorized as a construction-related concern—the impacts on pedestrian circulation and passive

recreation on the esplanade if the ferry terminal is moved northwards or southwards from the current location with regards to noise, traffic, vibration, air quality. (CB1_024)

Has any study been done on how the foundation of the 2 River Terrace building might be affected due to the reconstruction of the ferry terminal and the areas around it? (Bega_003)

Noise from the ferry pier will create new quality of life impacts for the residents of the nearby buildings if it is shifted north or south from its current location. (CB1_024)

Circulation patterns from both the ferry commuters and those using what is left of the waterfront open spaces will be in conflict if the ferry pier is shifted north or south from its current location. (CB1_024)

The proposed plan to move the Brookfield Place Ferry Terminal north of its current location would have significant negative impact on the quality of life for the residents of, and the visitors to, north Battery Park City; even if it is temporary. Two years, per the proposed NW Resiliency Plan, is too long to be considered temporary. There is concern that two years is long enough for the "temporary" location to become the "new" location. (Riverhouse_022)

The scope needs to address all of the environmental issues (noise, air and water pollution) that are known to be related to the ferry dock. The concern is that moving the dock north, so that it is closer to our building and the playground where our children play, will worsen the current harm to our residents. While noise from the ferries most directly affects the residents on Riverhouse's west side, residents on all floors, not just lower floors, are disturbed and those residents should be considered. (Riverhouse_022)

As it relates to building and rebuilding platforms as well as other items like moving the ferry terminal, even if temporarily, the DEIS must take a hard look at the vibrations associated with this component and each alternative as a whole. It is an aspect that cannot be ignored. True alternatives by reach must be developed with meaningful consideration and explanation given to the impact on vibrations. Each alternative should be rated against one another and the community must be meaningfully engaged to understand the trade-offs and provide meaningful, informed feedback. (BPCNA_026)

The proposed move north would place the ferry dock even closer to Riverhouse and other residential buildings, as well as the children's playground and the usually serene area around the duck pond (see the picture below). For instance, if the dock is moved north, Riverhouse residents will have to deal with noise from the ferries that use the slips on the north and the south sides. Currently,

vibrations are only significant and noise is the most disruptive from ferries using the slips on the north side of the dock. Hence, Riverhouse residents can detect a difference based on this reasonably small distance between the north and the south slips and any blockage produced by the terminal building. Therefore, our objections to moving the dock north, so that the south slips would be even closer than the north slips currently are and the north slips would remain due west of our building, is a realistic worry. Noise and air pollution could effectively double for our residents, as well as in the playground, if the terminal is moved north. (Riverhouse_022)

We're discussing the ferry terminal that's already an existing issue that's so close to a residential building, that has sometimes the windows shake, that has some pollution in the parks. So the fact that that's getting screened out is just sort of hard to understand and comprehend, especially if you're going move that ferry terminal which could be potentially years. (Cushman_030)

Even as much as the ferry terminals, where we know that there's an environmental impact because it is in the final impact statement that the Port Authority put out, but the negative aspects on the children, and the animals, and the residents, moving it further north only enhances that. To have that taken out of the consideration here in terms of noise and pollution, it's really -- there's just nothing you can say that makes that right. (Meltzer_034) Community Board 1 urges the Port Authority of New York and New Jersey, the BPCA and Brookfield Properties to come to an agreement to move the ferry terminal south during construction, which appears to be the preferred temporary location for Battery Park City residents. (CB1_024)

Response 6-53: Since the release of the October 2022 DSOW and based on community and agency input and a review of the design options in 2023 and 2024, it has been determined that the ferry terminal will not be temporarily or permanently relocated a part of the Proposed Project. A description of how the work will be performed in this reach will be included in the DEIS and the baseline noise monitoring for the DEIS will address the incremental and combined noise impacts during construction.

6.12 Alternatives

Comment 6-54: You did not consider alternatives that are viable to protect the parks. These are award-winning parks; both Rockefeller and Wagner, and they need to be protected, right? (McGowan_046)

Response 6-54: Since the release of the October 2022 DSOW and based on community input and coordination of design options through 2023 and 2024, the Proposed Project has been designed to minimize the modifications of existing open spaces to what is

necessary to integrate the proposed flood protection with a few exceptions that integrate community input to the proposed design. The proposed designs and impacts on Rockefeller Park will be described in the DEIS (Wagner Park is being rebuilt as part of the South Battery Park Coastal Resiliency Project).

Comment 6-55: The DEIS should include a study of alternatives that add blue- green infrastructure and prioritizes preserving mature trees and the neighborhood character. The public in the December 7, 2022 meeting clearly asked for nature-based approaches to be prioritized and it is unclear why wetlands can be added in Reach 7 and not here. Adding nature -based approaches to slow and absorb storm surge could also minimize the impacts of Reach 1 so they should be looked at together. (BPCNA_026)

Response 6-55: As stated above, nature-based solutions to coastal storm surge are a resiliency approach that may be appropriate in other settings, but such systems require more land area than is available for this project and would be inconsistent with other design approaches for Lower Manhattan. The DEIS will include a description of the green infrastructure measures that are proposed to provide stormwater management in the project area. Creation of wetlands is not included in the design for Reach 7 or for any other locations in the project area.

7 Comments of Support and Opposition to the Project

Comment 7-1: I am supportive of this project. We need to be protected and we need to protect our future property values. (Bishop_006)

I'm generally very supportive of this project, as the neighborhood needs to be protected from future storms/floods. In general, I prefer the inboard alignment. I don't understand why the ferry terminal needs to be moved in order for this project to proceed, but it seems like a waste of money to move it twice. Those concerned about noise and/or pollution should think about how much of a difference 50 ft will make—seems like a lot of work/money for not much impact. (Gundersen_007)

We at Riverhouse support resiliency projects that will protect our property and neighborhood, but urge the Battery Park City Authority (BPCA) and the North/ West Battery Park City Resiliency Project (NWBPCR) team to emphasize community and resident well-being and way of life during, as well as before and after, the project. (Riverhouse_022)

I want to say a few things. First of all, I no longer live in Battery Park City, but I did live there for almost 13 years, and I agree with everybody who is speaking out of love for Battery Park City. It's an extraordinary and very beautiful place, and very special place. Having said that, I think it would be foolish and wrong and short-

sighted to ignore the risks that we are living under right now, it's a real risk. And I'm not just talking about the storm surges and sea level rise. We can see that the climate change is closing, glaciers have been melting in Antarctica and Greenland. We can see the calamities that are being caused like in Florida and other parts of the United States. Climate change is real, we are not going to escape it even if we'd like to. The inevitable result of this is that we are going to have to change drastically than to lose some of the things that we love. (Loeb Kreuzer_042)

I was living in Battery Park City when Sandy came ashore. I want to say one thing about it, it came in through the east. Battery Park City is indeed higher—was built higher to avert such a calamity—but because it came in from the east and not from the west, Battery Park City cannot count on that in the future. We can count on storms and other calamities happening with great regularity, and we have to do something to protect ourselves, do the best that we can, and it is a very, very complex drawback. (Loeb Kreuzer_042)

The Trust appreciates that BPCA has previously met with the Trust to describe the proposed North/West Battery Park City Resiliency Project (the "Proposed Project"), and that BPCA has committed to continue consulting with us as planning for the Proposed Project progresses. The Trust is likewise committed to participating actively in your planning process to ensure that our respective Boards of Directors and the public have the benefit of coordinated, thoughtful planning and analysis to support decision-making by both agencies. We understand that making waterfront communities more resilient will involve considering and balancing various types of public benefits and trade-offs. (Puri_025)

Response 7-1: Comments noted.

Comment 7-2: I do not believe in what you are doing. Cutting down trees? Why can't you Build the wall before the trees. The trees are helping stop pollution. I wish you lived here; you would understand how we feel. Use your money! Use our money things we want to happen. Don't use it for this. Kids care too. (Noa_014)

So maybe it's just having -- I mean, I've -- we've talked about this is jest, but maybe it's eliminate sand, you know someplace, you know, not right now, or ice skating or whatever, it's going to be hot cocoa. (Chapman_032)

I'm against what you're doing. I would do nothing. My sense of the meeting, my sense of the community is that nobody wants anything, we'll let it ride, we'll take our chances, we'll gamble with the future. (Heilweil_035)

My question is, under what circumstances will you say "okay, everybody. You don't want it, you don't get it. Because now it's on you, we're out of here"? When do you walk away and let us make the decision? (Heilweil_035)

When you're talking about risk management, if it goes bad and I lose everything, I lose $600,000. That may be pocket change for other people, that's a lot of money for me. I'm willing to put $600,000 on the line. I think everyone else is already also tired and on the risk. I want to manage my own risk, by what authority do you manage my risk for me? I'll repeat that: By what authority do you manage my risk for me? And to answer my own question, you have no authority to manage my risk. (Heilweil_035)

You would never do this in New York City to any other; Prospect Park, to Central Park. You treat these like they're yours, they're ours, right? They are the City's, they are the citizens'. And it's our money, and it's our parks that need to be defended. (McGowan_046)

We've worked diligently for months to get the Battery Park City Authority and our elected officials to listen to alternative plans and designs and to listen to the voices of thousands of people in lower Manhattan and you've ignored us. I want that on the record. There is a viable alternative and we don't want to see that and have the same ignorance be applied to the north, right? (McGowan_046)

This is really, really, irresponsible stewardship of our neighborhood and our money, and our environment. (Bega_038)

EIS is BPCA's responsibility as lead agency, not ours as the community. Absence is bad faith negotiation, disqualifies BPCA as lead agency, and nullifies the entire project. (Heilweil_004)

I have 2 small children who play in BPC every day. I care about their health & Safety. This process is happening too fast. I will make it my life’s work to protest this if you don't pump the breaks and give the community more time to understand & engage. (Propp_015)

This project does not have the public and neighbors of BPC in mind and I am positive there is a better way to combat flooding. (Juliao_012)

Again, to have not done so, via its OWN expertise, is fatal evasion of lawfulness; thus, these drafts are burden-shifting, ergo nullities, adding obstructionist burden to AGENCY mandated 'hard look'. (Heilweil_004)

Why are we destroying Wagner Park and preserving Rockefeller Park? (Propp_041)

Please don't tear down my parks and playgrounds, I love them and they're very fun. (Aronesty_045)

We have the high ground in this dispute. Not merely metaphor. BPCA can't copy numbers from A to B after how many years, twelve now since the one-off storm

surge, and want $1B, when you can't copy numbers? and how many millions of dollars in prep? (Heilweil_004)

I come as a concerned citizen, but I'll admit, rather uniformed. I don't know a lot of the details, I learned a lot about the scope today, and was—I am highly concerned. (Tekervan_037)

Include the community in an Alternate Design plan for Wagner and Battery Park Resiliency! (Ferme_011)

I don't think we can spend billions of dollars and time and, you know, destruction and heavy equipment and the dust, and everything that goes with it for plans that are not well thought out. (Yasui_043)

Response 7-2: Comments noted.