BK Bridge - Montgomery Coastal Resilience

Design to Upcoming Construction and Operations

May 11, 2021
AGENDA

1. PROJECT INTRODUCTION + RECAP
2. DESIGN PHASE RECAP - Q+A
3. CONSTRUCTION - Q+A
4. EMERGENCY RESPONSE PLAN, FROM 2025 ONWARD - Q+A
5. OPERATIONS + MAINTENANCE, FROM 2025 ONWARD - Q+A
6. CDBG-NDR ACTION PLAN AMENDMENT 1 PUBLIC HEARING - PUBLIC COMMENT
Lower Manhattan Coastal Resiliency

Types of Flood Risk Facing Lower Manhattan

**Storm Surge**
The temporary increase, at a particular location, in the height of the sea due to extreme weather conditions.

**Sea Level Rise (SLR)**
Refers to the increase in sea level caused by a change in the volume of the world’s oceans due to temperature increase, ice melt, and deglaciation (uncovering of glaciated land because of melting of the glacier).

South Street Post-Hurricane Sandy
New York City is implementing $500M in on-land capital projects and advancing a Master Plan for FiDi-Seaport. Capital projects to protect 70% of the shoreline of Lower Manhattan, and Master Plan for remaining 30%.
The BK Bridge-Montgomery Coastal Resilience (BMCR) project is a section of the LMCR project stretching from the Brooklyn Bridge to Montgomery Street.

The infrastructure, when deployed, will protect the Two Bridges neighborhood from flooding while maintaining the community’s views and access to the waterfront.

Project Team: 

- NYC/EDC
- Mayor’s Office of Resiliency
- Department of Design and Construction
- New York City DOT
- AECOM
LOWER MANHATTAN COASTAL RESILIENCY

Flood damage in Two Bridges from Hurricane Sandy
The Brooklyn Bridge-Montgomery Coastal Resilience project is more critical than ever.

This image shows the effect of a 100-year flood in the 2050s, accounting for a 30” rise in sea level above current height.

*A 100-year flood is a flood event that has a 1% chance of occurring in a year.*
DESIGNED WITH COMMUNITY

2016 to 2021

10 Community + Task Force Meetings
8 Public Meetings
3 Community Tabling Sessions
5 Updates to Community Leaders
4 Presentations at Local Housing Developments

Fall 2020

4 VR Videos
34,000 China Press + El Diario Print Newspapers with BMCR Advertisement Distributed Throughout the Lower East Side
24 Easy-to-Share Social Media Graphics Shared Across:
3 Social Media Platforms
8,470 Flyers
510 Posters

3 Waterfront Banners
128 Webinar Attendees
108 Mini Banners
604 YouTube Views of Webinar Recordings*

3 Coloring Books
10 Bulletin Boards

*As of 4/1/2021

BMCR Advertisement
DESIGNED WITH COMMUNITY

4 VR Videos

3 Waterfront Banners

108 Mini Banners

34,000 China Press + El Diario Newspapers with BMCR Advertisement
Webinar Attendees: 128
YouTube Views of Webinar Recordings*: 604
Coloring Books: 3,260

*As of 4/1/2021
This section of the East River Esplanade is being redesigned to reduce risk from flooding while maintaining views and waterfront access.

During major flooding events and regular tidal flooding, the flood protection will either flip up, roll or swing shut, or stay put.

Reducing the risk of flooding in Two Bridges.

The Lower Manhattan Coastal Resiliency (LMCR) project spans the entire Lower Manhattan coast and is the City’s plan to protect residents and businesses, MTA jobs, and critical infrastructure from flooding. The Brooklyn Bridge-Montgomery Coastal Resilience section of the project protects the Two Bridges community and is expected to break ground in 2021.

The same waterfront that the community enjoys when weather is good... transforms into critical flood protection during major flooding events.

We heard you.
The City has worked with you, the Two Bridges community, for over 4 years to understand your vision for a safe waterfront. Based on what we heard from you, the waterfront design will include:

- Spaces to move,
- Spaces to sit and relax,
- Spaces to play.

Raising key sections of the waterfront protects from tidal flooding.

The Lower Manhattan Coastal Resiliency (LMCR) project spans the entire Lower Manhattan coast and is the City’s plan to protect residents and businesses, MTA jobs, and critical infrastructure from flooding.

The Brooklyn Bridge-Montgomery Coastal Resilience section of the project protects the Two Bridges community and is expected to break ground in 2021.

ASK US A QUESTION OR SUBMIT A COMMENT AT qrgo.page.link/X2ncq ABOUT THE PROJECT ON:

Wednesday December 16, 2020 at 6 PM

Scan the QR code to join us for an online presentation about the project on Wednesday December 16, 2020 at 6 PM.

Ask us a question or submit a comment at qrgo.page.link/X2ncq.
BMCR is fully funded through the addition of new city capital funding.

- **$172 Million** Federal Funding (CDBG-NDR)
- **$350 Million** City Funding
- **$522 Million** Total Budget
WHAT DOES $522 MILLION DELIVER FOR OUR COMMUNITY?

- Flip-up gates
- Continued waterfront access
- Community amenities
- Addition of raised sill (platform) to protect against sea level rise in addition to storm surge.
- Drainage and parallel conveyance
- Replacement of water main in project area that broke in both 2018 and 2020.

Work below ground accounts for more than half of all material costs.

WHAT DOES $522 MILLION DELIVER FOR OUR COMMUNITY?

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WHAT DOES $522 MILLION DELIVER FOR OUR COMMUNITY?

- Pre-Design
- Design
- Community Engagement
- Environmental Review
- Permitting

- Construction Management
- Contingency
- Community Construction Liaison

- Material Costs
- Labor Costs
AGENDA

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5. OPERATIONS + MAINTENANCE, FROM 2025 ONWARD - Q+A

6. CDBG-NDR ACTION PLAN AMENDMENT 1 PUBLIC HEARING - PUBLIC COMMENT
The final design features spaces to socialize, spaces to sit and relax, spaces to move, and spaces to play.
SPACES TO SOCIALIZE | CATHERINE SLIP ESPLANADE
NORTH SPACES TO MOVE | FITNESS
SOUTH SPACES TO PLAY | PLAY
DESIGNED TO PROTECT THE SURROUNDING COMMUNITY

During major flooding events and regular tidal flooding, the flood protection will either...

...flip up,

or stay put.

roll or swing shut,

...transforms into critical flood protection during major flooding events.

Raising key sections of the waterfront protects from tidal flooding.

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AGENCY RESPONSIBILITY

Design + Planning

LEAD AGENCY

NYC/EDC

SUPPORTING AGENCIES

NYC Mayor's Office of Resiliency
AGENCY HANDOFF

Design + Planning → Procurement + Construction

LEAD AGENCY

NYC/EDC  
NYC DDC
Department of Design and Construction

SUPPORTING AGENCIES

NYC Mayor's Office of Resiliency
NYC Mayor's Office of Resiliency
NYC/EDC
AGENCY HANDOFF

Design + Planning → Procurement + Construction → Built Project

LEAD AGENCY

NYC/EDC

Department of Design and Construction

Operations and Maintenance
Flood Infrastructure

Operations and Maintenance
Landscape

Emergency Response Plan

SUPPORTING AGENCIES

NYC Mayor’s Office of Resiliency

NYC Mayor’s Office of Resiliency

NYC Mayor’s Office of Resiliency

NYC/EDC
CONSTRUCTION TIMELINE

Feasibility Study

We are here, Spring 2021

Pre-Construction

- Regular community updates from DDC at CB3 meeting
- Procurement process, including contractor selection

Construction

- Regular community updates from DDC at CB3 meetings
- Working on behalf of DDC as the first point of contact for local community members and stakeholders, the Community Construction Liaison (CCL) is responsible for communicating construction impacts and helping to resolve construction-related inquiries.
- Single-phase project with one contractor (no phasing)
- Ongoing communication through DDC’s Community Engagement, Intergovernmental Affairs, and CCL, as well as the project’s email listserv.

Summer 2016
Winter 2018
Spring 2019
Summer 2021

Winter 2022 to Summer 2025
During Construction, DDC will become the main point of contact.

Your Community Construction Liaison

Kiumars Amiri (Q)
Deputy Director, Coastal Resiliency
AmiriKi@ddc.nyc.gov

Fay Lee
Borough Outreach Coordinator
LeeFa@ddc.nyc.gov
A DEDICATED CONSTRUCTION POINT OF CONTACT

**Community Construction Liaison**

First point of contact for local community members and stakeholders including residents, small and large businesses, local schools, and emergency responders.

DDC will introduce the project CCL

**Responsibilities:**

- Inform neighbors of construction activities & impacts
- Resolve any project-related impacts to neighbors
- Attend community meetings such as Community Board meetings to provide project updates
COORDINATING ACROSS PROJECTS

TIMELINES

PIER 42
- Spring 2021 - Construction Started

PIER 35
- 2019 Completed

EAST RIVER ESPLANADE - PACKAGE 3
- 2014 Completed

EAST RIVER ESPLANADE - PACKAGE 4
- Completed 2020

BROOKLYN BRIDGE ESPLANADE (BBE)
- October 2019 - 100% Construction Documents
- Currently - Construction Procurement

BROOKLYN BRIDGE-MONTGOMERY COASTAL RESILIENCE
- Fall 2019 - Schematic Design Complete
- Summer 2021 - 100% Construction Documents and Bidding
- Winter 2022 - Construction Starts
- Summer 2025 - Construction Complete
WHAT TO EXPECT DURING CONSTRUCTION

*DETAILS TO BE CONFIRMED BY DDC ONCE BMCR PROJECT CONTRACTOR IS ONBOARDED

THE DESIGN TEAM IS WORKING WITH DOT TO KEEP THE TEMPORARY BIKE ROUTE AS CLOSE TO THE EXISTING ROUTE AS POSSIBLE.
Q + A

NYC DEPARTMENT OF DESIGN + CONSTRUCTION (DDC)
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WHAT TO EXPECT

Q: How much warning should I expect to have before a major flood event?

A: Storm notifications will be sent between 5 days and 36 hours before arrival of sustained tropical storm force winds. The time of arrival of these winds is referred to as “Zero Hour”.

A: In most cases, deployment of flood gates will accompany an evacuation order.

Q: If flood gates are deployed, should I expect to be evacuated?

Zero Hour: Time of arrival of sustained tropical storm force winds (39 mph or greater).
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Potential citywide messaging channels include press releases, NYC.gov websites, Notify NYC, 311, and social media channels.
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PRE-ZERO HOUR
- Storm monitoring and forecasting
- Pre-storm inspections of flood protection measures
- Cross-agency coordination
- Notification of potential event
- Deployment of infrastructure
  - Closing the Esplanade
  - Setup vehicular detour

ZERO HOUR

BOOKMARKER: BK Bridge - Montgomery Coastal Resilience
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### PRE-ZERO HOUR
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### DURING STORM
- Continuous storm & flood protections monitoring
- Monitor Notify NYC for emergency alerts and updates
Zero Hour: Time of arrival of sustained tropical storm force winds (39 mph or greater).

**ZERO HOUR**

- Storm monitoring and forecasting
  - Pre-storm inspections of flood protection measures
  - Cross-agency coordination
  - Notification of potential event
  - Deployment of infrastructure
    - Closing the Esplanade
    - Setup vehicular detour

**ZERO HOUR, DURING STORM**

- Continuous storm & flood protections monitoring
- Monitor Notify NYC for emergency alerts and updates

**POST-ZERO HOUR**

- Potential citywide messaging channels include press releases, NYC.gov websites, Notify NYC, 311, and social media channels

**POST-STORM**

- Removal of debris
- Cleanup and repairs of flood barriers unable to be stowed away due to damage / debris
- Document damages
  - Stow barriers
STAYING INFORMED

Are you signed up for emergency alerts through NotifyNYC?

GET FREE EMERGENCY ALERTS

Get the free app for Apple and Android devices

ALL NYC RESIDENTS
AECOM + NYC OFFICE OF EMERGENCY MANAGEMENT + NYC DEPARTMENT OF TRANSPORTATION (DOT)
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AGENCY RESPONSIBILITIES FOR SYSTEM COMPONENTS

- Interceptor Gate Chamber and House
- Tide Gates
- Isolation Gate Valve

- Above grade floodwalls
- Roller, Flip-Up, & Swing Gates
- Gate Manual Deployment Telehandlers

- Sport & Fitness Equipment
- Playground Equipment & Surfacing
- Bike Path (from Pier 35 South to Whitehall Street)

- Pier 36 Security Gates

- New combined sewers at various upland areas on City right-of-way and on non-City areas

- HPU at Flip-Up Gates. Hydraulic Power Units (HPUs) provide power for the flip-up gates, and are housed in a series of concrete columns.

- Seating (static and swing seats)
- Lighting
- Plumbing
- Pavers
SYSTEM TESTING

Special Inspections:
Conducted following tropical or extra-tropical storm events, earthquakes, or significant vehicle strike of floodwall or flood gate

Inspection Schedule

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarterly</td>
<td>• Visual assessment of maintenance needs, and items to monitor in the future</td>
</tr>
<tr>
<td></td>
<td>• Occurs prior to hurricane season</td>
</tr>
<tr>
<td></td>
<td>• Deploy gates to inspect</td>
</tr>
<tr>
<td>Annually</td>
<td>• More thorough inspection of structural integrity of system</td>
</tr>
<tr>
<td></td>
<td>• Conducted by a multi-disciplinary engineering team</td>
</tr>
<tr>
<td>Every 5 years</td>
<td>• Conduct assessments to identify changes in storm threat</td>
</tr>
<tr>
<td></td>
<td>• Review updated sea level rise projections to plan for any future flood protection needs.</td>
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CDBG-NDR ACTION PLAN AMENDMENT 1
PUBLIC HEARING
WHAT IS AN ACTION PLAN?

- The City of New York received $176 million of CDBG-NDR funding from the U.S. Department of Housing and Urban Development in January 2016 for coastal protection in Lower Manhattan, including BMCR.

- The City’s NDR Action Plan describes activities the City will fund with the grant and related funding sources.

- The City makes amendments to the Action Plan from time to time to reflect program updates, additional investments, and other significant changes.

- In accordance with NDR funding requirements, NYC is proposing a substantial amendment to its CDBG-NDR Action Plan and releasing Amendment 1 for public comment.
SUMMARY OF ACTION PLAN AMENDMENT CHANGES

- Updates project descriptions and other project information to be consistent with current framing including details on BMCR and Green Infrastructure Playgrounds

- Provides other updates to the BMCR project description, milestones, and beneficiaries based on 95% level design

- Announces additional funding commitments made by the City, particularly $318 million for BMCR

- Updates the CDBG-NDR grant deadline from September 2022 to September 2023

- Reallocates $3.0 million from Planning funds to BMCR project costs

- Reallocates $3.8 million from Administration funds to BMCR project costs
HOW TO COMMENT ON THE ACTION PLAN AMENDMENT

<table>
<thead>
<tr>
<th>Means</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment at Tonight's Hearing</td>
<td>Use Q&amp;A during tonight’s Public Hearing</td>
</tr>
<tr>
<td>Website</td>
<td>Visit <a href="http://www.nyc.gov/cdbgdr">www.nyc.gov/cdbgdr</a> to review the proposed CDBG-NDR Action Plan Amendment 1 and leave comments</td>
</tr>
</tbody>
</table>
| Mail                       | Send to: CDBG-NDR Action Plan Amendment  
c/o Calvin Johnson, Senior Assistant Director 
NYC Mayor's Office of Management and Budget 
255 Greenwich Street, 8th Floor 
New York, NY 10007 |
<table>
<thead>
<tr>
<th>Action</th>
<th>Time / Duration</th>
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<tbody>
<tr>
<td>Public Hearing</td>
<td>Tonight</td>
</tr>
<tr>
<td>Submit Public Comment</td>
<td>Comment Period Closes Sunday June 6, 2021 at 11:59pm</td>
</tr>
<tr>
<td>After the Comment Period: All comments will be reviewed, and a summary of the comments and the City’s responses will be made publicly available and submitted to HUD</td>
<td>One to Two Weeks (est.)</td>
</tr>
<tr>
<td>Submit for HUD Approval</td>
<td>Mid-June, 2021</td>
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<tr>
<td>HUD Approval of Action Plan Amendment</td>
<td>60 days after submission to HUD (approx. mid-August, 2021)</td>
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