

RED HOOK COASTAL RESILIENCY (RHCR)

60% DESIGN WALKTHROUGH - COMMUNITY MEETING FOR PRESENTATION PURPOSES ONLY

Eric Adams Mayor Thomas Foley Commissioner Mayor's Office of Climate & Environmental Justice









AGENDA

Introductions

- 1. Meeting Goals & Project Overview
- 2. Project Timeline
- 3. What We've Heard & Engagement
- 4. Overview of Proposed 60% Design
 Q&A Break 1
- 5. Elements of the Flood Protection System
- 6. In-Depth Review of 60% Design Concepts
- 7. Neighborhood-Wide ChangesQ&A Break 2

8. Regulatory Reviews:

- Easements
- Unified Land Use Review Procedure (ULURP)
- Environmental Assessment (EA)
- Public Design Commission (PDC)

Q&A Break 3

Closing Remarks & Next Steps

MEETING GOALS & PROJECT OVERVIEW

Red Hook Coastal Resiliency (RHCR) Project

This project will reduce coastal flood risks for the Red Hook community



What we will accomplish today:

- Share how this project will improve the neighborhood and impact everyday life in Red Hook
- Show how the proposed flood protection system will reduce coastal flood risk in Red Hook
- Review how the Brooklyn Waterfront Greenway (BWG) associated amenities will improve the neighborhood
- Review the standards and approvals the project must meet to provide the safest and best design



FEMA Phases & Funding



- **\$4 Million** awarded by FEMA to study the feasibility of an Integrated Flood Protection System (IFPS)
- **\$100 Million** total capital project budget, \$50M FEMA award and \$50M local City match
- The City is required to request FEMA and DHSES approvals throughout each phase of project development: During Phase I, 30%, 60%, 90% and 100% design submissions must be submitted and approved by FEMA before proceeding to the next deliverable and phase



FEMA Eligibility Criteria

- Project timeline: substantial design completion by end of 2022
- Must be an independent system cannot depend on other projects to fully function
- Benefit Cost Analysis (BCA): quantified benefits must be greater than quantified costs
- Must be a permanent system without temporary measures
- Cannot have a negative impact on existing conditions, or worsen flooding in other nearby locations
- City must be able to access, operate, and maintain the protection system, including emergency activations, routine inspections, and repairs as needed



FEMA Criteria & Project Priorities

Meet FEMA eligibility criteria and address community and City needs



Community Priorities

Maintain Waterfront Access, Preserve Neighborhood Character, Open Space and Trees, Neighborhood-wide Coordination, Enhance Community Preparedness



Reliability

Maximum Level of Flood Risk Reduction, Minimize Use of Deployable Features Mitigate Interior Flood Impacts



Environmental Impacts

Minimize and Mitigate Environmental Impacts, Incorporate Sustainable Features Urban Design

Integrate with Neighborhood Streetscape, Maintain Waterfront Access & Views, Minimal Impact to Pedestrian & Vehicle Circulation



Constructability

Minimize Construction Impacts to Neighborhood



Operations & Maintenance

Plan For Long-Term Operations & Maintenance Needs for the Life of the Project



RHCR Project Partners & Team

New York City Agencies

- Department of Design and Construction (DDC)
- Mayor's Office of Climate & Environmental Justice (MOCEJ)
- Department of Transportation (DOT)
- Department of Environmental Protection (DEP)
- NYC Department of Parks & Recreation (Parks)
- Economic Development Corporation (NYCEDC)
- Mayor's Office of Environmental Coordination (MOEC)
- NYC Department of City Planning (DCP)
- NYC Emergency Management (NYCEM)
- Office of Management and Budget (OMB)

New York State and Federal Agencies

- NYS Div. of Homeland Security and Emergency Services (DHSES)
- Federal Emergency Management Agency (FEMA)

Design Team

- NV5 Engineering (lead design consultant)
- Grain Collective
- Karp Strategies
- Melissa Johnson Associates
- Tetra Tech, Moffatt & Nichol, Toscano Clements Taylor, Siteworks, Core Environmental Consultants, Infrastructure Engineering, MSI Engineering, B. Thayer Associates, GdB Geospatial

Coordination with:

- New York City Housing Authority (NYCHA)
- NY & NJ Port Authority (NYNJPA)
- Property Owners (O'Connell, Thor Equities, IKEA, UPS, etc.)



City Agency Roles

Mayor's Office: Oversees interagency coordination, facilitates the decisionmaking process, and manages engagement with elected officials and other key stakeholders.

Mayor's Office of Climate & Environmental Justice (MOCEJ): Integrates sustainability, resiliency, and environmental justice into one coordinated approach across several climate and environmental offices, all working to make our buildings efficient and resilient; our infrastructure climate ready; our streets, open spaces and public realm active, safe and healthy; and our energy clean and resilient

Department of Design & Construction (DDC): NYC's primary capital design and construction project manager, DDC is managing the design and construction of the RHCR project.

The Mayor's Office of Management and Budget (OMB): Oversees both the expense budget and the capital budget and conducts legal reviews of capital projects. NEPA lead agency and responsible entity for the FEMA Grant.

The Mayors Office of Environmental Coordination (MOEC). Proposed Lead Agency for the City Environmental Review (CEQR) process and the City's liaison to state and federal agencies on environmental review matters.

NYC Law Department: Assisting in land use negotiations with non-city parties.

NYC Department of Citywide Administrative Services (DCAS): Assisting in appraisals and negotiations with non-city partners.

NYC Department of Transportation (DOT): Lead Agency in fulfilling the Uniform Land Use Review Requirements (ULURP). The agency is responsible for design review for all improvements within the ROW, including the flood protection system and greenway, as well as traffic circulation and safety. DOT will also be leading long-term operations and management of flood protection systems including deployment and emergency response.

NYC Department of Parks & Recreation (NYC Parks): Responsible for reviewing designs and issuing permits for project construction impacting assets and sites under Parks' jurisdiction.

NYC Department of Environmental Protection (DEP): Serves in a design and advisory capacity for activities related to stormwater management, water and sewer infrastructure, air quality, noise, hazardous materials, and natural resources.

NYC Department of City Planning (DCP): Responsible for reviewing the land use application pursuant to the Uniform Land Use Review Procedure (ULURP).

NYC Economic Development Corporation (EDC): Coordinates approvals for activities on NYCEDC-leased and administered properties, including NYC Ferry, and Home Port 2.



PROJECT TIMELINE



RHCR Project Timeline

RHCR Look Ahead & Engagement Opportunities

Continued Community Input at Critical Milestones



Preliminary Est. Mid-2024

PROCUREMENT & CONSTRUCTION



Preliminary Est. End of 2026

WHAT WE'VE HEARD & ENGAGEMENT

RHCR Highlights

What We've Heard

- Neighborhood Level Coordination RHCR is coordinated with various City/State/Fed agencies, including DOT, DOB, DEP, Parks, EM, EDC, NYCHA, Port Authority, FEMA, etc. as well as Red Hook stakeholders including O'Connell, UPS, Amazon, IKEA, Red Hook Container Terminal and Brooklyn Greenway Initiative
- NYCHA RHCR is a separate project from NYCHA's Recovery & Resiliency project at Red Hook Houses. We are not
 anticipating conflicting construction schedules or impacts
- Brooklyn Waterfront Greenway (BWG) the City is committed to improving connections along the Brooklyn Waterfront Greenway within Red Hook and are working to integrate build-out of the Greenway into the RHCR project.
- Trees this project seeks to preserve trees unless there is unavoidable impacts due to the installation of floodwall foundations and the BWG. The project team will look for opportunities to plant new trees in the neighborhood to reduce tree loss as much as possible.
- Last-Mile Delivery this project will not exacerbate local truck traffic, nor will it be impacted by the distribution centers – the two are independent from one another. The RHCR team is committed to delivering this critical flood protection infrastructure, while being aware of these community concerns. We will coordinate closely with DOT for future temporary construction impacts to maintain traffic circulation and preserve pedestrian safety.



Construction – Details of construction impacts, timeline, operations (closures, access, detours), and any potential job opportunities will be established upon construction contract award

RHCR Community & Stakeholder Engagement

What We've Done So Far

2016 – 2018	Feasibility study, four large public meetings, several focused-group meetings	
JAN 2020	Capital project kick-off meeting and recap of Feasibility Study	
IAN-MAR 2021	Introductory briefings with Elected Officials and stakeholders, including: Councilmember Menchaca, Congresswoman Velazquez, Assemblywoman Mitaynes, BK Borough President, BK CB6 District Manager, Red Hook Initiative, Resilient Red Hook, Red Hook West, Community Justice Center, MAP	
FEB-JUN 2021	Coordination meetings with private properties, including: Port Authority, O'Connell Group, Thor Equities, Amazon, UPS, IKEA	
SEP 2021	1 Design meetings with Elected Officials and key stakeholders, including: Councilmember Menchaca, Congresswoman Velazquez, Assemblywoman Mitaynes, BK Borough President BK CB6 District Manager, Resilient Red Hook, Red Hook West and East, MAP	
OCT 2021	30% Design Public Meetings / Workshops	
JAN-JUN 2022	Coordination meetings with private properties, including: Port Authority, O'Connell Group, Thor Equities, Amazon, UPS, IKEA	
JUNE 2022	60% Design Meetings: Elected Officials, CB6, and Red Hook Community	



OVERVIEW OF PROPOSED 60% DESIGN

Red Hook Neighborhood Flooding Existing Conditions Elev. 10-ft

Flood Protection Alignment

10

+10

Based on existing topography, the Flood Protection Alignment ties into natural high points in the neighborhood to provide a continuous line of protection at elevation 10'

+10

Existing 10' ElevationProposed Protection

O Tie-in Points

RHCR Overview

Project Goals, Alignment, Components

- Maintain a passive system at elevation 8-ft
- Deployable features are activated ahead of a hurricane for the system to reach elevation 10-ft
- Minimal impacts to pedestrian, bike, and vehicle circulation
- Maintain neighborhood connectivity and access to active waterfront
- Enhance and incorporate the Brooklyn Waterfront Greenway
- Reduce flood impacts to existing drainage system



Note: highlighted areas have been enlarged for visual presentation purposes only, and are not to scale



3 MIN Q&A BREAK 1



ELEMENTS OF THE FLOOD PROTECTION SYSTEM

Floodwalls Design

- Consistent with City's Coastal Resiliency projects ex. ESCR, BMCR
- Walls continue below grade approx. 4-feet
- Walls are supported on pile foundations
- Seepage barriers extend below wall footings
- Every 6-inches of the flood wall is represented by a banded pattern
- Wall heights will be published at wall ends
- Pattern spacing is consistent for all walls









Sliding Flood Gates Design

- Consistent with City's Coastal Resiliency projects ex. ESCR, BMCR
- Grey painted steel
- Rounded corners to complement walls
- Extend banding from walls through gates
- Incorporate gate numbering







TEXT + LABELING MUNSEL GREY PAINT (TYP)



TEXT + LABELING GW GREY PAINT (ASSER LEVY)



Flip Up Flood Gates Design

- Consistent with City's Coastal Resiliency projects -٠ ex. ESCR, BMCR
- Alloy aluminum with stainless steel components ٠
- 50-year life expectancy •
- Hydraulically deployed or manual .
- 1-1/2" thick dark grey grouted architectural finish ٠ to differentiate from sidewalk





IN-DEPTH REVIEW OF 60% DESIGN CONCEPTS

Establish Measurement Nomenclature

For Your Reference: Elevation vs. Height





Summit, Imlay and Van Brunt Street

3560

COMMUNITY PRIORITIES ACHIEVED

2

- Preserve Neighborhood Character
- Neighborhood-wide Coordination
- Enhance Community Preparedness



BROOKLYN WATERFRONT GREENWAY 30

1012

RE-GRADE YARD ENTRANCE

Rea

THE PORT A





Draft Rendering

Imlay Street and Bowne Street

50





Pioneer and Conover Streets



Clinton Wharf and Ferris Street

RAISED STREET

- COMMUNITY PRIORITIES ACHIEVED
- Maintain Waterfront Access
- Preserve Neighborhood Character
- Neighborhood-wide Coordination
- Enhance Community Preparedness

GREENWAY

FLOOD WALL AGAINST BUILDING







Ferris / Van Dyke / Conover Streets



- Preserve Neighborhood Character
- Open Space and Trees
- Neighborhood-wide Coordination,
- Enhance Community Preparedness

Beard and Conover Streets

BROOKLYN WATERFRONT GREENWAY

COMMUNITY PRIORITIES ACHIEVED

- Preserve Neighborhood Character
- Open Space and Trees
- Neighborhood-wide Coordination



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Beard and Van Brunt Streets



Beard and Van Brunt Streets













Todd Triangle (Columbia Street)

- erstander

THE REAL PROPERTY.





COMMUNITY PRIORITIES ACHIEVED

- Maintain Waterfront Access
- Preserve Neighborhood Character
- Open Space and Trees
- Neighborhood-wide Coordination
- Enhance Community Preparedness

NEIGHBORHOOD -WIDE CHANGES

Trees

This project seeks to preserve trees unless there is unavoidable impacts due to the installation of floodwall foundations and the Brooklyn Waterfront Greenway (BWG). The project team will look for opportunities to plant new trees in the neighborhood to reduce tree loss as much as possible.

Existing Trees

Anticipated number of impacted trees is 69 (*tbd*), due to: floodwall foundation, pedestrian access, BWG, and existing tree health

Proposed Planting Plans

DDC is in coordination with NYC Parks to develop a planting plan that meets tree replacement requirements





Traffic Flow & Street Changes

As part of this project, some street directions and traffic flow in some areas will be reorganized to improve efficiency, diversify truck traffic, and to allow the implementation of the Brooklyn Waterfront Greenway (BWG):

Ferris Street

Convert Ferris Street to one-way South-Bound (Sullivan to Coffey St.) Convert Ferris Street to one-way North-Bound (Van Dyke to Coffey St.) **This creates a one-way pair between Ferris St. and Conover St.**

Van Dyke

Convert Beard Street to one-way EB (Van Brunt to Dwight Streets) This creates a one-way pair between Beard St. and Van Dyke St.

This project seeks to preserve parking spots as much as possible, however, there are unavoidable impacts due to the installation of the BWG and floodwall that could lead to some parking loss; more details will be provided once the Traffic Study is completed





20 MIN Q&A BREAK 2



RGULATORY REVIEWS

Required Federal, State, & City Reviews and Studies

Compliance requirements for the project to provide the safest and best design

- Easements
- Unified Land Use Review Procedure (ULURP)
- Environmental Assessment (EA)
- Traffic Study
- Public Design Commission (PDC)



Easements

City processes used where access is required to build or maintain the protection system

Easements

- What is an Easement? Legal agreement that grants an interested party the right to use another person's property or land in a certain way despite not having any ownership interest.
- An easement will be required for short list of properties adjacent to proposed floodwalls for maintenance, operation, and inspections.





Unified Land Use Review Procedure (ULURP)

The City's public process to change the use of land (streets and property)

A Change in City Map (MM) action currently under review for:

- **Grades**: Alterations to legal grades due to raised street grades will also fall under this action.
- **De-Mapping:** The de-mapped portion of Halleck Street south of Todd Triangle may also be encompassed within the same ULURP action.

Additional actions may be needed for:

- IKEA (TBD): Portions of the proposed work on IKEA, located within a designated Waterfront Public Access Area may also necessitate a landuse action
- **Port Authority (TBD):** Proposed permanent project elements within PANYNJ property, such as the Brooklyn Waterfront Greenway and permanent flood walls.
- **Maintenance (TBD):** NYCDOT requires a 6-ft easement, where feasible, adjacent to all Flood Protection System elements for inspection.





Environmental Assessment

Required Studies and Analysis that support the EA



Water Quality





Floodplain



Coastal Resources





Noise Transportation **Hazardous Materials**

Threatened and Endangered Species

Cultural Resources

ADDITIONAL STUDIES NOT REQUIRED:

- Geology
- Topography
- Soils
- Air Quality
- Environmental Justice
- Land Use and Planning
- Public Service and Utilities
- Public Health and Safety

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Environmental Assessment

Federal / State / City Agency Consultations Required

Water Resources

NYS Department of State (DOS) Coastal Zone Management Act (CZMA) / NYC Waterfront Revitalization Program (WRP) -

Consistency Assessment Form

- Assessment Statements for Relevant Policies
- Joint Application Form
- Environmental Review Documents
- 60% Design Plans

T/E Species

- USFWS Information for Planning and Consultation (IPaC)
 - IPaC ESA Review Process > Consultation Package Builder (CPB)
- NOAA Essential Fish Habitat
 - Essential Fish Habitat (EFH) Assessment Consultation Worksheet
- NYSDEC

Cultural Resources

- NYS Office of Parks, Recreation, & Historic Preservation (OPRHP) State Historic Preservation Office (SHPO) and Section 106
 - Cultural Resource Information System (CRIS): Submit project documentation for Federal (Section 106), State or SEQR environmental Review (Project Description / Photographs of Project & Surroundings / USGS Quad Map)
- NYC Landmarks Preservation Commission (LPC)

Hazardous Materials and Wastes

- NYC Department of Environmental Protection DEP
 - Limited Phase I ESA: update for specific alternatives
 - Submit Phase I ESA / Phase II ESA Work Plan / Health & Safety Plan (HASP) (If remedial measures required > Draft Remedial Action Plan and Site Specific CHASP)

Air Quality

- Environmental Protection Agency (EPA) / NYC DEP
 - Qualitative / Quantitative Noise Assessment



Traffic Study

Comprehensive Study of Pedestrians, Bikes, Cars, and Truck Movements

Purpose: Analysis existing and future traffic conditions to evaluate:

- Potential Impacts from Flood Protection System (FPS)
- Pedestrian Level of Service on sidewalks
- Implementation of Brooklyn Waterfront Greenway (BWG)
- Truck and Bus Movements
- Parking, Crashes, Proposed Signalization

Conclusions/Recommendations

- Proposed flood protection system will not impact existing or Future Traffic Conditions
- Pedestrian and Bicycle Safety will be improved
- Congestion may increase in some locations based on assumed future development





Public Design Commission (PDC)

Advocate for innovative, sustainable, and equitable design of public spaces

All projects within the public realm that include a "Structure", or "Art Installation" need to be reviewed and approved by the Public Design Commission

Commission: PDC is made up of 11 Commissioners

Interagency Coordination: PDC submission takes place after agency approval of design ensuring compliance with City Design Standards and Regulations, as well as Community review

Schedule:

- PDC Preliminary Presentation August 2022
- PDC Final Presentation November 2022 •



Fixed Walls







Flip-up Gates



Planting Palate



Greenway Alignment



Seating, and other **Appurtenances**

Sampling of Elements Requiring PDC Approval



10 MIN Q&A BREAK 3



CLOSING REMARKS & NEXT STEPS

RHCR Look Ahead & Engagement Opportunities

Continued Community Input at Critical Milestones

	30%	Community and CB6 feedback on 30% design	OCT 2021	
	FEMA REVIEW	Approval of 30% design		
DESIGN	60%	Continued Community and CB6 meetings Public Design Commission (PDC) Preliminary Review		ve are
	FEMA REVIEW	Under Review	JUNE 2022	here
	100%	Final community presentation and CB6 Public Design Commission (PDC) Final Review		
	FEMA REVIEW	Upon approval, advance to procurement & construction	Est. Late 2022	

Preliminary Est. Mid-2024

	PROCUREMENT & CONSTRUCTION	Contract bid advertisement, contract award & registration, Regular progress updates to community Public notices, construction kick-off, continued community updates and advance notifications Preliminary Est. End of 2026
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CONTACT US

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RED HOOK COASTAL RESILIENCY

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NYC

Department of Design and Construction

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15 MIN OPEN DISCUSSION

