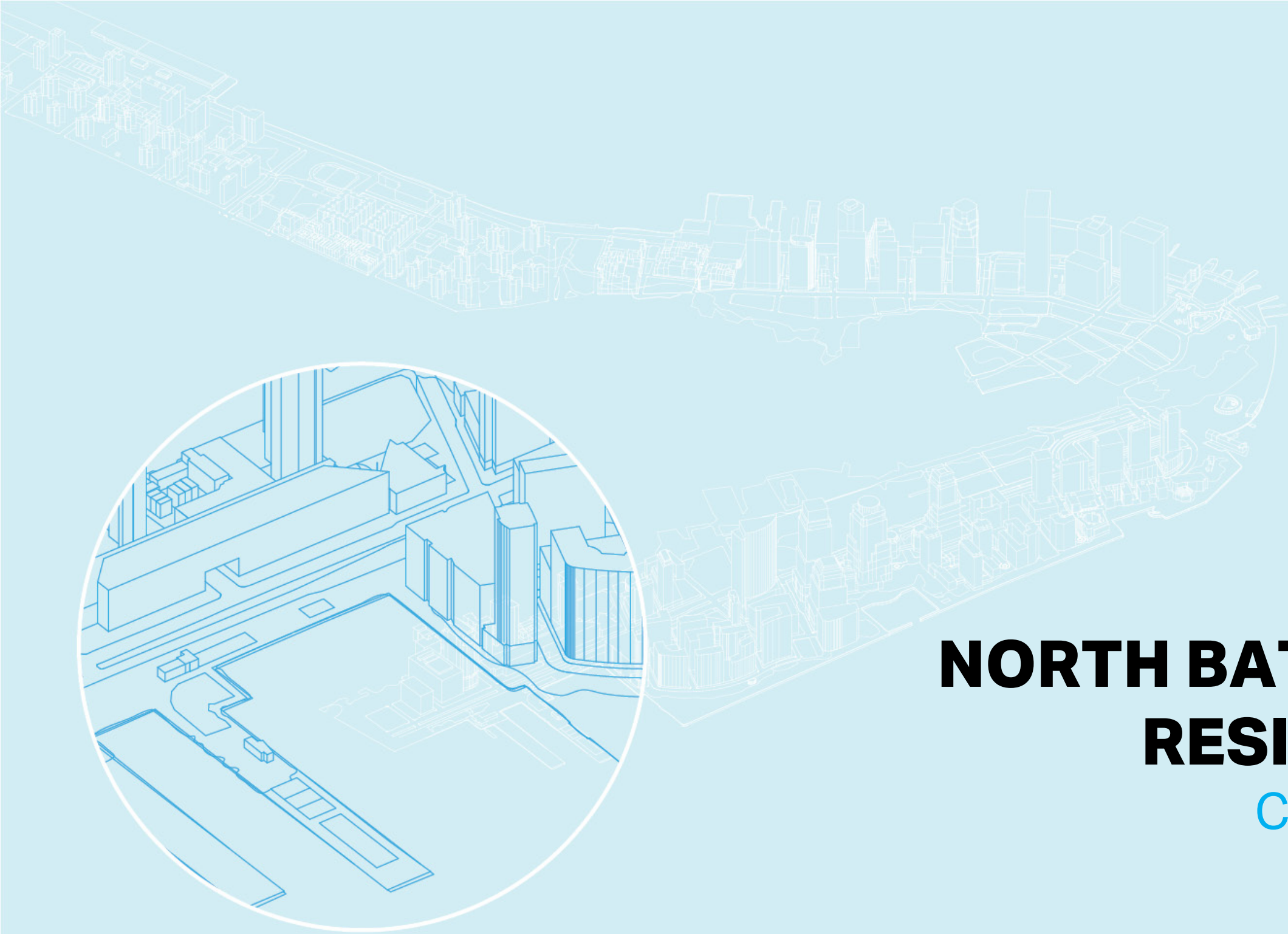




NORTH BATTERY PARK CITY RESILIENCY PROJECT

COMMUNITY MEETING #1

OCTOBER 1, 2019



NORTH BATTERY PARK CITY

AGENDA

- 1. YOUR TEAM**
- 2. PURPOSE + NEED + BACKGROUND**
- 3. SITE OVERVIEW**
- 4. RESILIENCY MEASURES**
- 5. Q+A**
- 6. NEXT STEPS**

**1 YOUR
TEAM**

KEY TEAM MEMBERS



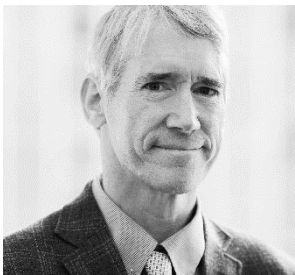
Alim Baycora, PE, LEED AP
Project Executive



Garrett Avery, ASLA
Project Manager



Serena De Stefano
Deputy Project Manager



Mark Foster, PE
Engineering Lead



Susan Bemis, AICP
Public Realm Design
Lead



Andrea Rosenthal, EIT, ENV-SP
Environmental Lead



Teresa Gonzalez
Partner and Stakeholder
Engagement



Nora Madonick
Community
Engagement



Wael Youssef, PE
Structural Engineering



Helder De Almeida, PE
Hydrological Team Lead



Samara Daly
Partner and Stakeholder
Engagement



Ibrahim Abdul-Matin
Partner and Stakeholder
Engagement



Mike Seering, PE
FEMA Certification

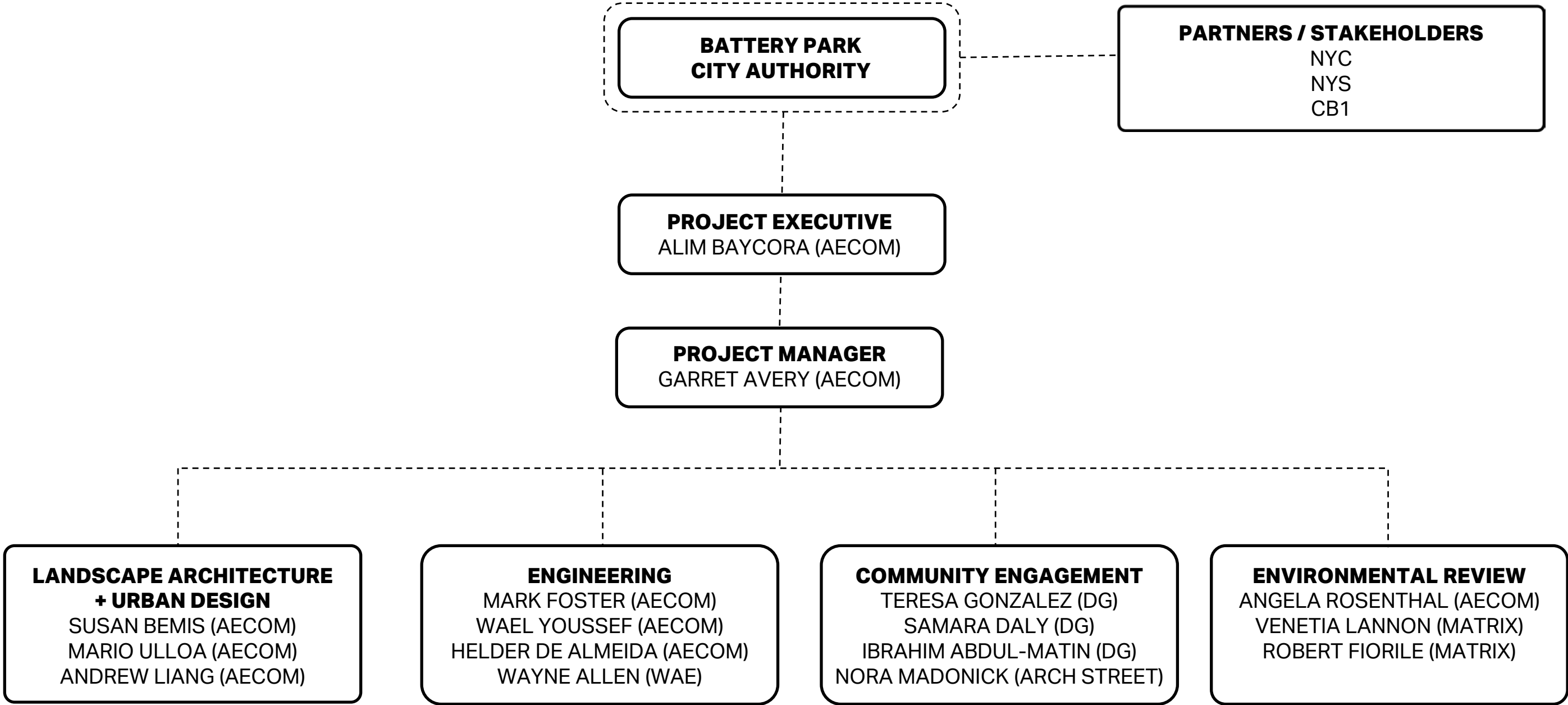
TEAM SUPPORT



JERSEY BORING & DRILLING COMPANY, INC.
JERSEY ESSAY LABS, INC.



ORGANIZATIONAL CHART



YOUR TEAM | AECOM

ABOUT US

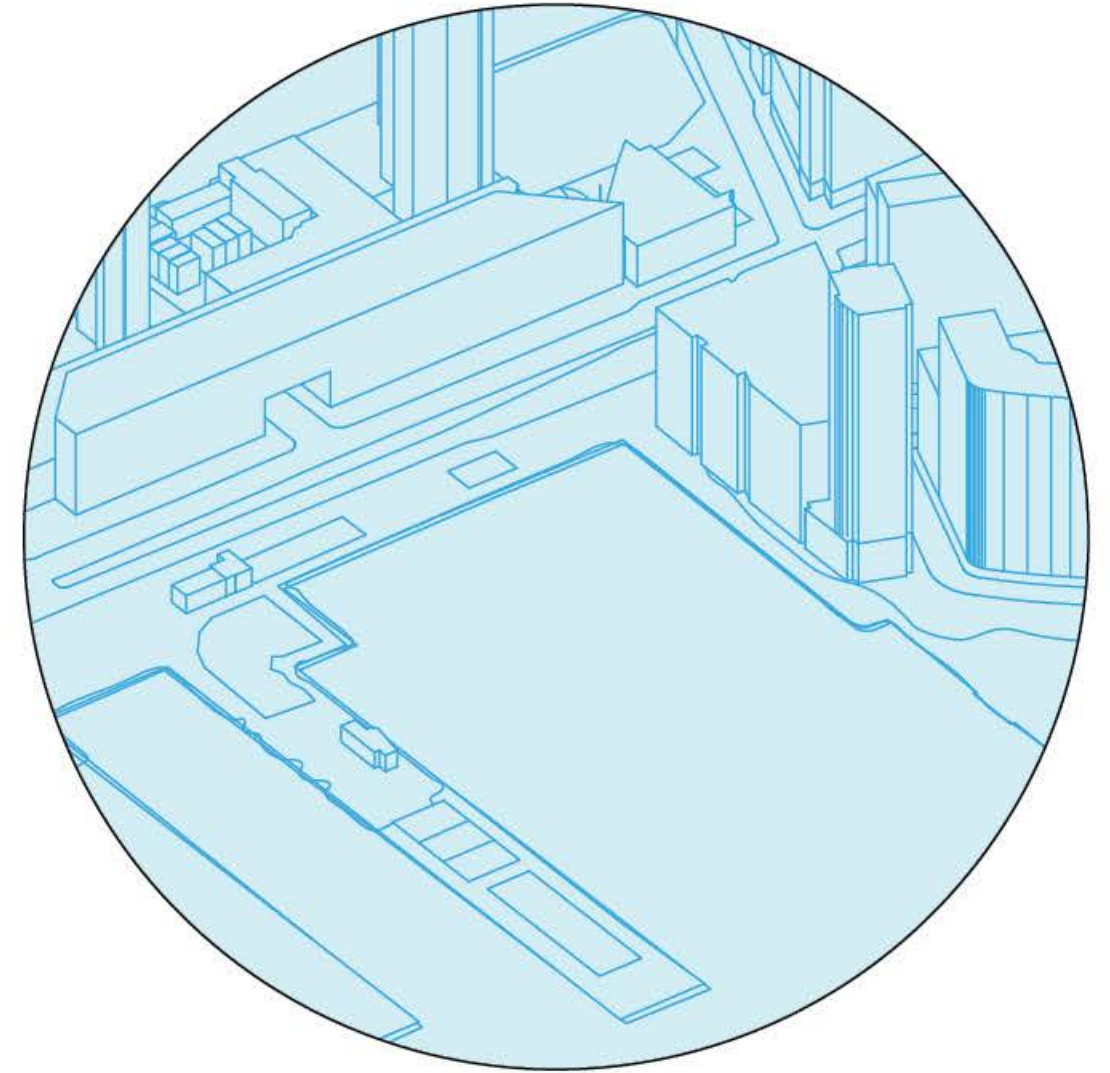
- Multi-disciplinary design team that implements the balance of disciplines
- Thrives at intersection of flood-risk management and urban integration for climate adaptation
- Robust experience in local multi-purpose and large scale urban coastal resiliency projects
- Extensively studied flood barrier technologies and approaches to flood reduction for use in Lower Manhattan
- 40+ years of providing technical support and design services to FEMA and USACE



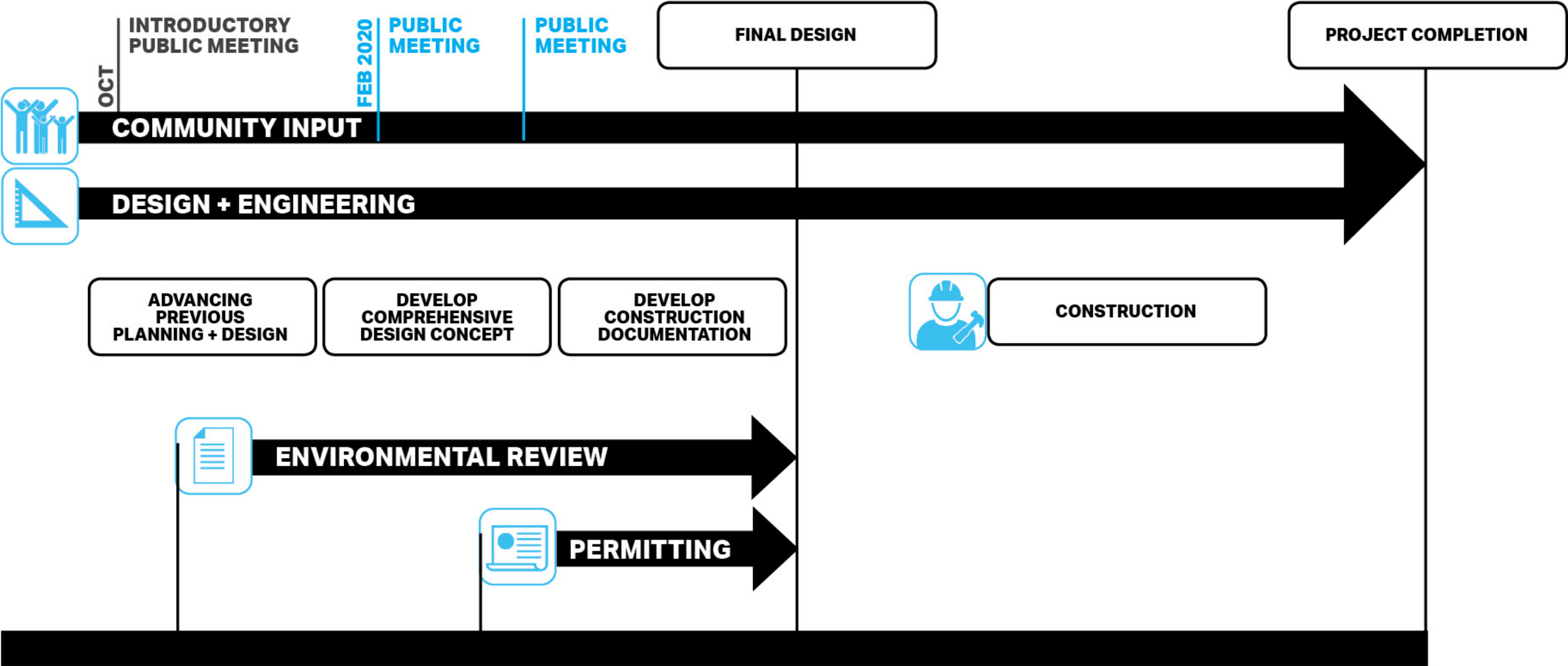
PROJECT SCOPE

PROJECT SCOPE

- Conceptual design through construction documentation of a comprehensive flood risk reduction alignment
- Integrate resiliency measures to improve risk-reduction and enhance social, recreational, and economic benefits
- Community, Partner, and Stakeholder Engagement
- Achieve independent utility to ensure FEMA certification/accreditation
- Develop long-term Operations and Maintenance manual



PROJECT SEQUENCE



2 PURPOSE + NEED + BACKGROUND

CLIMATE CHANGE + 21ST CENTURY THREATS

Increased impacts from and frequency of weather events, coupled with rising sea levels, means that a changing Manhattan shoreline is inevitable.



PURPOSE + NEED | ORGANIZING PRINCIPLES

- 1. Prioritize resiliency effectiveness and adaptability to reduce long-term risk**
- 2. Develop an implementable solution with independent utility**
- 3. Engage with community members, stakeholders, and Agency partners**
- 4. Achieve FEMA Certification/Accreditation**

2050'S 100-YEAR FLOODPLAIN



RESILIENCY MEASURES | BATTERY PARK CITY

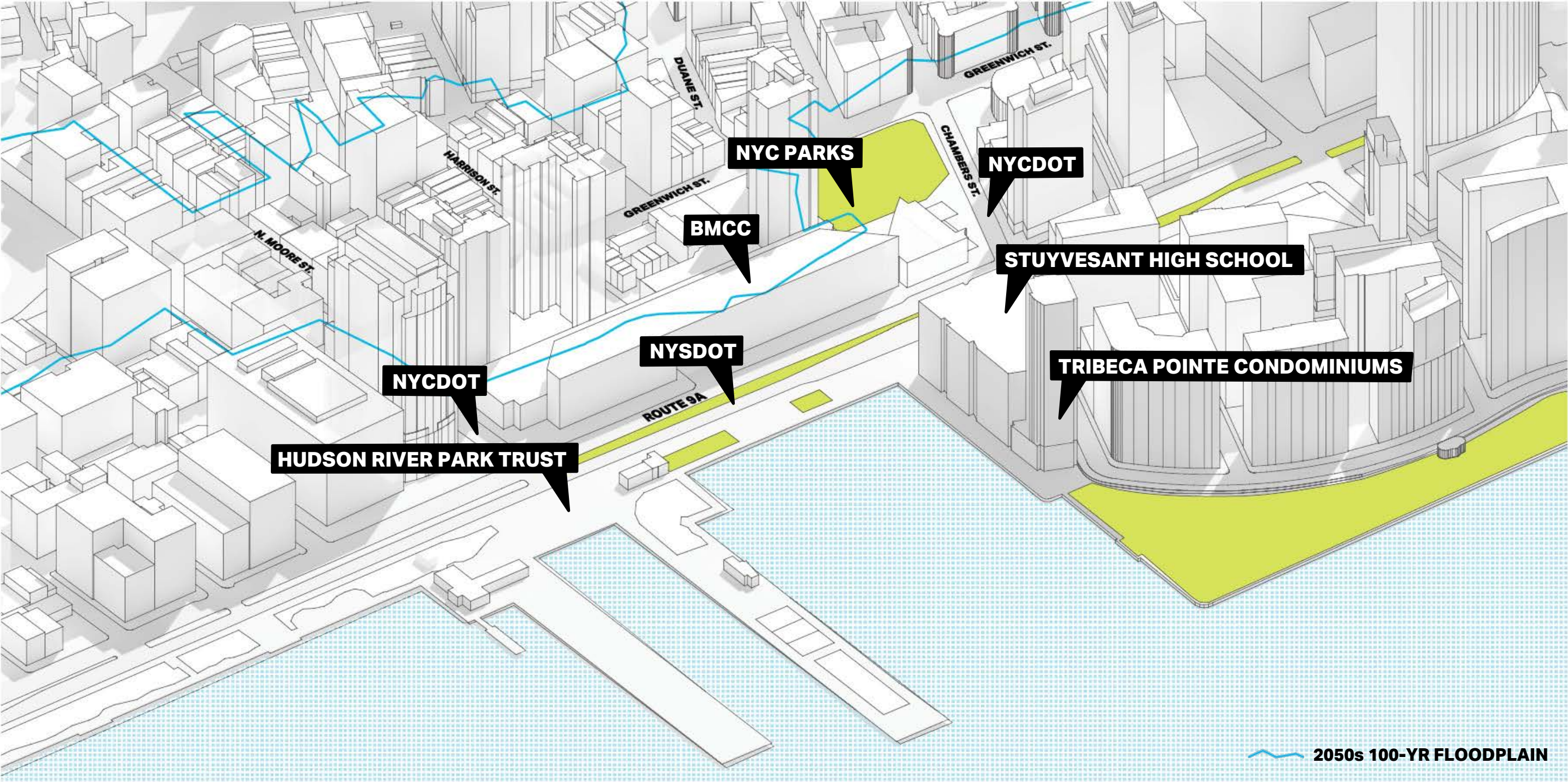


3 PROJECT AREA OVERVIEW

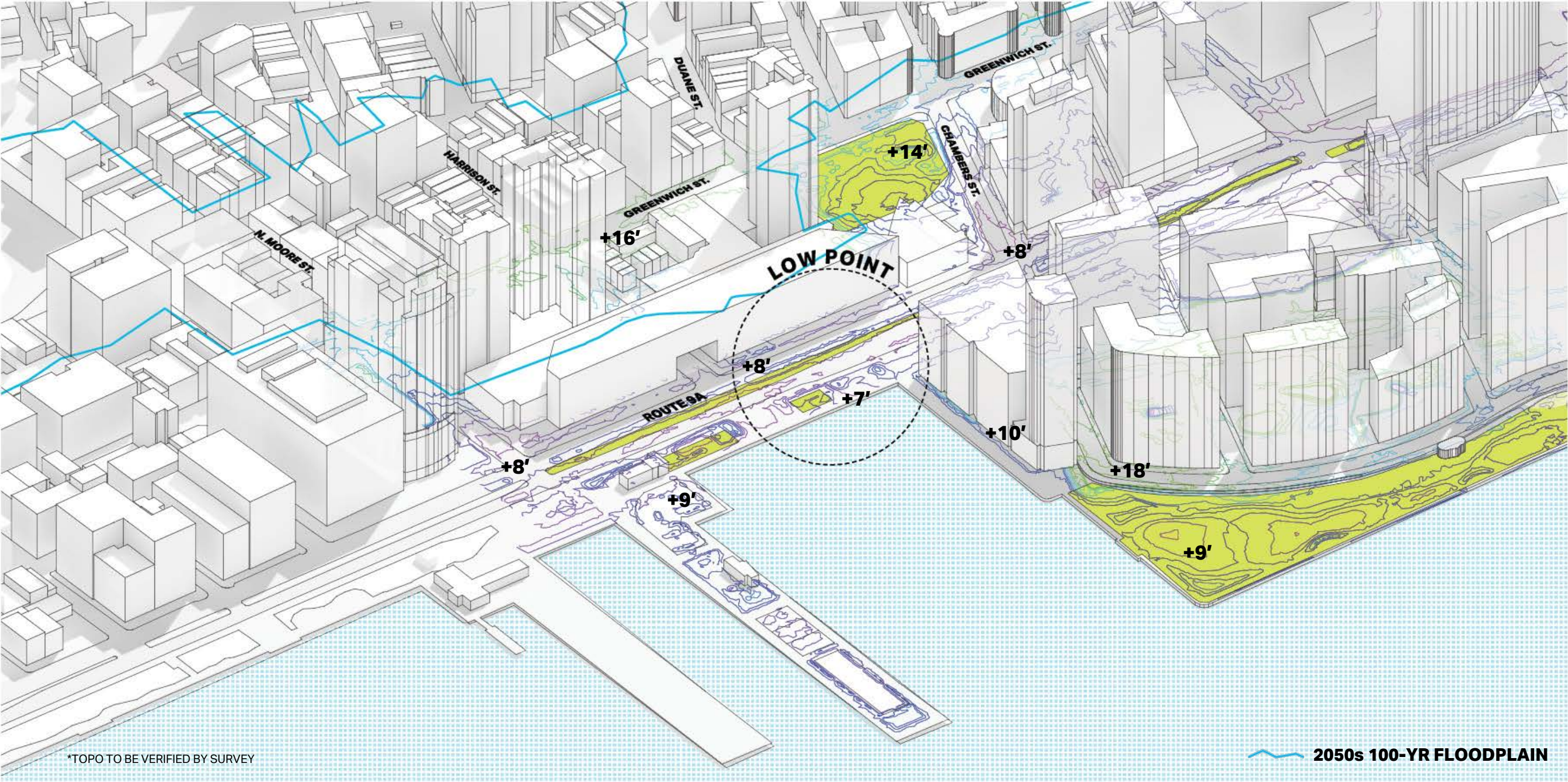
PROJECT STUDY AREA OVERVIEW



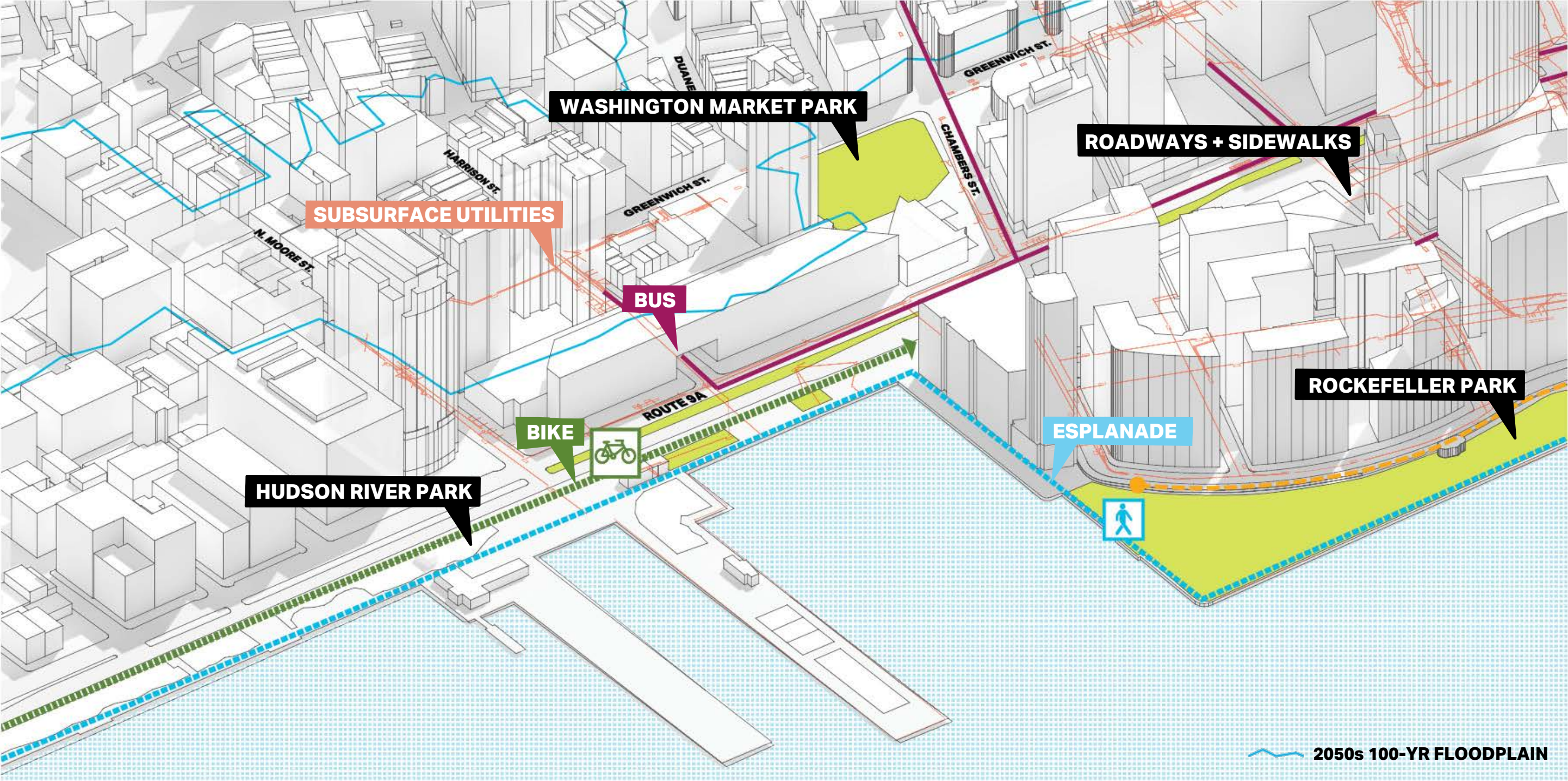
PROJECT STUDY AREA



TOPOGRAPHY | LOW POINT

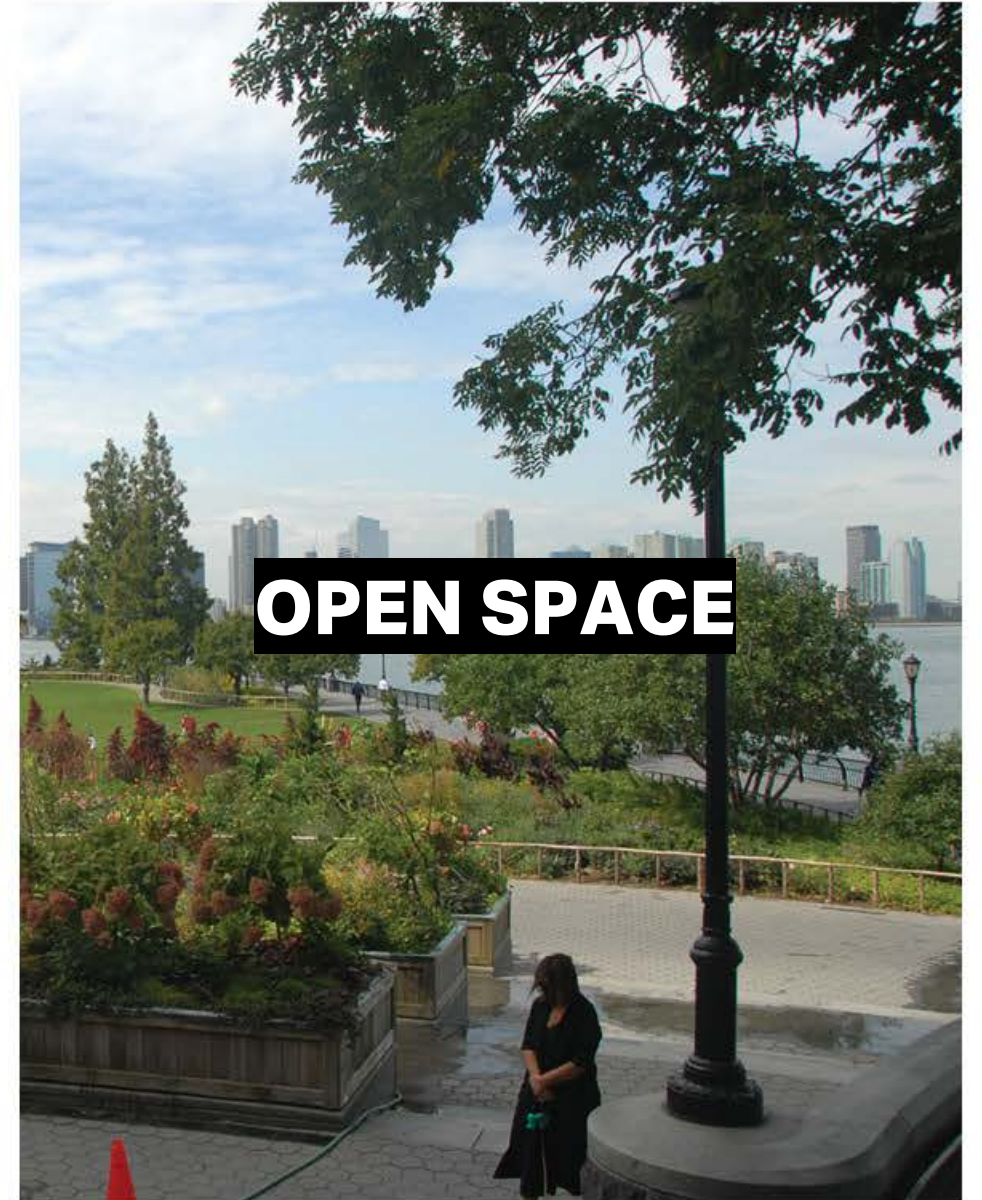
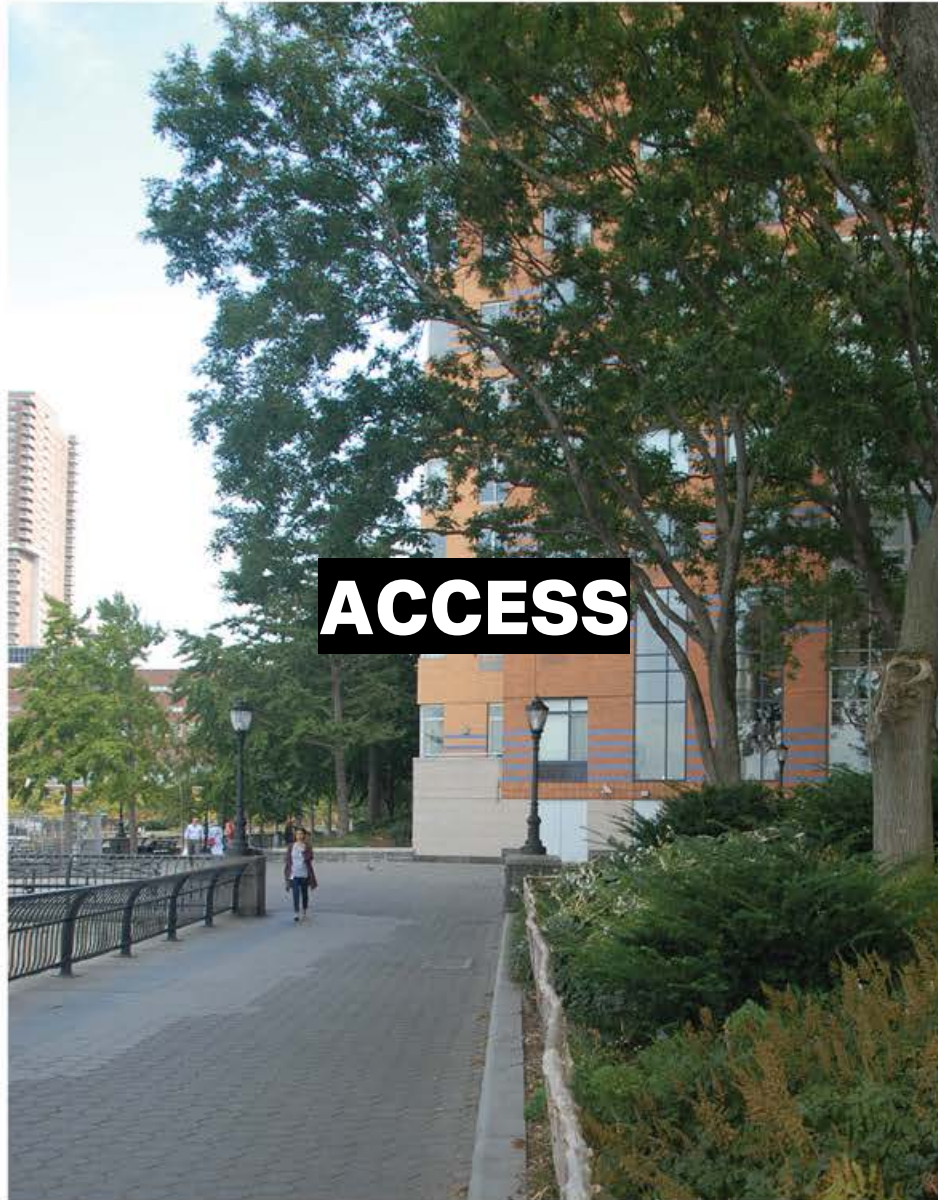


KEY CONSIDERATIONS



CONTEXT

The North Promenade provides continuous waterfront access for residents and visitors of Battery Park City and Lower Manhattan, as it connects Hudson River Park and Rockefeller Park along a contiguous waterfront. Along with the adjacent structures, it is currently one of the first assets impacted by extreme weather events, but it could become the first line of defense.



SITE VIEWS | NORTH ESPLANADE



SITE VIEWS | CHAMBERS STREET



SITE VIEWS | HARRISON STREET



SITE VIEWS | N MOORE STREET



SITE VIEWS | HUDSON RIVER PARK

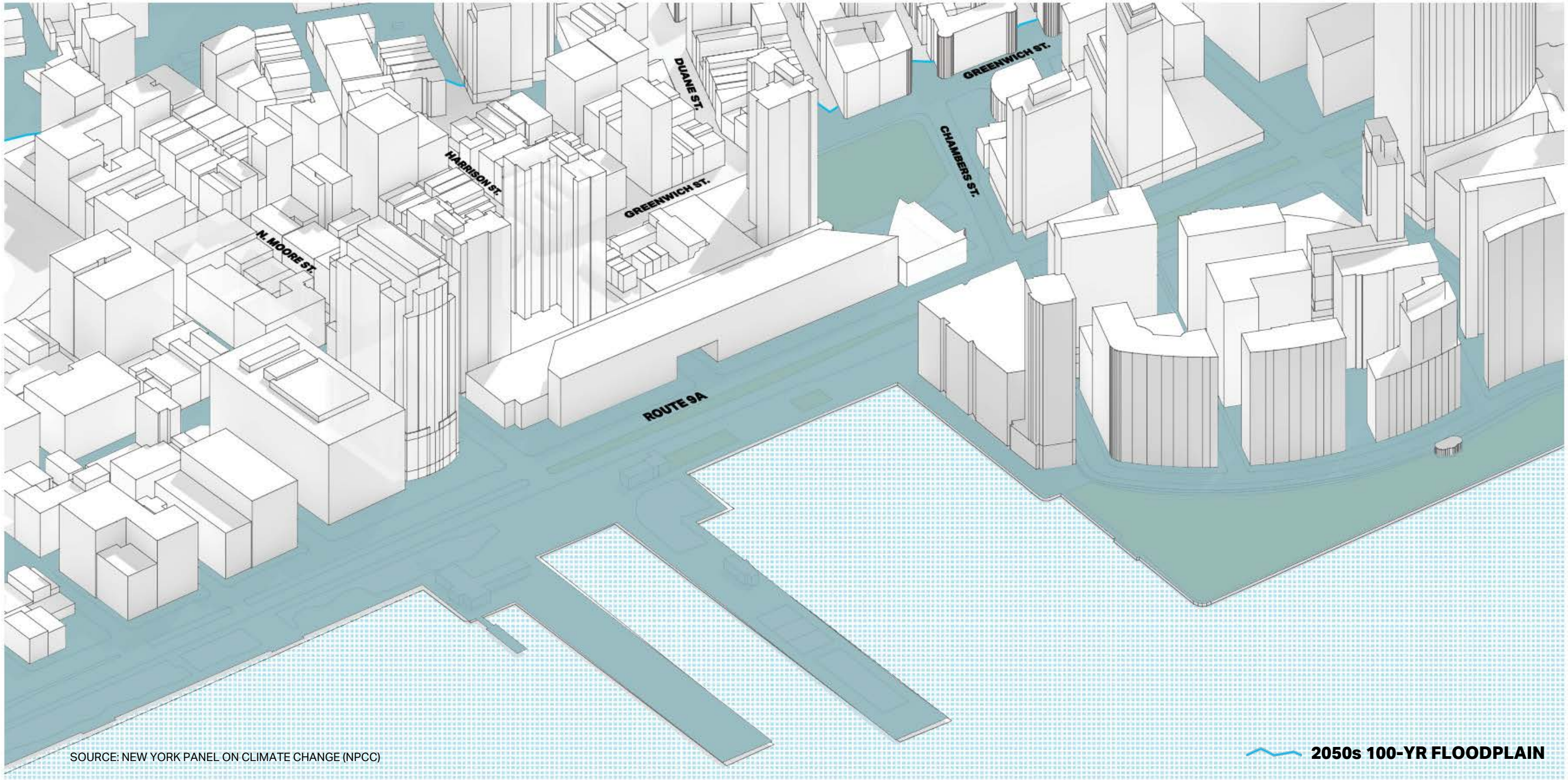


SITE VIEWS | ROUTE 9A



4 RESILIENCY MEASURES

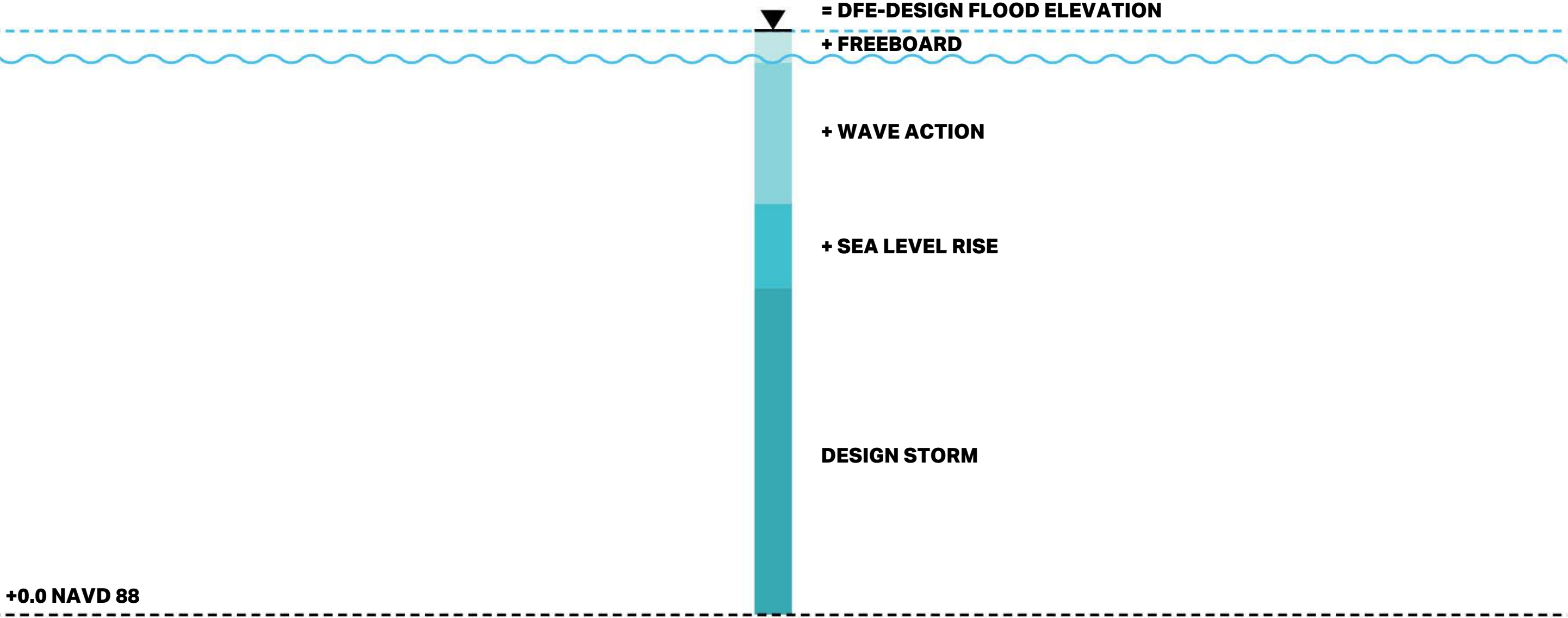
2050's 100-YEAR FLOODPLAIN



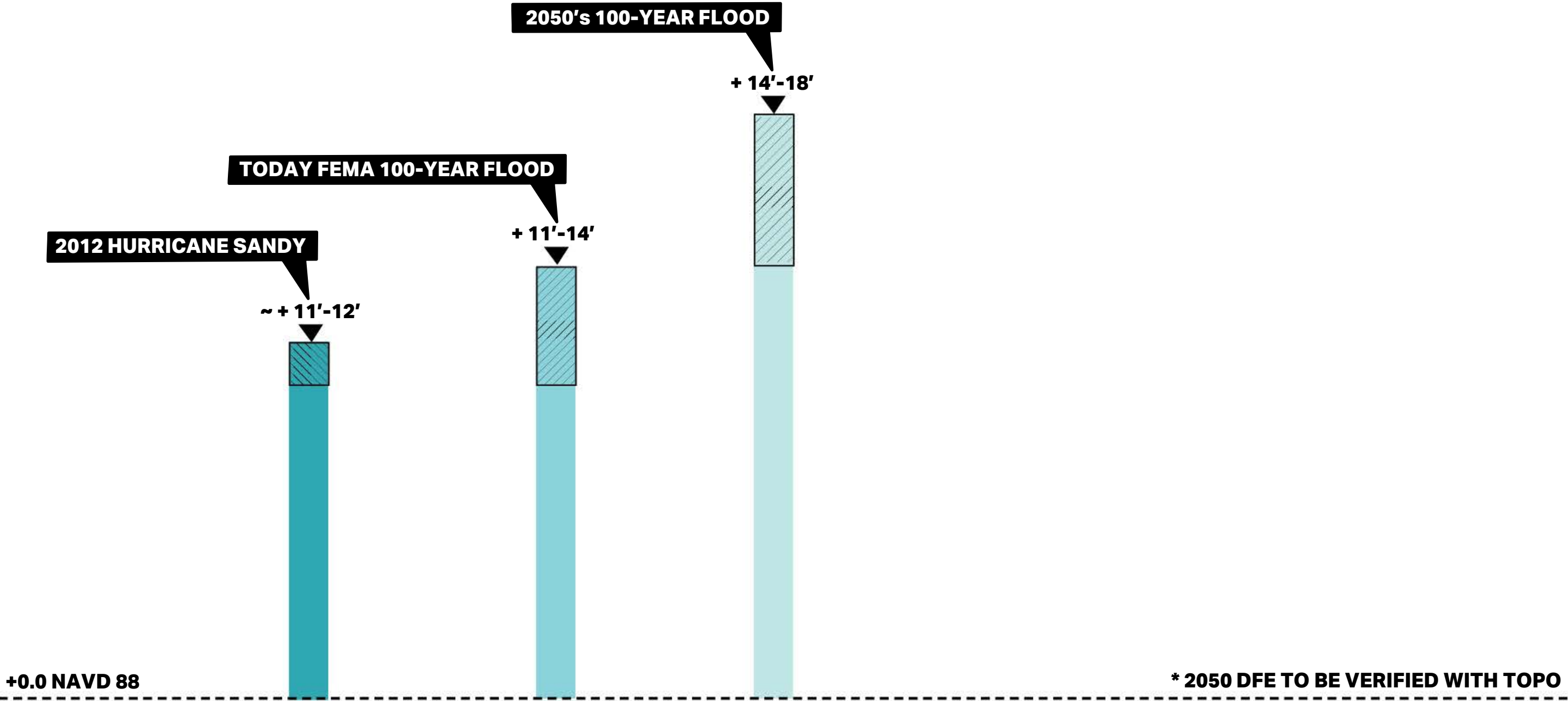
SOURCE: NEW YORK PANEL ON CLIMATE CHANGE (NPCC)

DESIGN FLOOD ELEVATION (DFE)

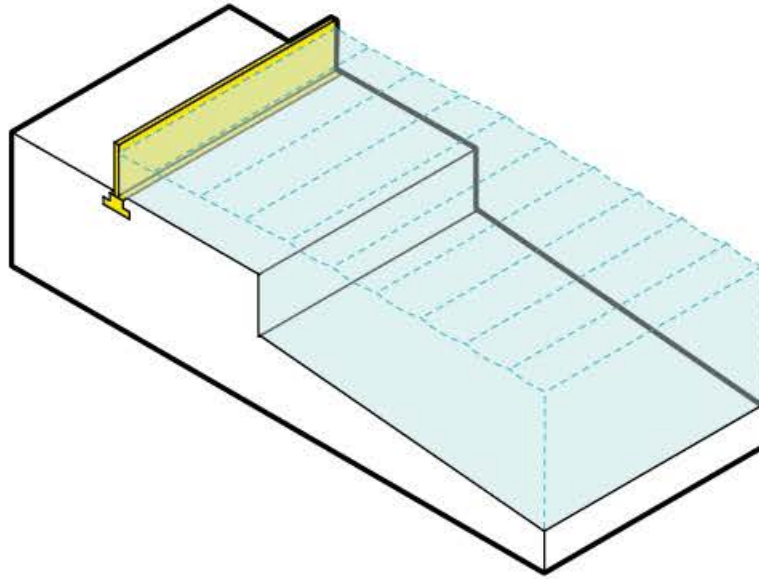
DESIGN STORM : 2050s 100 YEAR FLOOD



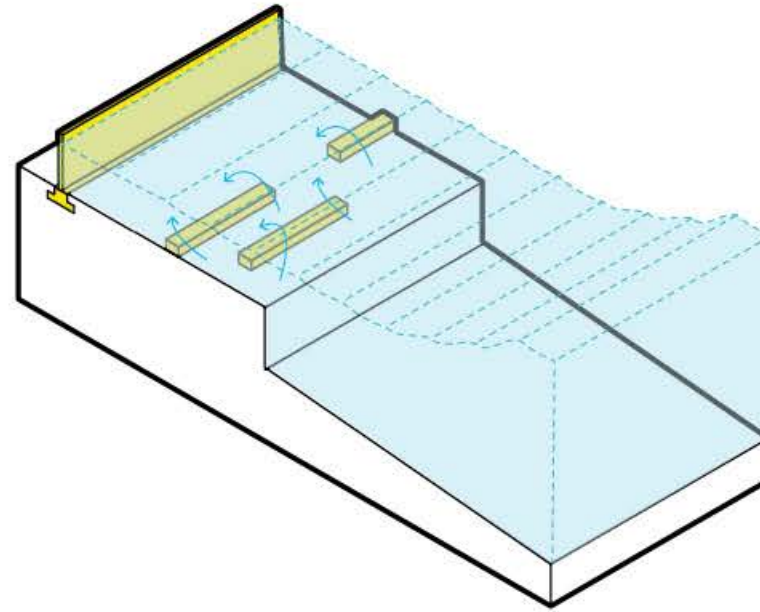
DESIGN FLOOD ELEVATION (DFE)



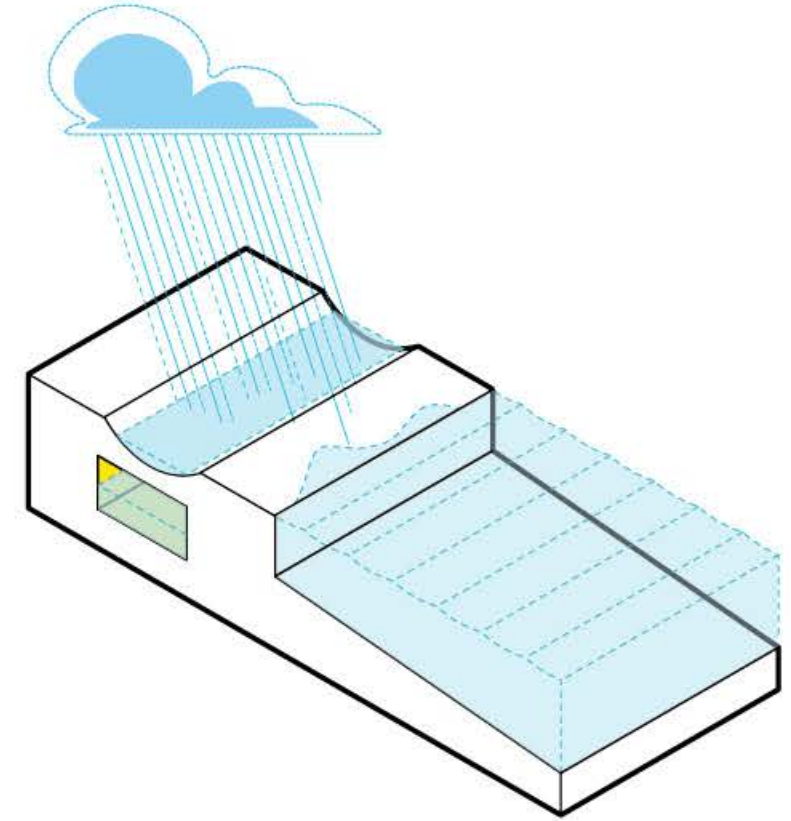
RESILIENCY MEASURES + METHODS



FLOOD RISK MANAGEMENT

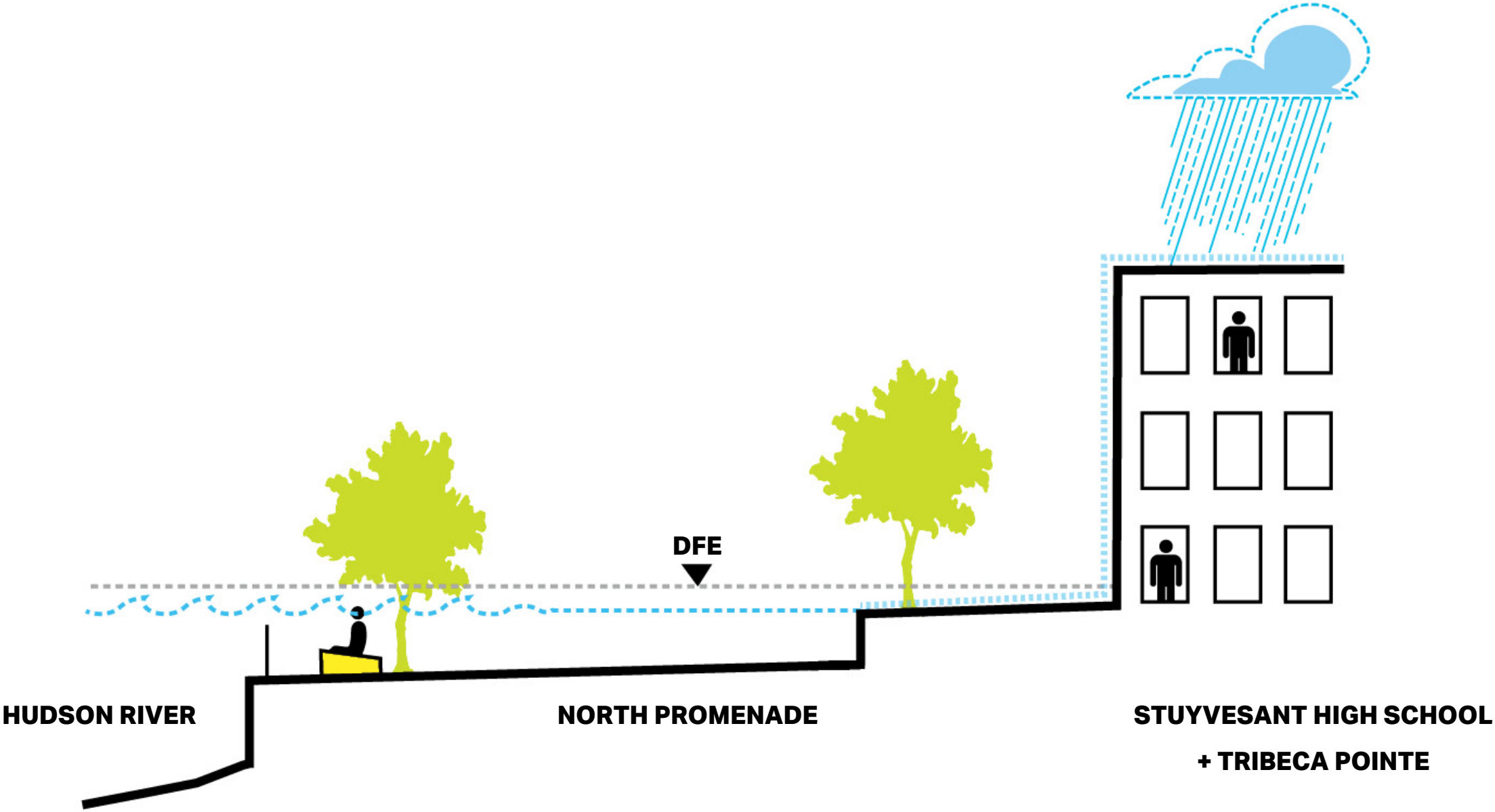


WAVE ATTENUATION

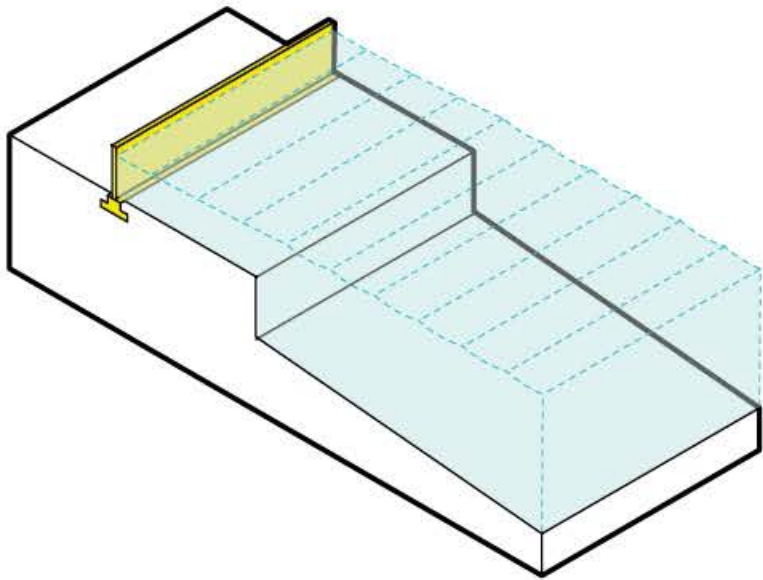


STORMWATER MANAGEMENT

RESILIENT COMMUNITY SPACE

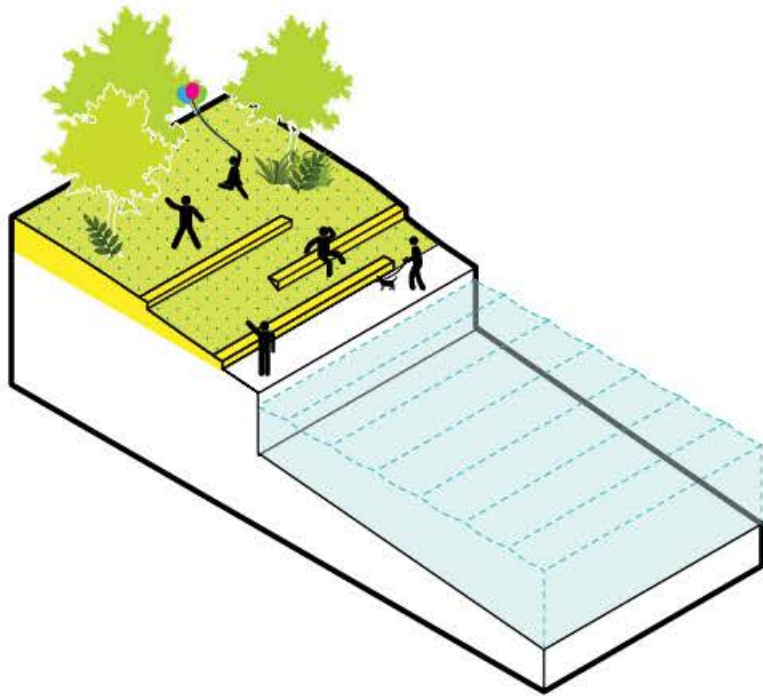


PROJECT PRIORITIES



RESILIENCY MEASURES

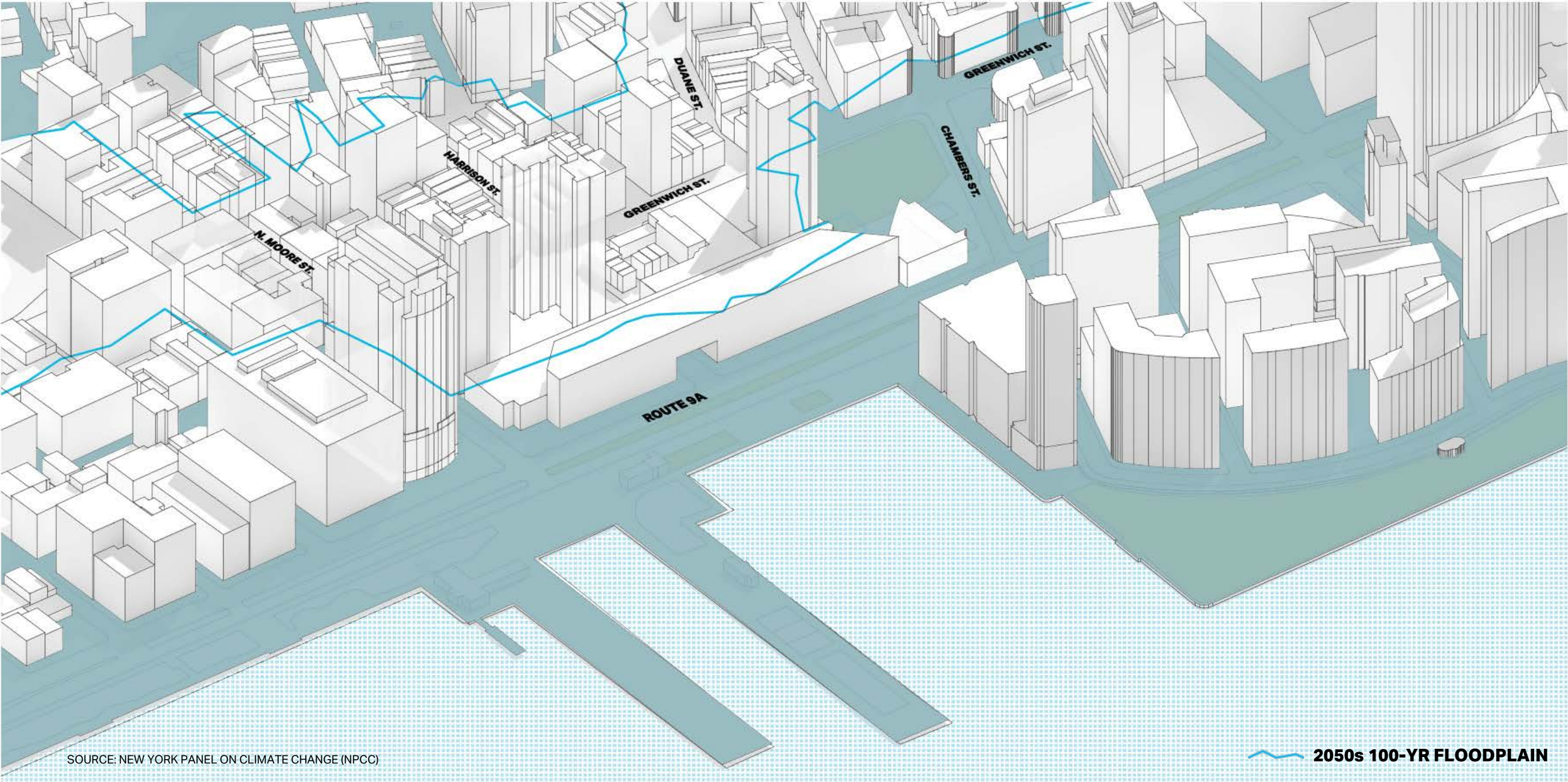
+



ADAPTIVE CAPACITY

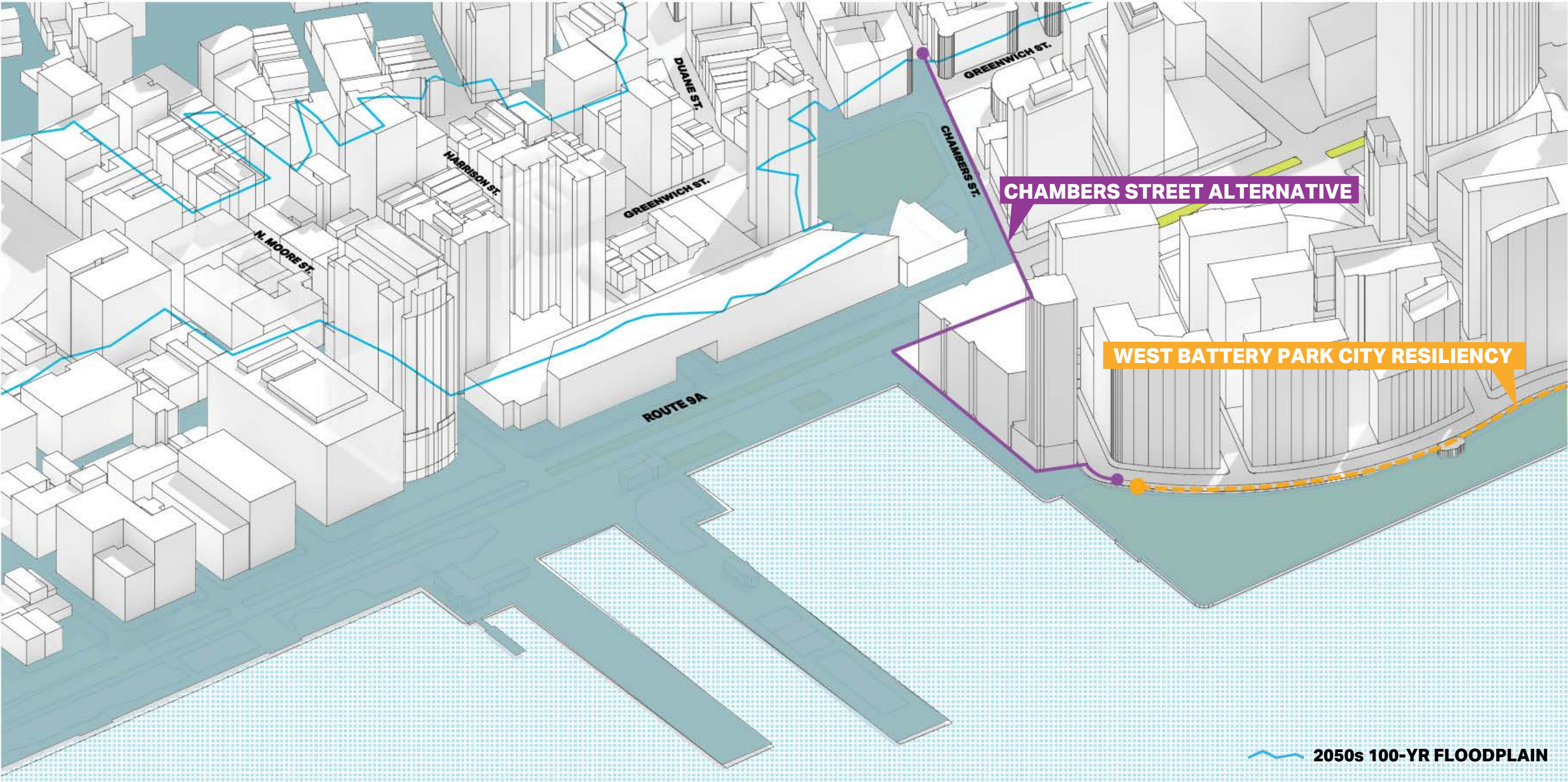
= **MULTI-PURPOSE
PERFORMANCE**

2050's 100-YEAR FLOODPLAIN

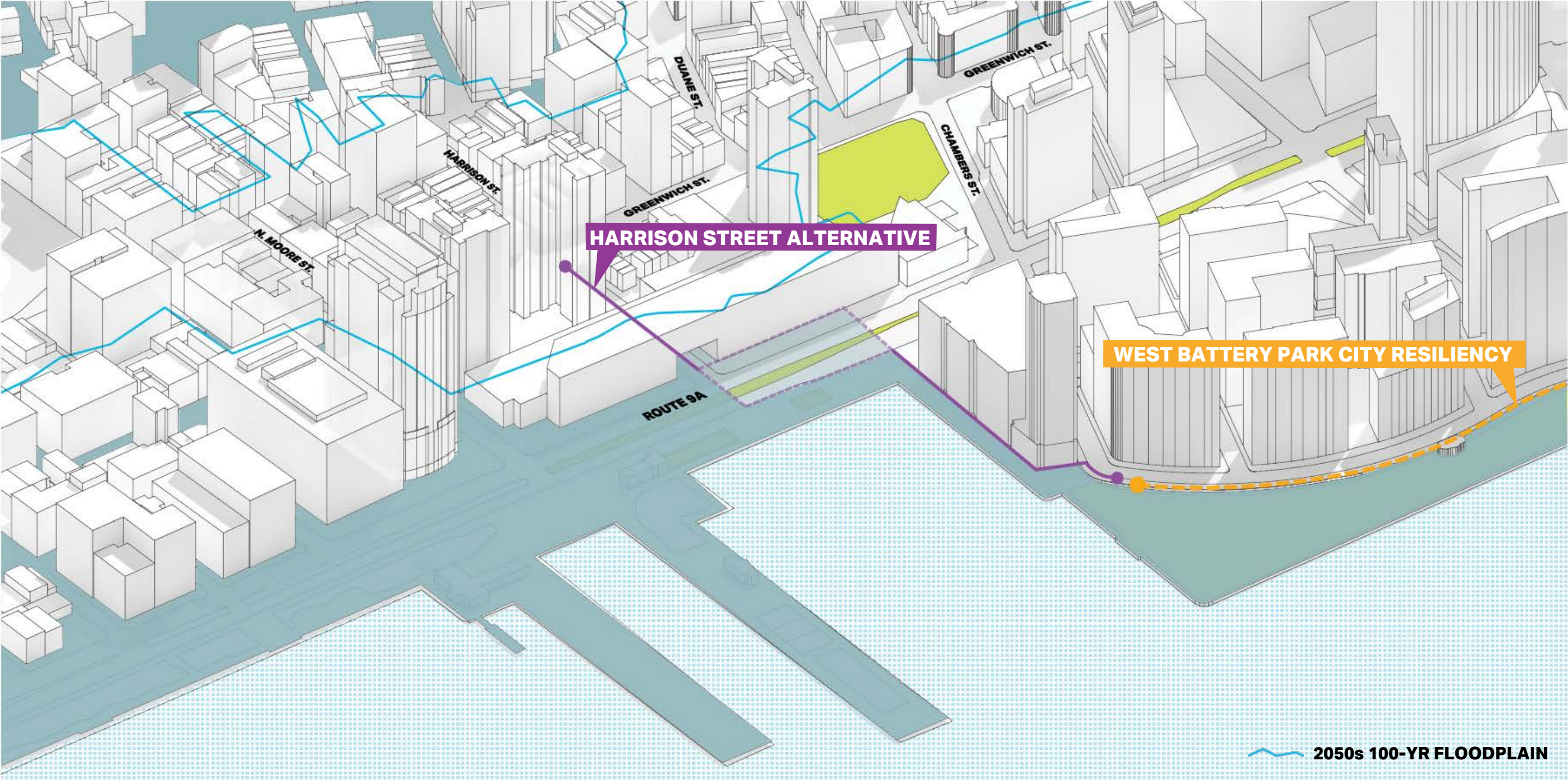


SOURCE: NEW YORK PANEL ON CLIMATE CHANGE (NPCC)

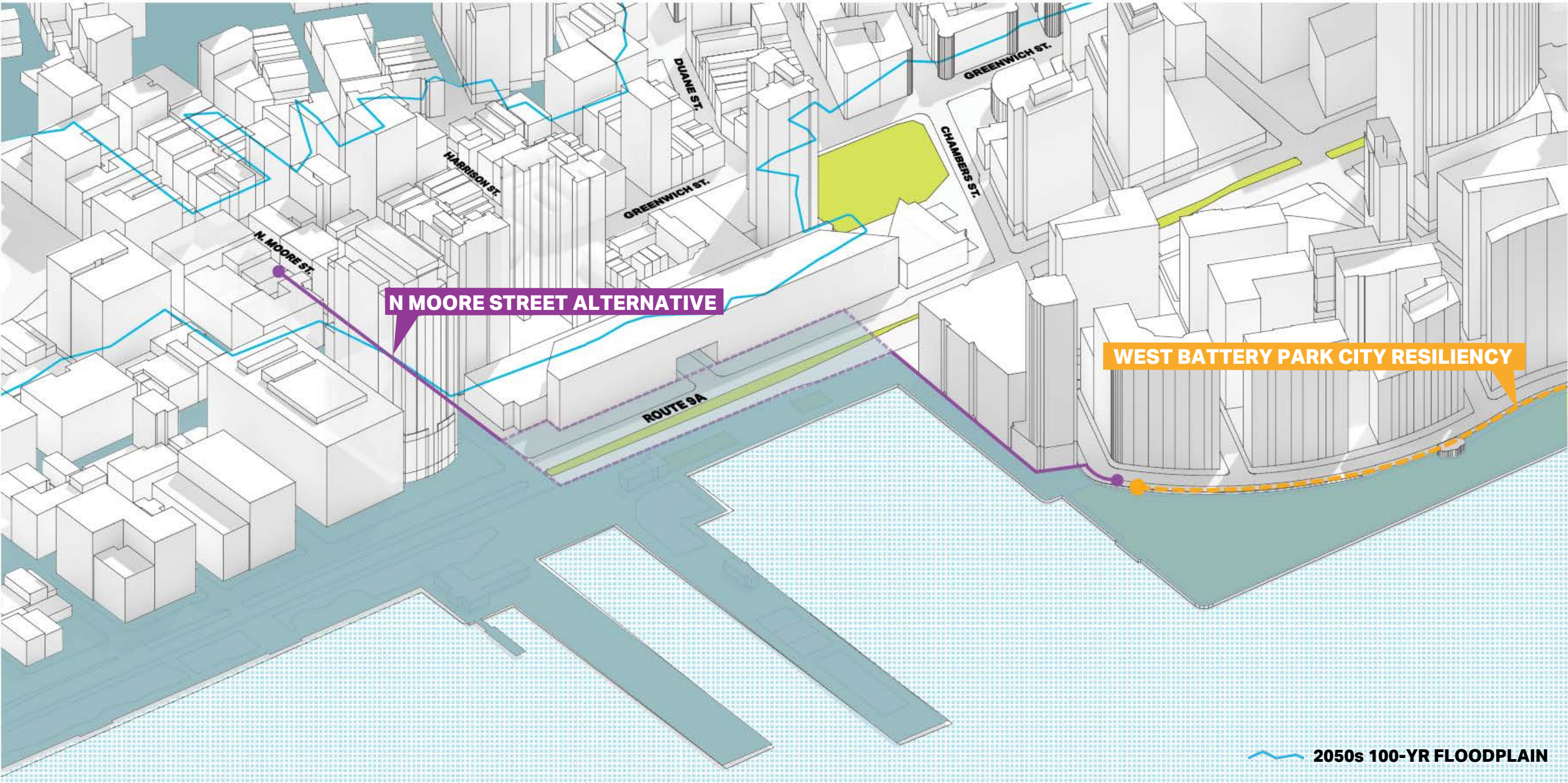
KEY CONSIDERATIONS | INTEGRATED FLOOD REDUCTION



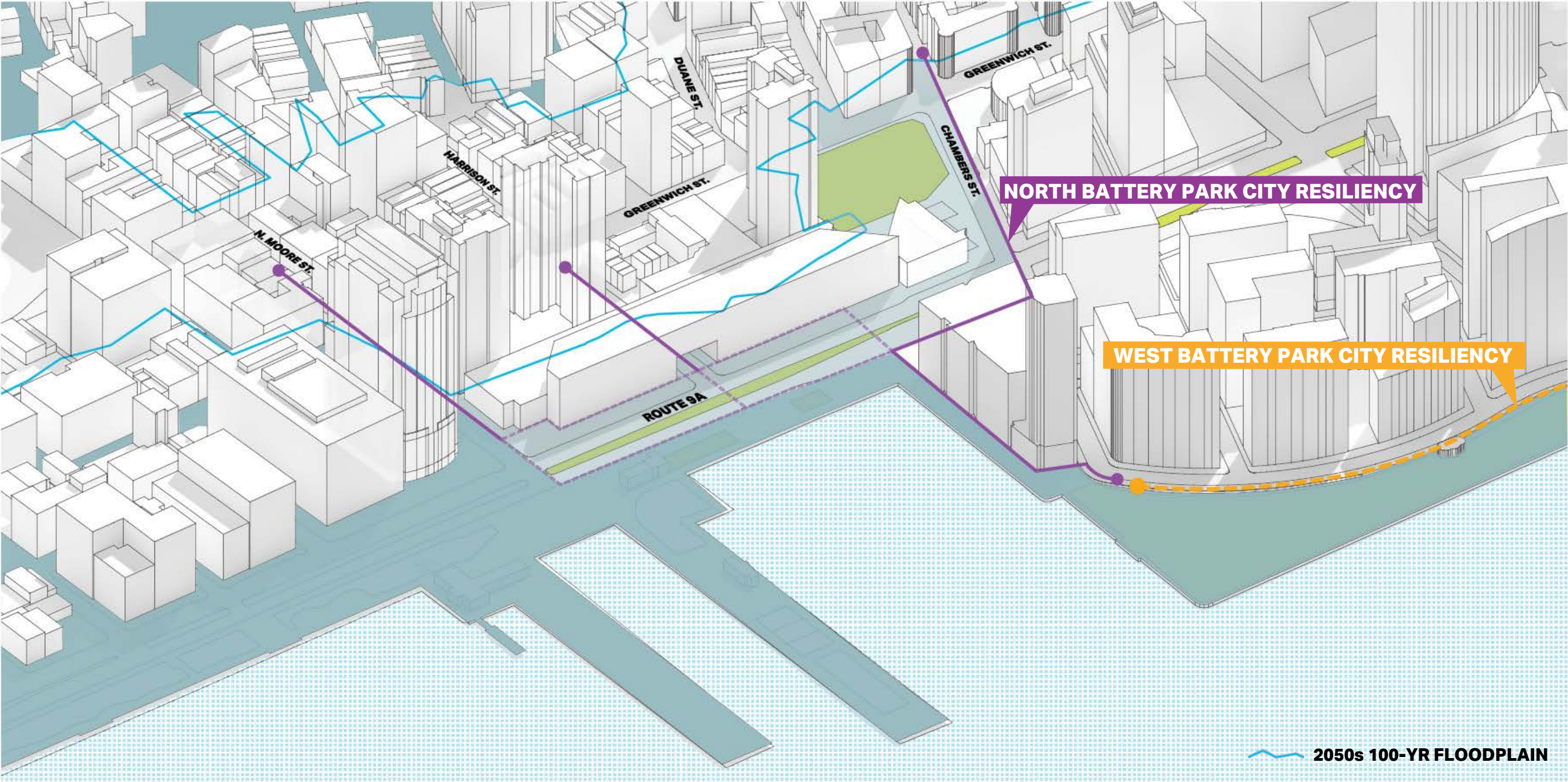
KEY CONSIDERATIONS | INTEGRATED FLOOD REDUCTION



KEY CONSIDERATIONS | INTEGRATED FLOOD REDUCTION



KEY CONSIDERATIONS | INTEGRATED FLOOD REDUCTION



NEXT STEPS

- Site Investigations: borings and surveys
- Integrated Coastal Modeling refinement
- Summary of your feedback for programming and design
- Early design development of flood alignment and overall project area
- **February 2020:** Community Meeting #2 – Alignment Recommendation + Preliminary Design Concepts

QUESTIONS + COMMENTS?



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5 Q+A

QUESTIONS + COMMENTS?



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