

Gateway Development Commission

Hudson Tunnel Project Section 4(f) Coordination

Proposed Changes to Project
Work in Hudson River and
Hudson River Park

June 13, 2024

For Indicative, Illustrative, Contemplative Purposes Only



Agenda

- Project Overview
 - Need for the Project
- Environmental Review & Section 4(f) Process
 - U.S. DOT Act Section 4(f)
 - Environmental Impact Statement
 - Proposed Project Modifications
 - Section 4(f) Properties
- Proposed Project Modifications
- Currently Contemplated Project Activities in Hudson River Park
 - Waterside
 - Landside
- National Historic Preservation Act Section 106
- Section 4(f) *De Minimis* Impact Determination
- Safety Measures & Best Management Practices
 - Navigating Around In-Water Construction
 - Safety Protections
 - Best Management Practices
- Stakeholder Outreach & Public Engagement Opportunities
 - Ongoing Coordination
 - Section 4(f)-Related Comments

Checkpoint 1: **Setting the Stage**

We have completed major federal environmental reviews; the project and construction plan were approved in 2021

As the project moves forward, we will continue to propose adjustments to this plan

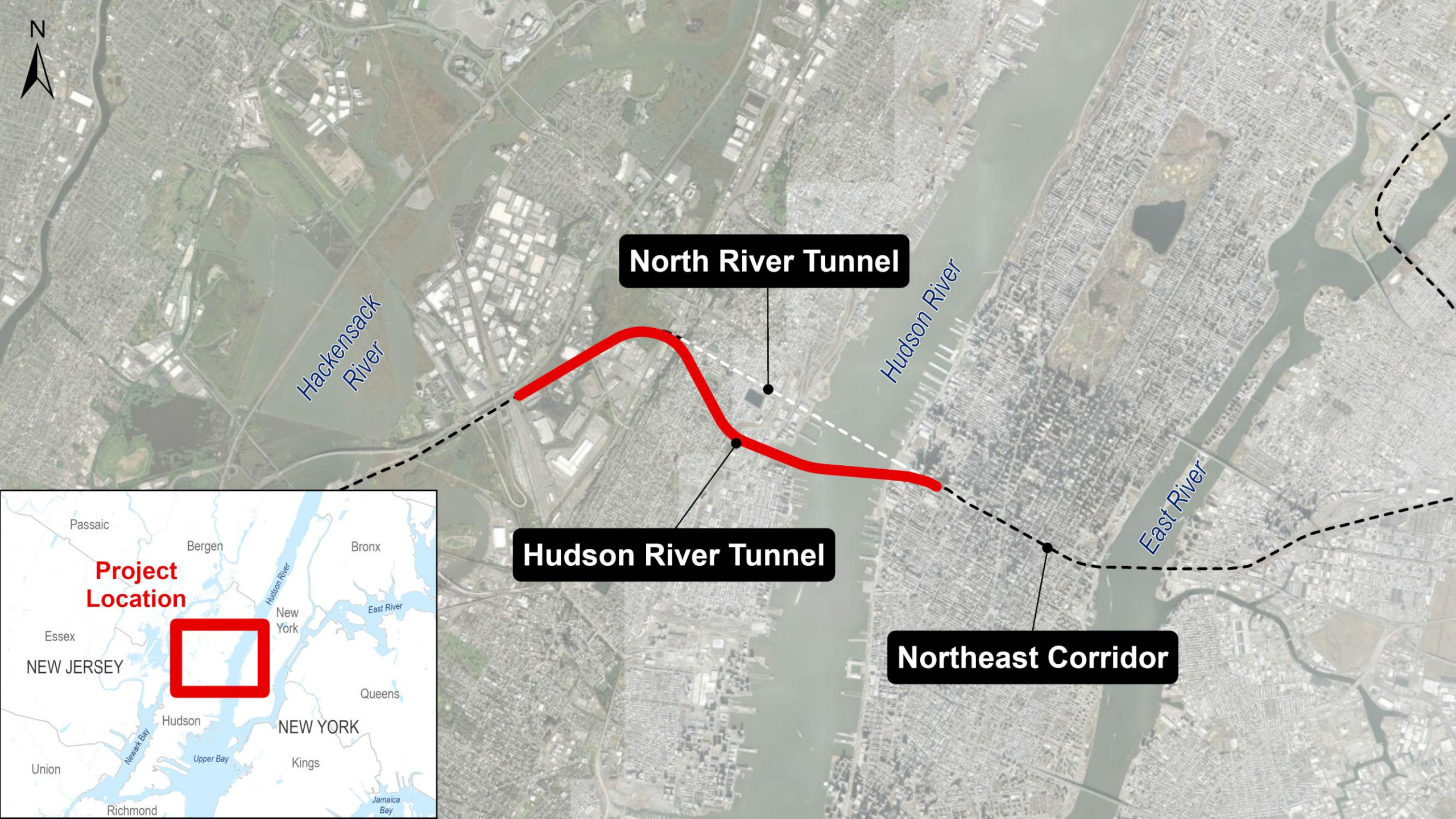
We are proposing two key changes: pile removal in the Hudson River and temporarily altered bike/walkways in Hudson River Park

Project Overview



NEED FOR THE PROJECT

- Existing Amtrak / NJ TRANSIT rail tunnel beneath Hudson River must be closed for full reconstruction to repair damage from Superstorm Sandy
- Need for repair is urgent: storm damage continues to degrade tunnel
- Existing train service (450 trains per day) must be maintained
- New tunnel will provide train capacity during reconstruction of existing tunnel and ongoing stability and redundancy once both tunnels are operating



North River Tunnel

Hudson River Tunnel

Northeast Corridor



Project Location



Hudson Tunnel Project

Contract Packaging Overview Map

-  Hudson River Ground Stabilization
-  HYCC-1 & HYCC-2 (Completed)
-  Hudson Yards Concrete Casing (HYCC-3)
-  Palisades Tunnel
-  Manhattan Tunnel
-  Hudson River Tunnel
-  Fit Out and Systems
-  NJ Surface Alignment
-  Tonnelle Avenue Overhead Bridge

Tonnelle Avenue Bridge & Utility Relocation

Tunnel Portal

Northeast Corridor

Tonnelle Ave
North Bergen

North River Tunnel

Palisades Tunnel

Union City

Manhattan Tunnel

Frank R. Lautenberg Station at Secaucus

Allied Interlocking

Hudson County Shaft





Weehawken

Hudson River Tunnel

Hoboken

HYCC-3

Manhattan Bulkhead
12th Avenue Shaft
High Line
Hudson Yards Western Rail Yard
Hudson Yards Eastern Rail Yard
10th Avenue Tunnel
10th Avenue
W 30th Street
W 29th Street
12th Avenue Fan Plant
Temporary Shaft

-  Hudson River Tunnel
-  Manhattan Tunnel
-  HYCC-3
-  HYCC-1 & HYCC-2 (Completed)

Hudson River Ground Stabilization

12th Avenue Shaft

Penn Station A-Yard

450 West 33rd Street

Penn Station A-Yard

Moynihan Station

Penn Station

12th Ave

9th Ave

EXAMPLE TUNNEL BORING MACHINE



Example Tunnel Boring Machine representative of what would be used to mine the Hudson River Tunnel

Environmental Review & Section 4(f) Process



ENVIRONMENTAL REVIEW

- National Environmental Policy Act (NEPA): Before providing funds or issuing a permit, Federal agencies must consider the environmental effects of projects; this was achieved by preparing an Environmental Impact Statement (EIS) for the Hudson Tunnel Project (issued together with the Record of Decision (ROD) in May 2021)
- The Federal Railroad Administration (FRA) was the lead Federal agency for the Project's environmental review, in accordance with NEPA
- The Federal Transit Administration (FTA) was a Cooperating Agency for the Final EIS (FEIS)/ROD and issued the ROD jointly with FRA
- The GDC is the NEPA Project Sponsor for the Hudson Tunnel Project

U.S. DEPARTMENT OF TRANSPORTATION ACT OF 1966 - SECTION 4(f)

- Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966, which established the requirement to consider alternatives which would avoid the use of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development
- Section 4(f) applies to projects that receive funding from or require approval by an agency of the U.S. Department of Transportation
- Before approving a project that “uses” Section 4(f) property, FTA/FRA must either (1) determine that the impacts are *de minimis*, or (2) undertake a Section 4(f) Evaluation to determine whether use of the property can be avoided
- Section 4(f) properties include publicly owned public parks, recreation areas, and wildlife or waterfowl refuges, or any publicly or privately owned historic site listed or eligible for listing on the National Register of Historic Places

Proposed Project Modifications



PROPOSED PROJECT MODIFICATIONS

- Following the issuance of the NEPA FEIS/ROD, potential changes to the project have been contemplated as design is advanced and construction methods are refined
- GDC proposes modifications to the project particular to the Hudson River and Manhattan waterfront portions of the Project Area that had not been contemplated as part of the previously completed NEPA FEIS/ROD or Section 4(f) Evaluation
- These changes to the project warrant reconsideration of potential uses of Section 4(f) properties

SECTION 4(f) PROPERTIES AFFECTED BY THE PROJECT – HUDSON RIVER BULKHEAD

- Extends from the Battery (i.e., an approximately 25-acre public park located at the southern tip of Manhattan) to West 59th Street
- Constructed between 1871 and 1936 by the New York City Department of Docks
- Eligible for listing on the National Register of Historic Places

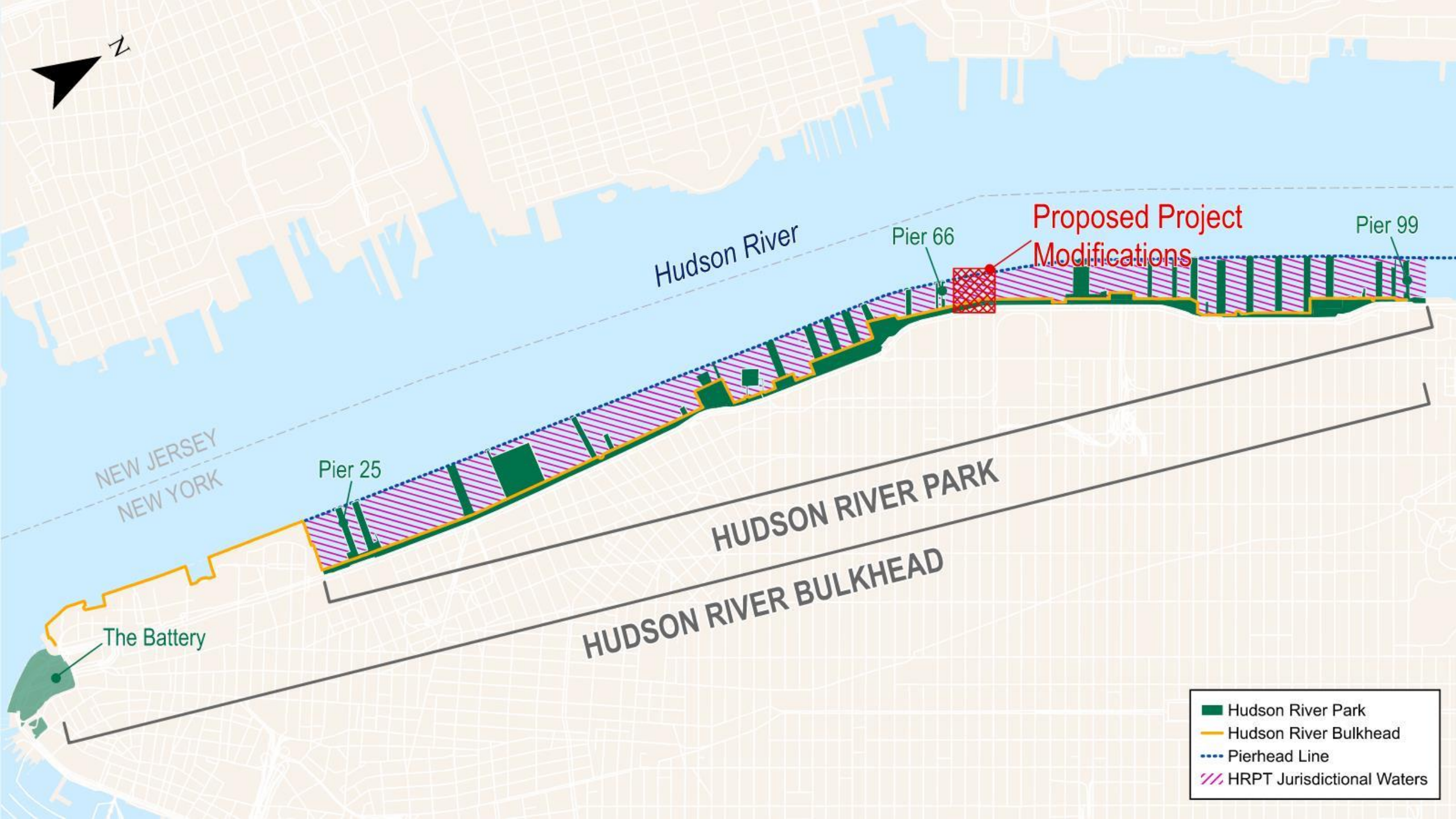


View north of the Hudson River Bulkhead from the foot of West 29th Street

SECTION 4(f) PROPERTIES AFFECTED BY THE PROJECT – HUDSON RIVER PARK

- 550-acre public park maintained by the Hudson River Park Trust (HRPT) that runs along 4+ miles of western Manhattan waterfront
 - Inclusive of the Hudson River Park Estuarine Sanctuary
- Hudson River Park Facilities in the vicinity of Project construction activities:
 - Pier 66 boathouse: operated by Hudson River Community Sailing and New York Kayak Polo
 - West 30th Street Heliport: operated by Air Pegasus





Hudson River

Pier 66

Proposed Project Modifications

Pier 99





NEW JERSEY
NEW YORK

Pier 25

HUDSON RIVER PARK

HUDSON RIVER BULKHEAD

The Battery

-  Hudson River Park
-  Hudson River Bulkhead
-  Pierhead Line
-  HRPT Jurisdictional Waters

Currently Contemplated Project Activities in Hudson River Park





WATERSIDE

LANDSIDE

West 30th Street Heliport

HRP Construction Staging Area

Hudson River Bulkhead

Hudson River

Hudson River Park

High Line

40' Navigable Waters Pierhead Line

FORMER PIER 69

FORMER PIER 68

PIER 66

TWELFTH AVE

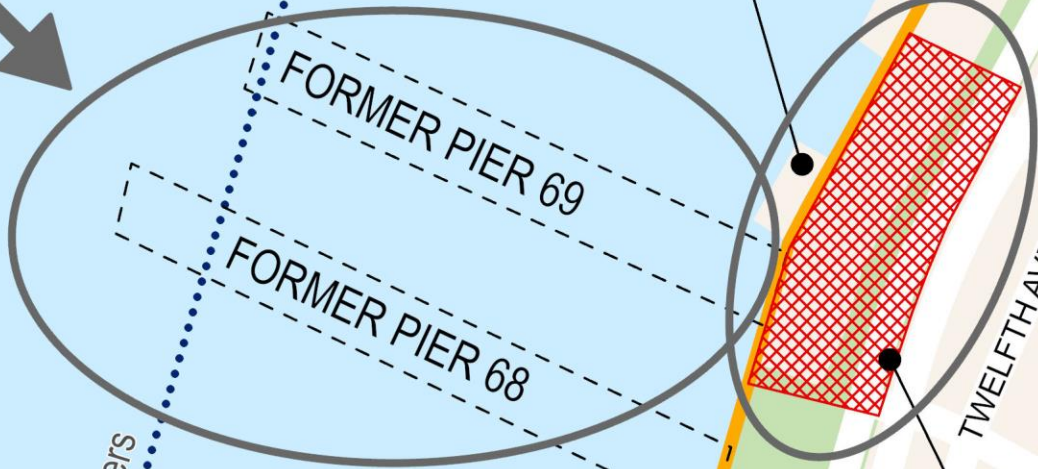
W 30 ST

W 29 ST

W 28 ST

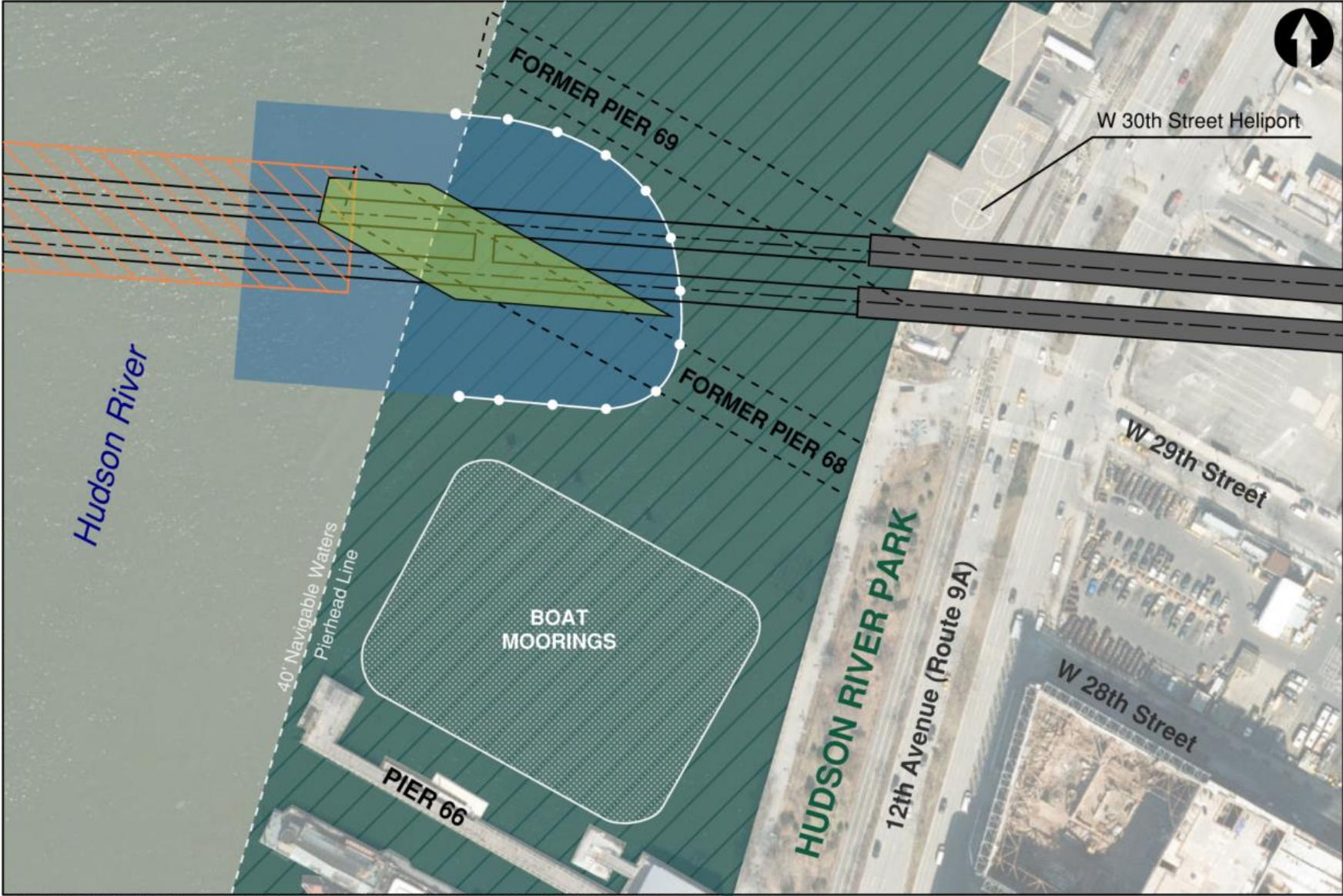
W 27 ST

ELEVENTH AVE



PROPOSED PROJECT ACTIVITIES IN HUDSON RIVER PARK – WATERSIDE

- Removal of in-water obstructions including wooden timber piles located within the Hudson River associated with former Manhattan Pier 68 and Pier 69
 - Includes the removal of in-water obstructions **west of the pierhead line in the low-cover area of the Hudson River**, as well as **between the pierhead line and the Hudson River Bulkhead** (under jurisdiction of HRPT)
- Activities conducted from barges stationed in defined work areas within the river
 - Extraction techniques: vibratory hammer, direct pull, clamshell or mechanical bucket, and, if needed, pile cutting
 - Excavation or vacuum suction dredging to access obstructions located below the riverbed mudline
- In-water construction activities would be regulated by U.S. Army Corps of Engineers (USACE), U.S. Coast Guard, National Oceanic and Atmospheric Administration (NOAA), and the New York State Department of Environmental Conservation (NYSDEC)



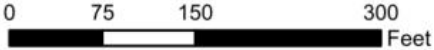
FORMER PIER 68

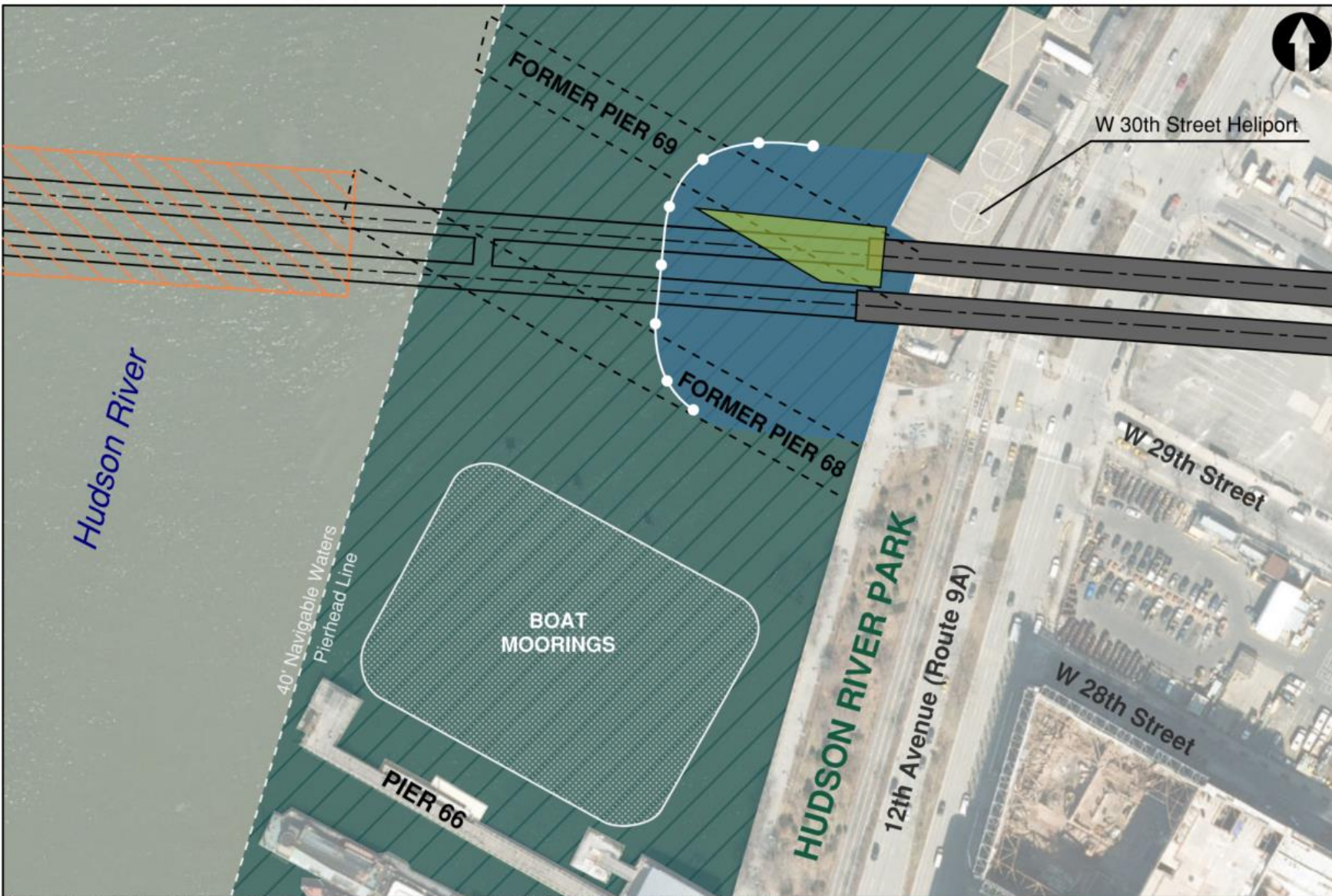
CONCEPTUAL IN-WATER CONSTRUCTION STAGING PLAN

Conceptual staging plan subject to further refinement

Source: ESRI, Maxar, Earthstar Geographics; Gateway Trans-Hudson Partnership (GTHP), 2024; Gateway Development Commission, 2024.

Hudson River Ground Stabilization Area (HRGS)	Buoy Marker	*The obstruction removal area for Pier 68 is estimated to be approximately 0.55 acres.
Active Work Area	Hudson Tunnel	
Obstruction Removal Area*	Hudson Tunnel - Landside Mined Tunnel	
Former Pier Outline	HRPT Jurisdictional Waters	



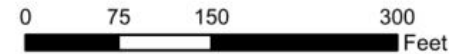


FORMER PIER 69 CONCEPTUAL IN- WATER CONSTRUCTION STAGING PLAN

*Conceptual staging
plan subject to further
refinement*

Source: ESRI, Maxar, Earthstar Geographics; Gateway Trans-Hudson Partnership (GTHP), 2024; Gateway Development Commission, 2024.

Hudson River Ground Stabilization Area (HRGS)	Buoy Marker	<p><i>*The obstruction removal area for Pier 69 is estimated to be approximately 0.20 acres.</i></p>
Active Work Area	Hudson Tunnel	
Obstruction Removal Area*	Hudson Tunnel - Landside Mined Tunnel	
Former Pier Outline	HRPT Jurisdictional Waters	



PROPOSED PROJECT ACTIVITIES IN HUDSON RIVER PARK – WATERSIDE SCHEDULE

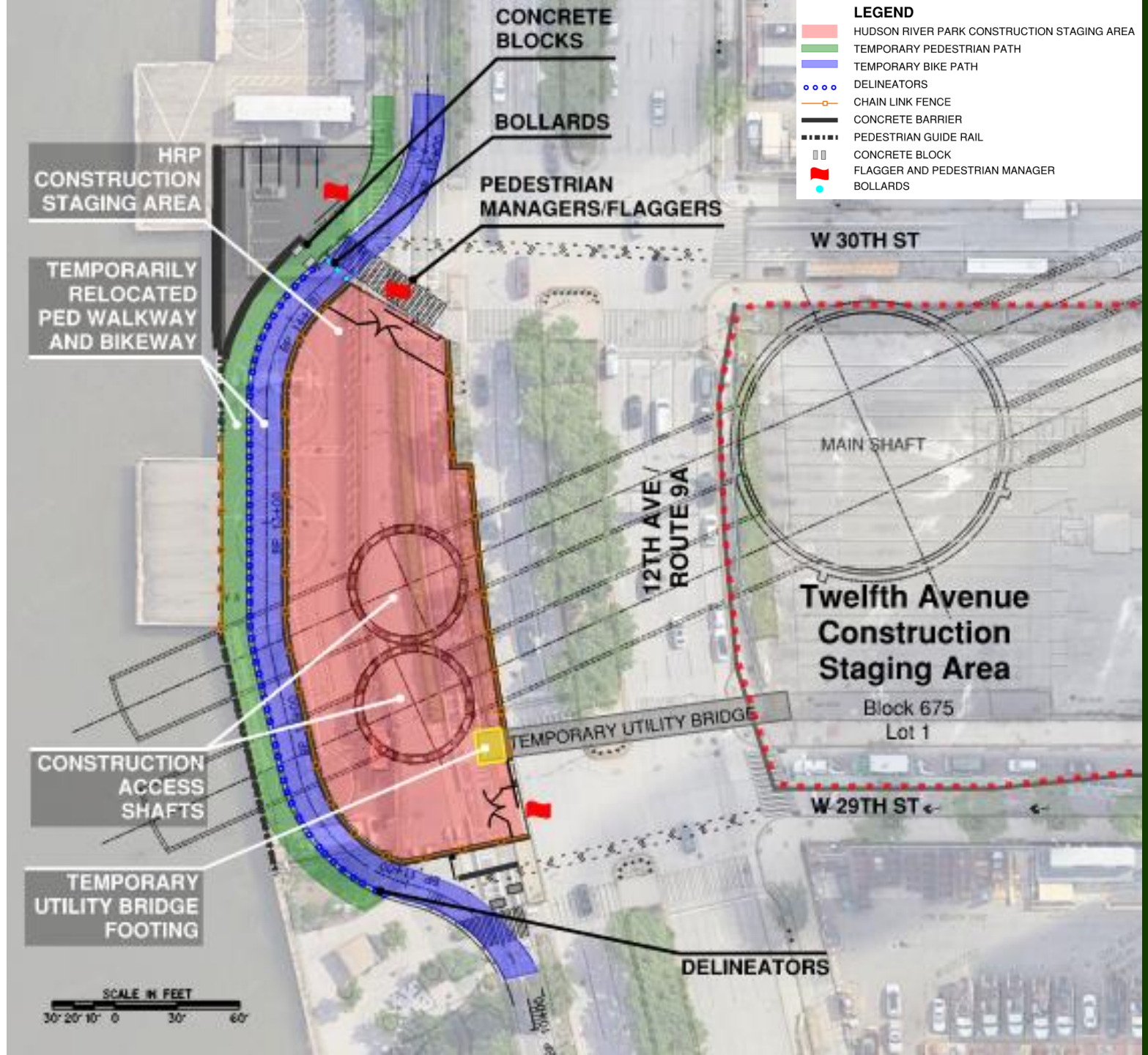
- Work activities would not be performed between January 21 and June 30, in accordance with the seasonal work restriction set forth in the FEIS/ROD.
- As currently contemplated, obstruction removal in the Hudson River would occur in two six-months-long “seasons”
 - Season 1 – July 1, 2025, to January 20, 2026
 - Season 2 – July 1, 2026, to January 20, 2027
- Obstructions would be removed on weekdays 7AM – 11PM; no weekend or overnight obstruction removal work is currently anticipated

PROPOSED PROJECT ACTIVITIES IN HUDSON RIVER PARK – LANDSIDE

- Construction staging area within the southern portion of the West 30th Street Heliport within Hudson River Park; activities would include:
 - Temporary impact to two of six helipads and other components of the West 30th Street Heliport (no change from EIS/ROD)
 - Excavation of two approximately 50'-diameter circular construction access shafts
 - Construction staging area for equipment storage and vehicle circulation
 - Below ground trenching and construction of temporary utility bridge to carry utilities across Twelfth Avenue to connect construction staging areas
 - Temporary relocation of the pedestrian walkway and bikeway west toward the river within Hudson River Park between West 29th Street and West 30th Street (currently located east of Hudson River Park, adjacent to Twelfth Avenue)

CONCEPTUAL CONSTRUCTION LAYOUT IN HUDSON RIVER PARK

Subject to agency and other coordination



EXAMPLE TEMPORARY UTILITY BRIDGE



Typical prefabricated utility bridge located across Twelfth Avenue/Route 9A between Carlisle Street and Rector Street

PROPOSED PROJECT ACTIVITIES IN HUDSON RIVER PARK – LANDSIDE SCHEDULE

- Construction activities in the Landside portion of Hudson River Park are anticipated to start in January 2025 and end in December 2027
- Construction would generally be performed on weekdays 7AM – 11PM
 - Sequential Excavation Method construction would occur below Hudson River Park and Twelfth Avenue/Route 9A for 24 hours per day on weekdays for up to approximately 36 months
 - Some weekend work to support weekday activities (e.g., equipment maintenance) may be required
- Construction at the Twelfth Avenue Construction Staging Area, located across Twelfth Avenue/Route 9A, would continue following the completion of construction in the Hudson River Park

Checkpoint 2: **Key Changes**

Pile removal would take place over two seasons, with changes to boaters' paths around the construction area

The pedestrian walkway and New York State Department of Transportation (NYSDOT) bikeway between 29th and 30th Streets would be temporarily altered, and a temporary utility bridge would be built

The bikeway and walkway would stay open throughout the entire project

National Historic Preservation Act Section 106



NATIONAL HISTORIC PRESERVATION ACT SECTION 106

- Section 106 refers to the original section within the National Historic Preservation Act of 1966, which established the national policy on the preservation of historic and cultural places
- Section 106 requires a Federal agency to 1) take into account the effects of its actions on properties listed in or eligible for listing in the National Register of Historic Places, and 2) provide the Advisory Council on Historic Preservation an opportunity to comment on the agency's actions
- The focus of this process is consultation with State Historic Preservation Officers, Federally recognized Tribes, applicants for Federal funding or approvals, local governments, the public, and others with a demonstrated interest
- Section 106 review encourages, but does not mandate, preservation

SECTION 106 DETERMINATION – FORMER PIER PILES & HUDSON RIVER BULKHEAD

- **Waterside:** In a letter dated January 11, 2024, the New York State Historic Preservation Office provided concurrence with FRA’s determination that the remnants of former Piers 68 and 69 are not eligible for listing in the National Register of Historic Places and indicated that they have no concerns regarding the project’s effects on these resources
- **Landside:** In a letter dated February 28, 2024, the New York State Historic Preservation Office provided concurrence with FRA’s determination that the proposed project modifications will have no additional adverse effects to historic and archaeological resources (i.e., the Hudson River Bulkhead)
- In emails dated March 4, 2024, and March 5, 2024, respectively, the Stockbridge-Munsee Tribal Historic Preservation Office and the Delaware Tribe of Indians’ Historic Preservation Office also provided concurrence with FRA’s determination

Section 4(f) *De Minimis* Impact Determination



WHAT IS A *DE MINIMIS* IMPACT (23 CFR 774.13)?

- For publicly owned public parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the activities, features, or attributes of the property
- For historic sites, a *de minimis* impact means that FRA/FTA have determined that either no historic property is affected by the project or that the project will have "no adverse effect" on the historic property
- A *de minimis* impact determination does not require analysis to determine if avoidance alternatives are feasible and prudent, but consideration of avoidance, minimization, mitigation, or enhancement measures should occur

SECTION 4(f) IMPACT DETERMINATION

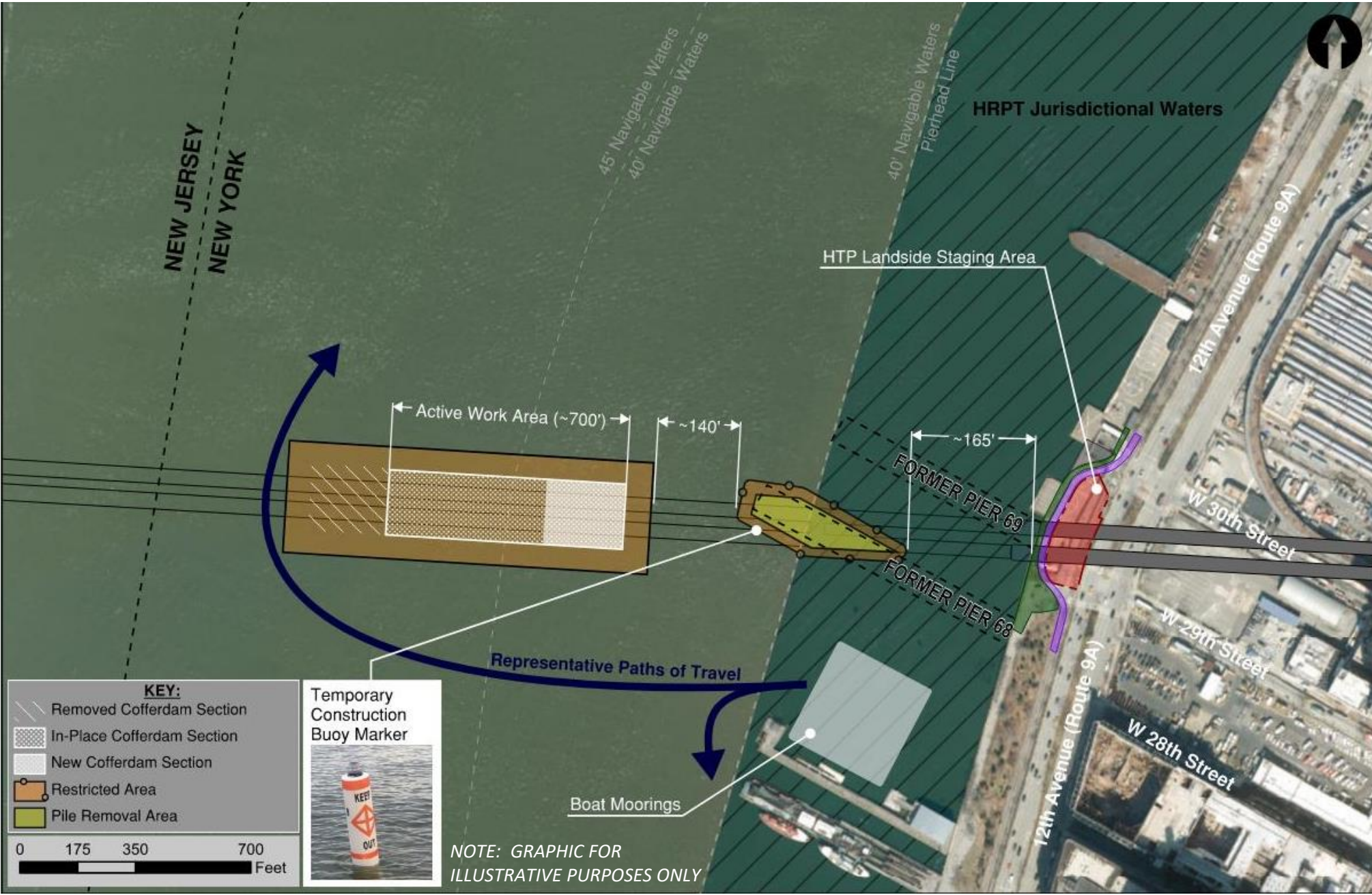
- The proposed project modifications meet the Section 4(f) *de minimis* impact conditions (23 CFR 774.13) as they:
 - would not prevent reasonable and convenient access to the Hudson River pierhead line and navigation channel
 - would not result in proximity impacts that would substantially impair recreational features of the Pier 66 boathouse and moorings
 - would maintain the bikeway and pedestrian walkway during construction activities in Hudson River Park
 - would affect an area small enough in size so as to not adversely affect the public use of Hudson River Park as a four-mile-long, 550-acre linear waterfront park
 - would result in no additional adverse effects to historic and archaeological resources, including the Hudson River Bulkhead
 - would not result in significant adverse effects to any threatened or endangered species or critical habitat within the Hudson River Park Estuarine Sanctuary

Safety Measures & Best Management Practices



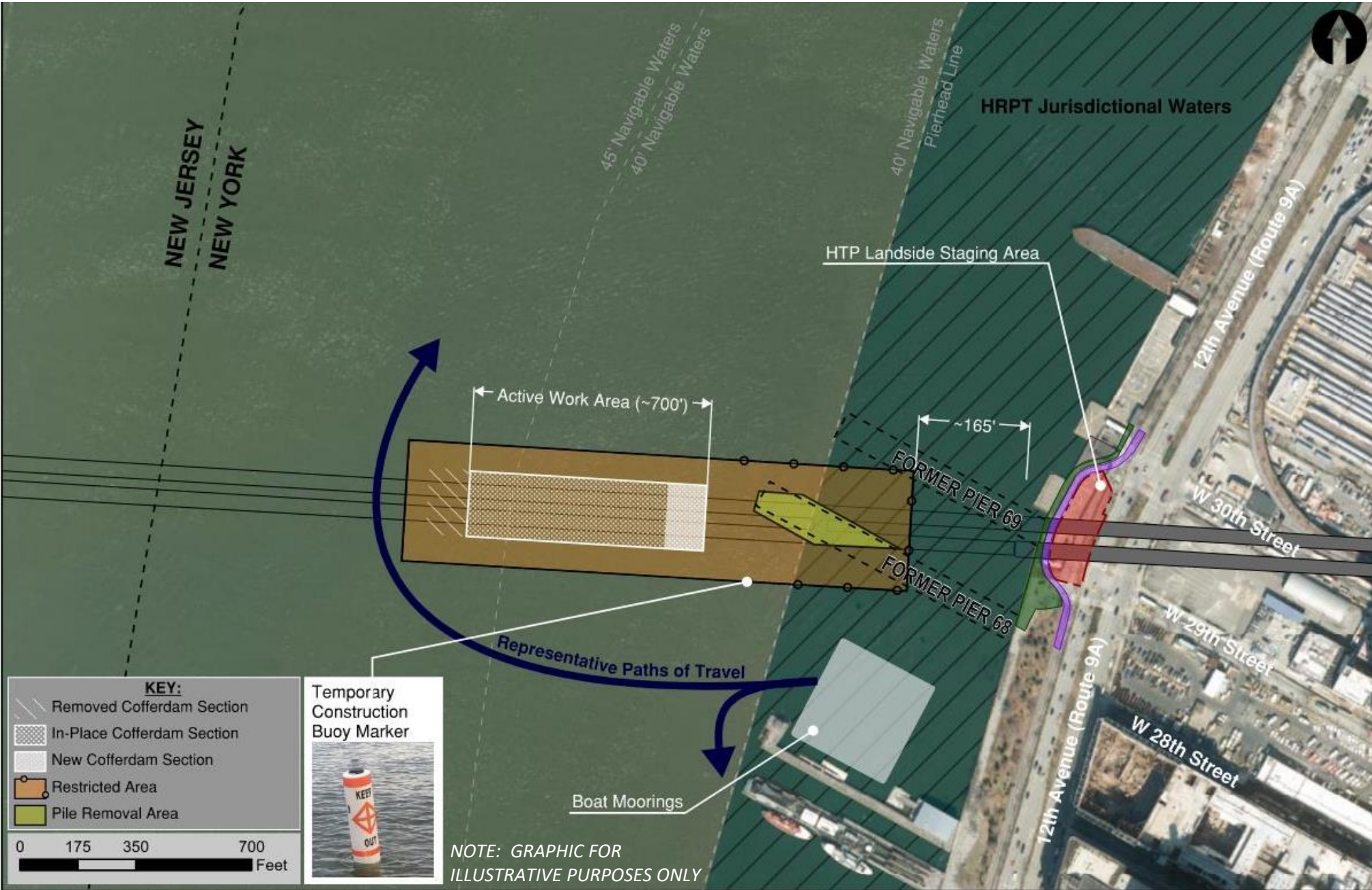
NAVIGATING AROUND IN-WATER CONSTRUCTION

- Obstruction removal activities would occur simultaneously with Hudson River Ground Stabilization (HRGS) work, which would be located west of the pierhead line (see FEIS/ROD Chapter 3, “Construction Methods and Activities”)
- Given the proximity of the HRGS work to the obstruction removal activities, boaters traveling north from the Pier 66 boathouse and moorings would likely first travel directly west into the 45’-deep navigation channel, moving around the western edge of the HRGS cofferdam and continuing north along the pierhead line
- As the HRGS cofferdam progresses west to east (i.e., toward former Piers 68 and 69), the distance that boaters would have to travel to maneuver around the cofferdam would gradually decrease
- Boaters would continue to be able to travel south along the pierhead line and between the navigation channel and the Pier 66 boathouse and nearby moorings
- Boaters would be able to travel along the pierhead line without restrictions during the interval between the two seasons of work (i.e., Jan 21, 2026, to Jun 30, 2026)



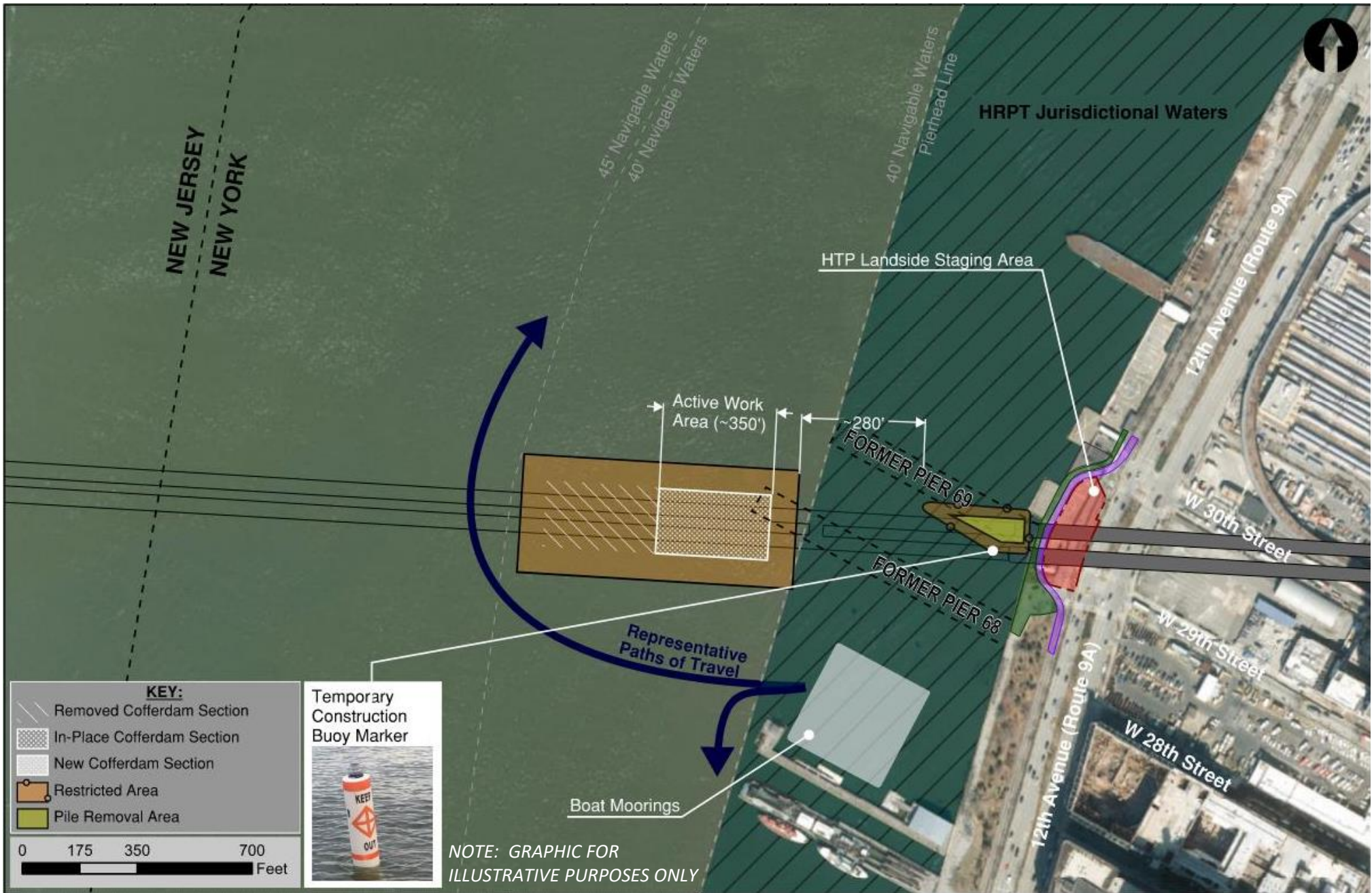
EXAMPLE SNAPSHOT OF POTENTIAL BOATER PATHS OF TRAVEL

SEASON 1
 JULY 2025 –
 JANUARY 2026



EXAMPLE SNAPSHOT OF POTENTIAL BOATER PATHS OF TRAVEL

SEASON 1
JULY 2025 –
JANUARY 2026



EXAMPLE SNAPSHOT OF POTENTIAL BOATER PATHS OF TRAVEL

SEASON 2
 JULY 2026 –
 JANUARY 2027

PROPOSED WATERSIDE SAFETY PROTECTIONS

- Measures to provide for the safety of Hudson River users (i.e., sailors, boaters) during obstruction removal activities include:
 - Marker buoys with solar lighting to delineate restricted work zones for obstruction removal in the Hudson River
 - Lighting on barges used for obstruction removal activities
 - Notification to mariners via the USCG
 - Hudson River Park Water Safety coordination
- With the implementation of these measures, boaters would continue to safely navigate the Hudson River



Marker buoys



IMPLEMENTATION OF BEST MANAGEMENT PRACTICES FOR IN-WATER WORK

- Best management practices implemented in coordination with Federal and State agencies, such as:
 - Use of turbidity curtains and monitoring
 - Placement of piles in barges with a basin to contain sediment and runoff
 - Operational modifications to minimize turbidity and sedimentation (e.g. reducing lift speed)



LANDSIDE SAFETY PROTECTIONS

- Safety measures within the landside portion of Hudson River Park would be implemented to prevent unauthorized access to work zones, and provide for safe pedestrian and bicycle passage in Hudson River Park adjacent to the Hudson River Park Construction Staging Area; safety measures include:
 - Flaggers and pedestrian managers at Hudson River Park Construction Staging Area access points
 - Bollards, concrete barriers, and concrete blocks to prevent vehicle access to temporarily relocated pedestrian walkway and bikeway
 - Delineators to separate temporary pedestrian walkway from the temporary bikeway
 - Pedestrian guide rails and chain link fencing to preclude public access to construction staging area and Hudson River

Checkpoint 3:
**Safety and
Community**

We have proposed safety measures to protect boaters, pedestrians and cyclists during construction

After construction in Hudson River Park is complete in 2027, the area used would be fully restored

We will continue to work closely with the Hudson River Park Trust, the boating community, and the public

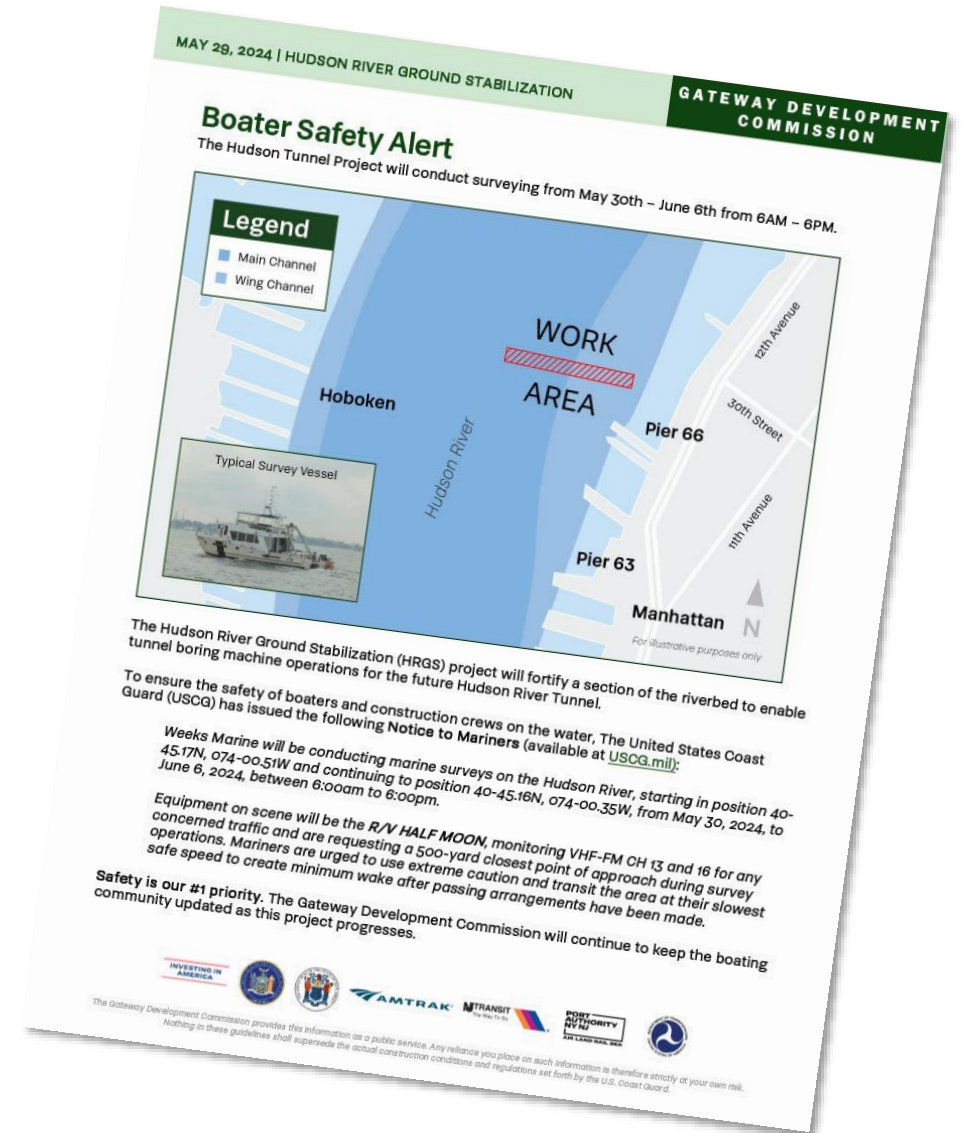
Stakeholder Outreach & Public Engagement Opportunities

ONGOING COORDINATION

- The Project Team commits to continued coordination with the following stakeholders to minimize disruption at Hudson River Park:
 - HRPT
 - HRPT Advisory Council
 - Hudson River Community Sailing and New York Kayak Polo
 - Air Pegasus
 - United States Coast Guard
 - U.S. Army Corps of Engineers (USACE)
 - National Oceanic and Atmospheric Administration (NOAA)
 - New York State Department of Environmental Conservation (NYSDEC)
 - Elected Officials
 - General public (Manhattan Community Board 4)

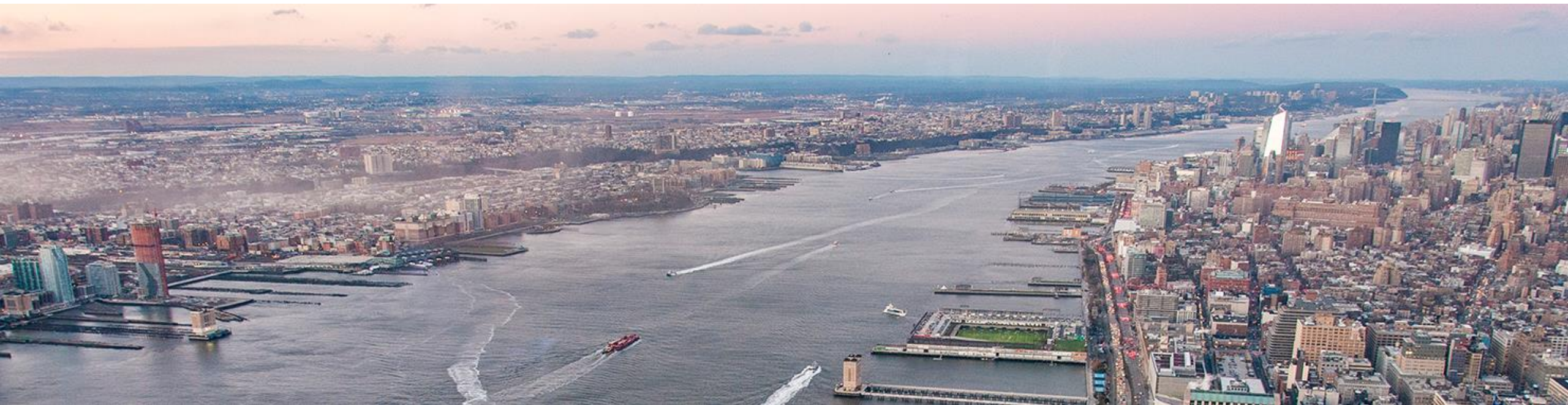
ONGOING COORDINATION CONT.

- The Project team will continue to send regular Boater Safety Alerts to the boating community on both sides of the river in coordination with the United States Coast Guard
- A drop-in Manhattan Public Information Center for community education and feedback is expected to open in 2025
- GDC has hired a full-time Manhattan Community Coordinator who will staff the Public Information Center



SECTION 4(f)-RELATED COMMENTS

- Comments on the proposed construction activities in Hudson River Park may be submitted on or before 5:00 p.m. on **July 15, 2024**, by emailing [**christopher.hansen@dot.gov**](mailto:christopher.hansen@dot.gov)
- Please visit [*hudsontunnelproject.com*](http://hudsontunnelproject.com) for additional project information



Gateway Development Commission

Thank you

GDC's Sustainability Plan



Holistic
Approach



FEIS as a
Guide



Envision as a
Framework



Monitoring
KPIs



Optimize
Synergies