

REBUILD BY DESIGN

HUDSON RIVER

JERSEY CITY HOBOKEN WEEHAWKEN | NEW JERSEY



RESIST ALIGNMENT
Construction Phase
November 16, 2023



AECOM

OMA

MAGNUSSON
KLEMENCIC
ASSOCIATES

MATRIX **NEW**WORLD



REMORA CONSULTING
LLC.

THE RBDH PROJECT TEAM



Presenter

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Director, Climate and Flood
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Construction



Presenter

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Community Engagement Lead,
Rebuild by Design Hudson River



DEP

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Community Construction
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Construction Project Manager

EE CRUZ & COMPANY
Resist Construction Contractors

AECOM
Architect/Engineer

Superstorm Sandy – 9:10am EDT October 29, 2012

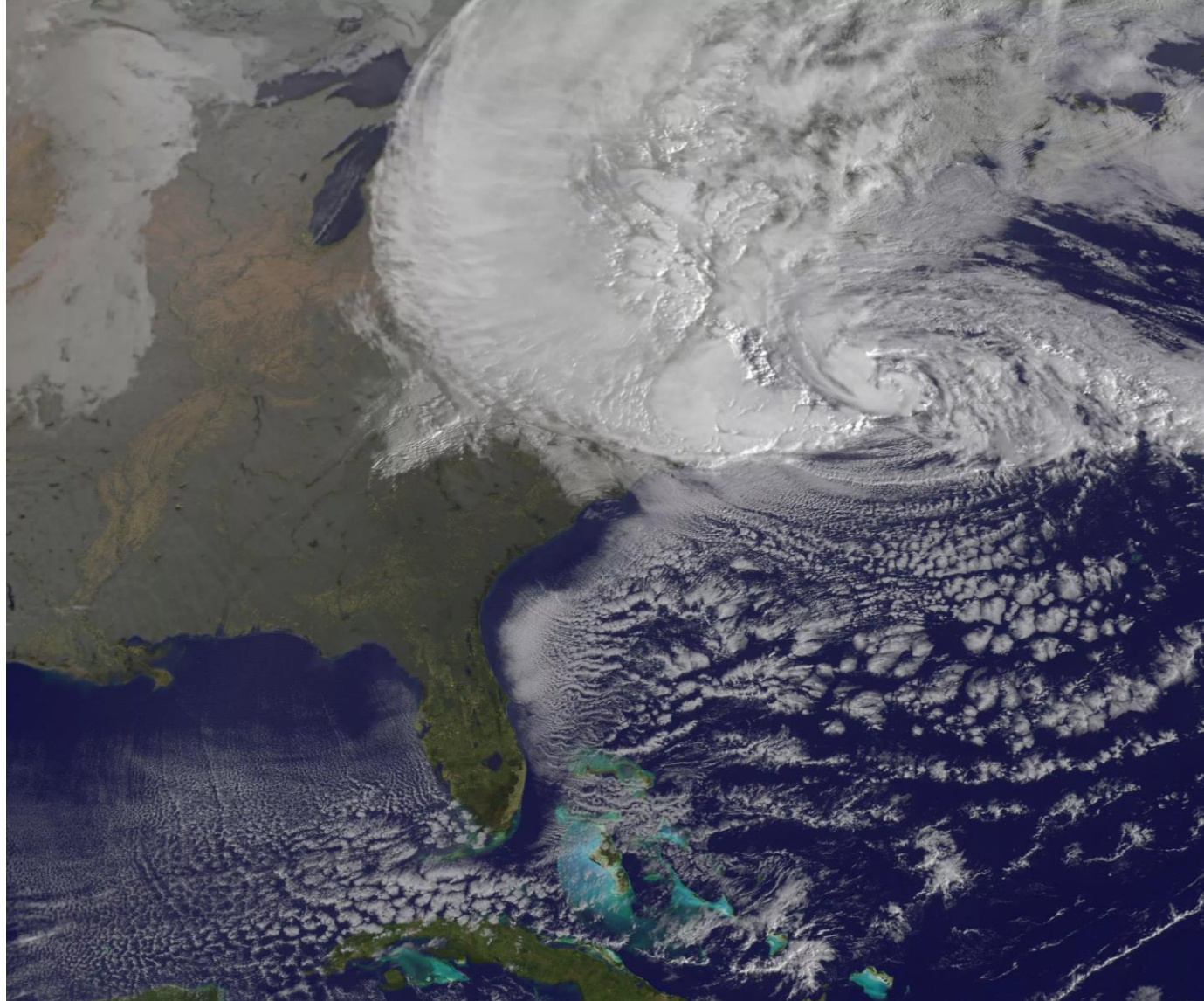


Image from NOAA's GOES-13

Flooding Post-Sandy 2012



Photos: Lauren Casselberry, The Jersey Journal



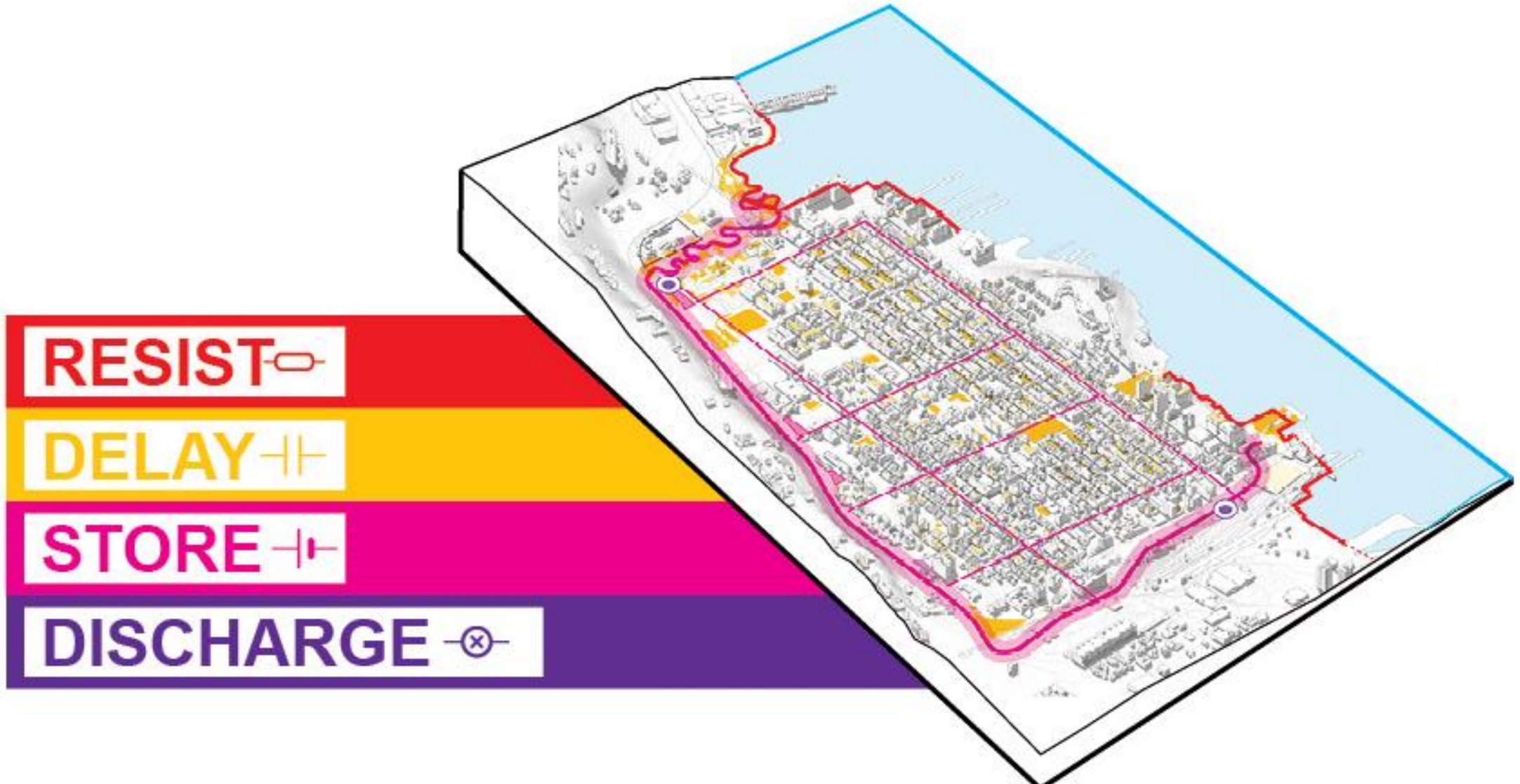
Flooding Post-Sandy 2012



Photo: Sterne Slaven, New York Times



HUDSON RIVER PROJECT: RESIST, DELAY, STORE, DISCHARGE



RESIST —

DELAY —

STORE —

DISCHARGE —

Developed by: OMA with Royal HaskoningDHV;
Balmori Associates; and HR&A Advisors



Rebuild By Design – Hudson River Project



Resist – Delay – Store – Discharge:
Combined coastal and stormwater drainage flood risk reduction.

Rebuild By Design – Hudson River Project



Resist

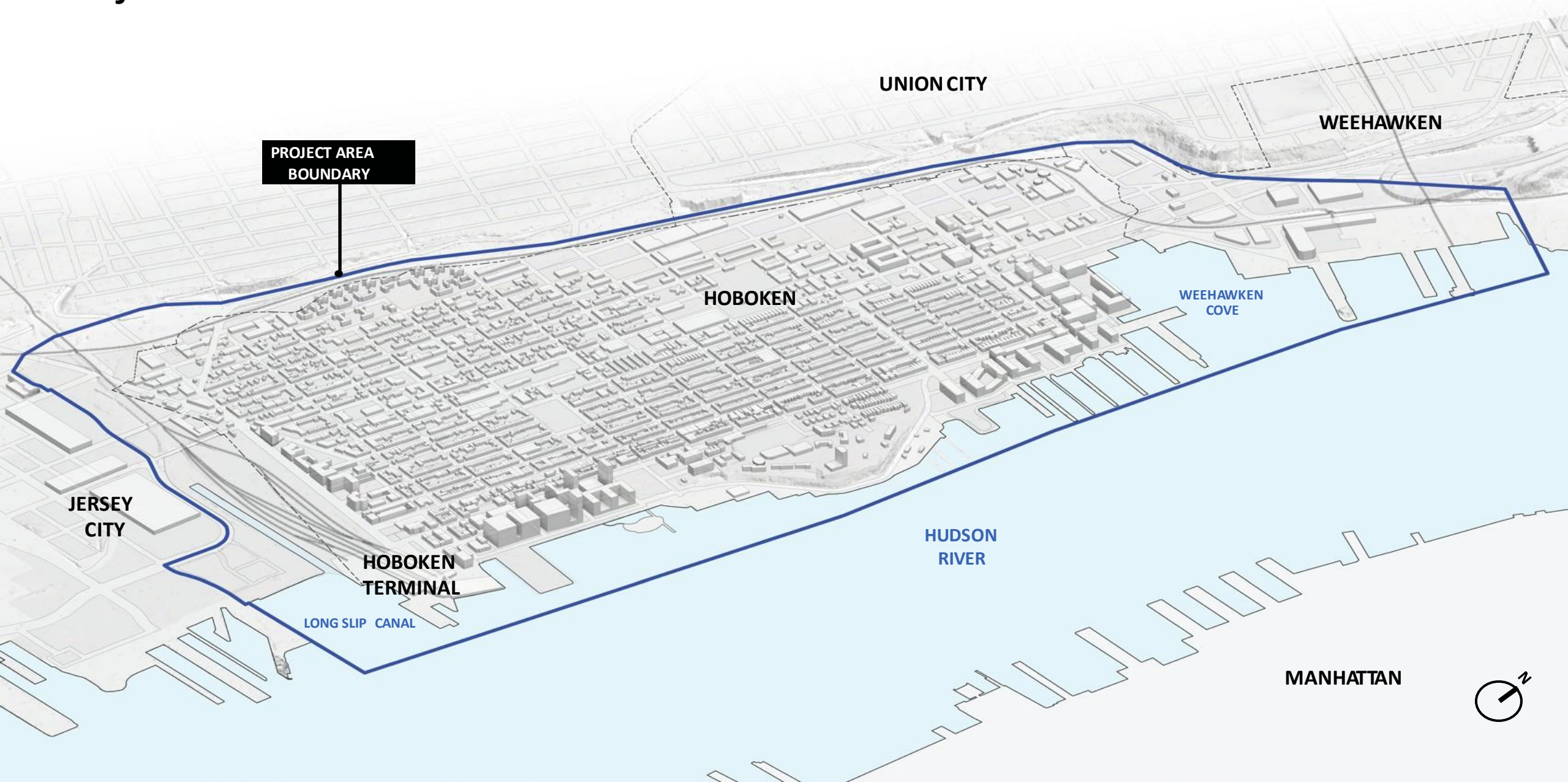
Hard infrastructure and soft landscapes for coastal defense.

\$230M

Original funding by U.S. Department of Housing & Urban Development
Additional funding secured through FEMA and American Rescue Plan



Project Area



**PROJECT AREA
BOUNDARY**

UNION CITY

WEEHAWKEN

HOBOKEN

**WEEHAWKEN
COVE**

**JERSEY
CITY**

**HOBOKEN
TERMINAL**

**LONG SLIP
CANAL**

**HUDSON
RIVER**

MANHATTAN



Topography








PROJECT AREA
BOUNDARY

WEEHAWKEN
COVE

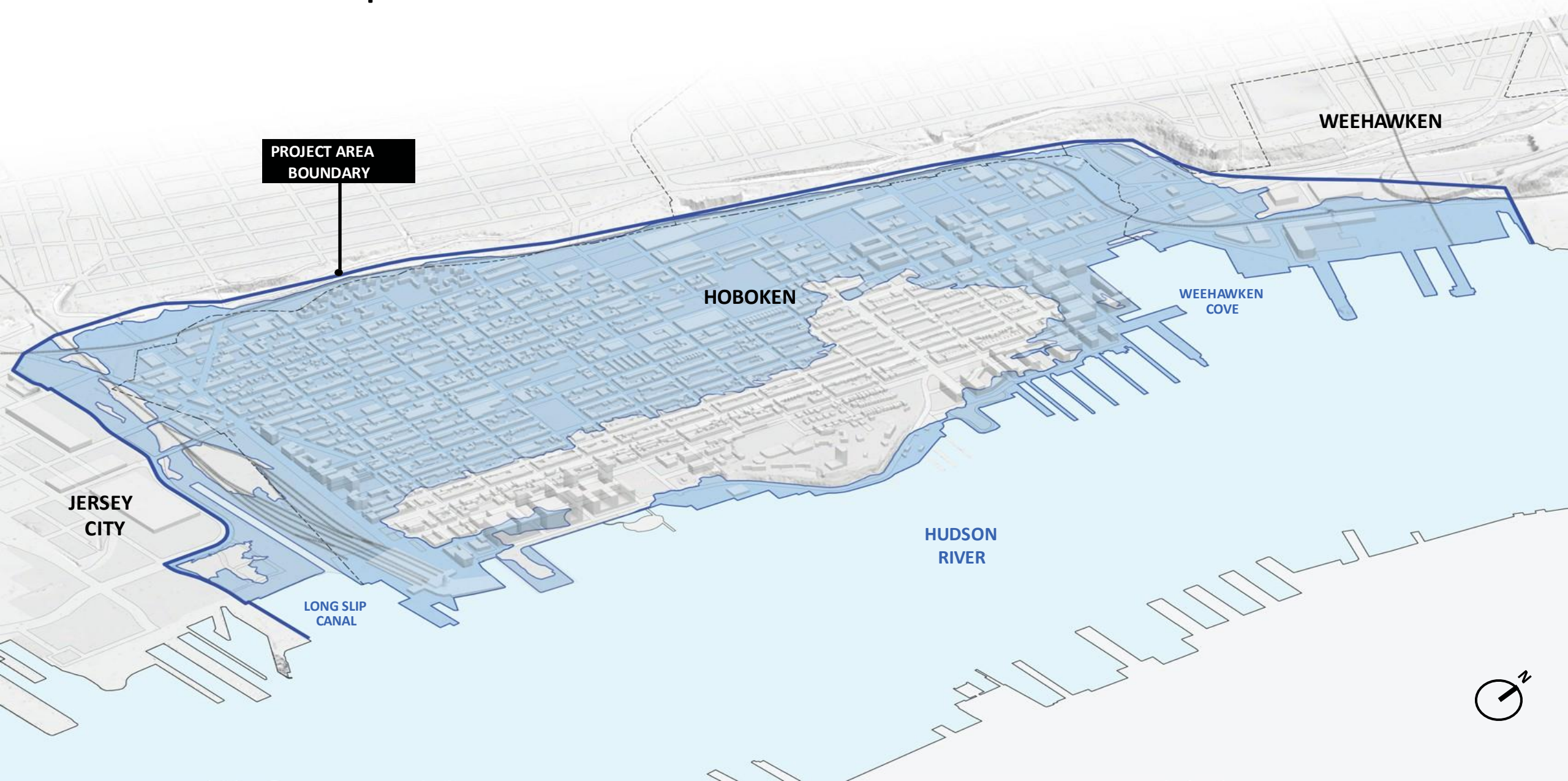
HUDSON
RIVER

LONG SLIP
CANAL

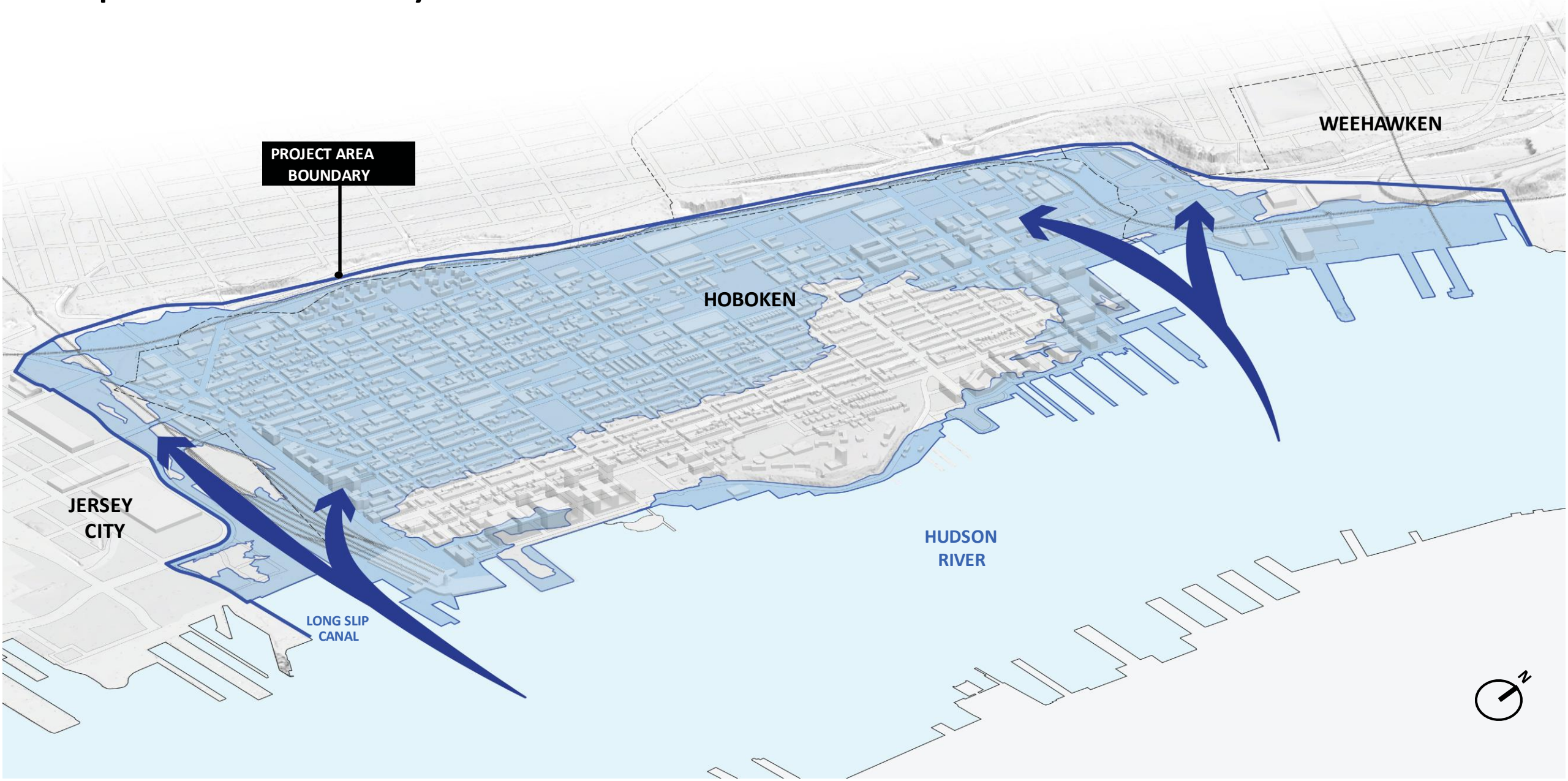
LEGEND

PROJECT AREA BOUNDARY	
15+ FT	
10 - 15 FT	
5 - 10 FT	
0 - 5 FT	

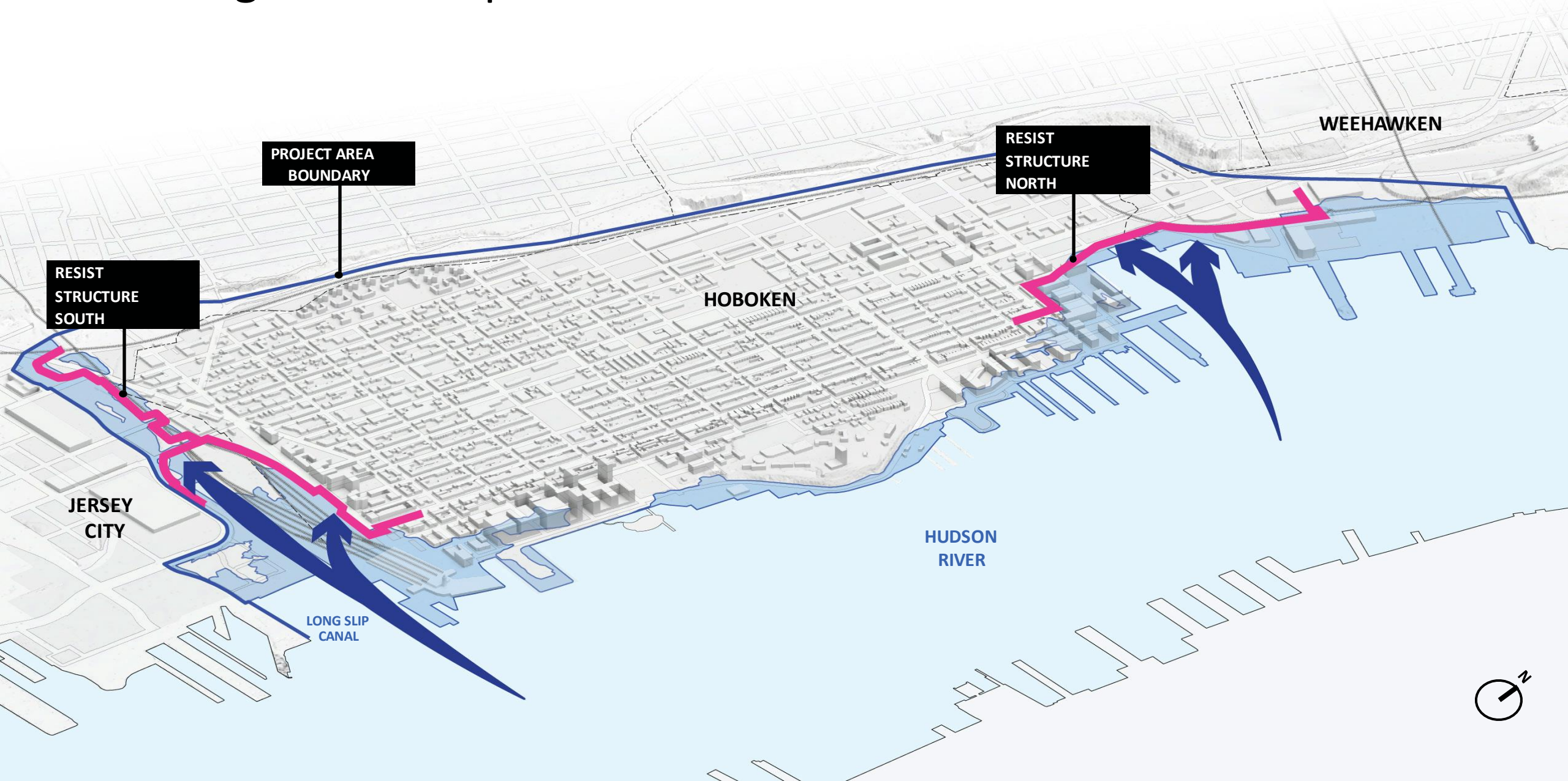
100-Year Floodplain



Superstorm Sandy Breach Points



Resist Alignment Purpose



RBDH Line of Protection



WEEHAWKEN

HOBOKEN

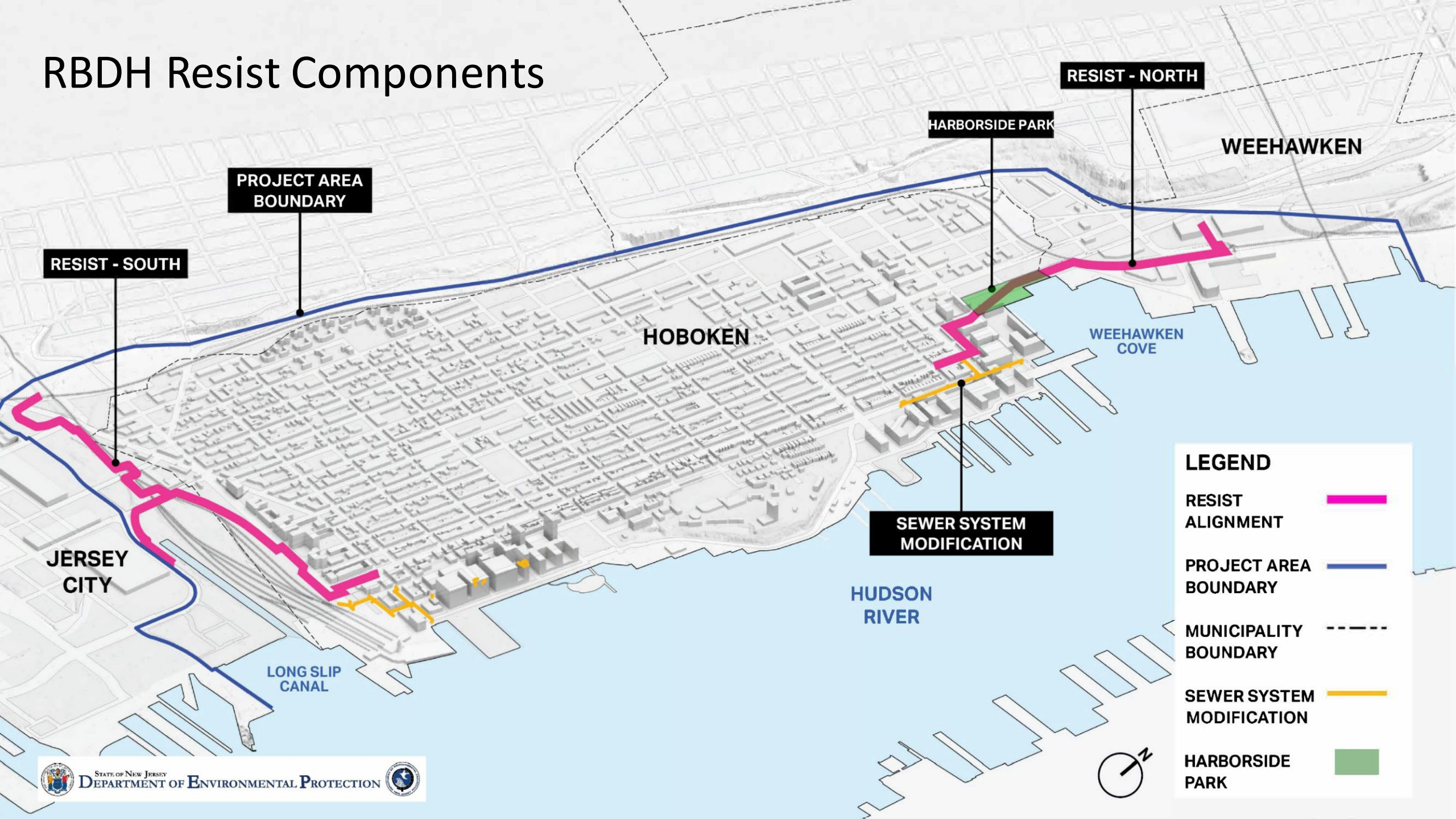
JERSEY CITY

LONG SLIP CANAL






HUDSON RIVER



RBDH Resist Components

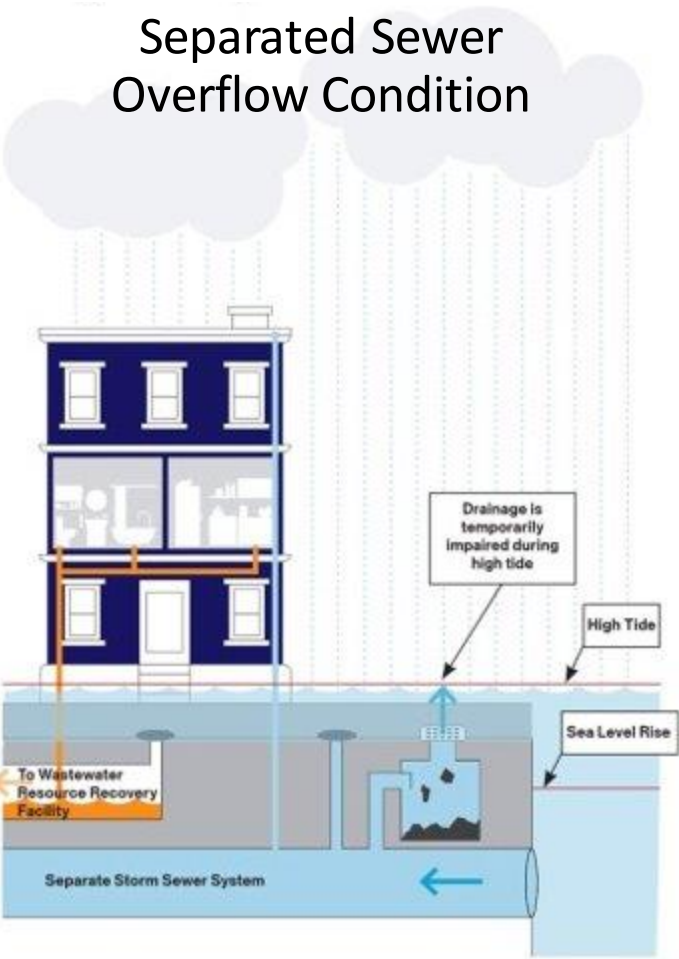
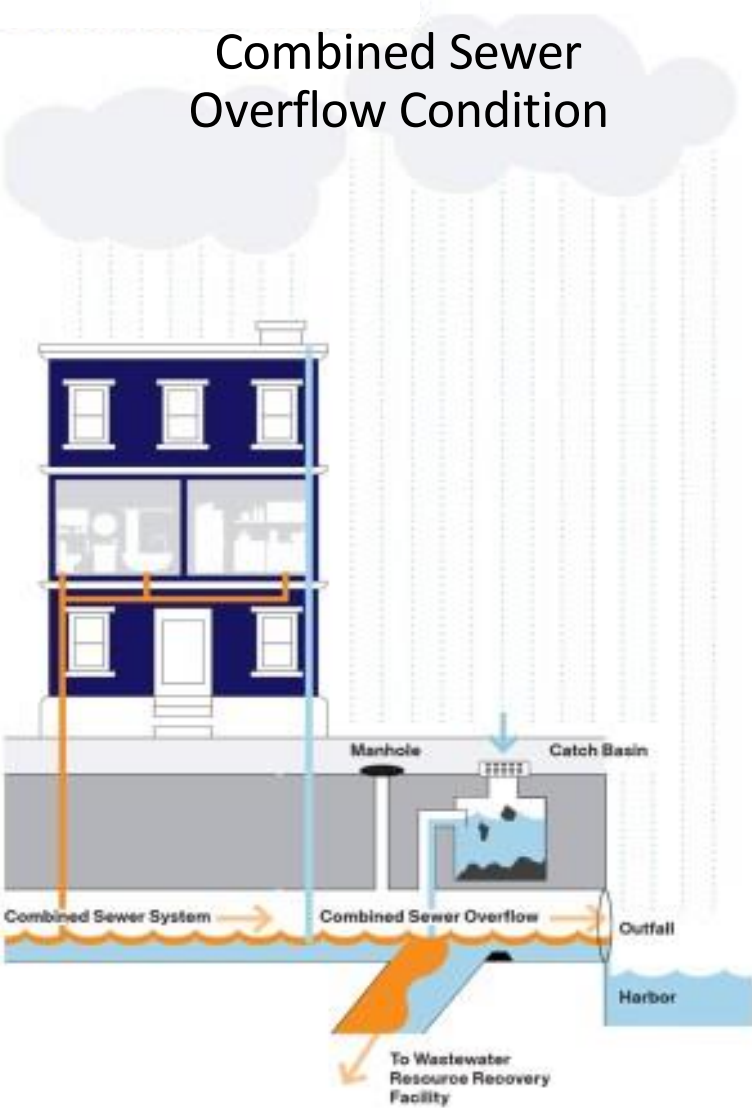


LEGEND

- RESIST ALIGNMENT 
- PROJECT AREA BOUNDARY 
- MUNICIPALITY BOUNDARY 
- SEWER SYSTEM MODIFICATION 
- HARBORSIDE PARK 



Combined & Separated Sewers

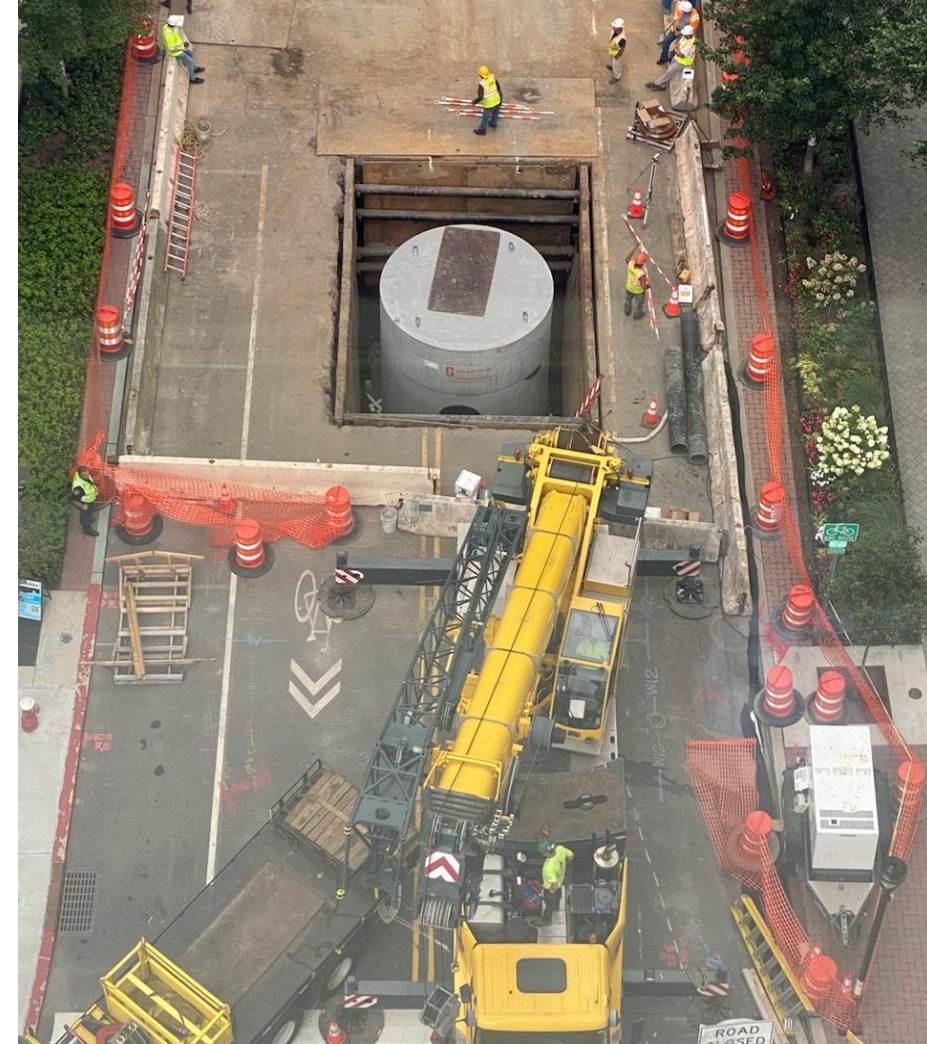


Source: New York City Stormwater Resiliency Plan, NYC Mayor's Office, May 2021

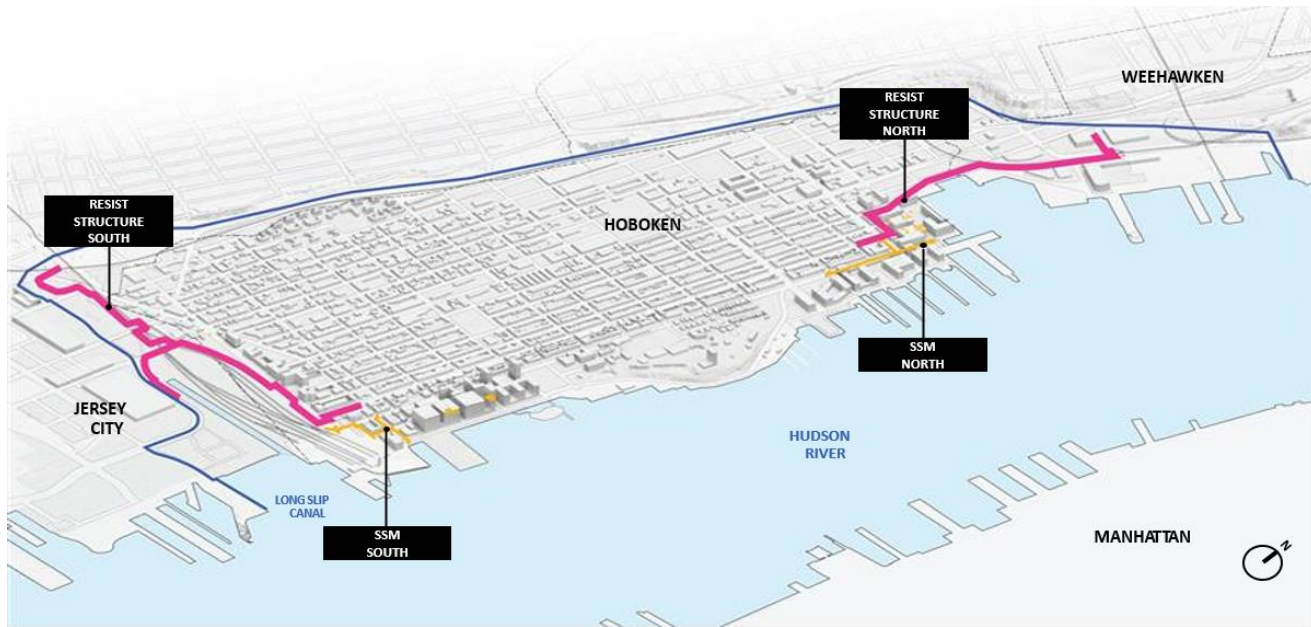
SSM Construction Complete

SCOPE OF CONSTRUCTION

- Over 100 existing manholes sealed
- Approx. 40 catch basins installed
- Over 30 manholes installed
- Over 40,00LF of pipe installed
- 8 stormwater treatment units installed



Rebuild by Design – Resist Alignment



WHAT: Installing a floodwall with flood gates and integrating a resiliency park, along with other urban amenities

WHERE: **Northern Hoboken/Southern Weehawken** – from 13th St and Washington St to Lincoln Harbor Rd
Southern Hoboken/Northern Jersey City – from Hoboken Ave/Coles St to Newark St and Washington St

WHY: To achieve greater resilience against storm surge through the Rebuild by Design Hudson River project

WHEN: Now (Fall 2023) through Summer 2027

What to Expect During Resist Construction

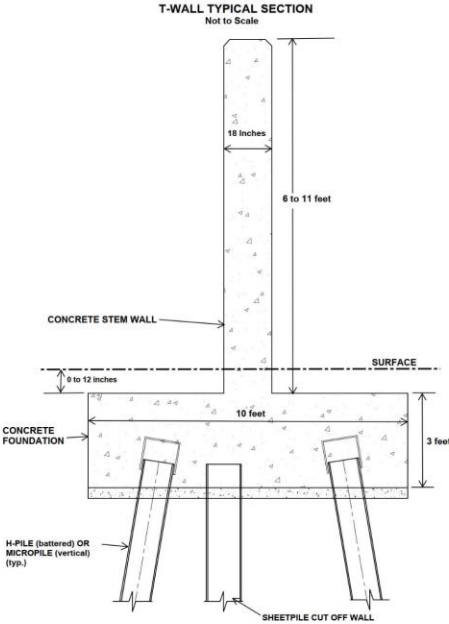
General scope of construction:

- Approximately 9,970 linear feet of concrete flood wall
- 26 flood gates
- 6 sluice gates and 2 steel flap gates
- Improvements to Harborside Park
- Integrating urban amenities to the Resist Alignment
- Approximately 66,300 linear feet of micropiles
- Approximately 52,000 linear feet of H-piles
- Approximately 81,600 square feet of sheet piles

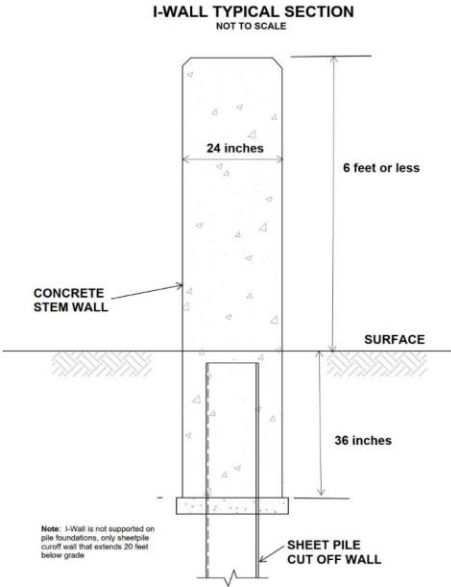


Resist Structure

T - Wall



I - Wall



Gate Examples

Rolling Gates



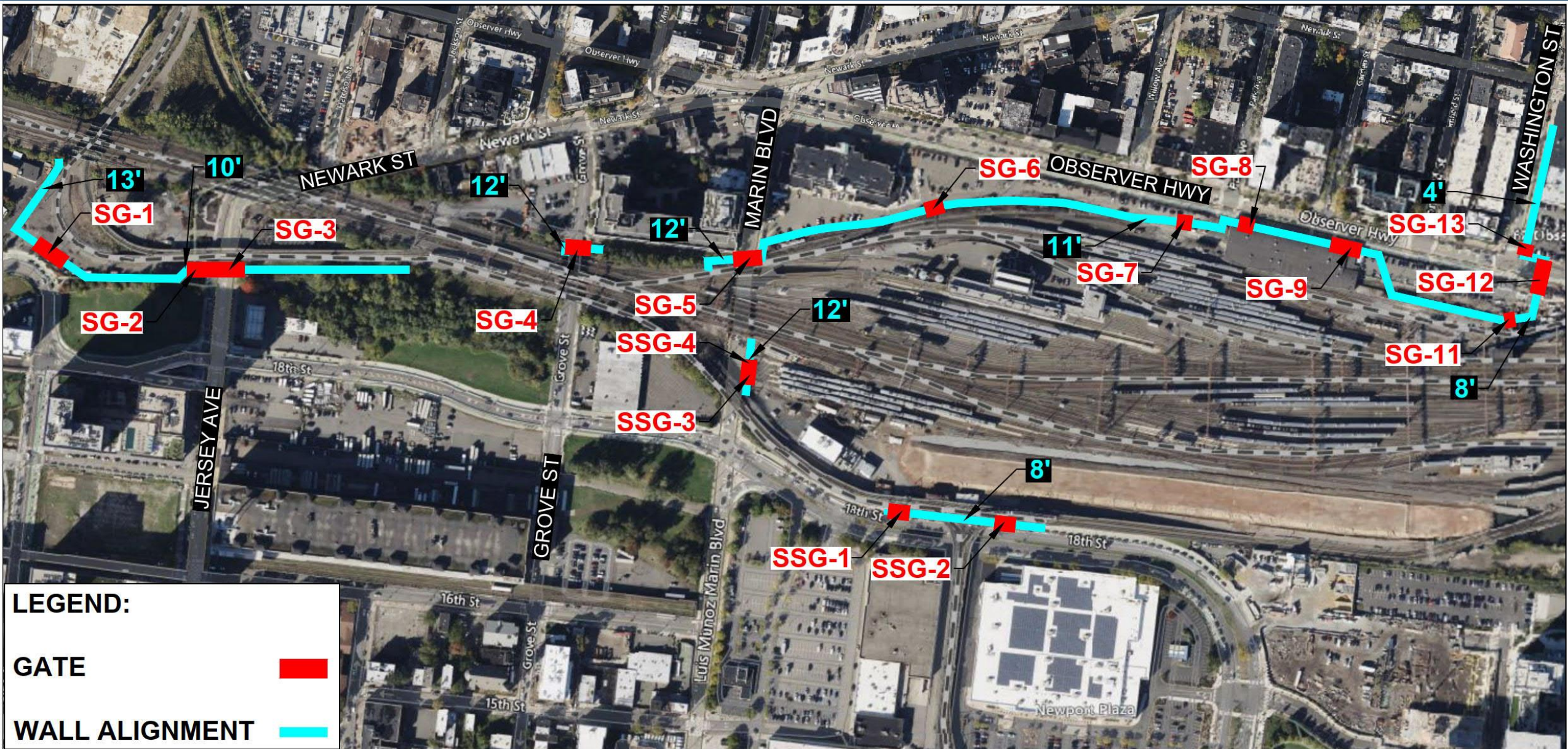
Swing Gates



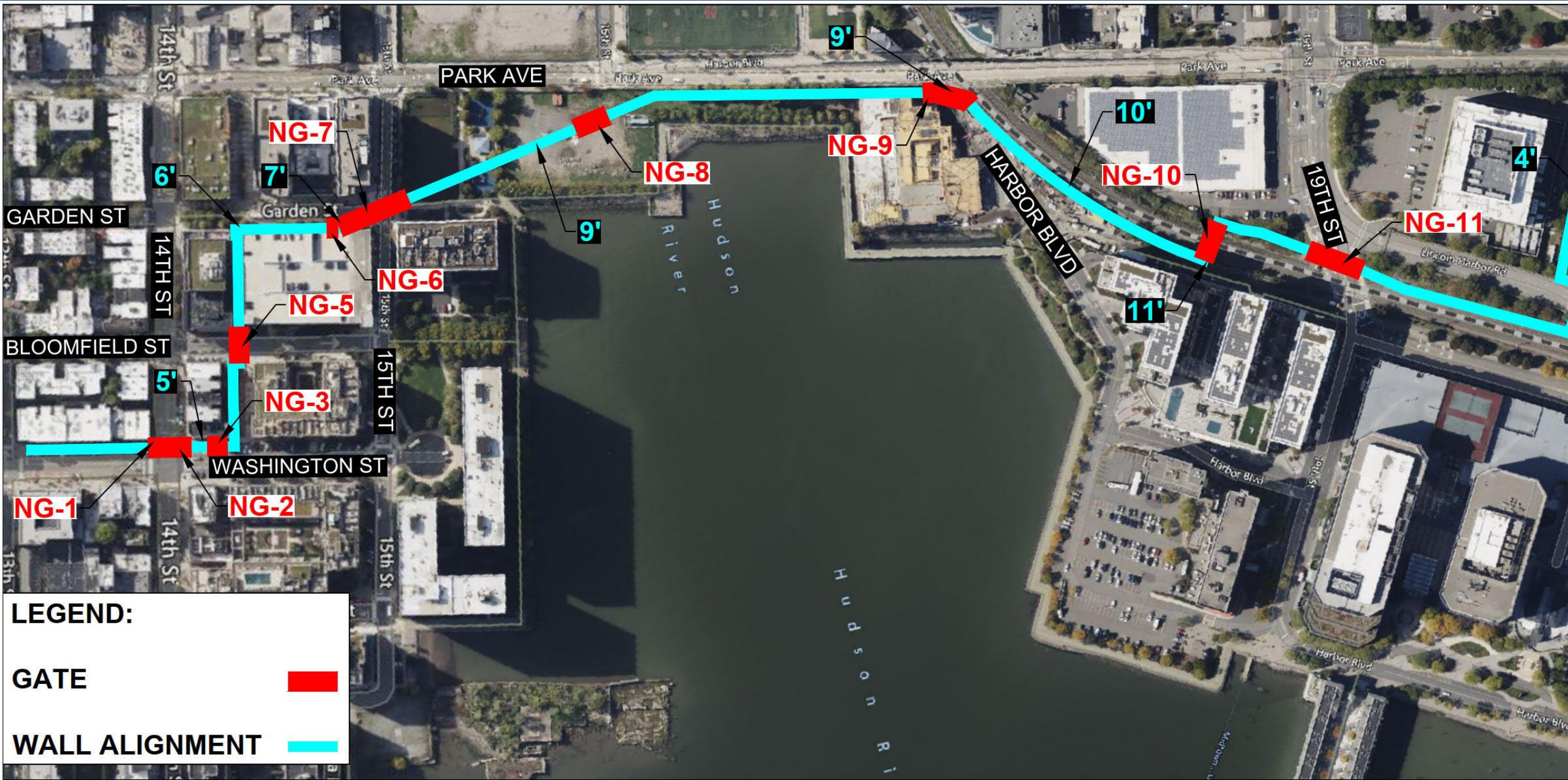
Stop Logs



Resist Alignment - South



Resist Alignment - North



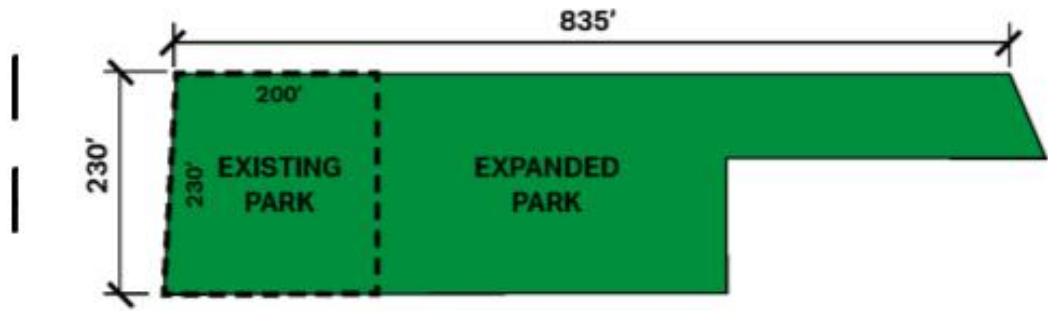
LEGEND:

GATE

WALL ALIGNMENT

Harborside Park

HARBORSIDE PARK



General Sequence of Construction

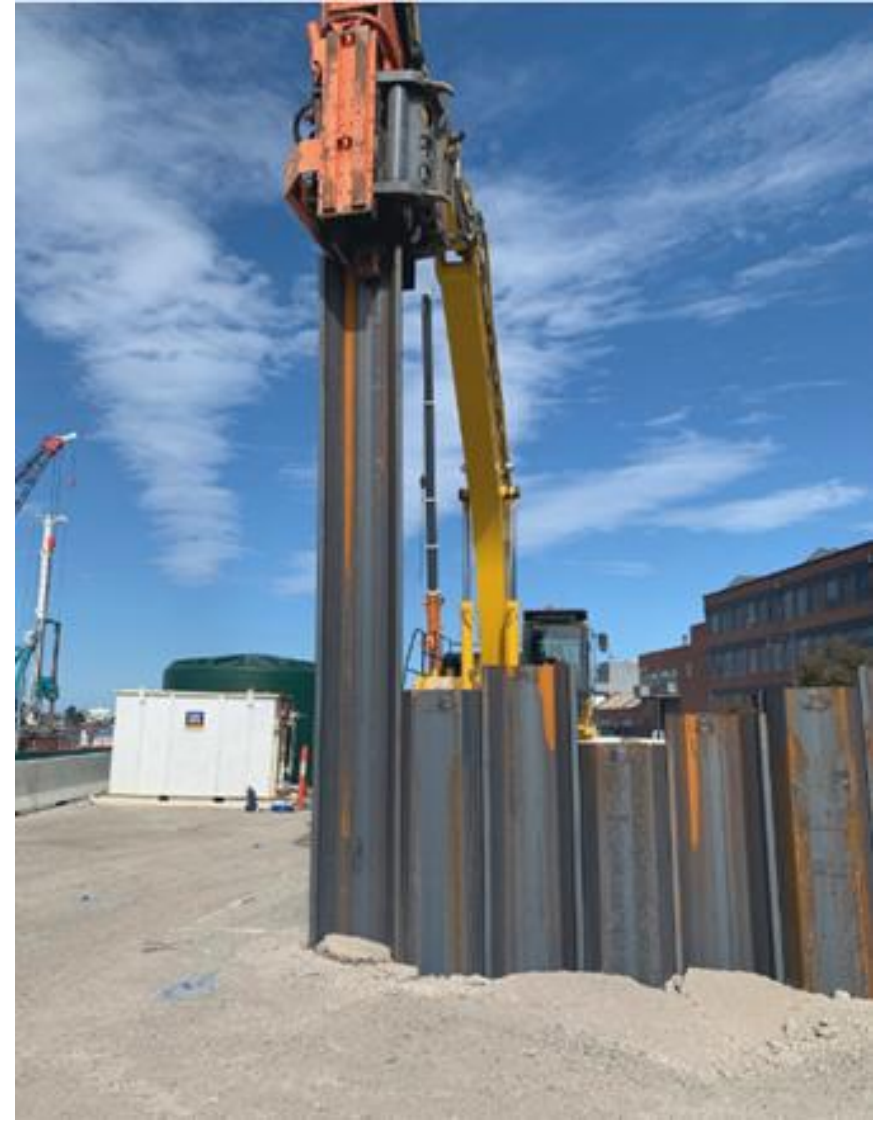
1. Test pitting / Utility location / relocation & protection

- Test Pitting is currently underway and will be occurring over the next couple of months.
- The purpose of the Test pits are to confirm locations of underground utilities prior to construction



General Sequence of Construction

2. Install piles & sheeting.



Illustrative examples of equipment used for installation. Actual equipment used may vary.

General Sequence of Construction

3. Install foundation and backfill.



4. Install stem wall.



Illustrative examples from other projects.

General Sequence of Construction

5. Install gate structures.



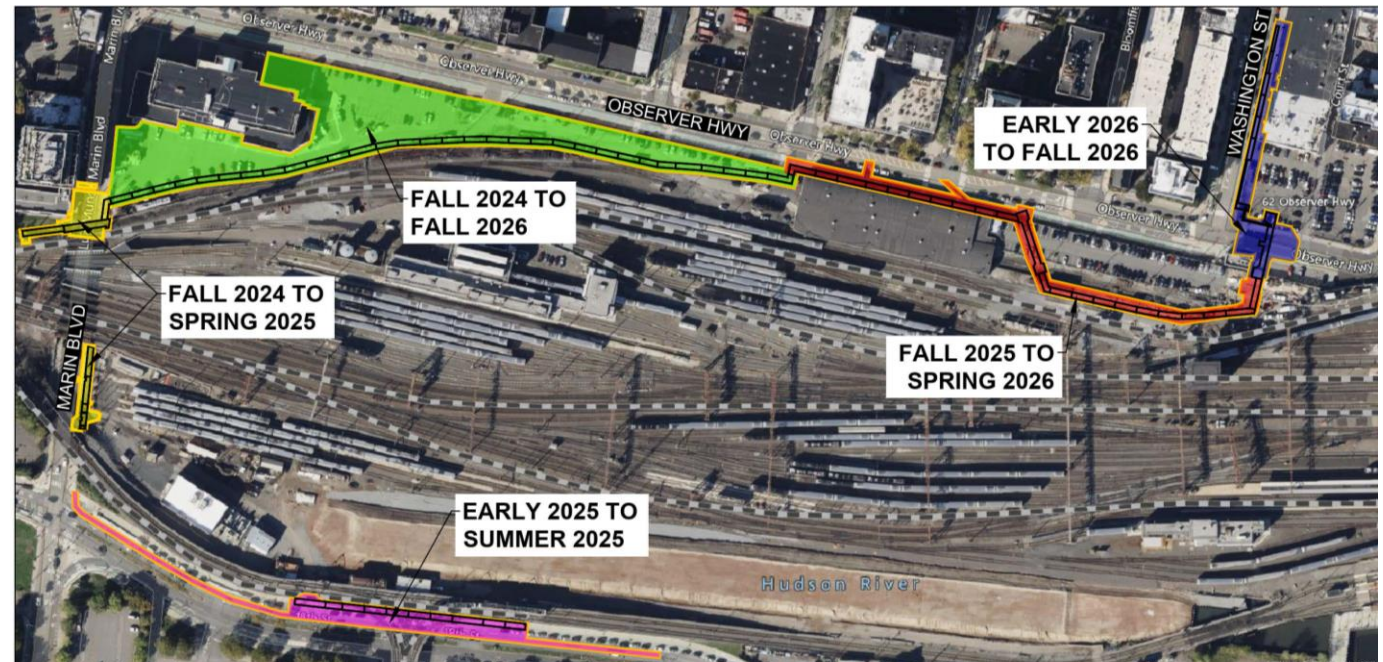
General Sequence of Construction

6. Install Urban Amenities, restore landscaping/plantings and site restoration.



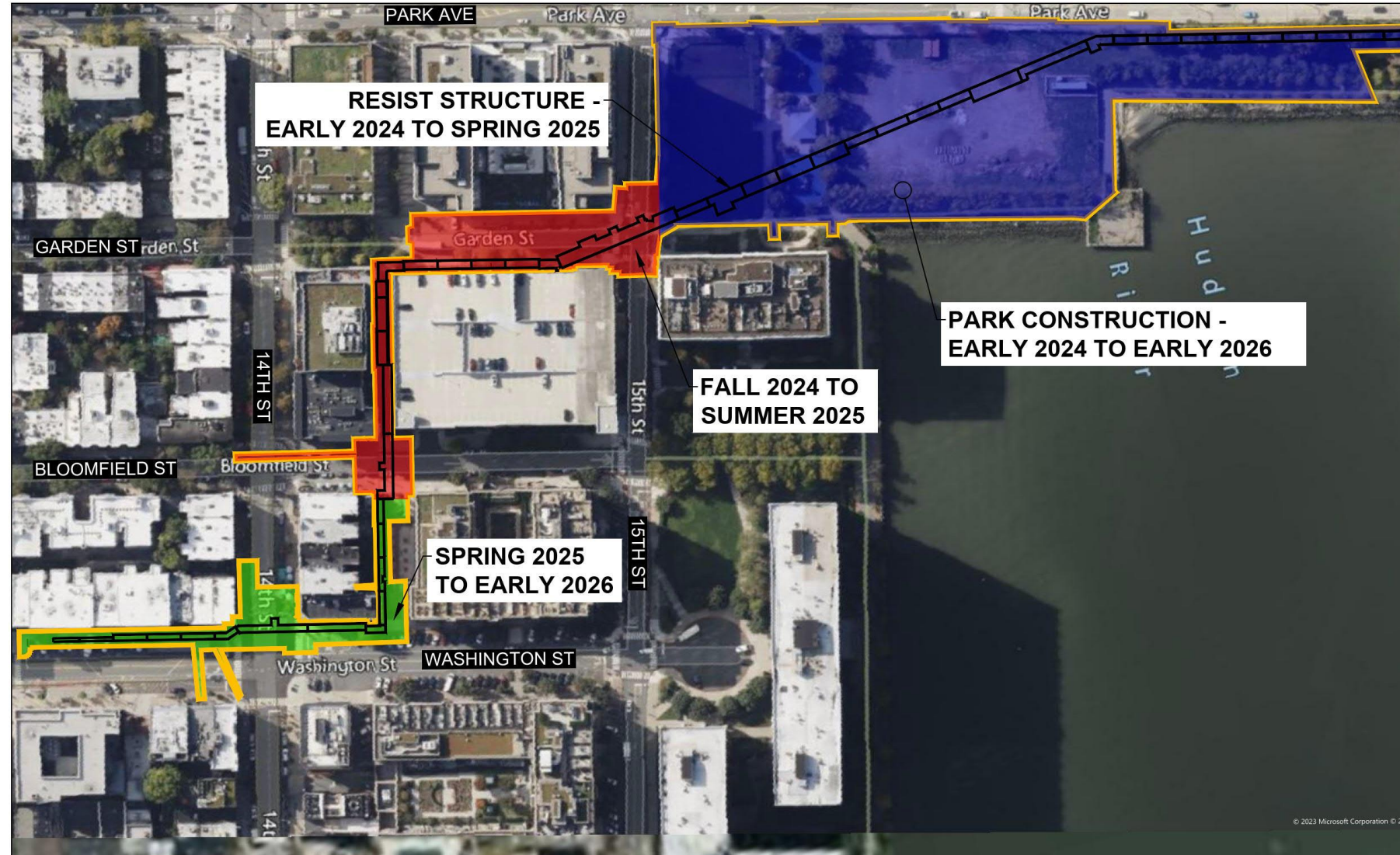
South Alignment – Current Timeline

- Timelines generally represent when construction is anticipated.
- Periodic work may occur outside the timeframes listed until final project completion anticipated in Summer 2027.
- Construction anticipated to proceed sequentially.



North Alignment – Current Timeline

- Timelines generally represent when construction is anticipated.
- Periodic work may occur outside the timeframes listed until final project completion anticipated in Summer 2027.
- Construction anticipated to proceed sequentially.



Quality of Life-Noise, Dust & Vibration Monitoring

- **Work will be performed within the permissible noise and vibration levels and will be consistently monitored.**
- **Contractor will be implementing their submitted approved plans for noise, dust and vibration control and monitoring.**
- **In the event noise, vibration, or dust levels exceed acceptable limits the Contractor will advise the Construction Manager immediately and appropriate action will be taken.**

Quality of Life–Traffic Maintenance & Protection

- Periodic lane shifts and /or lane closures will be in close coordination with Hoboken Police Dept.
- Hoboken Police Dept. / Office of Emergency Management will assist with traffic flow for any lane closures and provide traffic control officers to guide pedestrians.
- No parking will be permitted within work areas during closures.



Public Outreach

VISIT OUR WEBSITE:

<https://www.nj.gov/dep/floodresilience/rbd-hudsonriver.htm>

HOW TO STAY INFORMED:

- City of Hoboken construction updates
- Sign up for RBDH **weekly community construction advisories:**
https://public.govdelivery.com/accounts/NJDEP/subscriber/new?topic_id=NJDEP_299

QUESTIONS? please contact your **Community Construction Liaison (CCL):**

Isabella Brascetta | 1-800-252-0219 | rbdhinquries@portal3.pbid.com

Hoboken Contact: Caleb Stratton, Chief Resilience Officer, CStratton@hoboken.nj.gov

NJDEP website

QR Code



Advisories

QR Code



**Additional Community
Outreach Meetings will be held
as the Project progresses.**

Questions?