HUGH L. CAREY BATTERY PARK CITY AUTHORITY
Meeting of the Members
200 Liberty Street, 24th Floor
New York, NY 10281
May 29, 2025

Members Present
Don Capoccia, Chairman
Martha Gallo, Vice Chair
Catherine McVay Hughes, Member
Anthony Kendall, Member
Lester Petracca, Member
Angela Sung Pinsky, Member
Clinton Plummer, Member

Authority Staff in Attendance:
Raju Mann, President & CEO
Allie Atlas, Chief of Staff
Sharmila Baichu, Chief Human Resources Officer
Marie Baptiste, Deputy Treasurer
Brett Beecham, Deputy General Counsel
Zachary Bergen, Deputy General Counsel, Procurement & Contracts
Terence Cho, Vice President of Real Estate
Claudia Filomena, Senior Director of Capital Projects and Resiliency
James Gallagher, Special Counsel, Capital Projects
Megan Hood, Deputy General Counsel, Real Estate
Angela Howard, AVP of Construction & Site Management
Craig Hudon, Vice President of Parks Programming
Elaine Kleinberg, General Counsel
Karl Koenig, Controller
Lauren Murtha, Paralegal/Assistant Corporate Secretary
Jason Rachnowitz, Deputy Controller
Kimberlae Saul, AVP Planning & Design
Nicholas Sbordone, Vice President of Communications and Public Affairs
Ryan Torres, Vice President of Parks Operations
Yves Veve, Senior Director of Infrastructure

Others in Attendance: Various members of the public

The meeting, called on public notice in accordance with the New York State Open Meetings Law, convened at 1:04 pm.

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Mr. Cappocia started the meeting by recognizing the retirement of Abby Ehrlich after nearly 27 years of service. He noted thatAbby joined the Authority as Director of Parks

Programming at the Battery Park City Parks Conservancy. Ever since, he continued, she has made a tremendous impact, not only on making Battery Park City a place for world class art and culture, but also, as the neighborhood developed, she helped to build real community. From incredible events in the parks to bringing residents and folks from across the city to make art, to the development of Tear Drop Park, Abby's work here will have a lasting impact on generations, he stated. He then thanked Ms. Ehrlichfor her years of service to Battery Park City. "We wish you all the best for a happy retirement, including from what I hear lots of travel and time outdoors," he concluded.

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The first item on the agenda was a request for approval of the minutes of the April 23, 2025 meeting.

Upon a motion made by Mr. Petracca and seconded by Ms. Gallo, the following resolution was unanimously adopted:

APPROVAL OF MINUTES OF THE APRIL 23, 2025 MEETING

BE IT RESOLVED, that the minutes of the meeting of the Members of the Hugh L. Carey Battery Park City Authority held on April 23, 2025, are hereby approved.

* * *

There was one comment submitted by the public during the period of public comment. Following a public comment which noted the retirement of Pat Smith from the Battery Park City Homeowners Coalition, Mr. Capoccia congratulated Mr. Smith on his retirement and all the work done over a number of years.

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The next item on the agenda was the President's Report.

Mr. Mann presented updates to the Board, noting that final preparations are underway for the reopening of Wagner Park, with events planned to welcome the community back. Angela Howard, Yves Veve, David Babb, Anthony Buquicchio, and their team were praised for managing this effort.

On the Northwest Resiliency Project, Mr. Mann noted that construction was expected to begin by year-end. With thanks to Claudia Filomena and her team, he reported, the completion of the FEIS which was a major regulatory milestone. He also thanked James Gallagher, Dan Carmalt, Elaine Kleinberg, Kimberlae Saul, for their efforts, as well as AKRF and Sive Paget, for providing invaluable counsel, and AECOM.

Finally, he also thanked Abby Ehrlich, a long-time staff member, recognized for her contributions to arts and culture. He noted that her legacy will be celebrated at a farewell event in Tear Drop Park.

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Next, was the M/WBE Quarterly Report given by Ms. Nathan.

Ms. Nathan began for the months of January through March of this year 14% of the Authority's eligible spend on non-resiliency projects, approximately $3 million was awarded to minority and women owned business enterprises. On the resiliency side, she reported that M/WBE utilization was steady at 17%, with over $6.5 million awarded to certified firms during this period. When combining both resiliency and non-resiliency efforts, M/WBEs received approximately $7 million accounting for 17% of the total eligible spend, she stated. Looking at the broader performance to date, she continued, both resiliency projects remain on track to meet their projected utilization of 18% for the South project, and 21% for the Northwest project.

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Next, Ms. Frederick provided the Members with an update from the Investment Committee, which met prior to this meeting.

She reported that the Authority's investment advisors, PFM Asset Management and Ramirez Asset Management, met with the Investment Committee. The Investment Committee reviewed the second quarter investment report as presented by the investment advisors. We have, she reported, as of April 30th, $770 million in investments and 94% of that is invested in U.S. Treasuries. Ms. Frederick reported other topics of discussion focused on the impact of the U.S. government downgrade by Moody's, the debt ceiling, and the Federal Reserve. The Committee also looked at the impact on the U.S. dollar from current tariff policies.

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Next, Ms. Howard and Mr. Hudon provided an update on Wagner Park.

Ms. Howard announced that Wagner Park is poised to open in the end of July for programming. She also provided an update on the project budget.

Mr. Hudon then gave an exciting and extensive update of the roster of opening celebration programs that have been scheduled for Wagner Park, commencing July 29th.

* * *

Next, Ms. Torres gave an update on Parks Operations efforts and recent accomplishments in Battery Park City, emphasizing their dedication to keeping parks safe, clean, and accessible year-round. She also gave a report on recent highlights including partnering with local schools on educational and service projects, plantings, lawn reopenings, and padding installation at the ballfield. Ms. Torres then described some upcoming projects such as repairs to Rockefeller Park

playground features, relocating green compost bins to inside the parks, and ongoing coordination with the Design and Construction team on the Wagner Park reopening.

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Mr. Kendall joined the meeting at 1:35 pm.

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The next item on the agenda, presented by Ms. Torres, was an authorization to enter into a Memorandum of Agreement as an addendum to the Collective Bargaining Agreement between the Authority and DC37 for Deployment of the Integrated Coastal Flood Risk Management System.

Ms. Torres began by noting that, since June 2023, the Authority has been party to a collective bargaining agreement with DC37 for most of the Parks Operations employees. As such, the Authority recognizes DC37 as the collective bargaining representative for employees on various aspects, such as wages. In light of the flood barrier systems being installed throughout Wagner Park, the Parks Operations team will be responsible for the operation and the maintaining of these flood barrier systems, which includes the deployment operations. This agreement, she reported, is to allow for additional compensation when deploying the flood barrier system outside of normal working hours, and aligns with the Authority's current snow duty pay.

Upon a motion made by Ms. McVay Hughes and seconded by Mr. Plummer, the following resolutions were unanimously adopted:

AUTHORIZATION TO ENTER INTO AN MEMORANDUM OF AGREEMENT AS ADDENDUM TO A COLLECTIVE BARGAINING AGREEMENT WITH DISTRICT COUNCIL 37, AFSCME, AFL-CIO

BE IT RESOLVED that in accordance with the materials presented to this meeting, the President and Chief Executive Officer of the Hugh L. Carey Battery Park City Authority (the "President") or her/his designee(s) be, and each of them hereby is, authorized and empowered to enter into a Memorandum of Agreement as addendum to a Collective Bargaining Agreement with District Council 37, AFSCME, AFL-CIO authorizing payment, as described in the materials, for the deployment of the integrated coastal flood risk management system, and be it further

RESOLVED, that the President or her/his designee(s) be, and each of them hereby is, authorized and empowered to execute and deliver the memorandum on behalf of the Hugh L. Carey Battery Park City Authority, subject to such changes as the officer or officers shall, with the advice of counsel, approve as necessary and appropriate and in the best interests of the Conservancy, such approval to be conclusively evidenced by the execution and delivery of the memorandum; and be it further

RESOLVED, that the President or her/his designee(s) be, and each of them hereby is, authorized and empowered to execute all such other and further documents and to take all such other and further actions as may be necessary, desirable or appropriate in connection with the transactions contemplated in the foregoing resolutions, and any such execution of documents and any other

further actions heretofore taken are hereby ratified and any actions hereafter taken are confirmed and approved.

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The next item on the agenda, presented by Ms. Filomena, was an approval of the Final Environmental Impact Statement ("FEIS") for the North/West Battery Park City Resiliency Project ("NWBPCR Project").

Ms. Filomena first thanked the teams at AKRF, AECOM, Turner EE Cruz a JVand all of the cooperation of New York City agencies to bring this across the finish line. She then gave a high-level highlight of for the FEIS process, noting that it began in October of 2022. She reported that the Authority had a public hearing in November of that year, a year and-a-half later issued a draft environmental impact statement, , had the public hearing last fall, all culminating in the publication of our FEIS on May 19th, 2025. She then highlighted some of the findings of this FEIS that will be part of the statement of findings the Board is asked to adopt.

Ms. McVay Hughes reminded people that June 1 is the starting of the hurricane season, and that the 13th anniversary of Super Storm Sandy is approaching. She felt this was amazing work and noted that she would like to move this forward for approval.

Upon a motion made by Ms. McVay Hughes and seconded by Mr. Kendall, the following resolutions were unanimously adopted:

RESOLUTION ADOPTING SEQRA FINDINGS STATEMENT FOR NORTH/WEST BATTERY PARK CITY RESILIENCY PROJECT

WHEREAS, in response to the devastating impact of Superstorm Sandy in Lower Manhattan and in anticipation of future severe storm activity related to climate change, Battery Park City Authority (the "Authority") had proposed undertaking certain resiliency projects to protect the neighborhood and surrounding area from the threats of storm surge, intense precipitation events, and sea level rise; and

WHEREAS, the Authority has undertaken a detailed design process to determine how to meet the requirements for FEMA accreditation and to allow for future protection against a 2050s 100-year storm event in the northern portion of Battery Park City and the surrounding area of Lower Manhattan;

WHEREAS, the Authority has proposed to undertake the North/West Battery Park City Resiliency (NWBPCR) Project, which includes a flood alignment composed of multiple different integrated features such as deployable gates, exposed floodwalls, and certain interior drainage improvements, including a pump station;

WHEREAS, the flood alignment runs from North Moore Street and Greenwich Streets on the north, crosses State Route 9A, runs along the extent of the Battery Park City Hudson River Waterfront and connects with the South Battery Park City Resiliency (SBPCR) Project at approximately 1st Place.

WHEREAS, on February 18, 2022, the Authority issued a letter to various involved and interested agencies notifying them of its intent to assume the role of lead agency for the environmental impact review of the NWBPCR Project to be undertaken pursuant to the New York State Environmental Quality Review Act (SEQRA), none of which objected;

WHERESAS, the Authority determined that the NWBPCR Project had the potential to have adverse impacts and published a Draft Scoping Document for the Draft Environmental Impact Statement (EIS) on October 19, 2022;

WHEREAS, the public comment period for scoping began on October 19, 2022, a public meeting was held on November 16, 2022, and comments were accepted through December 31, 2022;

WHEREAS, a Notice of Completion of the Draft EIS (DEIS) was published on August 28, 2024, which started the public comment period for the DEIS. The Final Scoping Document was published with the DEIS, incorporating all comments on the Draft Scoping Document;

WHEREAS, a public hearing on the DEIS was held on September 18, 2024, and the public comment period concluded on October 7, 2024;

WHEREAS, a Final EIS (FEIS) was prepared, which reflected the changes to the design, included responses to all substantive comments on the DEIS, and made other revisions as necessary;

WHEREAS, the FEIS analyzed the potential environmental impacts of the Proposed Action for the 2031 analysis year, when the NWBPCR Project is expected to be completed and operational. The FEIS analyses concluded that the Project would have no significant adverse operational or construction impacts on: land use, zoning and public policy, socioeconomics, community facilities, shadows, solid waste and sanitation services, natural resources, water and sewer infrastructure, hazardous materials, energy, air quality, and GHG emissions

WHEREAS, the FEIS concluded that the Project would have significant adverse impacts on transportation in the operational condition, and would have temporary significant adverse impacts on noise, transportation, open space and neighborhood character during construction.

WHEREAS, mitigation has been proposed for all impacts identified, although the temporary construction impacts cannot be fully mitigated;

WHEREAS, the Board has reviewed the proposed Findings Statement (attached as Exhibit A), which summarizes the analyses and conclusions of the FEIS;

WHEREAS, the Authority has determined that the environmental impact review was conducted in accordance with 6 NYCRR Part 617;

WHEREAS, the Authority has determined that, consistent with social, economic and other essential considerations from among the reasonable alternatives available, the Project avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse

impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable;

WHEREAS, the Authority has determined that the NWBPCR Project is consistent with New York State and New York City's coastal policies;

WHEREAS, the NWBPCR project will provide critical protection against climate change in Lower Manhattan, consistent with the SBPCR Project the other projects identified as part of the City of New York's Lower Manhattan Climate Resilience efforts;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the Findings Statement as drafted and determines that the Authority should proceed with the NWBPCR Project, authorizes the President and Chief Executive Officer to sign and adopt the Findings Statement on or after May 30, 2025, while reserving its rights to review and approve any and all procurements associated with the NWBPCR Project as required by the Authority's Procurement Guidelines.

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The next item on the agenda, presented by Ms. Saul, was an authorization to enter into an amendment with Turner EE Cruz, a joint venture for the NWBPCR project.

Ms. Saul began by explaining that, due to feedback from the NYCDEP and DOT, the NWBPCR Project design had to be revised significantly, moving from 90% completion back to 30%, which affected both timeline and scope. She explained that gates by Route 9-A and Stuyvesant High School will be modified from flip up gates to swing gates. She also noted there was a redesign along BMCC's campusto accommodate a future egress stair as , that they will be adding in the future. Last, she noted that would also be a revision to the gate at Harrison Street, which used to be swing gates, and is now flip up gate.

Ms. Saul then explained Turner EE Cruz's proposed contract amendment is comprised of three buckets. The first bucket included the redesign just described for $12.6 million, inclusive of EIS extension. The other two buckets are Phase 2 contract services including moving some Phase 2 work up to Phase 1 and finalizing design documents, wall mockups, designs for utilities, flood gates, drainage, and instrumentation for monitoring the PATH tunnel. Bucket 3, she continued, includes field office mobilization, material mockups, PATH tunnel monitoring, and more test pits.

Upon a motion made by Mr. Petracca and seconded by Mr. Plummer, the following resolutions were unanimously adopted:

AUTHORIZATION TO AMEND AGREEMENT WITH TURNER EE CRUZ A JV - PROGRESSIVE DESIGN BUILD SERVICES FOR THE NORTH/WEST BATTERY PARK CITY RESILIENCY PROJECT

BE IT RESOLVED, that in accordance with the materials submitted at this Board meeting, the President & Chief Executive Officer ("CEO") of the Battery Park City Authority or his/her designee(s) be, and each of them hereby is, authorized and empowered to amend that certain

agreement with Turner EE Cruz a JV to increase the not-to-exceed amount by $36,921,033, resulting in an amended not-to-exceed contract value of $153,056,487.

RESOLVED, that the CEO or his/her designee(s), and each of them hereby is, authorized and empowered to execute and deliver the amendment on behalf of the Authority, subject to such changes as the officer or officers executing the amendment shall, with the advice of counsel, approve as necessary and appropriate and in the best interest of the Authority, such approval to be conclusive evidence by the execution and delivery of the amendment; and be it further

RESOLVED, that the CEO or his/her designee(s) be, and each of them hereby is, authorized and empowered to execute all such other and further documents, and to take all such other and further actions as may be necessary, desirable or appropriate, in connection with the transactions contemplated in the foregoing resolutions, and any such execution of documents and any other and further actions heretofore taken are hereby ratified, and any actions hereafter taken are confirmed and approved.

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The next item on the agenda, presented by Ms. Filomena, was an authorization to enter into an amendment with AECOM USA, Inc. for the NWBPCR Project.

Ms. Filomena began by explaining the proposed amendment was approximately $3 million and falls into two categories. One is for the time extension that Ms. Saul had already discussed. The second is the FEIS revisions that were also discussed, specifically around the additional transportation analysis that was required for Route 9-A, she concluded.

Upon a motion made by Ms. McVay Hughes and seconded by Mr. Kendall, the following resolutions were unanimously adopted:

APPROVAL TO AMEND AGREEMENT WITH AECOM USA INC. FOR CONSULTING ENGINEER SERVICES FOR THE NORTH/WEST BATTERY PARK CITY RESILIENCY PROJECT

BE IT RESOLVED, that in accordance with the materials submitted at this Board meeting, the President & Chief Executive Officer ("CEO") of the Battery Park City Authority or his/her designee(s) be, and each of them hereby is, authorized and empowered to amend that certain agreement with AECOM USA Inc. for Consulting Engineer Services for the North/West Battery Park City Resiliency Project: (a) provide for a fee increase attributable to the extension of the Project schedule; and (b) provide for an increase associated with the performance of certain additional and supplemental services, resulting in a total increase in the not-to-exceed amount from its current value of $29,901,420 by $3,308,902, totaling a new not-to-exceed amount of $33,210,322.

RESOLVED, that the CEO or his/her designee(s), and each of them hereby is, authorized and empowered to execute and deliver the amendment on behalf of the Authority, subject to such changes as the officer or officers executing the amendment shall, with the advice of counsel,

approve as necessary and appropriate and in the best interest of the Authority, such approval to be conclusive evidence by the execution and delivery of the amendment; and be it further

RESOLVED, that the CEO or his/her designee(s) be, and each of them hereby is, authorized and empowered to execute all such other and further documents, and to take all such other and further actions as may be necessary, desirable or appropriate, in connection with the transactions contemplated in the foregoing resolutions, and any such execution of documents and any other and further actions heretofore taken are hereby ratified, and any actions hereafter taken are confirmed and approved.

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The next item on the agenda, presented by Ms. Frederick, was an adoption of a resolution authorizing adoption of the Series 2025 Notes Resolution for the Revolver Increase.

Ms. Frederick explained that in 2023, the Authority secured a $100 million revolving credit facility from TD Bank to support pre-construction activities. Now, with the NWBPCR Project entering a larger and more active construction phase, the Authority is requesting to increase the revolver by $225 million, for a total capacity of $325 million, still with TD Bank. Given the need to have this financing in place by July 2025 to avoid any interruptions in the awarding of contracts and initiating work, BPCA requested that TD Bank increase our borrowing capacity from $100 million to $325 million. In order to preserve the 2023 Revolver pricing and facilitate the increase, TD will issue a new revolving credit facility ("2025 Revolver") in the amount of $225 million. This latter option proved the most prudent course of action, as it would maintain the lower pricing on the $100 million 2023 Revolver and retain all other previously negotiated substantive terms.

Ms. Frederick continued by explaining that the additional $225M will support early construction work before major construction begins in November 2025. The request is based on a forecasted spending plan developed with the contractor and AECOM to ensure proper liquidity and alignment with projected costs. The Authority's financing team included Bond Counsel, Hawkins, Delafield, Woods, with Roger Bagley present answer to any questions. The Authority also engaged Acacia Financial, who previously served as financial advisor on the 2023 bond.

She then recommended that the Members authorize the adoption of the Series 2025 Notes Resolution as well as the actual Series 2025 Note Resolutions. She noted this was subject to the approval of the Public Authorities Control Board.

Upon a motion made by Mr. Petracca and seconded by Mr. Kendall, the following resolutions were unanimously adopted:

BATTERY PARK CITY AUTHORITY

Resolution Authorizing Adoption of the Series 2025 Notes Resolution and Certain Other Matters in Connection Therewith

Adopted May 29, 2025

Resolution Authorizing Adoption of
the Series 2025 Notes Resolution
and Certain Other Matters in Connection Therewith

WHEREAS, the Battery Park City Authority (the "Authority") adopted its 2003 General Bond Resolution (the "General Bond Resolution") on September 9, 2003 for the purpose, among others, of securing certain Notes (as defined in the General Bond Resolution) of the Authority; and

WHEREAS, pursuant to the General Bond Resolution, the Authority proposes to adopt the Series 2025 Notes Resolution (the "Series 2025 Notes Resolution") and to issue thereunder its Junior Revenue Notes, Series 2025A (the "Series 2025A Notes"), its Junior Revenue Notes, Series 2025B (the "Series 2025B Notes"), and its Junior Revenue Notes, Series 2025C (the "Series 2025C Notes") for the purposes of (i) interim funding of the Authority's capital requirements related to its environmental resiliency project and other capital projects in anticipation of long-term bond financing; and (ii) to pay costs of issuance, including credit enhancement fees and expenses, if any;

NOW THEREFORE, BE IT RESOLVED by the Members of the Authority as follows:

1. The President and Chief Executive Officer of the Authority is hereby authorized and directed to complete and modify the provisions of the Series 2025 Notes Resolution by determining (a) the principal amount of the Series 2025A Notes, and the principal amount of the Series 2025B Notes, which aggregate principal amount shall not exceed TWO HUNDRED TWENTY-FIVE MILLION DOLLARS ($225,000,000); (b) the dated date or dates of the Series 2025A Notes, the Series 2025B Notes and the Series 2025C Notes (collectively, the "2025 Notes"); (c) the interest rate or rates (or the method for determining same from time to time) with respect to the 2025 Notes, provided that the stated interest rate or rates of the 2025 Notes shall not exceed fifteen percent (15%) per annum; (d) the maturity and redemption date or dates, if any, for the 2025 Notes; (e) the debt service and redemption provisions and schedules for the 2025 Notes; (f) the interest payment dates for the 2025 Notes; (g) the amounts and due dates of the sinking fund payments, if any, for any of the 2025 Notes of like maturity; (h) whether the 2025 Notes are to be issued in subseries; (i) that the 2025 Notes are to be issued as Junior Notes under the General Bond Resolution; and (j) whether any 2025 Notes are intended to be Tax-Exempt Notes. Said President and Chief Executive Officer is hereby further authorized and directed to determine, modify and complete any other provisions of the Series 2025 Notes Resolution to the extent necessary to give effect to the findings and determinations made by the Members of the Authority at this meeting, and to make such other changes, omissions, insertions and revisions to the Series 2025 Notes Resolution as shall be necessary or proper for carrying out, giving effect to and consummating the

financings and transactions contemplated by this resolution, the Series 2025 Notes Resolution, and the documents and instruments authorized herein and that shall not materially alter the terms of the Series 2025 Notes Resolution.

2. The series designations set forth in this resolution shall be interchangeable, provided that the aggregate principal amount of the 2025 Notes outstanding at any time and the Series 2025B Notes outstanding at any time (collectively, the "2025 Notes") shall not exceed TWO HUNDRED TWENTY-FIVE MILLION DOLLARS ($225,000,000).

3. The Authority hereby adopts the Series 2025 Notes Resolution substantially in the form thereof presented to this meeting. Delivery of a certified copy of the 2025 Series Resolution, completed in accordance with the provisions of Sections 1 and 2 hereof, to the Trustee (as defined in the General Bond Resolution) shall constitute conclusive evidence of the Authority's acceptance of the terms thereof.

4. Each of the following officers of the Authority is hereby appointed an Authorized Officer, within the meaning of the General Bond Resolution, until and including December 31, 2025: Donald Capoccia, as Chairman; Raju Mann, as President and Chief Executive Officer; Pamela Frederick, as Chief Financial Officer; andElaine Kleinberg, as General Counsel.

5. The Authority hereby approves the Revolving Credit Agreement with respect to the 2025 Notes (which are unrated Variable-Rate Notes that are not being underwritten for resale to the public), substantially in the form presented to this meeting (the "Revolving Credit Agreement"). The President and Chief Executive Officer is hereby further authorized to determine, modify and complete any other provisions of the Revolving Credit Agreement to the extent necessary to give effect to the findings and determinations made by the Members of the Authority at this meeting, and to make such other changes, omissions, insertions and revisions to the Revolving Credit Agreement as shall be necessary or proper for carrying out, giving effect to and consummating the financings and transactions contemplated by this resolution, the General Bond Resolution, the 2025 Series Resolution and the documents and instruments authorized herein and not contrary to the terms of the General Bond Resolution and the 2025 Series Resolution, as completed in accordance with the provisions of this resolution. Upon completion of the provisions of the Revolving Credit Agreement, an Authorized Officer is hereby authorized to execute the Revolving Credit Agreement in the name and on behalf of the Authority, such execution to constitute conclusive evidence of the Authority's approval of all changes in the form thereof, and to deliver the same to TD Bank, N.A ("TD Bank").

6. An Authorized Officer is hereby authorized to execute and deliver, in the name and on behalf of the Authority, all documents required to be executed and delivered in connection with the issuance of the 2025 Notes (including, but not limited to, any investment agreements or arrangements pertaining to amounts held under the 2025 Series Resolution, any modifications to existing interest rate exchange or swap agreements or terminations thereof (consistent, in each instance, with guidelines heretofore adopted by the Members), any escrow fund agreements, any interest rate cap, and any broker-dealer or other agency or service-provider agreements or credit enhancement or liquidity provider agreements) with such provisions as such Authorized Officer, after consultation with the General Counsel of the Authority, shall deem advisable and not contrary to the terms of the General Bond Resolution and the 2025 Series

Resolution. Execution and delivery of said documents shall constitute conclusive evidence of the Authority's due authorization and approval of said documents.

7. An Authorized Officer is hereby authorized to issue certifications as to its reasonable expectations regarding the amount and use of the proceeds of the 2025 Notes to evidence compliance with the Internal Revenue Code of 1986, as amended, and any Treasury regulations relating thereto.

8. An Authorized Officer is hereby authorized, at any time after the receipt of all necessary consents, proceedings and approvals, to execute and authorize the delivery of the 2025 Notes to TD Bank, and to do and perform all acts and things and execute and deliver any and all documents in the name of the Authority necessary, useful or convenient to the issuance and delivery of the 2025 Notes by the Authority to TD Bank. Execution and delivery of said documents shall constitute conclusive evidence of the Authority's due authorization and approval of said documents.

9. The Authority hereby authorizes the payment of fees for Hawkins Delafield & Wood LLP, Acacia Financial Group, Inc., and other counsels, professionals and advisors, from proceeds of the 2025 Notes and other funds of the Authority, and the execution of any agreements necessary for this purpose.

10. All actions to date of Members, officers, and employees of the Authority in furtherance of the issuance of the Series 2025 Notes are hereby ratified and approved.

11. This resolution shall take effect immediately.

TD Bank, N.A. Revolving Credit Facility

BATTERY PARK CITY AUTHORITY

SERIES 2025 NOTES RESOLUTION

Adopted May 29, 2025

Be it Resolved by the Members of Battery Park City Authority as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01 *Series 2025 Resolution.* 1. This Series 2025 Notes Resolution authorizing up to $225,000,000 outstanding Series 2025 Notes (defined below) is supplemental to, and constitutes a Series Resolution within the meaning of and is adopted in accordance with Article X of, the resolution adopted by the Authority on September 9, 2003, entitled "2003 GENERAL BOND RESOLUTION" and referred to herein as the "General Resolution."

2. It is hereby found and determined that it is necessary and required that the Authority authorize and issue at this time two Series of Bonds (as defined in the General Resolution) to be designated as herein provided to provide monies to carry out one or more purposes of the Authority.

Section 1.02 *Definitions*. 1. All terms that are defined in Section 103 of the General Resolution shall have the same meanings, respectively, in this Series 2025 Resolution as such terms are given in said Section 103, as amended through the date of adoption hereof.

2. In addition, as used in this Series 2025 Resolution, unless the context shall otherwise require, the following terms shall have the following respective meanings:

"Authorizing Resolution" means the resolution adopted by the Authority on December 18, 2024, entitled "Resolution Authorizing Adoption of the Series 2025 Notes Resolution and Certain Other Matters in Connection Therewith."

"Series 2025 Notes" means, collectively, the Series 2025A Notes, the Series 2025B Notes, and the Series 2025C Notes.

"Series 2025 Resolution" means this Series 2025 Resolution authorizing the Series 2025 Notes.

"Series 2025 Notes Costs of Issuance Subaccount" means the Series 2025 Notes Costs of Issuance Subaccount created and established within the Costs of Issuance Account of the Bond Proceeds Fund pursuant to or in accordance with Section 4.02 of this Series 2025 Resolution.

"Series 2025 Resolution" means this Series 2025 Resolution authorizing the Series 2025A Notes. *"Series 2025A Project Costs Subaccount"* means the Series 2025A Project Costs Subaccount created and established within the Project Costs Account of the Bond Proceeds Fund pursuant to or in accordance with Section 4.02 of this Series 2025 Resolution.

"Series 2025A Notes" means the Notes of the Series so designated and authorized by this Series 2025 Resolution.

"Series 2025B Notes" means the Notes of the Series so designated and authorized by this Series 2025 Resolution.

"Series 2025C Notes" means the Notes of the Series so designated and authorized by this Series 2025 Resolution.

"Tax Certificate" means the Federal Tax Certificate executed by an Authorized Officer of the Authority in connection with the issuance of the Series 2025 Tax-Exempt Notes, as defined in subsection 5.01(1) hereof.

3. Words of the masculine gender shall be deemed and construed to include correlative words of the feminine and neuter genders. Unless the context shall otherwise indicate, words importing the singular number shall include the plural number and vice versa, and words importing persons shall include firms, associations and corporations, including public bodies, as well as natural persons.

4. The terms "hereby," "hereof," "hereto," "herein," "hereunder," and any similar terms, as used in this Series 2025 Resolution, refer to the Series 2025 Resolution.

Section 1.03 *Authority for the Series 2025 Resolution*. This Series 2025 Resolution is adopted pursuant to the provisions of the Act and the General Resolution.

ARTICLE II

AUTHORIZATION, TERMS AND ISSUANCE OF SERIES 2025 NOTES

Section 2.01 *Authorization of Series 2025 Notes, Principal Amount, Designation and Series*. 1. A Series of Notes entitled to the benefit, protection and security of the General Resolution is hereby authorized to be issued, under the authority of Section 1977-a(1)(a) of the Public Authorities Law, in the aggregate principal amount outstanding at any time not to exceed $225,000,000. Such Series of Notes shall be designated as and shall be distinguished from the Notes of all Series by the title "Junior Revenue Notes, Series 2025A" pursuant to and subject to the terms, conditions and limitations established in the General Resolution and this Series 2025 Resolution. The Series 2025A Notes shall be, and are, Junior Bonds within the meaning ascribed thereto in the General Resolution.

2. A Series of Notes entitled to the benefit, protection and security of the General Resolution is hereby authorized to be issued, under the authority of Section 1977-a(1)(f) of the Public Authorities Law, in the aggregate principal amount outstanding at any time not to exceed $225,000,000. Such Series of Notes shall be designated as and shall be distinguished from the Notes of all Series by the title "Junior Revenue Notes, Series 2025B" pursuant to and subject to the terms, conditions and limitations established in the General Resolution and this Series 2025 Resolution. The Series 2025B Notes shall be, and are, Junior Bonds within the meaning ascribed thereto in the General Resolution.

3. A Series of Notes entitled to the benefit, protection and security of the General Resolution is hereby authorized to be issued, under the authority of Section 1977-a(1)(f) of the Public Authorities Law, in the aggregate principal amount outstanding at any time not to exceed $225,000,000. Such Series of Notes shall be designated as and shall be distinguished from the Notes of all Series by the title "Junior Revenue Notes, Series 2025C" pursuant to and subject to the terms, conditions and limitations established in the General Resolution and this Series 2025 Resolution. The Series 2025C Notes shall be, and are, Junior Bonds within the meaning ascribed thereto in the General Resolution.

4. The aggregate principal amount of the 2025 Notes outstanding at any time shall not exceed $225,000,000.

Section 2.02 *Purposes*. The purposes for which the Series 2025 Notes are being issued are (i) financing Project Costs consisting of interim funding of the Authority's capital requirements related to its environmental resiliency project and other capital projects in anticipation of long-term bond financing and (ii) paying the Costs of Issuance of the Series 2025 Notes.

Section 2.03 *Delegation of Authority*. 1. There is hereby delegated to the President or any other Authorized Officer of the Authority, as the case may be, in addition to the powers conferred thereon by the Authorizing Resolution in relation to the Series 2025 Notes, subject to the limitations contained herein and in the General Resolution and the Act, the power with respect to the Series 2025 Notes to determine and carry out the following:

(a) The Series Reserve Requirements for the Series 2025A Notes and for the Series 2025B Notes;

(b) Except in the case of Capital Appreciation Notes and Deferred Income Notes, the interest rate or rates of the Series 2025 Notes, including the interest rate or rates of Deferred Income Notes from and after the Interest Commencement Date, the date from which interest on the Series 2025 Notes shall accrue, the manner for determining such interest rate or rates, and the first interest payment date therefor; provided, however, that the stated interest rate on the Series 2025 Notes shall not exceed fifteen percent (15%) per annum;

(c) The Series 2025 Notes that are Capital Appreciation Bonds, if any, the Valuation Dates for such Series 2025 Notes and the Accreted Value on each such Valuation Date;

(d) The Series 2025 Notes that are Deferred Income Bonds, if any, the Valuation Dates for such Series 2025 Notes, the Appreciated Value on each such Valuation Date and the Interest Commencement Date for such Series 2025 Notes;

(e) The Series 2025 Notes that are Variable Interest Rate Bonds, if any, the maximum interest rate, if any, or the method of calculating such maximum interest rate for such Notes, and the provisions, if any, as to the calculation or change of variable interest rates;

(f) The Series 2025A Notes that are Option Bonds, if any, the provisions regarding tender for purchase or redemption thereof and payment of the purchase or Redemption Price thereof and the appointment of a remarketing agent with respect thereto;

(g) The denomination or denominations of and the manner of numbering and lettering the Series 2025 Notes;

(h) The Series 2025 Notes that are Book Entry Bonds, if any, and the Depository therefor;

(i) The Redemption Price or Redemption Prices, if any, and, subject to Article IV of the General Resolution, the redemption terms, if any, for the Series 2025 Notes;

(j) Provisions for the sale or exchange of the Series 2025 Notes and for the delivery thereof;

(k) The forms of the Series 2025 Notes and the forms of the Trustee's certificate of authentication thereon:

(l) Provisions with respect to funds and accounts and subaccounts therein, if applicable, and the Collateral and application thereof, as provided in Article VI of the General Resolution;

(m) Directions for the application of the proceeds of the Series 2025 Notes;

(n) Procurement of insurance, if any, for the payment of the principal of and interest on all or a portion of the Series 2025 Notes and the terms and conditions for such insurance;

(o) Provisions relating to (i) any Credit Facility, Qualified Swap or other similar financial arrangement entered into in connection with the issuance of the Series 2025A Notes and (ii) the obligations payable thereunder; provided, however, the documentation for such Qualified Swap shall accord with the guidelines heretofore adopted by the Authority for interest exchange agreements;

(p) Whether the Series 2025 Notes shall be issued in Subseries, the number of Subseries and the principal amount and designations of each Subseries;

(q) Determination of which series of bonds heretofore issued by the Authority and which maturities of such series and which portion of such maturities shall be refunded from proceeds of the Series 2025 Notes and other available moneys; and

(r) Any other provisions deemed advisable by an Authorized Officer of the Authority, not in conflict with the provisions hereof, of the Authorizing Resolution or of the General Resolution.

2. The President and Chief Executive Officer or such other Authorized Officer shall execute one or more Series Certificates evidencing determinations or other actions taken pursuant to the authority herein, in the Authorizing Resolution or in the General Resolution and any such Series Certificate shall be conclusive evidence of the action or determination of the President or such other Authorized Officer as to the matters stated therein.

ARTICLE III

EXECUTION AND AUTHENTICATION OF THE SERIES 2025 NOTES

Section 3.01 *Execution and Authentication of Series 2025 Notes*.

1. Pursuant to the provisions of Section 303 of the General Resolution, the Chairman or other member or the President of the Authority is hereby authorized and directed to execute by his manual or facsimile signature the Series 2025 Notes in the name of the Authority and the corporate seal (or a facsimile thereof) shall be thereunto affixed, imprinted, engraved or otherwise reproduced thereon. The Secretary or an Assistant Secretary of the Authority is hereby authorized and directed to attest by his manual or facsimile signature the execution of the Series 2025 Notes.

2. The Trustee is hereby authorized to authenticate by manual signature the Series 2025 Notes, and deliver the same to or upon the order of the Authority, in such amounts and at such times as the Trustee shall be directed in writing by an Authorized Officer.

ARTICLE IV

APPLICATION OF PROCEEDS

Section 4.01 *Application of Proceeds and Deposit of Moneys*. The Trustee shall apply the proceeds of the sale of the Series 2025 Notes in accordance with the written directions of any Authorized Officer given pursuant to clause (m) of subsection (1) of Section 2.03.

Section 4.02 *Additional Subaccounts*. There is created and established within the Costs of Issuance Account of the Bond Proceeds Fund a "Series 2025 Notes Costs of Issuance Subaccount." There are created and established within the Project Costs Account of the Bond Proceeds Fund a "Series 2025A Notes (Tax-Exempt) Project Costs Subaccount," a "Series 2025B Notes (Tax-Exempt) Project Costs Subaccount," and a "Series 2025C Notes (Taxable) Project Costs Subaccount."

ARTICLE V

SPECIAL COVENANTS

Section 5.01 *Tax Exemption; Rebates*. 1. The interest on the Series 2025A Notes and the interest on the subseries of Series 2025B Bonds (collectively, the "Series 2025 Tax-Exempt Notes") is intended to be excluded from gross income for purposes of federal income taxation. In order to maintain such exclusion, the Authority shall comply with the provisions of the Code

applicable to the Series 2025 Tax-Exempt Notes, including without limitation, the provisions of the Code relating to the computation of the yield on investments of the "gross proceeds" of the Series 2025 Tax-Exempt Notes, as such term is defined in the Code, reporting of the earnings on such gross proceeds, rebates of earnings on such gross proceeds to the Department of the Treasury of the United States of America, and use, ownership and management of the facilities financed by such gross proceeds. In furtherance of the foregoing, the Authority shall comply with the provisions of the Tax Certificate executed by the Authority in connection with the Series 2025 Tax-Exempt Notes.

2. The Authority shall not take any action or fail to take any action that would cause the Series 2025 Tax-Exempt Notes to be "arbitrage bonds" within the meaning of Section 148(a) of the Code; nor shall any part of the proceeds of the Series 2025 Tax-Exempt Notes or any other funds of the Authority be used directly or indirectly to acquire any securities or obligations the acquisition of which would cause any Series 2025 Tax-Exempt Notes to be an "arbitrage bond" within the meaning of Section 148(a) of the Code.

3. The Authority shall make any and all payments required to be made to the United States Department of the Treasury in connection with the Series 2025 Tax-Exempt Notes pursuant to Section 148(f) of the Code from amounts on deposit in the Arbitrage Rebate Fund and available therefor.

Section 5.02 *Survival of Covenant*. The obligation of the Authority to comply with the provisions of Section 5.01 hereof with respect to the rebate to the Department of the Treasury of the United States of America relating to the Series 2025 Tax-Exempt Notes shall remain in full force and effect so long as the Authority shall be required by the Code to rebate such earnings on the gross proceeds of the Series 2025 Tax-Exempt Notes notwithstanding that the Series 2025 Tax-Exempt Notes are no longer Outstanding.

ARTICLE VI

MISCELLANEOUS

Section 6.01 *No Benefit of Reserve Fund*. The Series 2025 Notes shall not be secured by the Reserve Fund or any amounts from time to time on deposit therein. Any provision of the Resolution to the contrary notwithstanding (including, without limitation, Sections 604(1)(b), 604(4)(b) and 606(2) of the General Resolution), under no circumstances shall amounts on deposit in the Reserve Fund be withdrawn therefrom for the purpose of paying, directly or indirectly, the principal or Redemption Price of, or interest on, any of the Series 2025 Notes.

Section 6.02 *Authority to Deliver this Series Resolution*. An Authorized Officer of the Authority is hereby authorized and directed to deliver this Series Resolution with such changes, insertions and omissions as may be approved by such Authorized Officer, such delivery being conclusive evidence of such approval; and provided, however, such changes, insertions and omissions shall not conflict with the provisions of the General Resolution and shall be necessary to effectuate the intent of this Series Resolution.

Section 6.03 *Effectiveness*. The Series 2025 Resolution shall become effective immediately upon its adoption.

Approved, May 29, 2025:

_____
Raju Mann,
President and Chief Executive Officer

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The next item on the agenda, presented by Mr. Munson, was approval of the May 29th Consent Agenda.

Mr. Munson presented four items for the Consent Agenda which included a no-cost, 12-month, contract extension with Genesys Engineering for ongoing monitoring, maintenance, and support of the Pier A BMS system. The second was a three-year, not to exceed, $235,725 contract with W&E Baum Bronze Tablet Corporation for the engraving of the names of NYPD officers who died in the line of duty on the New York City Police Memorial. The third was a five-year, not to exceed, $95,197.91 agreement with Abalon Exterminating Company for pest control services at BPCA indoor spaces throughout the neighborhood. And the last was a 51-month contract with AT&T for $107,467.40 for internet service provision in the new Wagner Park. Mr. Capoccia then asked for approval of the resolution as presented in the materials.

Upon a motion made by Mr. Kendall and seconded by Ms. McVay Hughes, the following resolutions were unanimously adopted:

AUTHORIZATION TO EXECUTE AN AMENDMENT TO AN AGREEMENT WITH GENESYS ENGINEERING, P.C. ("GENESYS") FOR THE PIER A BUILDING MANAGEMENT SYSTEM ("BMS") MONITORING AND MAINTENANCE SERVICES

BE IT RESOLVED, that in accordance with the materials submitted at this Board meeting, the President and Chief Executive Officer (the "President") of the Battery Park City Authority (the "Authority") or his/her designee(s) be, and each of them hereby is, authorized and empowered to extend the term of the Authority's Pier A BMS monitoring / maintenance services contract with Genesys from March 17, 2025 through March 17, 2026; and, be it further,

RESOLVED, that the President or his/her designee(s), and each of them hereby is, authorized and empowered to execute and deliver the amendment on behalf of the Authority, subject to such changes as the officer or officers executing the amendment shall, with the advice of counsel, approve as necessary and appropriate and in the best interest of the Authority, such approval to be conclusive evidence by the execution and delivery of the amendment; and be it further,

RESOLVED, that the President or his/her designee(s) be, and each of them hereby is, authorized and empowered to execute all such other and further documents, and to take all such other and further actions as may be necessary, desirable or appropriate, in connection with the transactions contemplated in the foregoing resolutions, and any such execution of documents and any other and further actions heretofore taken are hereby ratified, and any actions hereafter taken are confirmed and approved.

AUTHORIZATION TO ENTER INTO AN AGREEMENT WITH W & E BAUM BRONZE TABLET CORP. FOR STONE MEMORIAL ENGRAVING SERVICES

BE IT RESOLVED that in accordance with the materials presented to this meeting, the President and Chief Executive Officer (the "President") of the Hugh L. Carey Battery Park City Authority (the "Authority") or her/his designee(s) be, and each of them hereby is, authorized and empowered to enter into an agreement with W & E Baum Bronze Tablet Corp for Stone Memorial Engraving Services for a term of three (3) years and for a total not-to-exceed amount of $235,725, and be it further

RESOLVED, that the President or her/his designee(s) be, and each of them hereby is, authorized and empowered to execute and deliver the contract on behalf of the Authority, subject to such changes as the officer or officers shall, with the advice of counsel, approve as necessary and appropriate and in the best interests of the Authority, such approval to be conclusively evidenced by the execution and delivery of the contract; and be it further

RESOLVED, that the President or her/his designee(s) be, and each of them hereby is, authorized and empowered to execute all such other and further documents and to take all such other and further actions as may be necessary, desirable or appropriate in connection with the transactions contemplated in the foregoing resolutions, and any such execution of documents and any other further actions heretofore taken are hereby ratified and any actions hereafter taken are confirmed and approved.

AUTHORIZATION TO ENTER INTO ANAGREEMENT WITH ABALON EXTERMINATING COMPANY, INC.

BE IT RESOLVED that in accordance with the materials presented to this meeting, the President and Chief Executive Officer of the Hugh L. Carey Battery Park City Authority (the "President") or her/his designee(s) be, and each of them hereby is, authorized and empowered to enter into an agreement with Abalon Exterminating Company, Inc. to provide pest control services for a term of five (5) years in the not-to-exceed amount of $95,197.91, and be it further

RESOLVED, that the President or her/his designee(s) be, and each of them hereby is, authorized and empowered to execute and deliver the contract on behalf of the Authority, subject to such changes as the officer or officers shall, with the advice of counsel, approve as necessary and appropriate and in the best interests of the Authority, such approval to be conclusively evidenced by the execution and delivery of the contract; and be it further

RESOLVED, that the President or her/his designee(s) be, and each of them hereby is, authorized and empowered to execute all such other and further documents and to take all such other and further actions as may be necessary, desirable or appropriate in connection with the transactions contemplated in the foregoing resolutions, and any such execution of documents and any other further actions heretofore taken are hereby ratified and any actions hereafter taken are confirmed and approved.

AUTHORIZATION TO ENTER INTO AN AGREEMENT WITH AT&T ENTERPRISES, LLC

BE IT RESOLVED that in accordance with the materials presented to this meeting, the President and Chief Executive Officer of the Hugh L. Carey Battery Park City Authority (the "President") or her/his designee(s) be, and each of them hereby is, authorized and empowered to enter into an agreement with AT&T Enterprises, LLC to provide Wagner Park Pavilion Internet Service Provider services for a term of 51 months in the not-to-exceed amount of $107,467.40, and be it further

RESOLVED, that the President or her/his designee(s) be, and each of them hereby is, authorized and empowered to execute and deliver the contract on behalf of the Authority, subject to such changes as the officer or officers shall, with the advice of counsel, approve as necessary and

appropriate and in the best interests of the Authority, such approval to be conclusively evidenced by the execution and delivery of the contract; and be it further

RESOLVED, that the President or her/his designee(s) be, and each of them hereby is, authorized and empowered to execute all such other and further documents and to take all such other and further actions as may be necessary, desirable or appropriate in connection with the transactions contemplated in the foregoing resolutions, and any such execution of documents and any other further actions heretofore taken are hereby ratified and any actions hereafter taken are confirmed and approved.

* * *

There being no further business, upon a motion made by Ms. Gallo and seconded by Ms. McVay Hughes, the Members unanimously voted to adjourn the meeting. The meeting thereupon adjourned at 2:25p.m.

Respectfully submitted,

Lauren Murtha

Lauren Murtha

Public Comment
May 29, 2025

1. **Justine Cuccia**: Hi everybody. Thank you so much for letting me join remotely. All right. So good afternoon, and I want to let you know that I'm humble and proud to announce that I have been elected President of the Battery Park City Homeowner's Coalition. I want to thank Pat Smith, Ben Liss [phonetic], and John Bandler [phonetic] for their service, support, and leadership, and I also want to introduce you to our newest coalition Board of Director members, Thomas Anguila [phonetic]. You also -- you already know Miriam Cante [phonetic]. Thank you, Raju, for reaching out to schedule a meeting, and I look forward to meeting with you to talk about affordability and ground rent in Battery Park City on the 19th of June. Getting to the point of the matter, I want to be clear, no one who has been involved and paying attention can realistically expect the Battery Park City Authority to freeze ground rent or not take annual percentage increases. However, we can, and do realistically expect the Authority to recognize the extreme burden the ground rent places on all condominium owners as the ground rents increase, especially because these increases are not occurring in a vacuum. We're facing inflation, congestive pricing increases, cost of necessity increases, etc. A new iteration of the joint purpose fund has been allocated to finance affordable housing in New York City, but as you and I all know those funds will not be spent in Battery Park City, and I'm aware once we hand it over you have no control of those funds. Therefore, however, the Battery Park City Homeowner's Coalition is asking that this Board consider applying a portion of their budget out of capital or operating towards funding affordability in Battery Park City. While I for one appreciate the Battery Park City Authority's bringing a green market back to Battery Park City and your efforts to collaboratively create new open space during the upcoming Northwest Battery Park City resiliency project. All of these quality of life enhancements become moot unless you also and first address affordability in Battery Park City. One of the ways to accomplish this is to come to the table and once and for all negotiate a comprehensive balanced fair ground rent agreement with the 18 condominium buildings through 2119. Thank you so much. I appreciate your time.

EXHIBIT A

FINDINGS STATEMENT

State Environmental Quality Review Act

Findings Statement

Hugh L. Carey

Battery Park City Authority

North/West Battery Park City Resiliency Project

Borough of Manhattan

New York, New York

Pursuant to Article 8 of the Environmental Conservation Law (State Environmental Quality Review Act (SEQRA)) and Title 6 New York Codes, Rules and Regulations ("NYCRR") Part 617, Hugh L. Carey Battery Park City Authority (BPCA), makes the following findings:

Name of Action: North/West Battery Park City Resiliency (NWBPCR) Project

Project Location: The Proposed Action involves the construction of an integrated flood barrier alignment system that is along the north and west shorelines of Battery Park City and also includes a number of inland blocks east up to Greenwich Street. Specifically, the project alignment is along streets and open spaces between the intersection of North Moore Street/Greenwich Street on the north and 1st Place in Battery Park City on the south and includes a crossing of State Route 9A/West Street.

Summary of Action: In response to the devastating impact of Superstorm Sandy in Lower Manhattan and in anticipation of future severe storm activity related to climate change, the North/West Battery Park City Resiliency (NWBPCR) Project (the Proposed Project) has been proposed by the Battery Park City Authority (BPCA) for the purpose of implementing coastal protection against future severe storms for Battery Park City and adjoining upland areas. It is the purpose of the Proposed Project to establish a flood protection system comprised of a combination of floodwalls and deployable gates, along with drainage infrastructure improvements, that are designed to Federal Emergency Management Agency (FEMA) standards for flood protection, taking into consideration projections of sea-level rise, while retaining community character and design features, minimizing community impacts, and, where possible, providing targeted urban design and open space enhancements.

This proposal is part of a broader integrated coastal flood risk management system proposed for Lower Manhattan comprised of several interconnecting projects that together are designed to reduce the vulnerability of Lower Manhattan to coastal flood events. Since the Proposed Project is a major capital improvement project that is approximately 7,900 linear feet in length, it has been designed in sections, referred to as specific "reach" numbers or area designations, that extend between North Moore Street on the north (Reach 1) and South Cove on the south (Reach 7). At its southern end, the Proposed Project is designed to connect with the South Battery Park City Resiliency Project (SBPCR Project) at approximately 1st Place.

Lead Agency Contact:

Claudia Filomena, Senior Director of Capital Projects and Resiliency Operations
200 Liberty Street, 24th Fl.
New York, NY 10281
(212) 417- 2384

SEQR Classification*:* Type I

DESCRIPTION OF LEAD AGENCY ACTIONS

On February 18, 2022, BPCA initiated a Coordinated Review of the Proposed Project pursuant to SEQRA and informed the involved and interest agencies of its intent to assume the role as lead agency. BPCA determined the Proposed Project had the potential to result in significant adverse impacts and published a Draft Scoping Document for the Draft Environmental Impact Statement (DEIS) on October 19, 2022. A public hearing was held on November 16, 2022, and the period for submitting written comments remained open through December 31, 2022. A Final Scoping Document was published with the DEIS incorporating all comments on the Draft Scoping Document. The DEIS was published on August 28, 2024, and a public notice for the DEIS hearing was then published in the New York State Department of Environmental Conservation (NYSDEC) Environmental News Bulletin on August 28, 2024 and a local paper, the *Our Town Downtown,* on August 28, 2024, BPCA held a DEIS public hearing on September 18, 2024 at Stuyvesant High School (399 Chambers Street) with a period for the submitting written comments open through October 7, 2024. Those public hearing and written comments are addressed in the FEIS, as well as several written comments received after October 7, 2024. Additionally, consultation was conducted with involved and interested agencies for their review, comment and input to the FEIS. After the public comment period concluded, a Final EIS (FEIS) was prepared. Responses to comments are provided in Chapter 10 of the FEIS, and revisions to the DEIS were made as necessary. All substantive comments were documented in the FEIS, and copies of the comments are provided in the FEIS, Appendix I.

FACTS AND CONCLUSIONS IN THE FEIS RELIED UPON TO SUPPORT THE DECISION PROJECT

DESCRIPTION (PROPOSED ACTION)

Climate change-induced sea level rise accompanied by more frequent, intense storm events and tidal surges pose a significant risk to coastal communities both now and in the future. In 2012 Superstorm Sandy revealed the potential for significant public safety impacts and property damage from major coastal storms in the New York City area, including the potential for widespread damage to private property and public infrastructure. In response to these risks, BPCA has proposed the Proposed Project for the purpose of implementing coastal protection against future severe storms for Battery Park City and adjacent upland areas. It is the purpose of the Proposed Project to establish a flood protection system comprised of a combination of floodwalls and deployable gates, along with drainage infrastructure improvements, that are designed to FEMA standards for flood protection, taking into consideration projections of sea level rise, while retaining community character and design features, minimizing community impacts, and, where

possible, providing targeted urban design and open space enhancements. Moreover, this proposal is part of a broader integrated coastal flood risk management system proposed for Lower Manhattan comprised of several interconnecting projects that together are designed to reduce the vulnerability of Lower Manhattan to coastal flood events.

Since the Proposed Project is a major capital improvement project that is approximately 7,900 linear feet in length, it has been designed in reaches with assigned designations that extend between North Moore Street on the north (Reach 1) and South Cove on the south (Reach 7). In addition to providing organization to the design process, these reach designations were also used to organize the stakeholder/community engagement outreach and the analyses contained in the EIS. At its southern end, the Proposed Project has been designed to connect with the South Battery Park City Resiliency (SBPCR) Project at approximately 1st Place. That project is currently projected to be completed in early 2026. Assuming all required approvals are issued, construction of the Proposed Project is expected to last approximately five years, commencing in the 4th quarter of 2025 and substantially completed in 2030, with the Proposed Project fully operational in 2031.

BPCA, as the project sponsor, is the Lead Agency for fulfilling the requirements of SEQRA and the analyses provided in the FEIS were prepared to address the potential impacts of the Proposed Project in accordance with the methodologies of the Final Scoping Document and the requirements and guidance of both SEQRA and City Environmental Quality Review (CEQR) using the technical guidelines for impact analyses provided in the *CEQR Technical Manual* (2021). The FEIS will also be used to address the environmental review requirements of other involved agencies.

Proposed Project Area

The Proposed Project area is along the west side of Lower Manhattan and involves the installation of a flood barrier system between North Moore Street on the north and 1st Place on the south (the Project Area). The Project Area includes the alignment of the proposed flood barrier system structure, along with areas of grading and landscaping along the 7,900 linear foot Project Area and the proposed interior drainage improvements and pump station. In depth, the foundations and supporting piles for the proposed flood barrier system are expected to extend as much as 50 to 90 feet below the existing surface grade.

As stated above, the Project Area was organized during the project design phase into seven reaches. Beginning at the northern inland "tie-back" on North Moore Street just west of Greenwich Street in Tribeca (Reach 1 - State Route 9A/Tribeca) the proposed flood barrier system alignment extends along the south side of North Moore Street, turning south along the east side of State Route 9A/West Street with a connection across Harrison Street before crossing to the west side of State Route 9A/West Street before entering Battery Park City at the North Esplanade (Reach 2 - North Esplanade) and continuing west along the esplanade before connecting into high ground at the intersection of Chambers Street and River Terrace near the Hurricane Maria Memorial. The alignment then continues south at the Pavilion by Demetri Porphyrios in Battery Park City's North Neighborhood (Reach 3 - North Neighborhood/Rockefeller Park) and runs parallel to and along the west side of River Terrace. The alignment continues southward along the waterfront (Reach 4 - Ferry Terminal) heading toward North Cove where it extends east, south, and then west around North Cove (Reach 5 - Brookfield Place). South of North Cove, the alignment continues running parallel to and along the upper walkway of the Battery Park City Esplanade and perpendicular to street ends at Albany, Rector Place and West Thames Streets (Reach 6 - South Esplanade). The alignment

continues along the interior side of the South Cove (Reach 7 - South Neighborhood) and then south along the upland interior of South Cove to complete the proposed flood barrier alignment and connect with the SBPCR Project at approximately 1st Place.

Proposed Project Design Elements

This section describes the key design elements of the Proposed Project, with a reach-by-reach description of the proposed flood barrier system, planting and drainage improvement measures.

Design Flood Elevation

A coastal modeling report was prepared as the basis for determining the Design Flood Elevation (DFE) for the proposed flood protection system. This modeling considered both elevated surface water elevations in the Hudson River during a coastal storm event as well as wind direction and the resulting height and angle of wave impacts. Given the length of the Proposed Project (approximately 7,900 linear feet), there are ranges of predicted wave height along the length of the proposed flood barrier system that have determined the DFEs proposed at different points along the project alignment.

Flood Barrier System Elements

Barrier and Gate Structures

The proposed flood barrier system is comprised of passive floodwalls and deployable flood barrier elements, both of which have above- and below-grade (foundational) elements. The proposed deployable flood barrier elements include flip-up-gates, roller gates, swing gates, and stop logs. Deployable systems involve either manual deployment prior to a storm event, which requires a minimum of approximately 8 feet of clearance, or mechanical deployment (e.g., the State Route 9A/West Street gate crossing) which requires approximately 35 feet of clearance.

Flood Barrier System Foundations and In-Water Elements

Several segments of the Proposed Project require deeper foundation pile supports that extend to bedrock (i.e., 50 to 90 feet below the ground surface). During design storm event surge the elevated water levels of the Hudson River are expected to result in a temporary elevation of inland groundwater, which would then recede after the storm event. Therefore, the Proposed Project also includes a seepage barrier to avoid adverse impacts on properties in the protected area from these storm-induced elevated groundwater levels, while also allowing groundwater to continue its natural pattern of flow out to the Hudson River under the more typical non-storm condition. This proposed seepage barrier is comprised of a combination of steel sheeting supported by foundation piles embedded within a low permeability soil mix that together would minimize inland flow and under the flood barrier system during storm surge conditions.

Ecological enhancements are proposed for the first two rows of piles in Reaches 2 and 6 and on the new replacement bulkhead along Reaches 2, 4, and 6. In total, these ecological enhancements amount to approximately 87 cubic yards of in-water fill.

Proposed Flood Barrier System Design

The Proposed Project has been designed to provide flood protection during a design storm event and the proposed deployable elements would only be activated during design storm events. The necessary testing and routine maintenance of the system's individual components would be performed on a regular schedule as described below.

The flood barrier system, infrastructure upgrades and drainage improvements that comprise the Proposed Project are described below for each reach.

Reach 1 – State Route 9A/Tribeca

In this reach, the Proposed Project provides flood protection through a combination of passive and deployable flood barrier elements that are aligned along State Route 9A/West Street with a "tie-back" to an elevated upland location at the intersection of North Moore and Greenwich Streets. This reach also requires use of property in coordination with the New York City Department of Transportation (NYCDOT) and New York State Department of Transportation (NYSDOT), Hudson River Park Trust (HRPT), and the Borough of Manhattan Community College (BMCC). The NYSDOT right-of-way (ROW) includes State Route 9A roadway and any area acquired for highway purposes, subsurface and aerial space within the ROW, as well as the bikeway/walkway. Where project construction affects property and features under these agency jurisdictions, they will be restored in accordance with a final design developed in coordination with the relevant agency.

The sidewalk along North Moore Street would be widened by approximately 9 feet to accommodate the proposed flood barrier system with additional operational space for pedestrians and Independence Plaza functions. This widened sidewalk would be achieved by narrowing the North Moore Street roadway between State Route 9A on the west and Greenwich Street on the east and allows for installing the proposed flood barrier system offset from the property lines while maintaining pedestrian circulation along the sidewalk corridor and at the sidewalk/property line interface. There would be planted spaces between the sidewalk and the parking lane to allow for grassy areas and tree planting. On the eastern portion of the block, the flood barrier system would be aligned closer to the curbline and landscaped area, while on the western portion of the block, the alignment would shift south adjacent to BMCC. This design also involves narrowing the vehicular travel lanes on North Moore Street to accommodate the widened sidewalk.

At the intersection of State Route 9A/West Street and North Moore Street, the alignment turns south and extends along the east sidewalk (parallel to State Route 9A/West Street) as it follows an alignment southward that runs parallel to the BMCC property. At Harrison Street, the proposed alignment turns around the corner of the BMCC North building for a short distance with a flip-up gate across Harrison Street. From here, the alignment then turns back west toward State Route 9A/West Street (parallel to the BMCC South building) and at State Route 9A/West Street it turns south again, continuing along the east side of State Route 9A/West Street. At a point approximately opposite the Battery Park City North Esplanade, the proposed alignment turns west across State Route 9A/West Street and the flood barrier system here is comprised of a deployable swing gate system. Under the proposed design, the gates would be stored in the recessed position in the median of State Route 9A/West Street. West of State Route 9A/West Street, the alignment continues west where a swing gate is proposed at the crossing of the Hudson River Greenway to complete the Reach 1 design. As part of the Proposed Project, all areas affected by construction outside of

the proposed structure are to be restored with minor grade changes required to address transitions at the proposed flood barrier system structure.

As described above, in this reach there are segments of the Proposed Project along the public sidewalk that would require minor reductions in sidewalk widths along Harrison Street and State Route 9A/West Street to install the proposed flood barrier system, as well as a planting buffer between the wall and sidewalk. South of Harrison Street, the existing sidewalk width would be reduced to maintain façade access to the BMCC facilities; however, the final design will provide a minimum clear sidewalk width of 10 feet.

Tree removals in this reach are proposed along North Moore Street and State Route 9A/West Street. Street trees are to be replaced in accordance with a New York City Department of Parks and Recreation (NYC Parks)-approved tree replacement plan and restitution guidelines. Benches and other pedestrian amenities are to be replaced in their approximate existing locations as the updated design allows.

Drainage improvements proposed in Reach 1 include installing three below-grade slide gates within the two existing combined sewers and one existing storm sewer to prevent surge waters from backflowing into the protected area during the design storm event. Two of these slide gates are proposed in the northbound and southbound lane of State Route 9A/West Street just north of Chambers Street and the third one in Harrison Street. Tree pits to collect and percolate sidewalk drainage are also proposed.

Drainage improvements in Reach 1 also include the relocation of the existing 114-by-50-inch combined sewer overflow (CSO) pipe and tide gate structure to allow the flood barrier system wall to bridge over the historic bulkhead near Stuyvesant High School and minimize impacts to the historic bulkhead at this location. The relocation of the CSO pipe and tide gate would also provide added space for the proposed pump station (see the description below of the proposed pump station). It is important to note that only the existing CSO pipe is being relocated, not the outfall structure at the bulkhead. In addition, an overflow pipe for the BMCC parking lot is proposed to allow runoff to be rerouted south along State Route 9A/West Street and into the proposed pump station. This pipe is designed to connect downstream of the parking lot's existing catch basin and is designed to reduce flooding in the protected area from rain event drainage. Other proposed drainage improvements include modifications to existing storm sewers within city streets to support the Proposed Project.

Harrison Street Gate

Where the flood barrier system alignment crosses Harrison Street, flip-up gates are proposed, which would be stored in the street (below grade) and hydraulically deployed using hydraulics to raise them to a vertical position ahead of and during a design storm event and then lowered post-storm. A specialized drainage system is also proposed to prevent freezing during winter months. Two annual deployments of the gates would be required—one in late spring before hurricane season and one in the fall—for system inspection and maintenance. In addition to the gates, a seepage barrier is included below the roadway along the crossing alignment to prevent seepage of floodwaters into the Protected Area during a storm event.

State Route 9A/West Street Gate

Where the flood barrier system crosses State Route 9A/West Street, swing gates are proposed: one gate is for the southbound side enclosure and the other is for the northbound side. The gates would be stored in the recessed position in the median of State Route 9A/West Street at a location north of Chambers Street. To

achieve acceptable swing gate and geometric street design dimensions, the median at this location is also widened from approximately 20 to 30 feet for a distance of approximately 250 feet.

Reach 2 – North Esplanade

This reach extends along the North Esplanade open space of BPC, west of the Hudson River Greenway and continues west along the north façade of Stuyvesant High School and the Tribeca Pointe apartments; as the alignment approaches Reach 3, it turns southward just outside Tribeca Pointe's western façade. The key public space in this reach is the North Esplanade. In this reach, the design objective is to integrate the flood barrier system (the top of the floodwall elevation in this reach is a uniform 16.5 feet[1] above the Hudson River datum) into a reconstructed Esplanade while maintaining and enhancing its important function as a connection between Hudson River Park and Rockefeller Park in Battery Park City. To that end, the flood barrier system design is integrated along an interior alignment parallel to Stuyvesant High School into a terraced garden landscape treatment. The North Esplanade is also to be rebuilt at an elevation that varies from +12.5 feet at the eastern end, +15 feet toward the center, and +10 feet at the western end as a transition to the grade at Rockefeller Park.

Also proposed in this reach is a reconstructed relieving platform that widens the North Esplanade by six feet to the north with a transition curve at the bulkhead. Widening the Esplanade in this already narrow reach would provide additional public deck area that is structurally supported to allow for future upgrades and adaptability of the flood barrier system, should that be needed. The new, widened platform is designed to provide a primary circulation space that is a minimum of at least 20 feet wide and in addition to accommodating emergency and maintenance vehicles, also provides for a separation of circulation space between cyclists and pedestrians creating a more immersive pedestrian boardwalk experience with waterfront seating opportunities in a landscaped setting separate from the bikeway/walkway corridor. Both the upper and lower circulation spaces and the area along Stuyvesant High School are separated and screened by a series of raised planters with lush vegetation. On the east where the Esplanade connects with the bulkhead, a gradual curve in the deck is introduced to enhance the transition between the North Esplanade and the Hudson River Park esplanade. To the west where the North Esplanade leads into Rockefeller Park, the existing plaza area is to be reconstructed with raised planting beds and new seating oriented along the waterfront railing.

Under the proposed design, access to the Stuyvesant High School building entrance/exits is maintained by incorporating deployable gates (specifically, the east doors and north emergency doors). Accessibility will be improved at one location by eliminating the need for the existing stairs. While the Tribeca Pointe Apartment's main access is not affected by the flood barrier system, a roller gate is proposed to maintain access to the building's basement doors.

Plantings within the limit of work in this reach would be limited to replacement landscaping integrated into the design.

Drainage improvements proposed in Reach 2 include new catch basins and trench drains to capture stormwater runoff within the new platform, a new tide gate structure along the existing 30-inch stormwater

[1] Datum references in this section are to NAV88.

outfall located in Chambers Street to discharge to the Hudson River. In Reach 2, a new six-inch drainage outfall is proposed at the end of a trench drain located on the new platform under the North Esplanade.

Reach 3 – North Neighborhood/Rockefeller Park

In Reach 3, the Proposed Project design is comprised of a passive structure that generally follows the existing retaining stone walls where Rockefeller Park meets River Terrace. In this reach, a key project design objective is to minimize impacts on Rockefeller Park with its large recreational lawn, the south meadow, the Esplanade, the terrace and its sculptures. To achieve this goal the floodwall is aligned along the existing wall at a height ranging from 1.3 feet above grade on the sidewalk side near the Pavilion by Demetri Porphyrios, to 4.75 feet on the sidewalk side near the playground, only 1 to 2 feet taller than the existing stone wall that is approximately 2.75 feet above ground from the sidewalk side. Between Warren Street and the Irish Hunger Memorial area, it is proposed to remove the above ground portions of the existing stone wall and grading over the below-ground portion to create a new planting strip with the new floodwall aligned along a 3-foot offset to the west. This strategy allows the Proposed Project to protect many of the existing trees along River Terrace. At the Park House area and at the termination by the Pavilion by Demetri Porphyrios the proposed floodwall replaces the existing stone wall. Installation of the Proposed Project would remove some sections of the existing stone wall along River Terrace, reconfigure the basketball courts in their existing location with new seating, and retrofit and reinstall some of the existing playground equipment and install some new equipment matching the character and materials of the existing playground. The proposed design also includes a new planting strip along the sidewalk. The stone wall between Warren and Chambers Streets would remain; here, the elevated topography and the characteristics of existing fill, as demonstrated by a seepage analysis, achieve the necessary flood protection, and therefore no floodwall is required in this location.

Open space and landscape preservation and enhancement are also primary design considerations in Reach 3, with the objective of minimizing impacts of the proposed flood barrier system to Rockefeller Park and the streetscape along River Terrace.

With the Proposed Project, the following site enhancements are also proposed:

- Playground Reconstruction –design objective to preserve the current play experience.
- Basketball Court Improvements – design objective to resurface the courts with an improved configuration and integrated seating.

The design of the sidewalk along River Terrace also includes a planting strip adjacent to the proposed wall alignment coupled with green infrastructure. Here the passive landscape is comprised of planting beds and defined seating areas. High-performance rain gardens are also proposed along River Terrace. Between Warren and Murray Streets the Proposed Project maintains the entrance to the basketball courts from River Terrace with a stop log deployable and swing gates are proposed at the Murray Street entrance.

Drainage improvements proposed in this reach are comprised of green infrastructure practices, such as the high-performance rain gardens along River Terrace to capture and treat stormwater runoff from the roadway.

Reach 4 – Ferry Terminal

In Reach 4, the key project design elements include a new elevated platform with an integrated flood barrier system. At this location, the building at 300 Vesey Street is in close proximity to the existing relieving platform which precludes the complete positioning of the flood barrier off the existing platform structure. This subarea therefore involves platform reconstruction west of the building at 300 Vesey Street at an elevation above the existing platform and the installation of piles and a seepage barrier which provides the benefits of both wave attenuation and reducing the wall height.

At the southern end of Reach 4, the Proposed Project includes reconstructing the existing platform on the west side of the building at 300 Vesey Street with an expanded planting area, an immersive replacement landscape with seating, and a secondary path with a meandering alignment that is designed for universal accessibility across the platform. In addition, the proposed design includes removing curving granite walls in front of the building at 300 feet Vesey Street, raising the Esplanade by 3 feet to an elevation of 12.5 feet which eliminates universal accessibility challenges, and an above-ground 4-foot-high flood barrier system, which is aligned between the waterfront Esplanade and the inland plaza.

Key landscape design objectives for Reach 4 include preserving the existing Lily Pond while optimizing circulation space with new planted areas and an immersive path south of the pond to reduce pedestrian congestion in the vicinity of the ferry terminal, diversifying the park visitor experience, increasing habitat value and providing additional tree canopy, where possible.

Drainage improvements in Reach 4 include installing green infrastructure practices such as permeable paving to reduce runoff prior to discharge to the Hudson River. A new tide gate structure to be installed within the existing 96-inch CSO, in Vesey Place, is also proposed to prevent storm flows from entering the protected area during storm surge conditions. Additional drainage infrastructure such as trench drains and catch basins are also proposed to improve the capture and conveyance of stormwater runoff.

Reach 5 – Brookfield Place

The proposed flood barrier design in this reach is a combination of passive structures integrated into terraced planting (inland from the bulkhead/water's edge) with deployable elements with the primary objective of maintaining pedestrian circulation between the upper and lower Esplanade levels. In this reach the flood barrier design system in the northwest at Belvedere Plaza continues approximately 50 feet east along the face of the Brookfield Place buildings at 300 and 250 Vesey Street, respectively. At the 230 Vesey Street building this distance is increased to approximately 65 feet. To maintain accessibility between the esplanade and Brookfield Place and the Winter Garden, the proposed flood barrier system alignment essentially follows the edge of the platform which minimizes the impact to the plaza, trees, and dining terraces. It is also a design objective for the plaza spaces to remain essentially in their current configuration for the continued purpose of hosting year-round events. Therefore, the grade transitions between the upper dining terraces at Brookfield place are designed with a series of interconnected switch-back ramps that also provide seating opportunities, shade, and pockets of trees and vegetation. The proposed alignment also is aligned along the frontage of Pumphouse Park before crossing Liberty Street to the east of the Battery Park City mechanical buildings adjacent to the Police Memorial. From there, it turns west and follows the façade of the Gateway apartments replacing the existing privacy wall.

In this reach, the Proposed Project alignment needs to straddle two Port Authority of New York and New Jersey (PANYNJ)/Port Authority Trans-Hudson Corporation (PATH) transit tunnels located beneath the platform. At these locations special bridging structures are required for the purposes of maintaining the tunnel functions. To provide the necessary flood protection, the proposed bridging structure designs include butterfly valves that can be closed in a storm event which prevents the tunnels from acting as a conduit that conveys flood waters inland to the Protected Area; these valves would otherwise remain open. This alignment includes limited tree removal in Belvedere Plaza and on the perimeter of Pumphouse Park.

Drainage improvements proposed in Reach 5 consist of stormwater treatment practices such as permeable pavers, which will reduce overland runoff prior to discharge to the Hudson River. Additionally, the existing 18-inch outfalls in Reach 5 are to be replaced due to conflicts with the flood barrier system. To isolate the Protected Area, five new small stormwater outfalls are proposed (two 12-inch outfalls on the unprotected side and one 15-inch and one 12-inch outfall on the protected side). Drainage at Pumphouse Park is divided into north and south sections. With the Proposed Project, flow is directed from the central lawn into drainage infrastructure, with a new 12-inch outfall proposed on the south side to separately convey drainage. Additional minor drainage infrastructure improvements, such as trench drains and catch basins, are also proposed to capture and manage stormwater runoff.

Reach 6 – South Esplanade

Along the South Esplanade in Reach 6, the flood barrier is a passive structure that is aligned inland from the South Esplanade in an alignment that replaces the existing privacy walls and separates the ground and lower floors of the buildings from the South Esplanade. This proposed design alignment maintains the existing South Esplanade at the water's edge, while also creating the opportunity for a winding secondary path inland to accommodate more leisurely meandering pedestrian flow through a design that discourages rapid pedestrian traffic modalities. Such a design also creates the opportunity for more tree planting and replacement. Also proposed are programmed amenities with ample seating along both the existing South Esplanade and the secondary winding walkway.

In addition to the passive system, this reach design includes deployable roller gates for the purposes of maintaining physical and visual access corridors at the end of Albany, Rector, and West Thames Streets as well as emergency vehicle access with three new programmatic nodes proposed where these streets open to the South Esplanade. Two of these nodes are designed to provide smaller, passive seating opportunities or "reading" and "conversation" rooms and will include the art piece "Sitting Stance" proposed is to be relocated from the West Thames Street end.

Landscaping proposed along this reach is comprised of lush native plantings and tree replacement with the objective of providing shade, ecological habitat and a visual amenity.

Infrastructure improvements proposed in Reach 6 include four new tide-gate structures, with one along the existing 18-inch stormwater outfall located at the end of Albany Street and another along the existing 96-inch CSO at the end of Rector Place. Additionally, drainage improvements proposed within Gateway Plaza consist of installing sump pumps on the south side of the Gateway building to manage stormwater that would require a small area of disturbance for installation). When operating in a storm event, the pumped water is pumped downstream of the proposed tide gate structure on the south side of the Gateway building.

There is another tide gate structure proposed on the north side of the Gateway building. Both tide gates are proposed along existing 24-inch stormwater outfalls.

Reach 7 – South Neighborhood

South Cove is the prominent open space feature in Reach 7 and the Proposed Project has been designed to avoid the cove and to minimize to the greatest extent possible any impacts of the proposed flood barrier system on the public experience in South Cove and along the private courtyards that face the water, while providing the required flood protection. To achieve this objective, the proposed flood wall alignment runs parallel to the existing privacy walls of the Regatta Condominium, Riverwatch, and South Cove Plaza buildings to minimize impacts on the private courtyards of the adjacent buildings. This proposed design requires a small section of the flood barrier system to be installed using micropiles through the existing platform near the south-west corner of the Regatta Condominium. Also, along the Regatta Condominium, the Proposed Project includes a partial height wall with deployable gates to maintain some views and air circulation for the private outdoor space currently used by the childcare facility and the space associated with the corner retail. To minimize visual impacts, the privacy wall alignment on the eastern side of South Cove follows the upland topography and the existing privacy walls of the existing buildings. At the intersection of South End Ave and 3rd Place, some regrading is proposed to minimize the visual impact of the flood wall and gates are also proposed to maintain pedestrian access to South Cove and the South Esplanade from South End Avenue, 3rd Place, and 2nd Place.

In this reach, the proposed design also includes new immersive planting along the north side of South Cove and accessible seating and shade structures along the flood barrier system with planting beds and seating proposed to enhance the use and enjoyment of this space and the waters of the Cove. Under the proposed design, circulation spaces include the Esplanade and paved paths with trees integrated in hardscapes and street/park furnishings at the three street ends. Along the north wall landside of the cove it is also proposed to include a new waterside ecological experience using the face of the structural wall adjacent to the sloped path with landscape enhancements that support the local ecology and also provide educational opportunities. The proposed open space design is directed at maintaining the existing character and accessibility at the street ends while also increasing the planting footprint. Under the proposed design the ramp leading to the lower-level Esplanade needs to be reconstructed to accommodate the proposed grades in the upper level; art in the lower-level Esplanade and the Honey Locust grove that are part of the South Cove art installation are outside the limit of work and would not be affected by the Proposed Project.

Drainage improvements proposed in this reach include green infrastructure practices such as three rain gardens proposed to treat stormwater runoff from impervious surfaces in South Cove. Additional drainage infrastructure, such as trench drains and catch basins, are also proposed to capture and convey stormwater runoff. Finally, in Reach 7 a new 8-inch outfall to the South Cove is proposed to discharge water collected by proposed platform underdrains and the proposed rain garden.

Interior Drainage Improvements

To address the need for enhanced drainage system protection and management in the protected area a number of measures are proposed including below-grade improvements to the City sewer system by installing tide gates at existing combined sewer and municipal separate storm sewer system outfalls, replacing existing slide gates, isolating the Protected Area from adjacent unprotected drainage areas and

Near Surface Isolation (NSI) measures that are comprised of flood-proofing approximately six existing access manholes to the regulator chambers and ten interceptor sewer manholes along State Route 9A/West Street.

As part of the drainage system analysis, it was also determined through modeling that with the installation of these improvements to isolate the protected area, a pump station was also needed to address the impacts on interior drainage flows during a combined storm surge and rain event.[2] Based on modeling of the infrastructure system, the selected location for the proposed pump station is in the northern portion of the Protected Area (i.e., east of Stuyvesant High School and near Reach 1) and during a design storm event (with the flood barrier system activated) the station would be activated to pump combined flows from the protected area out to the Hudson River. The pump station mechanical equipment is proposed to be located below grade at the pedestrian plaza adjacent and to the east of Stuyvesant High School, just northwest of the intersection of Chambers Street and State Route 9A/West Street and the electrical system would be housed in an above-grade structure.

The proposed pump station location and sizing were selected based on modeling performed for present and future storm events. Consistent with FEMA certification guidelines, a number of storm conditions were modeled assuming various combinations of tidal design storm surge and rainfall intensity. These model simulations showed that the storm event closure of the tide gates at outfalls NCM-072 and NCM-073, is largely responsible for the potential interior drainage flooding. A siting study was then conducted to identify locations in the Protected Area and along the existing infrastructure grid where a pump station would yield the greatest benefit in addressing this flooding.

Based on this modeling and analysis and taking into account other design factors, the proposed site was identified as the preferred location. This location is in the Protected Area upstream of the existing tide gates and proximate to CSO outfall NCM-073, which minimizes the length of force main pipe needed between the pump station and to the proposed discharge location at outfall NCM-073.

A concept design for the proposed pump station is based on four below-grade, 20-mgd submersible centrifugal pumps with manual bar screens to intercept and reduce the anticipated debris and large floatables in incoming CSO storm flows. In addition to the pump station, a new flow diversion chamber is also proposed in the nearby 114- by 50-inch CSO outfall located between State Route 9A/West Street and Stuyvesant High School. The pump station outflow would be handled by a 48-inch ductile iron force main approximately 100 linear feet in length that connects to the NCM-073 outfall pipe downstream of the tide gate before discharge to the Hudson River. The above-described elements of the proposed pump station are all below grade with at-grade access hatches to allow for maintenance and repair of the system.

In addition to the below grade elements, the proposed pump station requires an above grade structure to house the operational systems and electrical panel room (with a backup generator) for the purposes of activating the pumps and related mechanical equipment when needed during the design storm event. Recognizing the space limitations in this area for such a facility, with the need to maintain circulation and access at the school and along the Greenway, design options for this structure are under consideration.

[2] **Appendix G**: "Interior Drainage Report," March 2025.

Designs of the pump station and the related infrastructure improvements are being developed in consultation with NYCDEP, a process that is expected to continue into 2026.

Open Space Designs and Planting

It is an objective of the Proposed Project to limit impacts on open space and trees to the minimum necessary to install the proposed flood barrier system and to restore the impacted landscaped with a design that includes a variety of native plants that together support the robust ecological communities of the BPC open spaces along the project corridor, with enhancements where appropriate. It is also a project design objective to increase habitat biodiversity in the planted zones of the six BPCA reaches to enhance opportunities for wildlife by providing not only foraging opportunities but also creating habitat that allows all park users (human and non-human) to thrive. To that end, the proposed planting plans include a variety of salt tolerant oaks such as red oak, swamp white oak, and willow oak in the planting palette, as well as winter foraging sources like hawthorn and holly. A description of the proposed open space design elements is provided below.

- In Reach 1 the proposed flood alignment is primarily inland. Therefore, impacts on trees in this reach are limited to trees at the intersection of Greenwich Street and North Moore, along North Moore Street, and along State Route 9A/West Street. The proposed flood barrier system has also been designed to minimize impacts on open spaces and to enhance the transition between the North Esplanade in Reach 2 and Hudson River Park (see the description above). As described above, the Proposed Project also includes a pump station at a location immediately west of the Greenway and just south of the proposed State Route 9A/West Street crossing; while much of this facility is below grade, the proposed above-grade structure would house the electrical panels to operate the pump. Outside the station structure all open space areas affected by construction would be restored.
- In Reach 2, the flood protection system is aligned along the North Esplanade north of and adjacent to the northern boundary of Stuyvesant High School. In this reach, the North Esplanade is proposed to be elevated and expanded to the north (over the water) by six feet with a new transition curve at the connection into Hudson River Park. The proposed North Esplanade design includes an upper and lower pathway, separated by new plantings and vegetation to provide aesthetic enhancement to the open space experience with improved pedestrian/cyclist circulation and a separated area with enhanced seating opportunities for waterfront viewing.
- In Reach 3, the proposed flood barrier system extends primarily along River Terrace parallel to the interior (eastern) edge of Rockefeller Park following the current alignment of the existing stone wall. This alignment has been selected since it meets the flood protection objective with the least disturbance to the open lawn space facing the Hudson River and the higher elevations limit the need for a flood barrier structure. During installation of the flood barrier system, while the lawn and Esplanade are proposed to remain open, the playground and basketball and handball courts need to be temporarily closed, but would then be restored. In addition to installing new playground equipment and reinstalling some refurbished playground equipment, the Proposed Project includes resurfacing the basketball courts and improving the layout while integrating public seating. The Proposed Project design also includes a planting strip parallel to the flood alignment and the outside edge of the River Terrace sidewalk to create more space between the existing street trees and proposed floodwall and protect trees from clearing, where possible.

- In Reach 4, the proposed design protects and preserves the existing Lily Pond while adding a newly planted area along a new immersive pedestrian path. Overall, design in this reach involves targeted upgrades in seating, planting, and optimizing access for pedestrian circulation.
- Along Reach 5, the proposed design integrates the flood barrier system into a targeted plaza redesign that has as its objective maintaining open space with targeted access improvements. Existing open spaces in this reach include the large plazas with dining terraces at Brookfield Place, some active recreational space (e.g., volleyball), memorials, and Pumphouse Park. Modifications proposed to these existing open spaces are minimal with no impact on the primary functions as a public gathering, recreational and event space, supported by maritime features in and around the marina and public views of the water. To facilitate public use and universal access, additional planting and switchback ramps are proposed between the Esplanade and Brookfield Place, while also increasing seating opportunities with shade and pockets of trees and vegetation. Additionally, in Reach 5, the proposed design also includes the removal and replacement of several large trees in Belvedere Plaza and in Pumphouse Park. These removals are necessary to install the proposed below grade flood control gates within the Port Authority water exchange tunnels (see also the discussion below under "Impacts to Trees"). Under the proposed design the west side of Pumphouse Park is also landscaped with native grasses, shrubs, and new ramps to improve accessibility.
- Along Reach 6, the Proposed Project aligns the flood barrier system along a stretch of new and redesigned open spaces adjacent to the existing privacy walls. Under the proposed design, the South Esplanade at the water's edge is unaffected with a new secondary, meandering path that introduces a separation of space and allows for more leisurely pedestrian strolling. This secondary path is proposed to be landscaped with tree plantings and the opportunity to provide more shaded seating. Also proposed for this reach are redesigned open spaces at the street ends of Albany, Rector, and West Thames Streets.
- In Reach 7, the proposed flood protection system alignment runs alongside the existing privacy walls which minimizes impacts to the public spaces in the South Cove. With this proposed alignment, the existing lower Esplanade that overlooks the cove is unaffected by the Proposed Project; there would also be no change in the total open space acreage, only targeted design enhancements along the upper Esplanade that include providing lush planting along the north side of the South Cove coupled with new seating and share structures along the proposed flood barrier system. The proposed design in this reach also includes reconstructing the existing Esplanade ramp to account for changes in the proposed grades of the walkway on the upper level. The Proposed Project also includes using the face of the wall adjacent to the sloped path to provide targeted ecological and educational opportunities.

Tree Removal and Replacement

Although the Proposed Project has been designed to minimize tree clearing to the extent possible while integrating the proposed flood barrier system within existing streets and open spaces, an estimated 435 trees need to be cleared with 450 new tree plantings and up to approximately 17 tree transplants. Of the 435 total trees proposed to be removed, approximately 40 trees have been identified for removal due to tree health, which would happen regardless of the Proposed Project.

For City street trees under the jurisdiction of NYC Parks (i.e., streets trees along North Moore and State Route 9A/West Street), the Proposed Project would comply with the requirements of Chapter 5 of Title 56 of the Rules of the City of New York (NYC Parks Rules) and Local Law 3 of 2010, and BPCA would

submit a permit application including final tree clearing, protection, and replacement for review and approval by NYC Parks. In accordance with City regulations, all tree clearing and protection measures along North Moore Street and the curb line along northbound State Route 9A/West Street must be approved by NYC Parks before construction activities can proceed and these activities are also subject to a NYC Parks construction permit that includes a final tree clearing, protection and replacement based on a pre-construction inventory of the trees to be cleared; specifications for trees to be protected or pruned; and a tree replacement plan that includes tree planting locations and species with a post-construction monitoring during the warranty period. Trees to be removed and replacement trees planted within the ROW of State Route 9A/West Street would be subject to review and approval by NYSDOT, which would also identify any required restitution for tree removal.

BPCA and the design team have worked to maximize tree replacement planting, targeting tree species and locations that would complement the current landscape design in the Battery Park City setting, while also meeting the objectives of FEMA (and the USACE guidelines) to ensure that inspections can be provided and impacts during storm events are avoided while maintaining the flood barrier system's structural integrity and functionality during a storm event. The Proposed Project would remove 435 trees and plant 450 new trees. Table 1 provides a summary of the total projected tree clearing, transplanting and replacement planting.

Table 1
NWBPCR Tree Removals, Transplants, and New Trees

Reach	Total Trees to be Removed [1][2]	Total New Trees to be Planted [3][4]
1	65	40
2	30	50
3	40	65
4	25	40
5	120	80
6	125	135
7	35	40
Total	**435**	**450**

Notes:
1. Approximately 40 trees would be removed due to tree health; this should happen regardless of project. Approximately 395 trees would be removed due to the project's construction.
2. Includes removal of approximately 6 trees in Reach 1 in NYC Parks jurisdiction.
3. Includes approximately 8 trees in Reach 1 in NYC Parks jurisdiction.
4. Up to approximately 17 trees are assumed to be candidates for transplanting.

Urban Heat Reduction - Design Elements

The Proposed Project would reduce contributors to urban heat through an abundance of plantings, where hardscape is needed, a reliance on high-albedo and pervious materials. The proposed design increases the total planting coverage over what exists today within the limit of work by approximately 30 percent increase. In some areas, such as in Reaches 4 (Ferry Terminal) and 7 (South Neighborhood), there would be a 50 percent increase in planted areas over existing conditions. The planting design throughout the Reaches employs a multi-layered approach, incorporating groundcover, tall perennials, shrubs, understory trees, and canopy trees to provide maximum evapotranspiration and to protect the ground from drying out or absorbing heat. Over 75 percent of the proposed paved areas will be made of high-albedo materials (such

as light-colored pavers, stone, and concrete), which reflect more light, cool the surrounding air, and serve to reduce urban heat as compared to materials that absorb and increase heat, like asphalt.

System Testing, Operations and Maintenance

The Proposed Project, once installed, would require regular maintenance and inspections that are performed in accordance with an approved Operation and Maintenance (O&M) manual, and an Emergency Response Plan for use during storm surge events. At a minimum, the O&M manual is to provide the procedures for regular testing, routine maintenance and repair work, inspection and reporting requirements for the agencies with these responsibilities. Performing these maintenance obligations is essential for the operational reliability of those elements of the flood barrier system that are considered critical to providing perimeter storm surge protection and interior drainage. A maintenance agreement will be required, which will also confirm that NYSDOT will not be responsible for any operation and maintenance of the flood barrier system, including deployable gates, drainage improvements and any project elements installed in the State ROW.

Testing and maintenance of the deployable gates during non-storm conditions is expected to be undertaken twice a year to ensure they are ready to operate in a design storm condition. This gate testing would require temporary closure of the sections of the roadways and sidewalks within the Project Area, including State Route 9A/West Street (both the roadway and parallel bikeway between Chambers Street and North Moore Street), Harrison Street, and North Moore Street, and various locations within Battery Park City. This testing would be implemented in accordance with an approved flood barrier system maintenance and operations plan that would be subject to review and approval by NYSDOT and NYCDOT, NYC Emergency Management (NYCEM), as well as NYPD and FDNY, NYCDEP, other City agencies and FEMA, while minimizing impacts on transportation systems including temporary closures and diversions of vehicles, cyclists and pedestrians with the objective to ensure safe access is coordinated and maintained with alternate access routes, as needed. To that end, it is expected that gate maintenance and testing operations would be performed for each gate during overnight hours. The closures would last up to 8 hours, and the frequency of the closures would depend on the type of gate installed. Flip-up gate testing is expected to require closures twice per year per gate, and swing-gate closure testing would be limited to once per year per gate. Given that a plan will be in place to minimize impacts and that this testing is a limited and coordinated event, the annual testing and maintenance events would not result in any significant adverse impacts on transportation systems.

Design Storm Conditions

Design storm conditions would involve the deployment of all gates to complete the flood barrier system, enclose the Protected Area and provide the necessary flood protection. In a storm event, NYCEM would determine the timing of the deployment of the gates along State Route 9A/West Street. This will be addressed in the Emergency Response Plan that will be designed to address the needs of the community and emergency vehicles both in the Protected Area and the adjacent neighborhoods. This Plan will be prepared in coordination with FEMA, NYCEM, BPCA, NYSDOT, NYCDOT, NYCDEP, NYPD, FDNY, NYC Parks, and other City and State agencies, including the MTA for issues related to transit systems management. Given that these design storm conditions are episodic and temporary, and the Emergency Response Plan would need to be in place to address transportation needs of the community, including allowing for adequate evacuation time before deployment, it is not expected that the deployment of flood protection gates during storm event conditions would result in any significant adverse impacts on

transportation systems. Finally, protecting this segment of the highway from the impacts of flooding would eliminate the need for post-storm debris removal from the protected area and repairs, thereby providing for a faster resumption of traffic and transit access within the Protected Area.

Property Jurisdiction

While much of the Project Area alignment is within the jurisdiction of BPCA, Reach 1 is comprised of primarily City- and State-owned street rights-of-way, including lands along North Moore and Harrison Streets which are under City jurisdiction and the highway lands along the State Route 9A/West Street corridor segment. The State Route 9A/West Street corridor is owned by the State by and through NYSDOT and is maintained by NYCDOT. There are sections of the project segment along North Moore Street that may require use of property within Independence Plaza (which is privately owned) and lands adjacent to BMCC (under the jurisdiction of the Dormitory Authority of New York [DASNY]). The portion of the Project Area that is west of State Route 9A/West Street includes lands (and lands underwater) managed by the State of New York through NYSDEC and HRPT. Land along the marginal street, wharf, or place between the State Route 9A/West Street right-of-way and the North Esplanade (i.e., the location of the proposed pump station) is under the jurisdiction of BPCA. In addition, access agreements are expected to allow temporary construction access for properties fronting the Proposed Project corridor as well as access to properties for the long-term inspection, monitoring, and maintenance of the flood barrier system.

PURPOSE AND NEED

Many coastal communities like Battery Park City and the inland neighborhoods of Lower Manhattan face the significant challenge of identifying how to address the impacts from more frequent and intensive storm events and tidal flooding while simultaneously prioritizing design strategies that preserve the quality of life and livability in City spaces.

The principal purposes of the Proposed Project are therefore to:

- Provide a reliable coastal flood barrier system that addresses the potential flooding impacts of the design storm event and reduces flood risk to residents, property, and assets within Battery Park City;
- Preserve, enhance, and protect to the maximum extent practicable the open spaces and waterfront cultural resources of Battery Park City;
- Preserve and enhance to the greatest extent possible the character, accessibility, including universal access, and design aesthetic of the neighborhood and its interface with the Battery Park City waterfront with access to coastal view sheds, particularly views of the Hudson River, New York Harbor, and the Statue of Liberty; and
- Avoid or minimize disruption to existing below and above-ground infrastructure (i.e., water and sewer infrastructure, tunnels, utilities, etc.) from both construction impacts and flood events.

Specific design objectives of the Proposed Project are to:

- Provide a reliable and adaptable coastal flood barrier system that minimizes flood risk by relying on passive flood control rather than operational interventions and mechanical "deployable" flood barrier systems;
- Reduce urban heat island effect and enhance outdoor thermal safety;
- Construct and operate the Proposed Project in an environmentally responsible manner; and
- Utilize cost-effective low-impact solutions to maximize capital investment over the lifespan of the Proposed Project.

The Proposed Project's primary goal is addressing these challenges by providing coastal storm flood risk reduction through a flood barrier system that: (1) is integrated into the public space/realm with accompanying urban design and open space enhancements; and (2) meets the design criteria for a 2050s 100-year storm event (referred to hereafter as the "design storm event"), inclusive of increased intensity and frequency of rainfall, coastal surge, and predicted sea level rise of 2.5 feet (consistent with design parameters for certain other Lower Manhattan Coastal Resiliency [LMCR] projects).

It is BPCA's objective that once installed the flood barrier system will be accredited by FEMA which requires a final review of as-built plans and verification that the flood barrier system meets all pertinent requirements and can achieve acceptable risk reduction. Once approved, FEMA accreditation would remove the Project Area from the currently mapped flood zone, and property owners in the area who have a federally backed mortgage would no longer be required to obtain flood insurance.

PROBABLE IMPACTS OF THE PROPOSED ACTION

The FEIS examined both the short-term (construction) and long-term (operational) effects of implementing the Proposed Project and identifies the potential significant adverse environmental impacts in accordance with the *CEQR Technical Manual* as well as the applicable state and federal guidelines.

Based on the guidance of the *CEQR Technical Manual*, it was determined that detailed analyses of socioeconomic conditions, community facilities and services, shadows, solid waste and sanitation services, energy, operational air quality, operational noise, and public health were not required. Effective December 30, 2024, Section 8-0109(2)(k) of the New York State Environmental Conservation Law requires that EISs include a statement of the effects of a proposed action on disadvantaged communities, including whether the action may cause or increase a disproportionate pollution burden on a disadvantaged community (DAC). NYSDEC issued proposed draft revisions to its SEQRA regulations (6 NYCRR Part 617), which were consulted to conduct a screening analysis for environmental justice and found that no further analysis was warranted. The following technical areas were examined in detail in the EIS for potential environmental impacts: land use, zoning, and public policy; open space, historic and cultural resources; urban design and visual resources; natural resources; hazardous materials; water and sewer infrastructure; transportation; greenhouse gas emissions and climate change; neighborhood character, and construction**.**

Each technical area analyzed in the EIS followed a methodology that includes a description of existing conditions (i.e., the affected environment) and conditions in the future both without and with the Proposed Project based on the analysis year (i.e., the year in which the Proposed Project would be operational) of

2031. The incremental difference between future conditions with and without the Proposed Project was then assessed for significance.

Operational Impacts

Land Use, Zoning, and Public Policy

The Proposed Project is primarily aligned inland from the bulkhead/water's edge and is integrated into the existing street corridors and open spaces. In addition to the flood barrier system, the Proposed Project includes interior drainage improvements to manage stormwater runoff flooding in the Protected Area that address a simultaneous tidal and rainstorm event; these improvements are to be integrated into the City's existing infrastructure system and include near surface isolation installations along State Route 9A/West Street with below-grade tide gates and the proposed pump station.

With the Proposed Project there are no changes in land use along the Project Area or along the waterfront, nor would the adjacent inland residential, commercial, and institutional uses be impacted. Implementing the Proposed Project does not require any zoning actions and the Proposed Project would not conflict with the Project Area zoning. Based on a review of the applicable policies, it has also been determined that the Proposed Project is consistent with public policies including the City's Waterfront Revitalization Program (WRP) and the policies of BPCA with respect to resiliency and sustainability. In sum, the Proposed Project provides resiliency and protection against design storm events and the effects of sea level rise while preserving public access to the waterfront with no significant impacts on historic or visual resources. Therefore, it is concluded that the Proposed Project does not result in any significant adverse impacts or conflicts with respect to land use, zoning or public policy.

Open Space

The Proposed Project would not result in any potential significant adverse impacts or conflicts with open space resources. Under the proposed design, once constructed, the overall acreage and availability of open space resources in the Project Area would remain largely unchanged, with a slight expansion of space in Reach 2 with the widened esplanade adding 0.05 acres. The Proposed Project would also support the protection of existing open space resources in the Protected Area that would otherwise continue to be subject to storm surge flooding associated with the design storm. Therefore, it is concluded that the Proposed Project would not result in any potential significant adverse impacts to open spaces.

Historic and Cultural Resources

Archaeological Resources

To assess the potential impacts of the proposed on archaeological resources, the Area of Potential Effect (APE) is the area expected to be disturbed horizontally (i.e., the footprint of proposed ground disturbance), and vertically (i.e., the proposed depth of ground disturbance). To assess the potential for impacts within the Archaeological APE, a Phase 1A Archaeological Documentary Study and supplemental analyses of the Project Area were prepared and reviewed by SHPO and LPC and it was recommended that Phase 1B Archaeological Investigations, including a geomorphological investigation and archaeological monitoring during construction, be performed to confirm the presence or absence of archaeological resources in areas identified for potential archaeological sensitivity. All subsequent investigations, including the Phase 1B

Archaeological Investigations of the identified areas of potential archaeological sensitivity, are to also be performed in consultation with SHPO and LPC, as well as the Section 106 Consulting Parties (including Indigenous Nations with cultural or ancestral connections to New York County). With the implementation of the Phase 1B Archaeological Investigations and all subsequent analyses determined to be necessary based on continued consultation with LPC, SHPO, and the Section 106 Consulting Parties, it is concluded that the Proposed Project would avoid any significant adverse impacts on archaeological resources.

Historic Architectural Resources

An analysis of potential impacts on Historic Architectural Resources was undertaken in accordance with Section 14.09 of the New York State Historic Preservation Act (NYSHPA) and Section 106 of the National Historic Preservation Act of 1966 (NHPA), as implemented by federal regulations. For this analysis the APE for historic architectural resources (the "Historic Architectural APE") was defined as the area within 400 feet from the Project Area, which accounts for potential direct impacts from construction vibration (i.e., properties within 90 feet of the Project Area) and potential indirect impacts (visual and contextual). There are a number of resources within the 90-foot-wide study area including South Cove, which SHPO has been determined to be eligible for listing on the State and National Registers of Historic Places (S/NR-eligible), Hudson River Bulkhead (S/NR-eligible), New York World Telegram Building (S/NR-eligible), Barclay-Vesey Building (New York City Landmark [NYCL], S/NR), 90 West Street (NYCL, S/NR), Lamppost 79 (NYCL) and a portion of the Tribeca West Historic District (NYCL, S/NR-eligible) along Greenwich Street. Therefore, pursuant to Sections 14.09 and 106 a, BPCA, in consultation with LPC and SHPO, would develop and implement construction protection plans (CPPs) for these historic architectural resources to avoid inadvertent construction-period damage from ground-borne vibrations, falling debris, dewatering, subsidence, or any other potential impacts during the construction period. With these protection plans in place it is concluded that the Proposed Project would avoid any adverse impacts to historic architectural resources.

In Reach 1 a small portion of the buried Hudson River Bulkhead may be removed to install the proposed roller gate, as the upper portion of the buried bulkhead is within the alignment of the gate track. This impact, however, is limited to a small section of granite block at the top of the bulkhead at this location and the majority of the historic bulkhead would remain unaffected by the Proposed Project. Therefore, it is concluded that this limited direct effect to a small section of historic material would not result in a significant adverse effect to the historic resource. BPCA will also evaluate the potential to salvage the removed bulkhead materials with LPC and SHPO.

As the North Cove Marina would be closed for the duration of construction at Reach 5, the Shearwater (S/NR) would be relocated and moored at an alternative location during construction. Because the Shearwater is actively used for sightseeing cruises and its historic significance is not related to its current location at the North Cove Marina, this temporary relocation would not result in an adverse effect to the historic schooner.

It is also not expected that the Proposed Project would result in any contextual impacts on historic architectural resources in the Project Area or in the Historic Architectural APE. The Proposed Project design would not alter the scale, visual prominence, or visual context of any building, structure, object, or landscape feature; screen or eliminate publicly accessible views; or introduce new shadows or lengthened shadows on an historic landscape or a historic structure that is sunlight dependent.

Finally, in Reach 7 the Proposed Project design would also not directly impact South Cove (S/NR-eligible) since the proposed flood protection alignment and related improvements are aligned along the interior edges of South Cove and the main contributing features of the landscape would therefore be unaffected.

For the above reasons, it is concluded that the Proposed Project would not result in any significant adverse impacts on historic architectural resources.

Urban Design and Visual Resources

The Proposed Project would not result in any significant adverse urban design impacts to urban design and visual resources. While the floodwalls and deployable systems are new features introduced to the public realm, they are largely proposed to be installed in locations where there are existing fences and walls or adjacent to building façades. In addition, the Proposed Project would maintain the visual connectivity between the waterfront and the adjacent inland portions of Battery Park City and from the neighborhoods east of State Route 9A/West Street. All of the street-end entrances to the Battery Park City Esplanade and adjoining parks, as well as the additional entrance to Rockefeller Park between Murray and Warren Streets, are designed with deployable systems that remain in the open position except in a storm condition. While the Proposed Project would reconstruct sections of the Battery Park City Esplanade and adjoining parks, it would maintain or enhance their character, and the reconstructed spaces would respect and complement the design of the existing Esplanade and parks through site programming, use of materials, and planting. While the connecting segments of the floodwall would also partially extend into the view corridors at some of locations, views to the waterfront and Hudson River would be largely be maintained and no views would be fully blocked. Proposed planting used to attenuate the visual impact of the flood barrier system could also obscure some of these views to the waterfront, but changes to these views from plantings would vary by season and this impact is concluded to not be significant.

The Proposed Project would result in a temporary adverse impact from the removal of approximately 435 existing trees throughout the Project Area. However, the proposed design also includes the planting of at least 450 new trees throughout the Project Area and transplanting of existing trees to avoid impacts, where feasible.

For the above reasons, it is concluded that the Proposed Project would not result in any significant adverse impacts on urban design and visual resources.

Natural Resources

Floodplains

Once the Proposed Project is installed, it would improve the resilience of Battery Park City and inland properties (i.e., the Protected Area) against design storm events and sea level rise, thereby reducing the risk of flooding impacts and damage. It is also proposed that the flood barrier system be accredited by FEMA, which would remove the portion of the Study Area and the Protected Area landward of the flood barrier system from the current flood zone. Therefore, it is concluded that the Proposed Project would not result in any significant adverse impacts to floodplains.

Groundwater

The Proposed Project would not adversely affect groundwater resources. Groundwater is not used as a potable water source in Manhattan and the Proposed Project would not involve any use or drawdown of groundwater during its operation.

Essential Fish Habitat, Significant Coastal Fish and Wildlife Habitat, and Hudson River Park Estuarine Sanctuary

Because the Proposed Project would not result in significant adverse impacts to aquatic biota, water quality, or sediment quality, it would not result in any significant adverse impacts to aquatic habitat, including those associated with designated Essential Fish Habitat (EFH), or the defining characteristics of the Lower Hudson Reach Significant Coastal Fish and Wildlife Habitat (SCFWH) or the Hudson River Park Estuarine Sanctuary.

Terrestrial Resources

The proposed landscaping plan includes a variety of native plants that are designed to enhance the diversity of ecological communities within the Project Area which is consistent with the Battery Park City Sustainability Plan[3] and would benefit terrestrial resource habitats. Replaced and transplanted trees, as well as newly planted shrubs and herbaceous plants would provide habitat and foraging opportunities for wildlife and implementation of the flood barrier system would protect terrestrial resources and landscapes in the Protected Area in the Study Area during future storm events when compared to the No Action condition. Therefore, it is concluded that the Proposed Project would not result in any significant adverse impacts to terrestrial resources.

Threatened, Endangered, and Special Concern Species

The Proposed Project would not impact any significant habitats for monarch butterfly (*Danaus plexippus*; federal proposed threatened), willow oak (*Quercus phellos*; state-listed endangered) or tricolored bat (*Perimyotis subflavus*; federal proposed endangered). Because the post-construction landscape design would replace existing trees, shrubs, and herbaceous plants disturbed by the installation of the flood barrier system with native and adapted plants, the Proposed Project would not result in any significant impacts to habitats when compared to the No Action condition. On January 30, 2025, the US Fish and Wildlife Service (USFWS) concurred with the US Army Corps of Engineers' (USACE) determination that the Proposed Project would not impact tricolored bat and monarch butterfly.

While the Proposed Project would result in modification to critical habitat for Atlantic sturgeon associated with the permanent loss of 0.6 acres of soft bottom habitat and shading of 4,688 square feet (0.1 acre) of water column, this represents a small area relative to the thousands of acres of available foraging habitat suitable for sturgeon in the Hudson River. Additionally, most of these impacts would be located beneath existing overwater platforms within the Project Area and the Proposed Project also includes a monitoring plan to avoid impacts during construction.

[3] Battery Park City Sustainability Plan. September 2020. Available from: https://bpca.ny.gov/nature-and-sustainability/sustainability/

Wetlands

The proposed in-water elements of the project are comprised primarily of new piles, construction of precast concrete and sheet pile seepage barriers, concrete bridging structures, and placement of low permeability clean fill as part of the flood barrier system. In total, the permanent in-water elements of the Proposed Project would result in the permanent loss of 25,621 square feet (0.6 acres) of benthic habitat and 8,999 cubic yards of water column below spring high waters (SHW). Of these impacts, approximately 3,700 cubic yards would be within a 14,929-square-foot (0.34 acre) area in waters 6 feet deep or less at mean low water (MLW). This would result in a minimal impact on NYSDEC littoral zone tidal wetlands that would be offset using compensatory mitigation developed in coordination with NYSDEC.

Given that there are no suitable on-site locations to provide onsite wetland mitigation to offset the proposed fill in the river that is necessary to install the flood barrier system, the proposed mitigation to address this impact is the purchase of tidal wetland mitigation bank credits from the Saw Mill Creek Wetland Mitigation Bank (Staten Island, New York). Ecological enhancements are also proposed for the first two rows of piles in Reaches 2 and 6, which consist of precast reinforced concrete that create artificial habitats for marine life. Similar enhancements would be made to the new replacement bulkhead within Reaches 2, 4, and 6. Any such ecological enhancements would be completed prior to the completion of the Proposed Project at the end of 2030. With these measures and the erosion and sediment control Best Management Practices described in Chapter 3.11, “Construction,” it is concluded that the Proposed Project would not result in any significant adverse impacts to wetlands.

Aquatic Resources

The above-described impacts of the Proposed Project on benthic habitat and the water column and overwater shading would result in a minimal change in foraging habitat for striped bass and other fish species when compared to the extent of similar habitat available in the lower Hudson River and this is therefore not concluded to be a significant adverse impact on aquatic biota. Given that the proposed overwater deck extension in Reach 2 is only 6 feet wide, there is a limited potential for this incremental increase to result in shading effects on aquatic habitat. In addition, no submerged aquatic vegetation (SAV) was observed at this location (or in the Study Area), so the increase in shading would not impact or inhibit SAV growth.

The excavation or displacement of sediment in Reach 5 required for installing the bridging structures over the PANYNJ PATH tunnels would also not result in any significant adverse impacts to benthic habitat.

Improvements to stormwater management with the Proposed Project, including implementation of green infrastructure, will improve the quality of stormwater discharged from in the study area.

Under the design storm conditions the Proposed Project would not result in significant adverse impacts to water quality of the Hudson River, and in particular in the vicinity of the existing NYCDEP Combined Sewer Overflow (CSO) outfall NCM-073 that discharges to the southern portion of the Hudson River Park Estuarine Sanctuary (Sanctuary) in Reach 2, when compared to the No Action condition. With the Proposed Project, an appreciable portion of the area that would be inundated by the storm surge associated with the design storm under the No Action condition would be protected and would not be flooded and therefore would not contribute pollutants associated with receding floodwaters to the Hudson River and in particular to the southern portion of the Sanctuary. Additionally, the Proposed Project includes a pump station to be

located at Stuyvesant Plaza that would operate during the design storm conditions, discharging combined stormwater and sanitary effluent from the combined sewer and pumping it to the downstream side of the tide gate at CSO outfall NCM-073 when water levels in the Hudson River and within the Sanctuary are high. Even with the additional 2 million gallons of flow from outfall NCM-072 that would be redirected to outfall NCM-073, discharging the combined flow during the storm surge event would result in greater levels of mixing when compared to the No Action Storm Event condition when some or all of the same combined sewer flow would have been discharged to the lower southern portion of the Sanctuary and the Hudson River after the surge event when the receiving volume of the river is lower and less mixing would occur.

Therefore, it is concluded that the Proposed Project would not result in any significant adverse impacts to aquatic resources.

Hazardous Materials

The Proposed Project involves demolition and excavation activities that would have the potential to disturb hazardous materials in existing structures and the subsurface. However, with the implementation of the proposed appropriate protection measures the potential for these significant adverse impacts is avoided. By implementing these protection measures and complying with all City, state, and federal procedures and regulations governing the handling, excavation, stockpiling and transport of contaminated or hazardous soil, the management of groundwater and solid waste, the handling of construction-related materials and chemicals, and implementing BMPs and response measures, the Proposed Project would not result in any significant adverse impacts with respect to contaminated or hazardous materials during construction. There would also be no impacts during the operational phase of the Proposed Project.

Water and Sewer Infrastructure

The Proposed Project would not generate any added water supply or wastewater treatment demands that would overburden the existing capacity of the combined and separate stormwater sewer systems serving the Project Area. The Proposed Project would, however, install a flood barrier system to meet the flood protection goal and doing so requires some modifications of the sewer system to prevent inflow of coastal storm surge into the Protected Area through the sewer system. In addition, the Proposed Project would provide stormwater management measures to handle a simultaneous tidal and rainfall event, including a new pump station, near surface isolation measures such as tide gates, upgraded manholes, and green infrastructure.

With these proposed infrastructure modifications in place, it is concluded that the Proposed Project would not result in any significant adverse impacts to the City's infrastructure systems with the benefit of resiliency upgrades.

Transportation

Analyses of potential significant adverse transportation impacts were performed where the Proposed Project would reduce street capacity to handle vehicles or narrow pedestrian and bicycle pathways. Analyses were conducted at the intersection of State Route 9A/West Street and North Moore Street, Harrison Street, and Chambers Street, and pedestrian elements at nine locations in Reach 1 including North Moore and Harrison Streets and along State Route 9A/West Street. These assessments were also conducted for shared pedestrian and bicycle facilities in Reaches 4 through 7 including in the vicinity of the Lily Pond, Pumphouse Park,

Gateway Plaza, and the street ends at West Thames and Albany Streets as well as in the vicinity of South Cove. Based on these detailed analyses, it was concluded that the Proposed Project would result in significant adverse traffic impacts at State Route 9A/West Street and North Moore Street during the weekday midday, weekday PM, and Saturday peak hours. Mitigation measures were identified for these potential traffic impacts, and the impacts would be fully mitigated. There would be no significant adverse transportation impacts on transit or pedestrians.

Installing the proposed flood barrier system with additional landscaping and widening the sidewalk on the south side of North Moore Street would not result in any adverse impacts on pedestrian movement or circulation along North Moore Street. Rather, the widened sidewalk would improve pedestrian conditions.

Testing and maintenance of the deployable gates during non-storm conditions is expected to be performed annually for the purposes of exercising the floodgates to ensure they are operable in a storm condition. This testing would require temporary closure of segments of the roadways and sidewalks in the Project Area, including State Route 9A/West Street (both the roadway and parallel bikeway between Chambers Street and North Moore Street) and would be implemented in accordance with an approved flood barrier system maintenance and operations testing plan and procedures that are subject to review and approval by NYSDOT and NYCDOT, NYCEM, as well as NYPD and FDNY, other City agencies and FEMA. It is expected that system gate maintenance and testing operations would be performed during off-peak (e.g., overnight) hours in accordance with that testing and maintenance plan and would limit impacts such that the periodic testing and maintenance events would not result in any significant adverse impacts on transportation systems.

Design storm conditions will also involve the deployment of all gates to enclose the Protected Area. In a storm event, NYCEM would determine the timing of the deployment of the system. These deployment procedures are to be addressed in an Emergency Response Plan that will be designed to address the needs of the community and emergency vehicles both in the Protected Area and the adjacent neighborhoods. Given that these design storm conditions are episodic and temporary with a plan in-place to address transportation needs of the community, including allowing for adequate evacuation time before deployment, it is not expected that the storm-event activation of the flood protection gates would result in any significant adverse impacts on transportation systems.

Greenhouse Gas Emissions and Climate Change

The Proposed Project would not introduce any substantial new buildings or other uses that generate emissions or require energy or fuel consumption. While the Proposed Project includes a permanent pump station to prevent flooding on the dry side of the flood barrier system, it would operate only during storm events and would not represent a substantial increase in energy demand.

The total fossil fuel use in all forms associated with construction of the Proposed Project would result in up to approximately 45,207 metric tons of CO_2e emissions. A number of potential emission reduction measures during project construction are under consideration and may include the use of biodiesel, expanded use of recycled steel and aluminum, as well as expanded construction waste reduction.

Based on the above, it is concluded that the Proposed Project would not result in any significant adverse impacts with respect to greenhouse gas emissions.

Neighborhood Character

The Proposed Project would not adversely alter defining features of the neighborhood or result in a significant adverse impact or a combination of impacts that would adversely impact neighborhood character. Rather, the Proposed Project would provide neighborhood benefits through the proposed flood protection system while improving the resiliency of the waterfront and sustainability in Battery Park City and the larger Protected Area in Lower Manhattan. Completion of the Proposed Project would also provide design storm protection from coastal surge events and sea level rise while enhancing access to and usability of open space. The Proposed Project also includes landscape enhancements to support the pedestrian experience within BPC coupled with widened pedestrian paths. Additionally, the Proposed Project has been designed to minimize obstructions to visual corridors and key features of the Study Area. Therefore, for the above reasons it is concluded that the Proposed Project would not result in any substantial changes to neighborhood character and would promote resiliency and sustainable development in the neighborhood.

Construction Impacts

Description of Construction Activities

It is expected that construction of the Proposed Project would commence in the 4th quarter of 2025 and be substantially completed in 2030, with the Proposed Project fully operational in 2031. For the purposes of assessing the potential construction impacts of the Proposed Project, a preliminary construction schedule was developed based on this build-out schedule and then used to analyze the range of potential impacts anticipated during construction.

The primary construction activities related to the Proposed Project include installing erosion and sediment control measures; demolition of existing structures (i.e., walls and platforms), drilling shafts and pile installation; installing new platforms and walls and pouring concrete; grading and landscaping; installation, replacement, and relocation of water and sewer infrastructure including the proposed pump station; delivery and installation of gates; and final landscaping (seeding and planting) and installation of park amenities and equipment. Upon completion of construction, site restoration and decommissioning of construction protection measures would commence, including the removal of barriers and signage, replacing or reinstalling fences and other temporarily removed street furniture.

The Proposed Project includes restoring all Battery Park City open spaces affected by construction once the flood barrier system is installed which would involve final grading, landscaping and replacement of benches and lighting that is temporarily removed during construction. This would be performed in accordance with a landscaping plan to replace all impacted vegetation with a variety of native plantings that support ecological communities with enhancements in all areas affected by construction. In addition to replanting trees, seeding and planting activities may also include installing temporary erosion control or slope stabilization measures in some areas as the vegetation reestablishes. Any clearing or pruning of street trees would also require the approval of NYC Parks. The Proposed Project would also require temporary construction access agreements at a number of properties (e.g., Hudson River Park, NYSDOT, and properties fronting the Proposed Project corridor) to allow site and property access during construction.

For activities within City streets all work must be performed in accordance with applicable means and methods approved by NYCDOT and NYC Parks. For activities within the State Route 9A/West Street right

of way, or City Streets, all work must be performed in accordance with applicable means and methods approved by NYSDOT, NYCDOT and NYC Parks where applicable. Any required temporary lane and road closures would also be coordinated with NYCDOT and NYSDOT to ensure compliance with the appropriate restrictions and in accordance with an approved Maintenance and Protection of Traffic (MPT) plan, and a Traffic Management Plan that is expected to include flaggers to assist with traffic management at key entry and exit points.

Project construction activities are expected to involve the use of several types of equipment and vehicles. Each reach is expected to require the use of excavators, loaders, and dump trucks with cranes, hydraulic press-in hammers, concrete mixers, and concrete pumps to install the Proposed Project's primary structural components. Delivery trucks would also be used throughout the construction period to support a variety of construction activities from structural installation to landscaping. Barges are proposed for construction activities along the water's edge that include delivery and removal of materials and pile installation.

Construction Open Space

Project construction is expected to begin in the fourth quarter of 2025 and be substantially completed in 2030, with the Proposed Project fully operational in 2031. While the Proposed Project would be constructed over a period of approximately five years, the peak construction year for open space impacts is 2028, which is when the maximum area of open space along the Project Area would be temporarily closed for construction. These temporary closures would result in a temporary significant adverse impact to open space resources in both the Residential and Nonresidential Open Space Study Areas. In the No Action condition, SBPCR Project's open spaces that are currently closed will be reopened, with Wagner Park completed and reopened in 2025, and the adjacent sections of the Battery Park City South Esplanade and Pier A Plaza reopened in early 2026. In addition, the Battery Coastal Resilience Project is expected to be completed, elevating the waterfront Esplanade at The Battery. Phase 1 of that project is expected to be completed by August 2025 and will reopen that open space, while Phase 2, which includes reconstructing the eastern portion of the wharf and adjacent areas, is scheduled to begin after Phase 1 concludes and is targeted to reopen in 2026.

With the temporary construction period closure of open spaces along the Project Area it is expected that open space user demands and needs would divert to other Study Area open spaces, thereby resulting in the potential temporary indirect impacts.

In the ¼-mile Nonresidential Study Area during the peak construction year of 2028, the passive open space ratio is anticipated to be 0.24 acres per 1,000 nonresidents with the Proposed Action which is a decrease from 0.32 acres per 1,000 nonresidents from the No Action condition (or about a 16 percent decline). While there is a temporary construction period decline in this ratio it would continue to be above the *CEQR Technical Manual* guideline of 0.15 acres per 1,000 nonresidents and is a temporary closure of open spaces that would be phased with Project Area open spaces reopening as construction in Reach 7 (South Cove) is projected to be as early as first quarter of 2028, just before the 2028 peak open space impact year when six of the project reaches and the associated open spaces would be under some phase of construction. Reach 2 would complete construction in early 2029 and the remaining Reaches 1, 3, 4, 5, are to be completed in late 2030.

In the ½-mile Residential Study Area, the active open space ratio is projected to decrease slightly from 0.48 to 0.47 acres per 1,000 residents and the total and passive open space ratios would temporarily decrease from 1.76 to 1.61 and 1.29 to 1.14, respectively. The total and active open space ratios would continue to be below City guidelines; however, the passive open space ratio would remain above the City guidelines. For active spaces, the Proposed Project would result in the temporary closure of the Esplanade and diversions of biking and jogging, as well as the Rockefeller Park playground, basketball and handball courts and a number of other recreational features between 2026 and 2030, that would reduce by 0.5 acres the Residential Study Area's existing 36.68 acres of active open space.

While there would be a construction period open space impact over the full construction period that would peak in 2028, construction of the Proposed Project has been phased to minimize these impacts to the maximum extent practicable, recognizing that the flood protection system is largely aligned along the public open spaces of Battery Park City. In addition, Rockefeller Park would remain open throughout construction and there would be a diversion route for north/south bikers, joggers and walkers while the segments of the esplanade are temporarily closed.

While the temporary closure of park space in the Project Area would result in the indirect use of other nearby open space resources, there are a number of large, publicly accessible park spaces that provide active and passive uses that are in close proximity to the Proposed Project. For example, the analysis takes into account that the SBPCR Project's open spaces that are currently closed will be reopened, with Wagner Park completed and reopened in 2025, and the adjacent sections of the Battery Park City South Esplanade and Pier A Plaza reopened in early 2026.

The user demand during the temporary construction period closure of open spaces can be addressed by several of the open space resources in the study area. For example, the Hudson River Greenway would remain open as would Teardrop Park which is within the Battery Park City north neighborhood and the northern portion of this park includes plantings, nature play areas, a children's slide, grass lawns, and benches, while the southern portion of the park is dedicated to passive open space with additional winding paths, benches, a small amphitheater, and plantings. Part of the Battery Park City open space system includes the Battery Park City Ballfields, located along State Route 9A/West Street between Warren and Murray Streets to the east. Also to the east, just across State Route 9A/West Street is Washington Market Park which offers a variety of active and passive spaces. Adjacent and to the north, there are also several active spaces in Hudson River Park including the esplanade for jogging, basketball and sports courts recreational piers, in-water activities, such as kayaking and rowing, as well as passive spaces such as natural habitats, with educational viewing and seating opportunities. To the southeast there is also ferry access from the Battery Maritime Building to the large open spaces at Governors Island, a 172-acre open space with ball fields, lawns, playgrounds, and miles of pedestrian pathways and bike lanes. These open spaces would continue to serve the community throughout the construction of the Proposed Project.

At project completion, there would also be the open space benefits of enhanced accessibility by improving pedestrian circulation with elevated platforms and pathways and creating switchbacks and winding pathways to enhance passive open spaces in the Project Area. Additionally, the Proposed Project would protect open space resources upland and within the Protected Area from future storm events. Open spaces west of the flood barrier system would also benefit from drainage improvements and green infrastructure enhancements, like high-performance rain gardens.

Construction Natural Resources

An assessment of potential construction period impacts by each natural resource technical area is summarized below.

Groundwater. Groundwater pumping is expected to be necessary for certain construction activities that require excavation below surface grading such as water and sewer main construction. Given the project location near the river and the relatively shallow groundwater conditions, groundwater pumping will require NYSDEC permits for pumping and discharges to surface waters (the Hudson River), and/or a NYCDEP permit for discharges to the City sewer system. Residual groundwater from dewatering operations is to be treated in accordance with either NYSDEC or NYCDEP permitting requirements prior to discharge. These permit approvals would need to be obtained before the construction activities that require dewatering approvals can proceed.

Floodplains. Construction of the Proposed Project would not adversely affect floodplain hydrology or exacerbate flooding conditions. In addition, the construction zones would be protected from flooding in the event of a major tidal storm event or equipment and materials would need to be relocated out of the impact area.

Wetlands. All construction activities are proposed to be performed in accordance with USACE, NYSDEC and other applicable permits that govern activities within surface waters and wetlands, tree removal and protection, and erosion and sediment control. To that end, to avoid impacts to littoral zone tidal wetlands associated with turbidity increases from suspended sediment during in-water construction, best management practices would be implemented through a Stormwater Pollution Prevention Plan (SWPPP) for the purpose of avoiding the discharge of materials to the Hudson River littoral zone tidal wetlands. In addition, to minimize resuspension of bottom sediment during in-water construction, containment booms and full-length turbidity curtains would be installed around work areas to contain any potential impacts from sediment resuspension. Any sediment resuspended during in-water work such as pile drilling and sheet pile installation would therefore have only a minor, short-term and localized effect on water quality. The use of bubble curtains around all pile installation activities would also reduce the intensity of underwater noise on aquatic species and would minimize temporary increases in underwater noise levels such that would not exceed the threshold for physiological injury to fish. Therefore, with these measures in place, it is concluded that the Proposed Project would avoid significant adverse impacts to aquatic resources, including water and sediment quality, aquatic biota, and essential fish habitat.

Terrestrial Communities. Terrestrial ecological communities in the Study Area are limited to previously anthropogenic and landscaped communities along the waterfront of BPC. Temporary construction impacts to these communities would not result in any significantly adverse ecological impacts given its predominantly urban setting and the affected areas would be restored as part of the final landscaping plan. Where possible, trees along the Project Area would be retained and protected during construction with a tree replacement plan.

Terrestrial Wildlife. It is expected that project construction activities would result in minor short-term impacts to terrestrial wildlife. Therefore, species that are present either as transients or nesting would be temporarily displaced due to increased noise and human activity during construction but are expected as urban generalists to relocate to suitable habitat that is available within Battery Park City or the greater NYC area and flyway.

Protected Species. Construction of the Proposed Project would not result in any significant adverse impacts to state or federally listed threatened, endangered, or candidate species. There is no essential breeding habitat for monarch butterfly (i.e., milkweed plants) along the project corridor or in the Study Area and any monarch butterflies that may be present are expected to be occasional migratory individuals rather than breeding populations. There is no suitable habitat for tricolored bats in the Study Area nor are tricolored bats expected to be present in the Study Area; on January 30, 2025, the U.S. Fish and Wildlife Service (USFWS) concurred with the US Army Corps of Engineers' (USACE) determination that the Proposed Project would have no impact on monarch butterfly or tricolored bats. Peregrine falcons are known to have nest sites throughout southern Manhattan and have been documented by the New York Natural Heritage Program (NYNHP) as nesting within 0.5 miles of the Project Site. However, any falcons in the Project Area are expected to avoid the Study Area during active construction and return post construction. Migration of shortnose sturgeon, Atlantic sturgeon, and sea turtles through the Hudson River during spring and early fall would not be obstructed by project construction which would only result in increased noise within a relatively small aquatic zone in the Hudson River. Because impacts associated with the in-water construction activities would be localized, including resuspended sediments and elevated noise levels, the deeper channel habitat typically used by sturgeon would not be adversely impacted during project construction. The temporary loss of potential foraging habitat due to avoidance of the Study Area would not result in any significant adverse impacts to sturgeon or sea turtles, as similar suitable habitat would continue to be available nearby and they would be expected to return to the Study Area following construction.

In addition, construction of the Proposed Project would not adversely impact water or sediment and would not significantly affect habitat for aquatic biota, including striped bass, and would therefore not result in significant adverse impacts to the Lower Hudson Reach, which is designated as significant coastal fish and wildlife habitat, or to the Hudson River Park Estuarine Sanctuary.

Construction Transportation

Traffic

Traffic conditions were evaluated at 14 intersections for the Peak Construction Analysis for the construction weekday AM and PM peak hours. Based on that analysis, during project construction significant adverse traffic impacts were identified at two intersections during the construction weekday AM peak hour and four intersections during the construction weekday PM peak hour. **Table 2** summarizes these projected significant adverse traffic impacts.

Table 2
Summary of Peak Construction Analysis Significant Adverse Traffic Impacts

Intersection		Weekday AM Peak Hour	Weekday PM Peak Hour
NB/SB Street	**EB/WB Street**		
North End Avenue	Vesey Street		SB-LT
State Route 9A/West Street	Murray Street		EB-L
			WB-LT
State Route 9A/West Street	Laight Street	WB-L	
State Route 9A/West Street	Liberty Street		EB-DefL
		NB-L	NB-L
State Route 9A/West Street	Albany Street		EB-LTR

Note:
L = Left Turn, T = Through, R = Right Turn, DefL = Defacto Left Turn, EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound

Traffic conditions were evaluated at five intersections for the Construction MPT Analysis scenario related to construction of the floodwall and EWP. According to those analyses, a potential significant adverse traffic impact would occur at State Route 9A/West Street and Harrison Street during the AM peak hour.

Traffic conditions were evaluated at five intersections for the Construction MPT Analysis scenario related to construction of the State Route 9A/West Street and Harrison Street gate crossings. According to those analyses, potential significant adverse traffic impacts would occur at three intersections as set forth in **Table 3**.

Table 3
Summary of Construction MPT Analysis State Route 9A/West Street Gate Construction: Northbound and Southbound Lane Closure for 36 months Significant Adverse Traffic Impacts

Intersection		Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour	Construction Weekday AM Peak Hour	Construction Weekday PM Peak Hour
NB/SB Street	**EB/WB Street**						
State Route 9A/West Street	Murray Street					WB-LT	
						WB-R	WB-R
		NB-L	NB-L			NB-L	NB-L
		NB-TR	NB-TR		NB-TR	NB-TR	NB-TR
							SB-R
State Route 9A/West Street	Warren Street					EB-LTR	EB-LTR
		NB-TR				NB-TR	NB-TR
State Route 9A/West Street	Chambers Street					EB-LTR	EB-LTR
						WB-LT	WB-LT
		NB-TR	NB-TR	NB-TR	NB-TR	NB-TR	NB-TR
		SB-T		SB-T	SB-T	SB-T	SB-T
						SB-R	SB-R

Note:
L = Left Turn, T = Through, R = Right Turn, DefL = Defacto Left Turn, EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound

Transit

The incremental subway, PATH and bus trips generated during project construction are well below the respective *CEQR Technical Manual* thresholds. Therefore, detailed transit analyses were not warranted, and the Proposed Project would not result in any significant adverse transit impacts.

Citywide Ferry Service

The Proposed Project is not expected to generate any incremental trips on the Citywide Ferry Service during construction. Therefore, an analysis of ferry facilities was not warranted, and the Proposed Project would not result in any significant adverse ferry impacts.[4]

Pedestrian

The incremental pedestrian trips generated from construction workers are projected to be well below the *CEQR Technical Manual* analysis threshold of 200 pedestrians per hour at any one location. Therefore, a detailed pedestrian analysis is not warranted, and the Proposed Project would not result in any significant adverse pedestrian impacts for the Peak Construction Analysis.

An evaluation of the proposed construction barriers and the MPT was also performed. To determine the impacts of narrowed sidewalks and sidewalk closures, pedestrian conditions were evaluated at ten sidewalks, six corners, and three crosswalks for the commuter weekday AM, midday, and PM and Saturday peak hours. Based on this analysis, significant adverse pedestrian impacts during construction were identified at five pedestrian elements during the weekday AM peak hour, two elements during the weekday midday peak hour, five elements during the weekday PM peak hour, and two elements during the Saturday peak hour. **Table 4** summarizes these projected significant adverse pedestrian impacts and the potential mitigation measures are summarized below under "Mitigation."

Table 4
Summary of Construction MPT Analysis Significant Adverse Pedestrian Impacts

Pedestrian Element	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
West Sidewalk along State Route 9A/West Street between Harrison Street and Chambers Street	Impacted		Impacted	Impacted
East Sidewalk along Greenwich Street between North Moore Street and Franklin Street	Impacted		Impacted	
Greenwich Street and Franklin Street Northeast Corner	Impacted	Impacted	Impacted	Impacted
Greenwich Street and North Moore Street South Crosswalk	Impacted		Impacted	
Greenwich Street and Franklin Street North Crosswalk	Impacted	Impacted	Impacted	

[4] While project worker trips originating New Jersey may also use NY Waterway, these trips were conservatively assumed in the vehicle or transit modes.

Parking

The Proposed Project would generate a daily parking demand of 104 vehicles during peak construction activities that could be fully accommodated by nearby off-street facilities within ¼ mile of the Project Area. Therefore, the Proposed Project would not result in any potential significant adverse parking impacts.

Construction Air Quality

Measures would be taken to reduce pollutant emissions during construction of the Proposed Project in accordance with all applicable laws, regulations, and building codes. Potential measures for reductions of emissions from construction of the Proposed Project include the use of ultra-low sulfur diesel (ULSD) fuel, dust suppression measures, idling restrictions, diesel equipment reduction, and use of best available technology (i.e., equipment meeting the U.S. Environmental Protection Agency's [USEPA] Tier 4 emission standard). Additionally, BPCA has committed to explore use of electrically powered construction equipment including equipment that is undergoing demonstration testing, or may evolve in the near-term thereby becoming available during the course of project construction. BPCA has established a goal of requiring its contracting team to electrically power at least 20 percent of the on-site, mobile construction equipment that would be used to build the flood barrier wall. It is envisioned that the mobile equipment will be equipped with electric battery-operated generators that will also be outfitted with special, OSHA-compliant, noise-reducing back-up alarms. With the implementation of these emission reduction measures, the dispersion modeling analysis of construction-related air emissions for both non-road and on-road sources determined that particulate matter ($PM_{2.5}$ and PM_{10}), annual average nitrogen dioxide (NO_2), and carbon monoxide (CO) concentrations would be below their corresponding *de minimis* thresholds or National Air Quality Ambient Standards (NAAQS), respectively. Therefore, it is concluded that project construction would not result in significant adverse air quality impacts.

Construction Greenhouse Gas Emissions and Climate Change

Construction of the Proposed Project would involve the use of both stationary source (nonroad) construction equipment and on-road (mobile source) vehicles, both of which have GHG emissions. It was determined that project construction would result in up to approximately 45,207 metric tons of CO_2 emissions associated with fossil fuel use in all forms. Potential measures for reductions of emissions from construction of the Proposed Project include the commitment to explore use of electrically powered construction equipment such as equipment that is undergoing demonstration testing, or may evolve in the near-term thereby becoming available during the course of project construction. BPCA has established a goal of requiring its contracting team to electrically power at least 20 percent of the on-site, mobile construction equipment that would be used to build the flood barrier wall. It is envisioned that the mobile equipment will be equipped with electric battery-operated generators that will also be outfitted with special, OSHA-compliant, noise-reducing back-up alarms. Additional emission reduction measures during construction may include the use of biodiesel, expanded use of recycled steel and aluminum, as well as expanded construction waste reduction. Therefore, it is concluded that project construction would not result in significant impacts with respect to greenhouse gas emissions.

Construction Noise and Vibration

Construction-generated noise would result in significant adverse effects at multiple sensitive receptors. The noise level increments resulting from construction would be due primarily to noise generated by on-site

construction activities (rather than construction-related traffic). The construction noise analysis examined the reasonable worst-case peak hourly noise levels resulting from construction in each reach and is therefore conservative in predicting increases in noise levels; typically, the loudest hourly noise level would not persist throughout the entire construction period.

The construction noise analysis predicted that noise levels due to construction would exceed the construction noise impact criteria throughout the work areas, including levels that would be noticeable and potentially intrusive during the most noise-intensive construction activities at some receptors. While the highest levels of predicted construction noise would not persist throughout construction, and noise levels fluctuate resulting in increases that are intermittent, these impacted locations would experience construction noise levels of a magnitude and duration that constitute significant adverse impacts under CEQR.

Construction noise is regulated by the requirements of the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) and the DEP Notice of Adoption of Rules for Citywide Construction Noise Mitigation (also known as Chapter 28). These requirements mandate that specific construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. Therefore, on the limited occasions when weekend or after-hour work may be necessary (e.g., overnight work in Stage 1E along State Route 9A/West Street or Saturday activity for deliveries or weather catch-up), permits would be required, as specified in the New York City Noise Control Code. As required under the New York City Noise Control Code, a site-specific Construction Noise Mitigation Plan for the Proposed Project would also be developed and implemented prior to the start of work. Additional measures that may be implemented to mitigate impacts are summarized below under "Mitigation."

With respect to vibration, it was determined that based on an analysis of project construction methods that construction activities may produce noticeable vibration levels (i.e., vibration levels exceeding 75 VdB) as well as noticeable ground-borne noise levels (i.e., up to 54 dBA) at adjacent structures during pile and/or sheeting installation; however, this activity would only be experienced for limited periods of time at certain locations. Consequently, it is concluded that construction vibration would not result in any significant adverse impacts.

Construction Neighborhood Character

Since the Proposed Project would result in temporary significant adverse open space, traffic, and noise impacts during construction, and these are defining features of neighborhood character, it was concluded that the Proposed Project would result in temporary significant adverse neighborhood character impacts during the construction period. The construction effects from the Proposed Project would be temporary and localized, confined largely to the buildings and streets surrounding the Project Area.

MITIGATION

In addition to the mitigation and impacts avoidance measures described above for wetlands, archaeological and historic resources, the Proposed Project has the potential to result in significant adverse impacts for operational traffic and temporary significant adverse impacts during construction on open space, traffic,

noise, and neighborhood character. Potential mitigation measures for each of these technical area significant impacts are discussed below.

Transportation

As described in Chapter 3.8, "Transportation," the analyses examined the potential operational impacts of the Proposed Project on traffic and pedestrian conditions. The Proposed Project would not result in any significant adverse pedestrian impacts, but would result in significant adverse traffic impacts at the State Route 9A/West Street and North Moore Street intersection during the weekday midday, weekday PM, and Saturday peak hours due to the reduced width of the westbound travel lanes with the North Moore Street sidewalk extension. The significant adverse traffic impacts at this intersection could be mitigated in the weekday midday, weekday PM, and Saturday peak hours with standard traffic mitigation such as signal timing changes. These proposed mitigation measures would be subject to approval by NYCDOT and NYSDOT prior to implementation.

State Route 9A/West Street and North Moore Street

By shifting two seconds, six seconds, and three seconds of green time from the northbound/southbound phase to the westbound phase during the weekday midday, weekday PM, and Saturday peak hours, respectively, the significant adverse impacts at the westbound left-turn and westbound right-turn would be mitigated under the North Moore Street sidewalk extension.

Construction Open Space

To continue to provide public programs and events during construction that have traditionally taken place at various park spaces throughout the Esplanade, such as the Irish Hunger Memorial Plaza, Pumphouse Park, Belvedere Plaza, and South Cove, among others, BPCA would temporarily relocate all of the programs and events in affected areas to parks and open spaces within Battery Park City for the duration of the proposed construction.

In addition, provided below is a list of temporary open space mitigation opportunities that may be provided by the BPCA within Battery Park City during project construction:

- Play areas
- Parklets and street seats
- Pop-up parks
- Seating
- Open Streets

BPCA has engaged a design team to create and implement a master plan for interim accessibility, wayfinding signage, public furnishings and art that will address how Battery Park City will function and look during the multi-phase, five-year resiliency initiative and capital construction project. The plan will identify opportunities for temporary public spaces and temporary furnishings and/or programming of existing public spaces, establish a wayfinding strategy involving both temporary signage and supplemental permanent signage, facilitate bicycle and pedestrian circulation, and propose an approach to and locations

for both temporary public art installations and the future permanent expansion of BPC's portfolio of public artwork.

HRPT is in the midst of the design process for a new Estuarium in the upland area between Piers 25 and 26. The project has long been a core part of Hudson River Park's plans. While there is no fixed date, construction could start as soon as 2026, subject to funding. The new Estuarium would serve as a new environmental education and research facility focused on Hudson River Park's Estuarine Sanctuary and the larger Hudson River ecosystem, and would serve community members, school children, and the scientific community. The approximately 8,500-gsf facility would include public exhibit space featuring aquaria tanks hosting Hudson River fish and wildlife, a classroom, and a working laboratory. As mitigation for the Proposed Project's construction open space impact, BPCA would make a contribution to the construction cost of the Estuarium.

However, even with the proposed mitigation, the impacts to open space during construction would not be fully mitigated. As described above it is anticipated that the temporary closure of open space resources along the Battery Park City Esplanade, including Belvedere Plaza, Kowsky Plaza, and North and South Coves during construction would create demand for programmed activities in other open spaces in the study resulting in a temporary significant adverse impact on these open spaces from the added demand.

Construction Transportation

Peak Construction Analysis: Traffic

Based on the Peak Construction Analysis scenario, the following five intersections would experience temporary significant adverse traffic impacts:

- North End Avenue and Vesey Street (PM peak hour)
- State Route 9A/West Street and Murray Street (PM peak hour)
- State Route 9A/West Street and Laight Street (AM peak hour)
- State Route 9A/West Street and Liberty Street (AM and PM peak hours), and
- State Route 9A/West Street and Albany Street (PM peak hour)

Standard traffic mitigation measures (i.e., signal timing changes) that are subject to the approval of NYCDOT would fully mitigate the significant adverse impacts at three of the five intersections. The weekday PM peak hour significant adverse traffic impacts at State Route 9A/West Street with Murray Street and Liberty Street would remain unmitigated.

MPT Construction Analysis: Traffic

Based on the MPT Construction Analysis scenario inclusive of the flood barrier system installation and the EWP, State Route 9A/West Street at Harrison Street would experience temporary significant adverse traffic impacts during the weekday AM peak hour. With the implementation of standard traffic mitigation measures (signal timing changes), the significant adverse traffic impact could be mitigated.

Based on the MPT Construction Analysis scenario inclusive of the State Route 9A/West Street and Harrison Street gate crossings, the following intersections would experience temporary significant adverse traffic impacts during the worst-case construction PM peak hour:

- State Route 9A/West Street and Murray Street;
- State Route 9A/West Street and Warren Street; and
- State Route 9A/West Street and Chambers Street.

All significant adverse traffic impacts associated with the gate crossing MPT plans have been identified as unmitigable without considering mitigation from the Traffic Management Plan (TMP) referenced in Chapter 3.11.4, "Construction Transportation." Given the Design Build nature of the Proposed Project, final, approved MPT plans are not available. Following the EIS, BPCA and its contractors will apply for permits to partially or fully close the roadways evaluated and analyzed in the EIS. At that time, NYSDOT and NYCDOT's Office of Construction Mitigation and Coordination (OCMC) Unit will request detailed MPT plans for each construction phase and BPCA and its contractors will provide the requested MPT plans. Next, NYSDOT and NYCDOT's OCMC Unit will review and approve the detailed MPT plans. Once final, approved MPT plans are available, a TMP including mitigation will be scoped with NYSDOT and NYCDOT. All proposed partial- and full-roadway closure conditions along State Route 9A/West Street between Chambers Street and Harrison Street and other streets analyzed in the FEIS would be subject to the TMP that will be coordinated among the relevant agencies, and subject to their review and approval, including BPCA, NYSDOT, NYCDOT, NYPD and FDNY, to ensure construction is implemented with the least impact to travel lanes, while still providing the necessary pre-construction notifications and alternative diversion routes options through signage and other outreach means. This plan will also detail the deployment and placement plans for Traffic Enforcement Agents (TEAs) and Variable Message Signs (VMS). This TMP may include additional data collection and analysis to sufficiently address relevant agencies' requirements. If so, the additional traffic data collection and analysis would include the use of Synchro software on State Route 9A/West Street and other nearby intersections. The analysis would be used to identify the extent of delays and effectiveness of improvement measures identified in the FEIS as mitigation, and modify those conclusions if necessary to further improve traffic conditions under the final, approved MPT plans. Mitigation to partially or fully address the significant adverse traffic impacts identified in the FEIS may include, but is not limited, to temporary traffic signal phasing and timing adjustments, parking prohibitions or lane restriping to facilitate temporary through or turning lanes, turn prohibitions to eliminate conflicts with through-vehicles and improve through-vehicle traffic flow, and TEAs who can better react to changing traffic conditions.

MPT Construction Analysis: Pedestrians

According to analyses conducted under the MPT analysis, potential significant adverse pedestrian impacts could result at the following five pedestrian elements - two sidewalks, one corner, and two crosswalks:

- West sidewalk of State Route 9A/West Street between Harrison Street and Chambers Street during the weekday AM and PM and Saturday peak hours;
- East sidewalk of Greenwich Street between North Moore Street and Franklin Street during the weekday AM and PM peak hours;
- Northeast corner of Greenwich Street and Franklin Street during the weekday AM, midday, PM and Saturday peak hours;
- South crosswalk of Greenwich Street and North Moore Street during the weekday AM and PM peak hours; and

- North Crosswalk of Greenwich Street and Franklin Street during the weekday AM, midday, and PM peak hours.

The majority of these significant adverse pedestrian impacts could not be mitigated. However, the significant adverse pedestrian impacts on the east sidewalk of Greenwich Street between North Moore Street and Franklin Street could be mitigated by the removal of street planters and the LOS on the northeast corner of Greenwich Street and Franklin Street could be improved by removing the trash receptacle from the corner reservoir area (partially mitigated), but would still result in an unmitigated impact. The remaining one sidewalk and two crosswalks could not be mitigated in any peak hour.

To determine the significant adverse impacts of open space closures on pedestrians and bicyclists, a qualitative analysis of alternate routes bypassing closed open spaces and routes to other available open spaces was conducted. Based on this analysis, the potential for temporary unmitigated significant adverse effects on pedestrians and bicyclists would result in 2028, the peak year of construction activity, and would result at lesser levels throughout the duration of the construction schedule.

Construction Noise

Impact Summary

A detailed analysis of project-generated construction noise identified significant impacts along the seven reaches, including noise levels that would be noticeable and intrusive during the most noise-intensive construction activities. The highest levels of predicted construction noise would occur as a result of ground-borne noise at receptors immediately adjacent to pile and/or sheeting installation locations. However, such noise levels would not persist throughout construction, and noise levels due to construction would fluctuate with construction intensity resulting in noise increases that are intermittent, many locations would experience construction noise levels where the magnitude and duration constitute significant adverse impacts under CEQR.

All of the buildings where impacts have been identified feature modern façade construction, including insulated glass windows and an alternative means of ventilation that would allow for the maintenance of a closed-window condition. As such, construction noise reaching the interior of these buildings via an airborne pathway (i.e., not ground-borne or structure-borne noise) would be reduced by 28 or more dBA, resulting in interior noise levels (excluding ground-borne or structure-borne noise) in the low 40s to high 50s dBA during the most noise-intensive construction activities occurring nearest each building.

A significant adverse construction noise impact was identified at 21 South End Avenue (i.e., the Regatta and the Battery Park Montessori preschool). Even with the mitigation measures, the FEIS concluded that construction of the flood barrier system adjacent to this location would result in interior noise levels of up to approximately 54 dBA on the ground floor where the school is located. For impacted open space areas and buildings with outdoor terraces, no practical and feasible mitigation measures have been identified that could be implemented to reduce noise levels below the CEQR threshold. Consequently, construction activities would result in noise levels at these receptors that would constitute a significant adverse noise impact that is unavoidable.

Recognizing that the Proposed Project is a large multi-year capital project with an approximately 5-year construction duration, periods of substantially and significantly elevated construction noise are unavoidable.

It is therefore the objective of the BPCA working with its selected construction team to minimize construction noise impacts on the community to the extent feasible, while facilitating project completion. While noise impacts for a project of this scale in close proximity to residences and open spaces cannot be fully mitigated, measures will be taken to minimize the impact to the extent feasible.

To that end, the following measures are part of the project's noise emission control and mitigation approach.

Source Controls

As stated above, project construction is required to comply with the noise mitigation rules of the City of New York and the requirements of the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) for construction noise control measures. Specific noise control measures that would be incorporated in the projects noise mitigation plan(s) that are required under the New York City Noise Control Code would include a variety of source and path controls, as follows:

- Using equipment that meets the sound level standards specified in Subchapter 5 of the New York City Noise Control Code would be utilized from the start of construction;
- Conversions from diesel- or gas-powered equipment to electrical-powered equipment (e.g., water pumps, bench and table saws) as early as possible;
- Enclosures for diesel or gas-powered generators and pumps to the extent feasible and practicable;
- Where feasible and practicable, the construction site is to be configured to minimize back-up alarm noise;
- Minimizing truck idling to 3 minutes;
- Proper maintenance of all equipment and noise attenuation measures such as mufflers;
- Path controls (e.g., placement selection and enclosure of equipment, barriers) and siting noisier equipment, such as cranes, concrete pumps, concrete trucks, and delivery trucks, at the maximum operational distance away and shielded from sensitive receptor locations;
- Enclosures and acoustical fencing including a minimum 8-foot-high temporary fence with acoustical blankets and recurves (i.e., angled tops) to provide some level of noise protection for high elevations with sound blankets hung next to the construction operation;
- Sound-absorptive "blankets" mounted on the work side of each site-perimeter noise barrier;
- Noise path control measures (i.e., portable noise barriers, panels, enclosures, and acoustical tents);
- Minimizing construction activities outside standard work hours (the 7 AM to 3:30 PM workday), with some workdays extended until 6PM to complete a task and for the crossing of State Route 9A/West Street);
- Minimizing the impacts of the most impactful construction activities, such as jackhammers and hoe rams, saw cutting for the platform demolition and no "impact pile driving" (i.e., the less noise-intensive method of drilled shafts with vibratory sheet pile installation); and

- All noise emitting equipment is to comply with all City, State and Federal noise emission regulations and will be inspected regularly to ensure proper maintenance and operation.

The following specific noise source attenuation measures are also proposed to be implemented during project construction:

- Crane operations. Cranes will be equipped with well-maintained, manufacturer-recommended exhaust mufflers to mitigate noise escapes with diesel exhaust;
- Pile Installation. During pile installation, noise originates not only from the crane engine, but also from the methods used to install the pile. Therefore, as stated above the proposed method of pile installation is drilled shafts for longer piles and micropiles with vibratory sheet pile installation for the remainder (no impact pile driving);
- Enclosures and acoustical fencing. Typical designs for a noise barrier specify an 8-foot-high fence with acoustical blankets hung on the fence on the side of the construction operation. It is also proposed to include recurves (i.e., angled tops) to provide some level of noise protection for high elevations. In areas of construction adjacent to buildings where there is limited or no space for a construction fence, it is proposed to hang sound blankets next to the construction operation supported by manlifts or other means.
- Limiting use of vacuum excavators. Vacuum excavators create high noise levels. It is therefore proposed to minimize use of vacuum excavators to activities around critical infrastructure, utilities, and/or for sensitive tree root protection;
- Compressors. Utilizing low noise compressors (i.e., no greater than 70 dBA at a distance of 50 feet);
- Landscaping excavators. Utilizing low noise landscaping excavators (noise emission of 78 dBA at a distance of 50 feet);
- Jack Hammers. Manufacturer-recommended mufflers will be used on jackhammers.

Draping Sound Blankets from Buildings

For construction locations adjacent to buildings for which significant noise impacts have been identified and where the use of construction fencing is not feasible, BPCA will offer, subject to the agreement of the building owners, to install suspended sound blankets on the facades of such buildings. This option would only apply and be feasible for buildings that are already equipped with davits that are designed to support suspended platforms. The sound blankets would be hung from a height of 20 feet where practical over the facades, including the building windows; these measures would require review and approval by DOB for conformance to light and air requirements. The use of sound blankets would achieve up to 10 dBA of noise attenuation.

Construction Noise Curtain (20-foot-high mobile systems)

In locations where land area is constrained and access to davits is unavailable, site conditions will be evaluated for the potential for using mobile noise curtains hung from mobile telehandlers immediately adjacent to the building. The measure would not be used in locations with air vents. With this approach, an approximately 20-foot-high by 30-foot-wide section of noise curtain is hung from telehandlers and the curtain is stabilized at the base by deadweights and a structural beam. The system is mobile and could then

be relocated as construction activities progress. These 20-foot-high mobile barriers can provide up to 10 dBA for receptors that would otherwise have line-of-sight to the noise producing equipment.

Feasibility of Additional Potential Noise Reduction Measures

To ensure that the Proposed Project includes a full range of current and future feasible measures that support minimizing the impacts of construction, BPCA and its construction team have continued to explore and investigate the ability to use a combination of diesel and electrically powered construction equipment including equipment that is undergoing demonstration testing, or may evolve in the near-term thereby becoming available during the course of project construction (e.g., 2025 –to 2031). Predicated on continued technical advancement by the equipment industry and corresponding availability of electrically powered equipment types that have equivalent operating capability, BPCA has established a goal of requiring its contracting team to power at least 20 percent of the on-site, mobile construction equipment that would be used to build the flood barrier wall. It is envisioned that the mobile equipment will be equipped with electric battery-operated generators that will also be outfitted with special, OSHA-compliant, noise-reducing back-up alarms.

Coordination with Noise Receptors

To avoid potential construction noise interference with testing at Stuyvesant High School (i.e., 345 Chambers Street), the project construction team will coordinate with the school administration to minimize noise during examinations.

Project Coordination and Community Liaison

Project construction is to be closely coordinated with all stakeholders taking into consideration the overall project schedule, school calendars, open space needs and seasonal requirements for working adjacent to utilities, performing utility relocations, and coordination with NYCDOT and NYSDOT. To this end, BPCA will specify that the contractor have a Community Engagement Manager (CEM) who will be the primary point of contact for all public involvement related interfaces between the contractor and local stakeholders during the entire construction period and will serve as a point of contact for the community and local representatives for the purposes of addressing concerns, problems and issues that arise during large multi-phase construction projects such as the proposed BPCA resiliency project.

ALTERNATIVES

Alternatives to the Proposed Project that were considered include:

- A No Action Alternative (required by SEQRA/CEQR);
- Design Alternatives, including
- State Route 9A/West Street Gate Options
- Harrison Street Gate Crossing Option
- North Moore Alternative Design Option
- Pump Station Location Alternatives

- A No Unmitigated Significant Adverse Impact Alternative

The No Action Alternative is to provide the Lead and Involved agencies with an assessment of the expected environmental consequences of no action on their part. Under the No Action Alternative (considered in the technical analyses of the EIS as the No Action Condition), there would be no discretionary actions requiring environmental review and the related impacts that are summarized above. However, there would also be no coastal storm protection system installed in the Project Area and, as a result, the Protected Area would remain at risk of flooding from rainfall and storm surges during major storm events.

Design alternatives focused on those that were considered during the project design process including inboard and outboard alignments of the flood barrier system and the pump station siting. It was the conclusion of the alignment analysis that although many of the flood barrier system design options that were evaluated for each reach were considered practicable from a constructability standpoint, the project alignment best meets the project Purpose and Need and overall community objectives, while also resulting in the least impact to regulated marine resources and other natural, cultural, and built features that comprise the Project Area.

As part of the design process for the proposed pump station, three locations were considered: 1) the BPCA ballfields; 2) the schoolyard of PS/IS 289; and 3) the plaza area east of and adjacent to Stuyvesant High School. The latter site was ultimately chosen and is considered in the EIS as it provides an optimal location for such a facility with the least disruption to public open space and the shortest distance to the outfall discharge location. Alternative design options were considered by NYCDEP and BPCA for the above-grade structure. In each option, the at-grade footprint of the structure remains within the plaza area adjacent to the school and there would continue to be plaza circulation space with no structure in the bikeway/walkway corridor (Hudson River Greenway). In each of the scenarios, the above-ground elements of the pump station are to be designed with the objective of minimizing effects on pedestrian circulation in this public space and avoiding interference with the emergency entrance/exit at the high school. Final exterior finishes are to enclose all equipment and achieve design compatibility with the aesthetic context of the adjacent school and bridge. Selection of a final design option be determined by BPCA in coordination with NYCDEP, the New York City School Construction Authority, NYCDOT and other City agencies.

To identify the No Unmitigated Significant Adverse Impact Alternative, the unavoidable impacts identified for the Proposed Project were considered to determine the avoidance measures that would be required for the different types of impacts. The Proposed Project would result in unmitigated or potentially unmitigated significant adverse impacts temporarily during the construction phase, due to construction activity impacts on open space, transportation, noise, and neighborhood character. The No Unmitigated Significant Adverse Impact Alternative examines changes to the Proposed Project and/or the construction thereof specifically to avoid the unmitigated significant adverse impacts associated with the Proposed Project. In summary, to eliminate all significant adverse impacts, the Proposed Project would have to be modified to a point where the principal goals and objectives would not be realized.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

Unavoidable significant adverse impacts resulting from the Proposed Project have been identified during the construction phase and include temporary impacts on open space, transportation, noise, and neighborhood character.

GROWTH INDUCING ASPECTS OF THE PROPOSED ACTION

This section focuses on whether the Proposed Project has the potential to induce new development within the Project Area by supporting or encouraging such development. Typically, growth-induced effects occur when a project:

- Attracts significant increases in local population by creating or relocating employment or by providing support facilities or services; and/or
- Increases development potential of an area due to the introduction of roads, water and sewer infrastructure, or other utilities.

The Proposed Project would provide flood control measures that would safeguard the area from the 100-year storm event, inclusive of the 90th percentile projection for sea level rise through the 2050s. While the landscape of the Project Area would be changed by the construction of the flood barrier system, the use of the Project Area would not be altered. After the Proposed Project is constructed, each of the defined reaches would continue to function as they currently do. The Esplanade is an important Lower Manhattan waterfront resource that already attracts a consistent and large volume of residents and visitors, which would not change after the Proposed Project is implemented.

As the Project Area is a highly developed urban area, there is limited, if any, space available for future development. Regardless, the Proposed Project would not incorporate new roads, water or sewer infrastructure, or other utilities that would increase the development potential of the Project Area.

As such, the Proposed Project does not have the potential to induce future growth within the Project Area.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

This section addresses whether the Proposed Project would cause permanent loss of one or more environmental resources, either natural or humanmade due to construction or operation of the Proposed Project.

Both natural and humanmade resources would be expended in the construction and operation of the Proposed Project, including:

- Building materials used for construction;
- Energy through consumption of gas and electricity during construction activities; and
- Human labor needed to construct and operate the flood barrier system.

These are considered irretrievable commitments because their reuse for another purpose is not possible. The Proposed Project also constitutes a long-term commitment of land, thereby rendering this land unusable for other purposes. Lastly, funds committed to the design, construction, and operation of the Proposed Project would be unavailable to other projects.

These commitments of resources and materials are weighed against the Proposed Project's purpose and need, as identified in Chapter 1.0, "Project Description." The Proposed Project's fulfillment of the project purpose and need to provide a reliable coastal flood barrier system that reduces flood risk to residents, property, and assets within Battery Park City outweighs the irreversible and irretrievable commitment of resources.

CERTIFICATION OF FINDINGS

Having considered the draft and final Environmental Impact Statement and having considered the preceding written facts and conclusions relied on to meet the requirements of 6 NYCRR Part 617.11, BPCA finds and certifies that:

1. The requirements of 6 NYCRR Part 617 have been met; and

2. Consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is the one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.

3. The Proposed Action is consistent with the coastal policies of the State of New York and is consistent to the maximum extent practicable with New York City's Local Waterfront Revitalization Program.

Name of Agency: Hugh L. Carey Battery Park City Authority

Signature of Responsible Officer: _____

Name/Title of Responsible Officer:

Date: