230 Kent Avenue Rezoning

Environmental Assessment Statement

CEQR No.: 23DCP075K

Prepared for:
Kent Riverview LLC

Prepared by:
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Lead Agency:
New York City Department of City Planning
120 Broadway, 31st Floor New York, NY
10271

August 17, 2023

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City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) SHORT FORM

FOR UNLISTED ACTIONS ONLY • *Please fill out and submit to the appropriate agency* (see instructions)

Part I: GENERAL INFORMATION

1. *Does the Action Exceed Any Type I Threshold in 6 NYCRR Part 617.4 or 43 RCNY §6-15(A) (Executive Order 91 of 1977, as amended)?* ☐ YES ☒ NO

If "yes," **STOP** and **complete the FULL EAS FORM**.

2. *Project Name* 230 Kent Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
23DCP075K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
N230288ZRK, 230289ZMK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning			Kent Riverview LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shellooe, AICP, Director, EARD			Judith Gallent, Bryan Cave Leighton Paisner LLP		
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5. *Project Description*

The Applicant, Kent Riverview LLC, seeks approval for two discretionary actions (the "Proposed Actions") to facilitate development of the Applicant-owned site at 230 Kent Avenue (Block 2362, Lot 1; the "Applicant Site" or "Projected Development Site 1") in the Williamsburg neighborhood of Brooklyn Community District (CD) 1. These actions are: (1) a zoning map amendment to rezone Block 2362 in its entirety, comprised of Lots 1 and 3, ("Rezoning Area" or "Project Area") from an M1-4 district to an M1-4/R7X district within Special Mixed-Use District 8 (MX-8); and (2) a concurrent zoning text amendment to amend Zoning Resolution ("ZR") Appendix F to establish the Project Area within a Mandatory Inclusionary Housing ("MIH") Area; and to amend the table in ZR § 123-63 to include R7X as a designated residence district in MX-8 in Community District 1, Brooklyn in which MIH is required.

The area proposed for rezoning is comprised of Block 2362, Lots 1 and 3, and is bounded by River Street to the West, Kent Avenue to the east, North 1st Street to the south, and Metropolitan Avenue to the noth. The entirety of the area being rezoned (a.k.a. "Project Area") is currently vacant land.

Approval of the proposed actions would allow the Applicant to develop a new eight-story, approximately 43,095 gsf mixed-use building on Lot 1, including approximately 37,036 gsf of residential floor area (40 DUs) and 6,059 gsf of commercial floor area (local retail). The building would contain an approximately 5,742 gsf cellar split evenly between residential storage area and back-of-house area for the building's retail use. Depending on the MIH Option selected during ULURP, either 25 percent (10 DUs) or 30 percent (12 DUs) of the residential floor area would be designated as affordable housing. It should be noted that although the Applicant plans to develop approximately 40 residential units, 44 units will be assumed in the reasonable worst case development scenario (RWCDS) for conservative analysis purposes, with either 11 DUs (25 percent) or 13 DUs (30 percent) being affordable pursuant to MIH. Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed massing for the Applicant's building, which maximizes the allowable FAR, would be 105 feet tall; however, a height of 145 feet will be conservatively assumed as a RWCDS where applicable.

As a RWCDS for CEQR analysis purposes, a second Projected Development Site was identified and analyzed, which is not owned or controlled by the Applicant ("Projected Development Site 2"). The RWCDS for Projected Development Site 2 consists of a 14-story (145-foot-tall) approximately 94,670 gsf building, with an estimated 70,054 gsf of residential space (82 DUs including up to 25 affordable DUs), 13,765 gsf of local retail space and approximately 10,850 gsf of parking area in the cellar (29 non-attended

accessory spaces)2. The RWCDS assumes a 2025 build year for analysis, which accounts for development of both the Applicant Site and the non-Applicant Projected Development Site 2. Refer to Attachment A, "Project Description" for details.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 1	STREET ADDRESS 230 Kent Avenue (Applicant Site), 218 Kent Avenue/38 Metrpolitan Avenue (Projected Development Site 2)
TAX BLOCK(S) AND LOT(S) Block 2362, Lots 1 and 3		ZIP CODE 11249

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Proposed rezoning area bounded by River Street to the West, Kent Avenue to the east, North 1st Street to the south, and Metropolitan Avenue to the noth

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-4 | ZONING SECTIONAL MAP NUMBER 12c

6. *Required Actions or Approvals* (check all that apply)

City Planning Commission: ☒ YES ☐ NO ☒ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☒ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☒ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY	☐ DISPOSITION—REAL PROPERTY	☐ FRANCHISE
☐ HOUSING PLAN & PROJECT	☐ OTHER, explain:	

☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

Board of Standards and Appeals: ☐ YES ☒ NO

☐ VARIANCE (use)
☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

Department of Environmental Protection: ☐ YES ☒ NO ☐ Cogeneration Facility ☐ Title V Permit

Other City Approvals Subject to CEQR (check all that apply)

☐ LEGISLATION	☐ FUNDING OF CONSTRUCTION, specify:
☐ RULEMAKING	☐ POLICY OR PLAN, specify:
☐ CONSTRUCTION OF PUBLIC FACILITIES	☐ FUNDING OF PROGRAMS, specify:
☐ 384(b)(4) APPROVAL	☐ PERMITS, specify:
☐ OTHER, explain:	

Other City Approvals Not Subject to CEQR (check all that apply)

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)	☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
	☐ OTHER, explain:

State or Federal Actions/Approvals/Funding: ☐ YES ☒ NO If "yes," specify:

7. *Site Description:* *The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.*

Graphics: *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP	☒ ZONING MAP	☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP	☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)	

☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): appx. 18,024 sf (proposed rezoning area)

Waterbody area (sq. ft) and type: 0

Roads, buildings, and other paved surfaces (sq. ft.): 0

Other, describe (sq. ft.): vacant land

8. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): RWCDS total of 137,764 gsf in two buildings

NUMBER OF BUILDINGS: 2

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 43,095 gsf (Applicant Site); 94,669 gsf (Projected Dev. Site 2)

HEIGHT OF EACH BUILDING (ft.): 105' (Applicant Site), 145' (Projected Development Site 2)[1]

NUMBER OF STORIES OF EACH BUILDING: 8 (Applicant Site) 14 (Projected Development Site 2)

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO

If "yes," specify: The total square feet owned or controlled by the applicant: 5,472 sf

The total square feet not owned or controlled by the applicant: 12,552 sf

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO

If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):

AREA OF TEMPORARY DISTURBANCE: 18,024 sq. ft. (width x length)

VOLUME OF DISTURBANCE: appx. 180,240 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 18,024 sq. ft. (width x length)

Description of Proposed Uses (please complete the following information as appropriate)

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	107,090	19,824		
Type (*e.g.,* retail, office, school)	126 units	Local retail		

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 306 NUMBER OF ADDITIONAL WORKERS: 65

Provide a brief explanation of how these numbers were determined: Residential population based on the average household size in Brooklyn Community District 1 (2.43 persons per household) per the 2020 Decennial Census. Estimate of workers based on standard rates of three employees per 1,000 sf of retail, and one employee per 25 DU.

Does the proposed project create new open space? ☐ YES ☒ NO If "yes," specify size of project-created open space: sq. ft.

Has a No-Action scenario been defined for this project that differs from the existing condition? ☒ YES ☐ NO

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly: Under the No-Action condition, it is assumed that Lot 1, which is owned by the Applicant, would be developed on an as-of-right basis in accordance with the existing M1-4 zoning. The Applicant's site was identified as a projected development site in the River Ring Rezoning EIS, and was assumed to be developed with a 3-story mixed-use building with approximately 20,223 gsf, with approximately 6,741 gsf of commercial space (local retail), 6,741 gsf of light industrial space (warehouse), and approximately 6,741 gsf of community facility space (medical office). As such, the RWCDS for the proposed rezoning would assume this same program in the No-Action condition for the Applicant Site. As Lot 3 is owned by Con Edison, and would continue to be zoned for manufacturing use, it is conservatively assumed to remain undeveloped in the No-Action.

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2025

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 12-14 months (Applicant Site), 14-18 months (Projected Develoment Site 2)

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: Each of the two RWCDS buildings would be constructed in a single phase. Construction of the Applicant's Site is expected to begin in early-2024, following approval of the proposed actions, and would be completed by early-2025. For RWCDS purposes, it is assumed that Projected Development Site 2 could begin construction in mid-2024, following completion of site remedial activity, and be completed by late 2025.

[1] The maximum building height allowed by the proposed zoning district is 145 feet, and therefore this maximum height would be assumed for Projected Development Site 2 for all applicable CEQR technical areas. It should also be noted that, although the Applicant is proposing a building with a height of 105 feet (which maximizes the allowable FAR), for conservative analysis purposes, certain CEQR technical areas will assume that the building envelope would reach the maximum height (145 feet) allowed in the proposed M1-4/R7X zoning district.

10. ***Predominant Land Use in the Vicinity of the Project*** (check all that apply)

☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: vacant land, utilities

Part II: TECHNICAL ANALYSIS

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the "no" box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the "yes" box.
- For each "yes" response, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a "yes" answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Short EAS Form. For example, if a question is answered "no," an agency may request a short explanation for this response.

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. **Refer to Attachment C**		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form. **Refer to Attachment C and Appendix 1**		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Early Childhood Programs:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees?	☒	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☐	☒

	YES	NO
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. **Refer to Attachment F**		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Protection Plan Project Tracking Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure?	☐	☒
(c) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts? **Applicant Site received a Certificate of Completion from NYSDEC certifying that remedial activities have been completed in accordance with the Brownfield Cleanup Program. An Environmental Easement is placed on the site, which requires compliance with a Site Management Plan and allows restricted residential use. Refer to "Hazardous Materials" section in Attachment B for details.**	☒	☐
(d) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in the Hazardous Materials Appendix (including nonconforming uses)?	☒	☐
(e) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin? **Non-Applicant Projected Development Site 2 has not completed remedial activities**	☒	☐
(f) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(g) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(h) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☒	☐
(i) Has a Phase I Environmental Site Assessment been performed for the site?	☐	☒
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☐	☐
(j) Based on the Phase I Assessment, is a Phase II Investigation needed? **Refer to "Hazardous Materials" section in Attachment B**	☐	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒

	YES	NO
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☐
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☐
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): **9,742 lb/wk total (for RWCDS); increment of 7,440 lb/wk compared to No-Action condition.**		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): **17,856,234 MBtu total (for RWCDS); increment of 13,482,000 MBtu compared to No-Action condition.**		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16? **Although the uses individually do not exceed any thresholds in Table 16-1, as the RWCDS involves a mix of land uses, per *CEQR Technical Manual* guidance, a preliminary trip generation assessment was conducted and is provided in the "Transportation" section of Attachment B**	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☒
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.***	☐	☐
○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop, or Citywide Ferry Service landing?	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☐
(c) Does the proposed project involve multiple buildings on the project site? 2 adjacent buildings are assumed in RWCDS	☒	☐
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts? **Applicant Site has an (E) designation (E-636) requiring use of natural gas for HVAC system**	☒	☐
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒

	YES	NO
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts? **Applicant Site has an (E) designation (E-636) requiring 31 dBA of window/wall attenuation**	☒	☐
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. **Refer to Attachment B, "Supplemental Screening"**		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. **Refer to Attachment B, "Supplemental Screening"**		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☒	☐
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☒	☐
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☒	☐
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. **Refer to Attachment B, "Supplemental Screening"**		

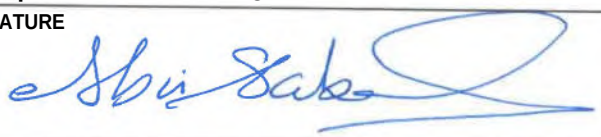
20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	DATE
Abir Sabet, AICP Philip Habib & Associates	August 17, 2023

SIGNATURE



PLEASE NOTE THAT APPLICANTS MAYBE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS: In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY § 6-06 (Executive Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

IMPACT CATEGORY	Potentially Significant Adverse Impact YES	NO
Land Use, Zoning, and Public Policy	☐	☒
Socioeconomic Conditions	☐	☒
Community Facilities and Services	☐	☒
Open Space	☐	☒
Shadows	☐	☒
Historic and Cultural Resources	☐	☒
Urban Design/Visual Resources	☐	☒
Natural Resources	☐	☒
Hazardous Materials	☐	☒
Water and Sewer Infrastructure	☐	☒
Solid Waste and Sanitation Services	☐	☒
Energy	☐	☒
Transportation	☐	☒
Air Quality	☐	☒
Greenhouse Gas Emissions	☐	☒
Noise	☐	☒
Public Health	☐	☒
Neighborhood Character	☐	☒
Construction	☐	☒

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☐ YES ☒ NO

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.

3. Check determination to be issued by the lead agency:

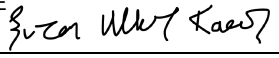
☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.

☒ **Negative Declaration:** If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see template) or using the embedded Negative Declaration on the next page.

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission
NAME	DATE
Evren Ulker-Kacar, AICP - Deputy Director	August 18, 2023

SIGNATURE 

NEGATIVE DECLARATION

Statement of No Significant Effect

Pursuant to Executive Order 91 of 1977, as amended, and the Rules of Procedure for City Environmental Quality Review, found at Title 62, Chapter 5 of the Rules of the City of New York and 6 NYCRR, Part 617, State Environmental Quality Review, the Department of City Planning acting on behalf of the City Planning Commission assumed the role of lead agency for the environmental review of the proposed actions. Based on a review of information about the project contained in this environmental assessment statement (EAS) and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed actions would not have a significant adverse impact on the environment.

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed actions sought before the City Planning Commission would not have a significant adverse impact on the environment. Reasons supporting this determination are noted below.

Land Use, Zoning, and Public Policy

A detailed analysis of Land Use, Zoning, and Public Policy is included in this EAS. The applicant, Kent Riverview LLC, seeks a zoning map amendment to rezone Brooklyn Block 2362 Lots 1 and 3 (the "Project Area" or "Rezoning Area") from an existing M1-4 district to an M1-4/R7X Special Mixed-Use District (MX-8) and a zoning text amendment to ZR 123-63 to add R7X as a residential pairing in an MX-8 district and to Appendix F of the Zoning Resolution (ZR) to establish the Project Area as a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area in Brooklyn Community District 1 (the "Proposed Actions"). The Proposed Actions would facilitate construction of a new eight-story, 105-foot tall, 43,095 gross square foot (gsf) mixed-use building consisting of 37,036 gsf of residential floor area and 6,059 gsf of commercial retail (the "Proposed Project"). The residential floor area would consist of 40 residential units, of which approximately 10 would be permanently affordable pursuant to MIH. For the purpose of presenting a conservative CEQR analysis, this EAS analyzes a development on the applicant-owned Projected Development Site 1 that differs than the Proposed Project as well as a development on a second non-applicant-owned Projected Development Site (Projected Development Site 2). With the exception of Air Quality analysis which analyzes an eight-story development for conservative analysis purposes, Projected Development Site 1 is analyzed as a 14-story, 145-foot-tall mixed-use building with 44 dwelling units including 11 permanently affordable pursuant to MIH. Projected Development Site 2 is analyzed as a 14-story, 145-foot-tall, 94,670 gsf mixed-use building consisting of 70,054 gsf of residential floor area and 13,765 gsf of commercial retail.

The Proposed Actions would not result in significant adverse impacts to Land Use, Zoning, and Public Policy. The development and uses facilitated by the Proposed Actions would be consistent with the medium-density mixed-use, residential, and commercial buildings found along Kent Avenue to the Project Area's west, North 1st Street to the Project Area's south, and Metropolitan Avenue to the Project Area's north. The mixed-use residential and commercial development facilitated by the Proposed Actions would be consistent with previous discretionary land use actions near the Project Area including the River Ring Rezoning (CEQR# 21DCP157K) to the west of the Project Area and the Greenpoint-Williamsburg Rezoning (CEQR# 04DCP003K) to the north, east, and south of the Project Area. While the Proposed Actions would allow for an increase in development and bulk relative to the No-Action condition, the proposed M1-4/R7X district would allow for development at a comparable and appropriate scale relative to the residential and mixed-use developments in the surrounding area including those immediately to the east of the Project Area that are within an M1-2/R6A district. The Proposed Actions would be compatible and consistent with public policies that currently apply to the Project Area and the surrounding area, including the City's goals to facilitate the construction of permanently affordable dwelling units. The Proposed Actions would be consistent with the policies set forth in the Waterfront Revitalization Program (WRP# 22-056). Therefore, the analysis concludes that the Proposed Actions would not result in significant adverse impacts related to land use, zoning, and public policy.

Open Space

A detailed analysis of Open Space is included in this EAS. A significant adverse impact with regards to an open space may occur if a proposed project results in the reduction of an area's open space ratio (indirect impact) by more than the general guidelines provided in the CEQR Technical Manual or if it directly eliminates or alters an open space resource (direct impact). The Proposed Actions would not directly displace any open space resources. In the No-Action condition, the open space ratio within a .5-mile study area of the Project Area is 0.969 acres of total open space, 0.355 for active recreation open space, and 0.614 of passive recreation open space for every 1,000 residents. The total and active ratios are below the City's goals of 2.5 total acres of open space for every 1,000 residents and 2 acres of active recreation open space per 1,000 residents, however, the .5-mile study area's ratio of 0.614 acres of passive open space per 1,000 residents exceeds the City's goal of .5 acres of passive recreation open space for every 1,000 residents. A proposed project may result in a significant adverse impact if the percentage change in the total open space ratio is greater than or equal to 2%, the percentage change for active open space ratio is greater than or equal to 1%, or if the percentage change in the passive open space is greater than or equal to 5%. In the With-Action condition, the total open space ratio would decrease by 1%, the active open space ratio would decrease by .84%, and the passive open space ratio would decrease by 1.1%. The analysis concludes that the Proposed Actions would not result in direct or indirect significant adverse impacts on open space resources in the vicinity of the Project Area and no further analysis is required.

Shadows

A detailed shadows analysis is included in this EAS. Utilizing a Reasonable Worst-Case Development Scenario (RWCDS) for shadows analysis, a building height of 145 feet was analyzed for both Projected Development Sites 1 and 2. The detailed shadows analysis indicates that developments facilitated by the Proposed Actions would cast incremental shadows on three sunlight-sensitive resources during at least one of the analysis days mandated by the CEQR Technical Manual. Incremental shadows resulting from the Proposed Actions would reach the East River for 27 minutes on the March 21st/September 21st analysis days, nine minutes on the June 21st analysis day, and two hours on the December 21st analysis day. In coordination with the New York City Department of Environmental Protection, the analysis concludes that incremental shadows cast on the East River would not significantly reduce sunlight exposure on this surface waterbody nor threaten the viability of vegetation or other resources. Shadows cast as a result of the Proposed Actions would reach the River Ring Open Space for 2 hours and 34 minutes on the March 21st/September 21st analysis days, for 21 minutes on the May 6th/August 6th analysis days, and for 3 hours and 21 minutes on the December 21st analysis day. Incremental shadow facilitated by the Proposed Actions would be cast on portions of the public beach, shore walkway, the ring walkway, and landscaped vegetation. Beginning at 8:51 a.m. on December 21st, incremental shadow would travel westward through the morning and would decrease in size as the sun rises higher towards the end of the morning. By approximately 10:30 a.m., incremental shadow would reach a small portion of the interior cove and the easternmost portion of the public beach, and by noon, the incremental shadow would be cast on a portion of the eastern edge of the ring walkway. Shadows cast during the December 21st analysis day would occur outside of the growing season for

Project Name: 230 Kent Avenue Rezoning
CEQR # 23DCP075K
SEQRA Classification: Unlisted

vegetation, and vegetation throughout the River Ring Open Space would receive ample sunlight on the other analysis days. No portion of the River Ring Open Space would be cast in incremental shadow for an extended duration. Shadows resulting from the Proposed Actions would reach Grand Ferry Park on the June 21st analysis day for 10 minutes beginning at 5:57 a.m. Incremental shadows would briefly reach the southernmost portion of Grand Ferry Park. The CEQR Technical Manual does not require assessment of shadows cast in the first 1.5 hours after sunrise. Shadows resulting from the Proposed Actions would not significantly affect or eliminate sunlight on any of the open space resources within the study area. Shadows resulting from the Proposed Actions would not significantly alter the public's usability or enjoyment of sunlight-sensitive resources and no further analysis is required.

Hazardous Materials, and Air Quality

An (E) designation (E-723) related to hazardous materials and air quality would be established as part of the approval of the proposed actions and would be applicable to both projected development sites. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. An existing (E) designation (E-636) was placed on the applicant-owned Projected Development Site 1 in the River Ring FEIS (CEQR# 21DCP157K). E-723 will supersede the E-636 on the Projected Site 1 (Block 2362, Lot 1). The hazardous materials and air quality analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials and air quality.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Sean J. O'Rourke at sorourke@planning.nyc.gov.

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME	DATE
Evren Ulker-Kacar, AICP	8/18/2023
SIGNATURE	
TITLE	
Chair, City Planning Commission	
NAME	DATE
Daniel R. Garodnick	8/21/2023
SIGNATURE	

Project Name: 230 Kent Avenue Rezoning
CEQR # 23DCP075K
SEQRA Classification: Unlisted

Determination of Significance Appendix

The Proposed Action(s) were determined to have the potential to result in changes to development on the following site(s):

Development Site	Borough	Block and Lot
Projected Development Site 1	Brooklyn	Block 2362, Lot 1
Projected Development Site 2	Brooklyn	Block 2362, Lot 3

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-723**) would be established as part of approval of the proposed actions on **Projected Development Sites 1 and 2** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1	X	X	
Projected Development Site 2	X	x	

Hazardous Materials

The (E) designation (E-723) requirements applicable to **Projected Development Site 1** for hazardous materials would apply as follows:

Task 1- Sampling Protocol

Prior to construction, the Applicant must submit to the New York City Mayor's Office of Environmental Remediation (OER), for review and approval, a Phase II Investigation protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. No sampling should begin until written approval of a protocol is received by OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER. If remediation is indicated for the test results, a proposed remedial action plan (RAP) must be submitted by OER for review and approval. The Applicant must complete such remediation as determined necessary by OER. The Applicant should then provide proper documentation that the work has been satisfactorily completed. An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.

The (E) designation (E-723) requirements applicable to **Projected Development Site 2** for hazardous materials would apply as follows:

Task 1-Sampling Protocol

The applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

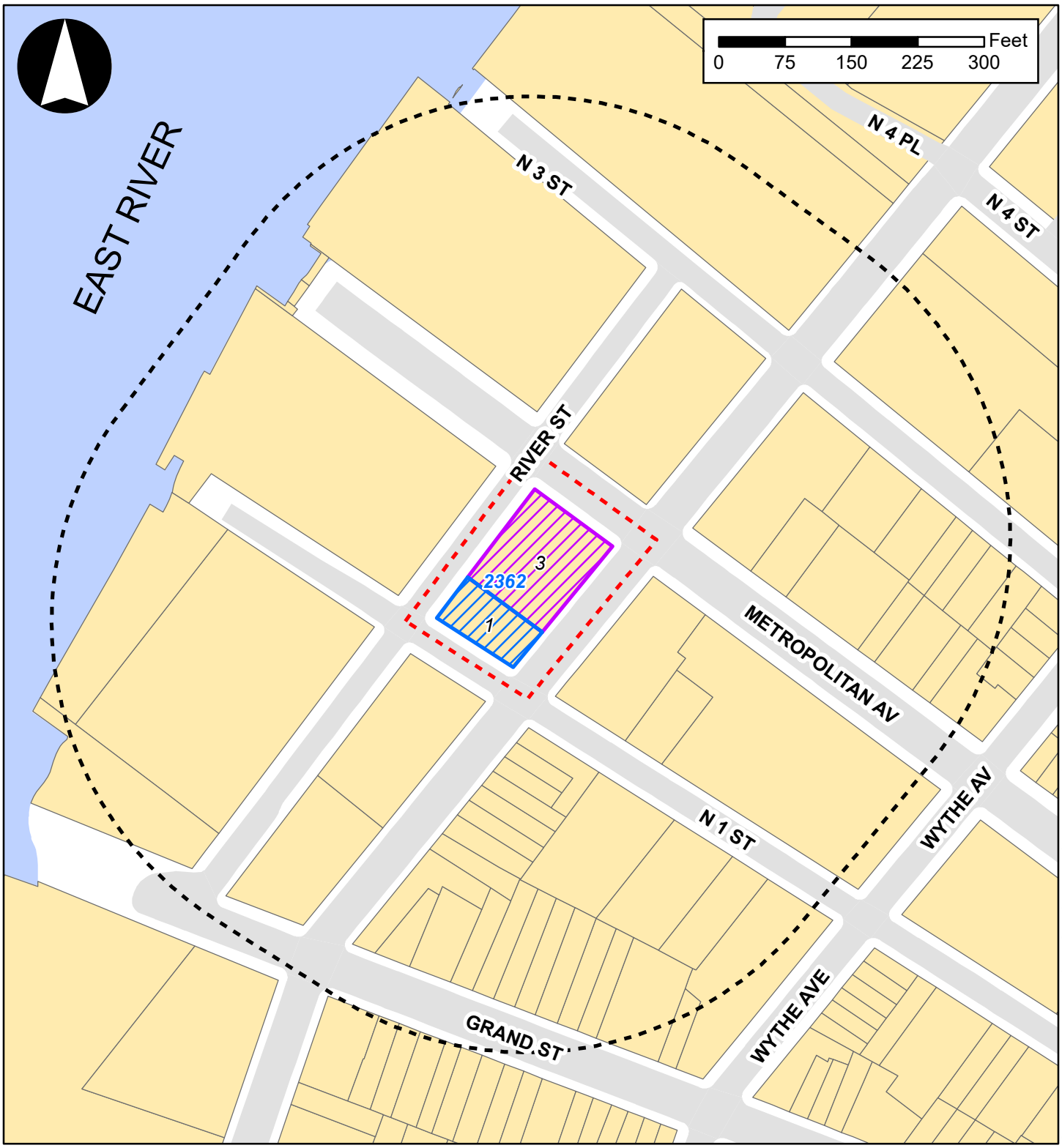
Air Quality

The (E) designation (E-723) requirements for air quality would apply as follows:

Projected Development Site 1: *Any new development on the above-referenced property on Lot 1 must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and hot water equipment and ensure that the HVAC system and hot water equipment stack on the building is located at the highest tier and at least 108 feet above grade and located at least 43 feet from the northern lot line facing Metropolitan Avenue. Adherence to these conditions would avoid any potential significant adverse impacts.*

Projected Development Site 2: *Any new development on the above-referenced property on Lot 3 must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and hot water equipment and ensure that the HVAC system and hot water equipment stack on the building is located at the highest tier and at least 148 feet above grade and located at least 18 feet from the western lot line facing River Street. Adherence to these conditions would avoid any potential significant adverse air quality impacts.*

Figure 1
Project Location

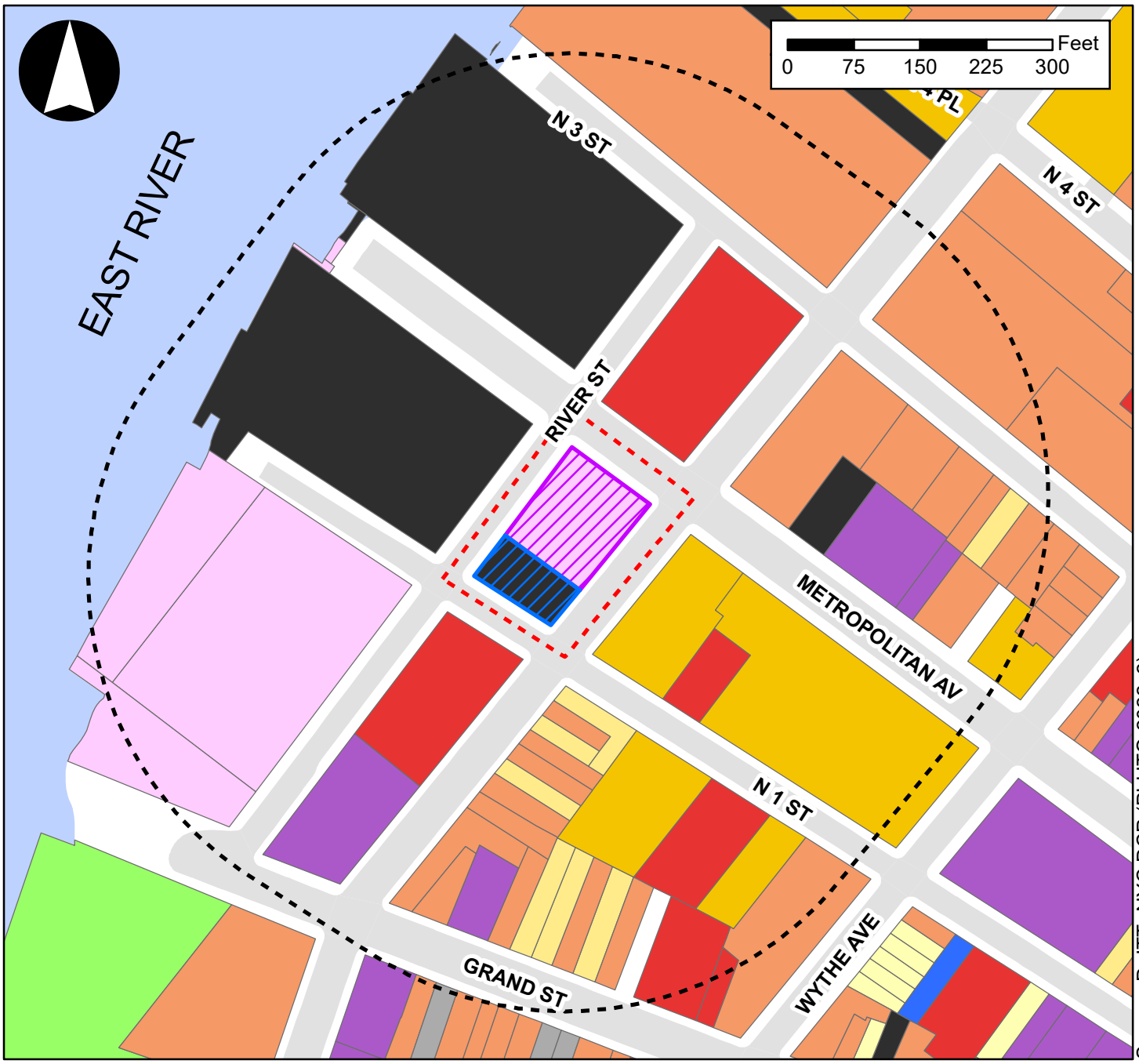


Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area
- 400-ft Radius
- 1 Tax Lots
- 2362 Tax Block



Figure 2
Land Use



Source: DoITT; NYC DCP (PLUTO 2022v2)

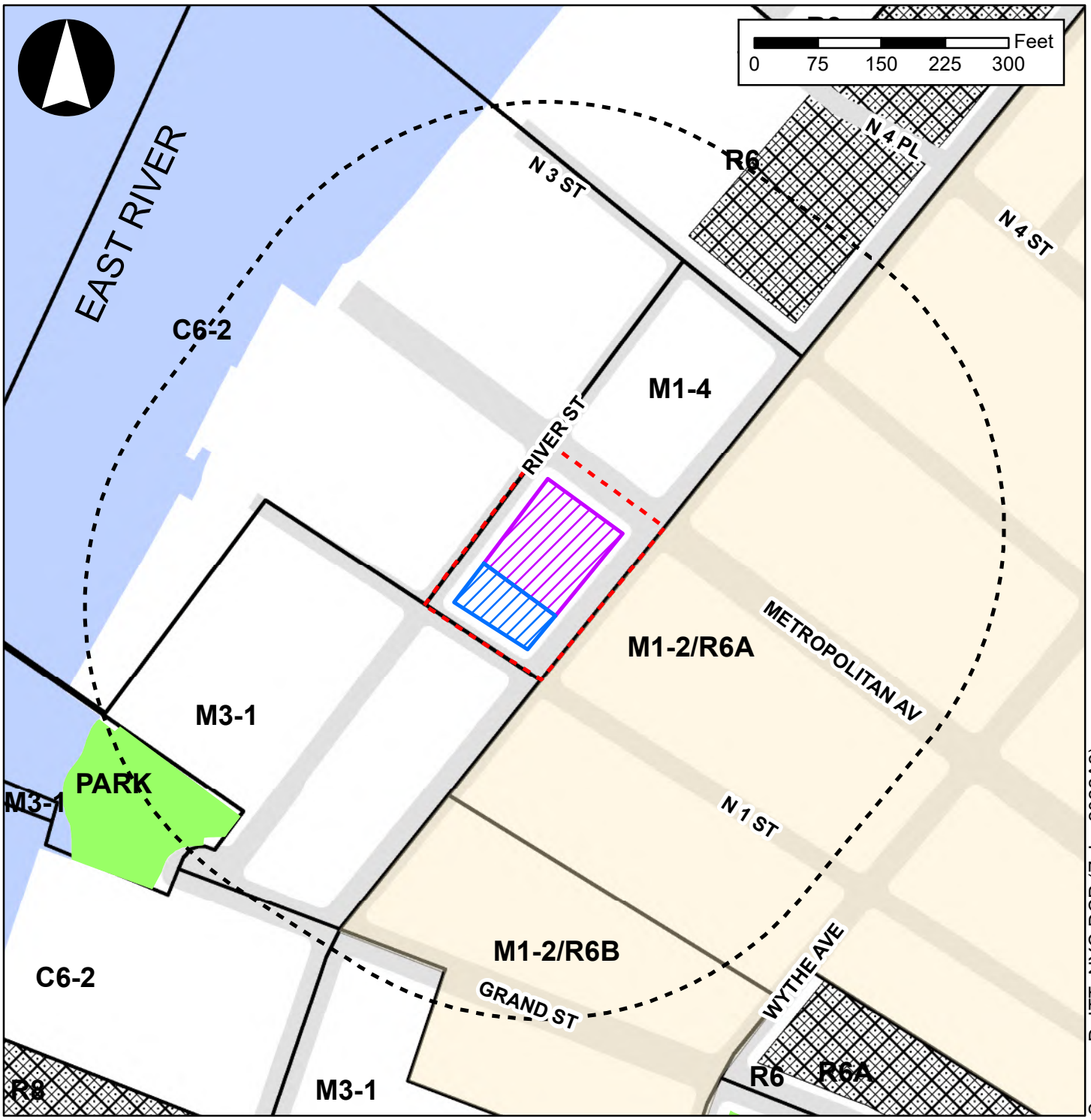
Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area
- 400-ft Radius

Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utilities
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land

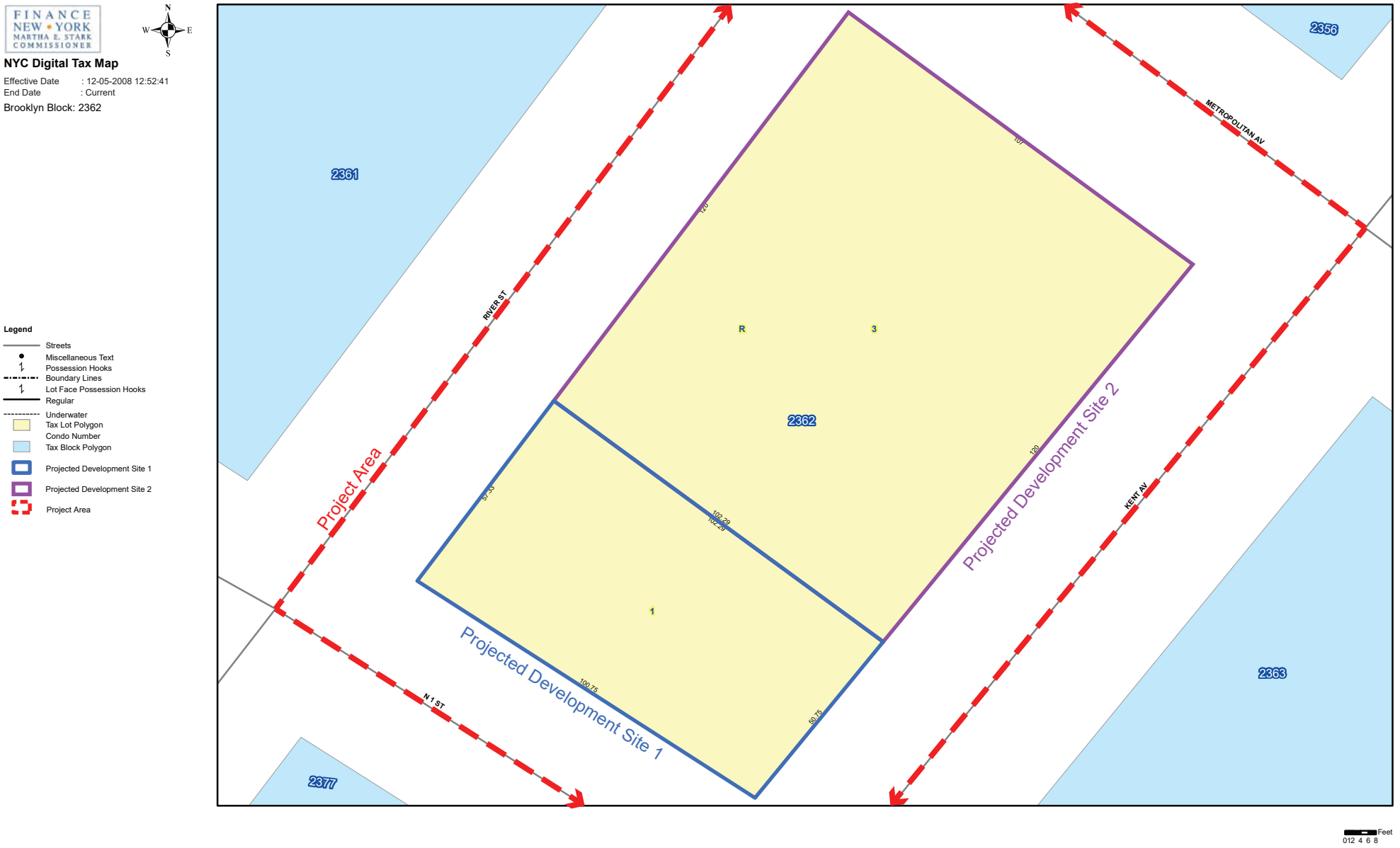
Figure 3
Zoning



Source: DoITT; NYC DCP (ZoLa 2022A2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area
- 400-ft Radius
- Special Purpose District (MX-8)
- M3-1 Zoning District
- C2-4
- Open Space

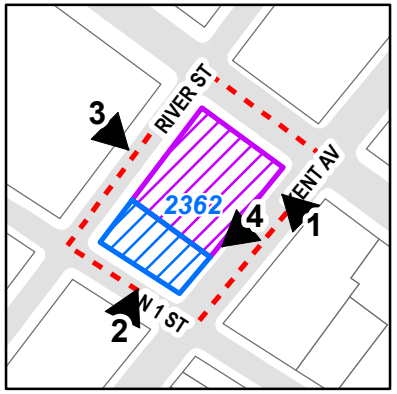


230 Kent Avenue Rezoning EAS

Figure 4
Tax Map



1. View of Projected Development Site 2 looking west across Kent Avenue





2. View of Projected Development Site 1 looking north across North 1st Street



3. Looking east across River Street towards Projected Development Site 2



4. View of the Project Area along Kent Avenue looking south

ATTACHMENT A

PROJECT DESCRIPTION

I. INTRODUCTION

The Applicant, Kent Riverview LLC, seeks approval for two discretionary actions (the "Proposed Actions") to facilitate development of the Applicant-owned site at 230 Kent Avenue (Block 2362, Lot 1; the "Applicant Site" or "Projected Development Site 1") in the Williamsburg neighborhood of Brooklyn Community District (CD) 1. The actions being requested are: (1) a zoning map amendment to rezone Block 2362 in its entirety, comprised of Lots 1 and 3 ("Project Area"), from a M1-4 district to a M1-4/R7X Special Mixed-Use (MX) District (MX8); (2) a concurrent zoning text amendment to (a) amend Zoning Resolution (ZR) Appendix F to establish the Project Area within a Mandatory Inclusionary Housing (MIH) area; and (b) amend the table in ZR Section 123-63 to include R7X as a designated residence district in MX-8 in Brooklyn Community District 1 in which MIH is required.

Approval of the Proposed Actions would allow the Applicant to develop a new eight-story, approximately 43,095 gsf mixed-use building on Projected Development Site 1, including approximately 37,036 gsf of residential floor area (approximately 40 DUs) and 6,059 gsf of commercial floor area (local retail). The building would contain an approximately 5,472 gsf cellar split evenly between residential storage area and back-of-house area for the building's retail use. Depending on the MIH option selected during the public review process, either 25 percent or 30 percent of the residential floor area (equivalent to approximately 10 and 12 DU's, respectively) would be designated as affordable housing. It should be noted that although the Applicant plans to develop approximately 40 residential units, 44 units will be assumed in the reasonable worst case development scenario (RWCDS) for conservative analysis purposes, with either approximately 11 DUs (25 percent of residential floor area) or 13 DUs (30 percent of residential floor area) being affordable pursuant to MIH. Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed massing for the Applicant's building would be 105 feet tall; however, a height of 145 feet will be conservatively assumed as a RWCDS where applicable.

In addition, for RWCDS analysis purposes, it is assumed that the proposed zoning changes would allow for redevelopment of Block 2362, Lot 3, which is not owned or controlled by the Applicant ("Projected Development Site 2") pursuant to the proposed M1-4/R7X zoning regulations. As described further below, the RWCDS for Projected Development Site 2 consists of approximately 94,670 gsf, with an estimated 70,054 gsf of residential space (82 DUs including up to 25 affordable DUs)[1], 13,765 gsf of local retail space and approximately 10,850 gsf of parking area in the cellar (29 non-attended accessory spaces)[2].

The RWCDS assumes a 2025 build year for analysis, which accounts for development of both the Applicant Site and the non-Applicant Projected Development Site 2.

This attachment provides a summary and description of the Proposed Actions, including the Project Area and Projected Development Sites, existing conditions, project's purpose and need, RWCDS under future No-Action and future With-Action conditions, and the governmental approvals required. The attached supplemental studies examine the potential for the Proposed Actions to result in impacts in any City Environmental Quality Review (CEQR) technical areas, including separate attachments with detailed

[1] Projected Development Site 2 could have 25 affordable DUs (30% of residential floor area) or 21 affordable DUs (25% of residential floor area), depending on which MIH option is selected.
[2] Projected Development Site 2 could have up to 31 non-attended accessory parking spaces depending on the MIH Option selected.

analyses of Land Use, Zoning, and Public Policy, Open Space, Shadows, Historic Resources, Urban Design and Visual Resources, Transportation, Noise and Air Quality, in **Attachments C through J**, respectively. All other warranted preliminary screening assessments are summarized in **Attachment B, "Supplemental Screening."**

II. BACKGROUND AND EXISTING CONDITIONS

The area proposed for rezoning is comprised of Block 2362, Lots 1 and 3, and is bounded by River Street to the West, Kent Avenue to the east, North 1st Street to the south, and Metropolitan Avenue to the north (see **Figure A-1**). The entirety of the area being rezoned (a.k.a. "Project Area" or "proposed rezoning area") is vacant land. The Project Area has a combined lot area of approximately 18,024 sf, and was rezoned from M3-1 to M1-4 as part of the *River Ring* project approved in December 2021 (C 210166 ZMK).

Lot 1 (Applicant's property) is an approximately 5,472 sf lot that recently completed environmental remediation. The lot was previously occupied by a two-story wood frame building with a partial basement, which had full lot coverage; that building was demolished in 2019. Records indicate that the site was a paint and lacquer manufacturing facility (Fyn Paint & Lacquer Co., Inc.) from 1930 to 2010. The facility was a large hazardous waste generator with an assigned EPA number. The Applicant Site was accepted into the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program and Brownfield Cleanup Program (BCP), and all cleanup and remedial activities have been completed (V00380, BCP site C224154). Remedial action has successfully achieved a Track 4 restricted residential cleanup, and an environmental easement was granted for the site pursuant to ECL Article 71, title 36, which restricts the use of groundwater and requires compliance with a Site Management Plan (SMP). Restricted residential cleanup is intended for sites that are expected to be developed for residential uses, specifically, multi-family residential housing and other uses with potentially higher exposures than commercial and industrial uses, but with restrictions that prohibit single family housing and vegetable gardens and use of on-site groundwater.

Lot 3 is an approximately 12,552 sf vacant lot currently owned by Con Edison, which contains no improvements and has no discernible use. Lot 3 was ancillary to Con Edison's North First Street Terminal (NFST), a No. 6 fuel oil storage complex that operated from the 1960s until it was decommissioned in 2012, and which is now part of the River Ring development site. Lot 3 was used as the facility's office, control room, boiler house, and parking lot, but all structures on the site have since been demolished and the lot is currently vacant. The former facility was a NYSDEC Major Oil Storage Facility (MOSF) (MOSF ID No. 2-1480). Subsurface investigations were conducted on behalf of Con Edison from 1999 through 2012 in order to assess potential impact from the oil storage. NYSDEC approved the work conducted for the MOSF assessment and issued a letter on July 24, 2012 indicating that no further action (NFA) was required specifically in relation to the former MOSF.

Surrounding Area and Context

Land uses within a 400-foot radius (the "surrounding area") of the Project Area include a mix of manufacturing, commercial, and mixed residential and commercial uses, as well as utility uses. To the east and northeast of the Project Area, the predominant uses include residences (comprised of both multi-family buildings and single and two-family walk-up buildings), retail establishments (specifically along Kent and Wythe Avenues), restaurants, offices and light-manufacturing spaces. The block immediately to the west, across River Street, is planned for redevelopment as part of the recently approved *River Ring Rezoning* project. Those waterfront blocks are currently used on an interim basis as a mini-golf course, an urban farm, and storage/parking for industrial equipment.

Figure A-1
Project Location - Aerial View



Source: DoITT; NYC DCP (PLUTO 2021v4)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area



The block immediately to the north is occupied by a recently constructed six-story (83-foot-tall) commercial building with approximately 24,000 gsf of office space on the 4th-6th floors, 22,000 gsf of destination retail (Trader Joe's) below grade, 21,000 gsf of ground floor retail, approximately 176 accessory attended parking spaces (34,370 gsf), and 1,600 gsf roof garden on the third floor. The block immediately to the south of the Project Area is occupied by a four-story newly renovated/altered commercial building (on the northern half of the block) with co-working office space, manufacturing space, event space, and ground floor retail; the southern half of the block is occupied by industrial/ manufacturing uses. The block immediately to the east of the Project Area, across Kent Avenue, is occupied by two mid-rise residential buildings ranging in height from three to seven stories, as well as a one-story commercial building housing a dance studio that fronts on North 1st Street.

The New York Power Authority (NYPA) Power Plant at 49 River Street is located on the waterfront to the southwest of the Project Area. Grand Ferry Park is located immediately south of the NYPA plant and falls just beyond the 400-foot radius. Further to the north of the Project Area residential uses predominate, with large tall waterfront towers ranging in height between 30 and 41 stories, and shorter mid-sized residential buildings and row-houses located upland. Warehouse, automotive and light-industrial uses are also located to the north/northeast of the Project Area.

The block to the southeast of the Project Area is occupied by mixed-use residential and commercial buildings, commercial buildings, multi-family residential buildings, and an industrial and manufacturing building. Buildings on the block range between two and seven stories.

The Project Area is located within a Transit Zone. The B32 local bus runs northbound along Kent Avenue to Long Island City, Queens, and southbound along Wythe Avenue to the Williamsburg Bridge Plaza. The North Williamsburg Ferry stop is located three blocks north of the Project Area. The Bedford Avenue (L) Station on North 7th Street is located northeast of the Project Area.

Zoning

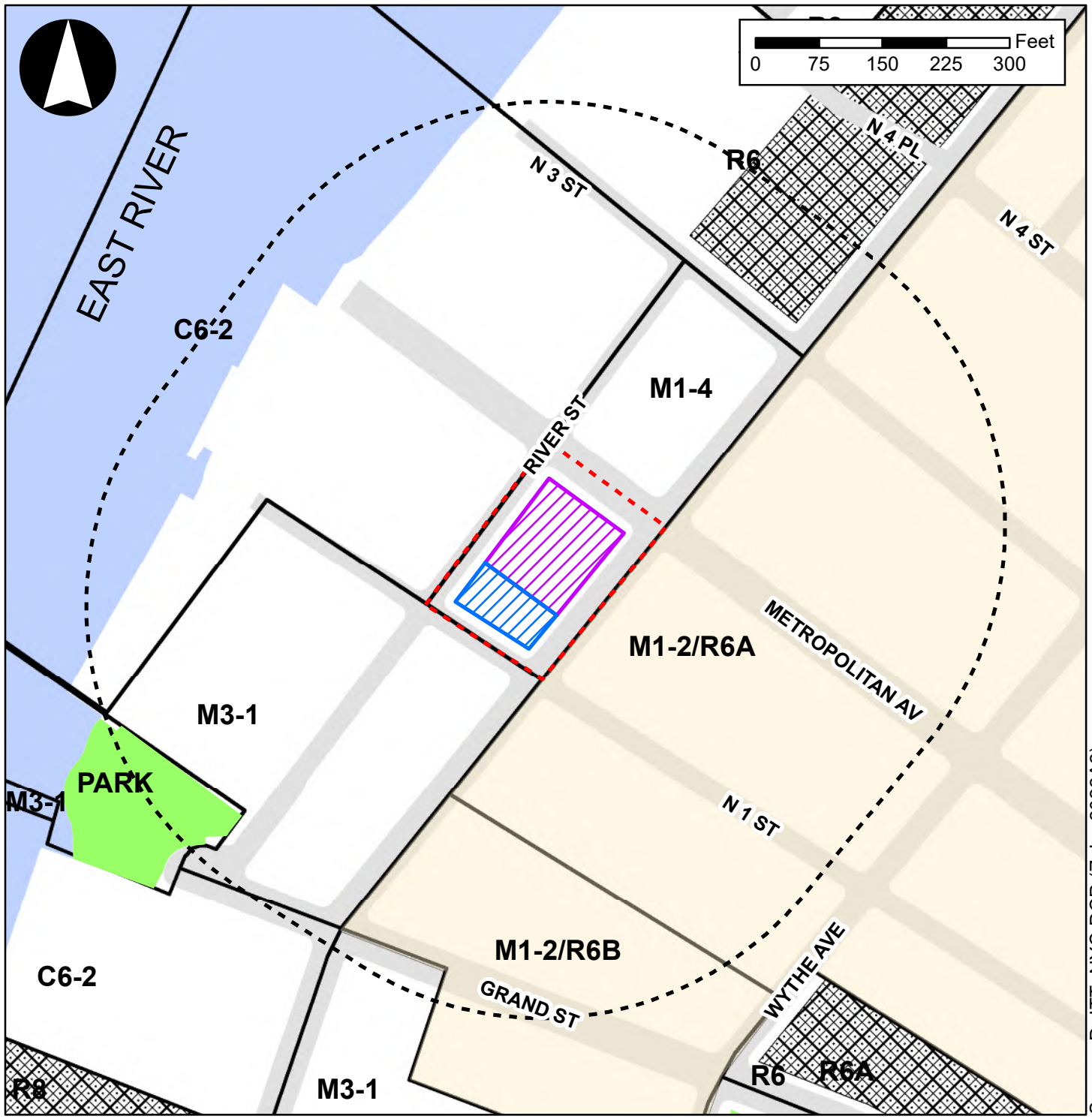
As shown in **Figure 2** of the EAS Form, the Project Area is located in a M1-4 manufacturing zoning district. M1-4 is a light industrial district that permits manufacturing and commercial uses at a maximum FAR of 2.0, as well as some community facility uses at a maximum FAR of 6.5. Residential uses are not permitted. M1-4 districts have a base height limit of 60 feet, above which a structure must fit within a sloping sky exposure plane. M1-4 districts do not require parking for manufacturing or commercial uses; parking requirements for community facility uses depend on the use and size of establishment. The surrounding area is primarily zoned C6-2 to the west, M3-1, C6-2 and M1-2/R6B to the south, M1-4, R6 and RB to the north, and M1-2/R6A to the east.

III. THE PROPOSED ACTIONS

The Applicant seeks the following discretionary land use actions:

Zoning Map Amendment to rezone Brooklyn Block 2362 in its entirety, comprised of Lots 1 and 3, from M1-4 to an M1-4/R7X Special Mixed-Use district (extension of MX-8), as shown in **Figure A-2**. MX districts are special purpose districts that pair manufacturing districts with residence districts. Residential uses are subject to the bulk controls of the residence district, while manufacturing, commercial, and community facility uses are subject to the bulk controls of the manufacturing district, except where modified by the MX district regulations for each use. Community facility uses are subject to the FAR restrictions of the residence district. For mixed-use buildings, the total maximum FAR is the maximum FAR permitted by any

Figure A-2
Zoning



Source: DoITT; NYC DCP (ZoLa 2022A2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area
- 400-ft Radius
- Special Purpose District (MX-8)
- M3-1 Zoning District
- C2-4
- Open Space

use on the zoning lot, whichever is highest. The provisions of the M1-4 district are described above. The R7X district is a contextual district that, in an MX district, is subject to Quality Housing bulk regulations, with the exception of lot coverage and street wall location regulations. Developments containing residential use in R7X districts in an MIH area can achieve a maximum FAR of 6.0, a base height of 105 feet, and a maximum building height of 140 feet (145 feet with a qualifying ground floor). Parking is required for 50 percent of DUs, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone, or for lots with 10,000 square feet of area or less. Parking requirements can be waived if 15 or fewer parking spaces are required. Community facility uses are permitted at a maximum FAR of 5.0. **Table A-1** compares the use and bulk requirements under the existing and proposed zoning districts.

TABLE A-1
Comparison of Allowable Uses and Maximum FAR for the Existing and Proposed Zoning

	Existing Zoning	Proposed Zoning
Zoning District	**M1-4**	**M1-4/R7X**
Use Groups	UG 4 to 14, 16 & 17 *(UG 5 by Special Permit)*	UG 1-14, 16 & 17 *(UG 5 by Special Permit)*
Maximum FAR		
Residential	N/A	6.0 with MIH
Community Facility	6.5	5.0
Commercial	2.0	2.0
Manufacturing	2.0	2.0
Height and Setback		
Maximum Base Height	60 feet or 4 stories	105 feet
Maximum Building Height	Governed by the Sky Exposure Plane	140 feet (145 feet with qualifying ground floor and MIH development)

Source: *Zoning Resolution of the City of New York.*
Notes: The MIH area sets a new maximum permitted residential FAR that supersedes the FAR permitted by the underlying zoning district. With both the designation of the Project Area as an MIH area and its rezoning to M1-4/R7X zoning district, the maximum permitted residential FAR within the Project Area would be 6.0, and the maximum building height would be up to 145 feet with a qualifying ground floor.

Zoning Text Amendments to Appendix F of the *Zoning Resolution (ZR) of the City of New York* to establish the Project Area as a Mandatory Inclusionary Housing (MIH) area, and to Section 123-63 to amend the table of Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing areas to add R7X to the list of designated districts within MX-8. The establishment of the MIH area would require a share of new housing to be permanently affordable where significant new housing capacity would be created. The MIH program includes two primary options for set-aside percentages with different affordability levels. Option 1 requires that 25 percent of residential floor area be affordable for residents with incomes averaging 60 percent of the area median income (AMI) (with ten percent of the floor area affordable at 40 percent AMI), and Option 2 requires that 30 percent of residential floor area be affordable for residents with incomes averaging 80 percent of the income index. In combination with these options, two other options may be made available. A "Deep Affordability Option" may be utilized under which 20 percent of residential floor area must be affordable housing units affordable to households with incomes at a weighted average of 40 percent of the income index. Also, a "Workforce Option" may be utilized provided that 30 percent of residential floor area contains housing units affordable to households with incomes at a weighted average of 115 percent, with five percent of residential floor area comprising units affordable to households at incomes of 70 percent of the income index and another five percent of residential floor area affordable to households at an income band of 90 percent of the income index. Depending on the MIH option selected during the public review process, either 25 or 30 percent of the residential floor area would be required to be affordable housing.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The Project Area was rezoned from M3-1 to M1-4 as part of the *River Ring* project, which was approved on December 15, 2021 (C 210166 ZMK). The Proposed Actions seek to build on those efforts by allowing residential use at an appropriate scale on the Applicant's property (Lot 1), which is located between the planned predominantly residential towers on the River Ring waterfront sites directly across River Street to the west, and the six- and seven-story apartment buildings located directly across Kent Avenue to the east.

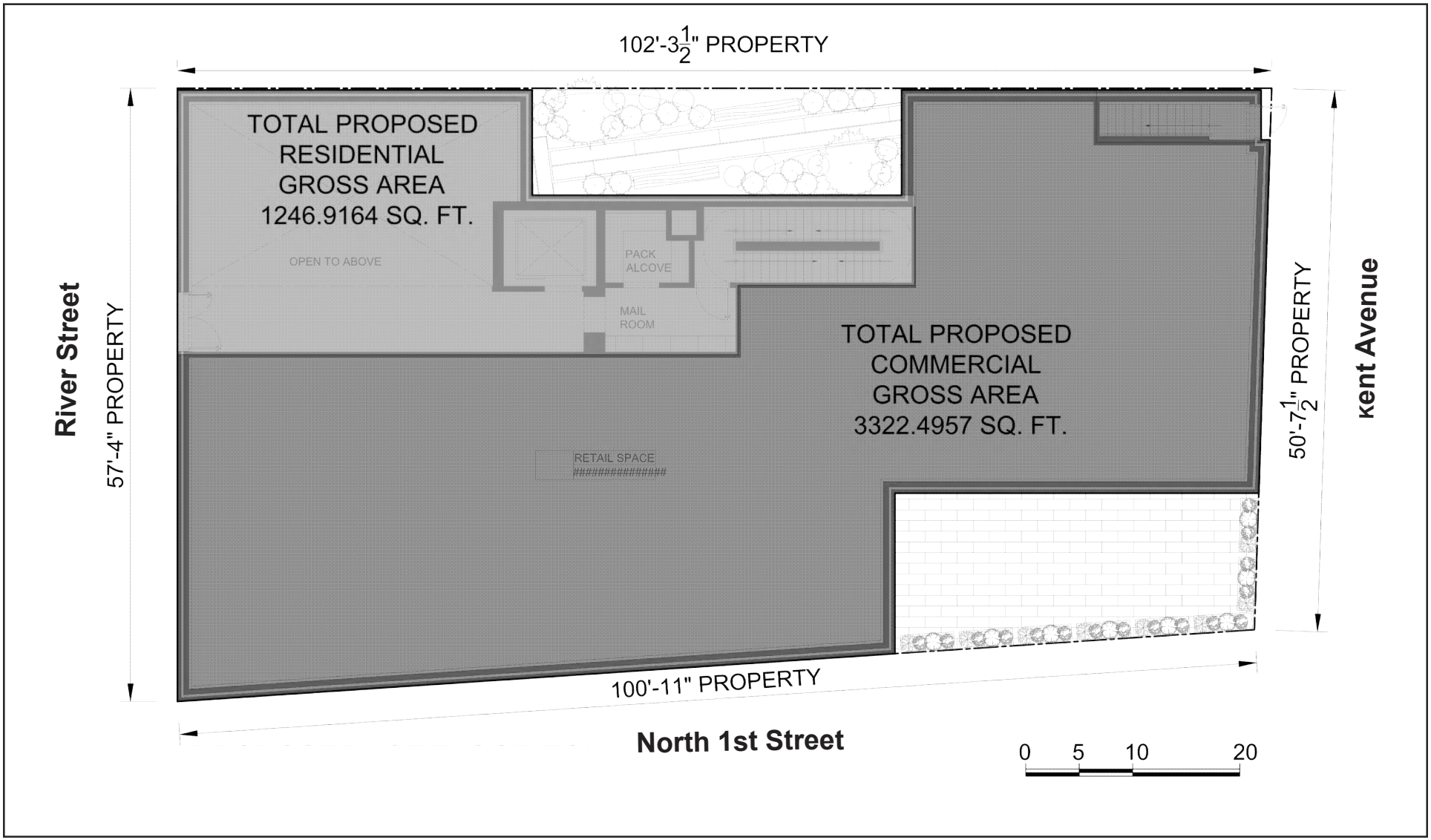
In light of the existing and proposed residential uses in the surrounding area (including the approximately 1,050 dwelling units recently approved at the River Ring development site), extending the existing Special Mixed Use District (MX-8) located east of the Project Area to map the proposed M1-4/R7X district would result in the development of the Project Area in a manner more consistent with existing and planned development surrounding it. Allowing residential uses in the Project Area would facilitate the development of much-needed residential units, including affordable units, in an area in which population is increasing and there is increased demand for residential uses. According to the New York City Department of City Planning's 2013 report *New York City Population Projections by Age/Sex & Borough*, Brooklyn is anticipated to have an estimated growth rate of 11.3 percent from 2010 to 2040.[3] As population in Brooklyn is expected to experience substantial and steady growth, additional housing is necessary to ensure adequate supply.

The proposed rezoning would also require the establishment of a new Mandatory Inclusionary Housing Area and thus the Proposed Actions would facilitate affordable housing an acute need within Brooklyn Community District 1. These required permanently affordable units at the Project Area would help to address affordable housing goals set forth by the City in *Housing New York: A Five-Borough, Ten-Year Plan*. The creation of new affordable housing supply at various income levels helps to alleviate the upward pressure on housing prices, and contributes to housing affordability in the surrounding area and larger City.

V. APPLICANT'S PROPOSED DEVELOPMENT

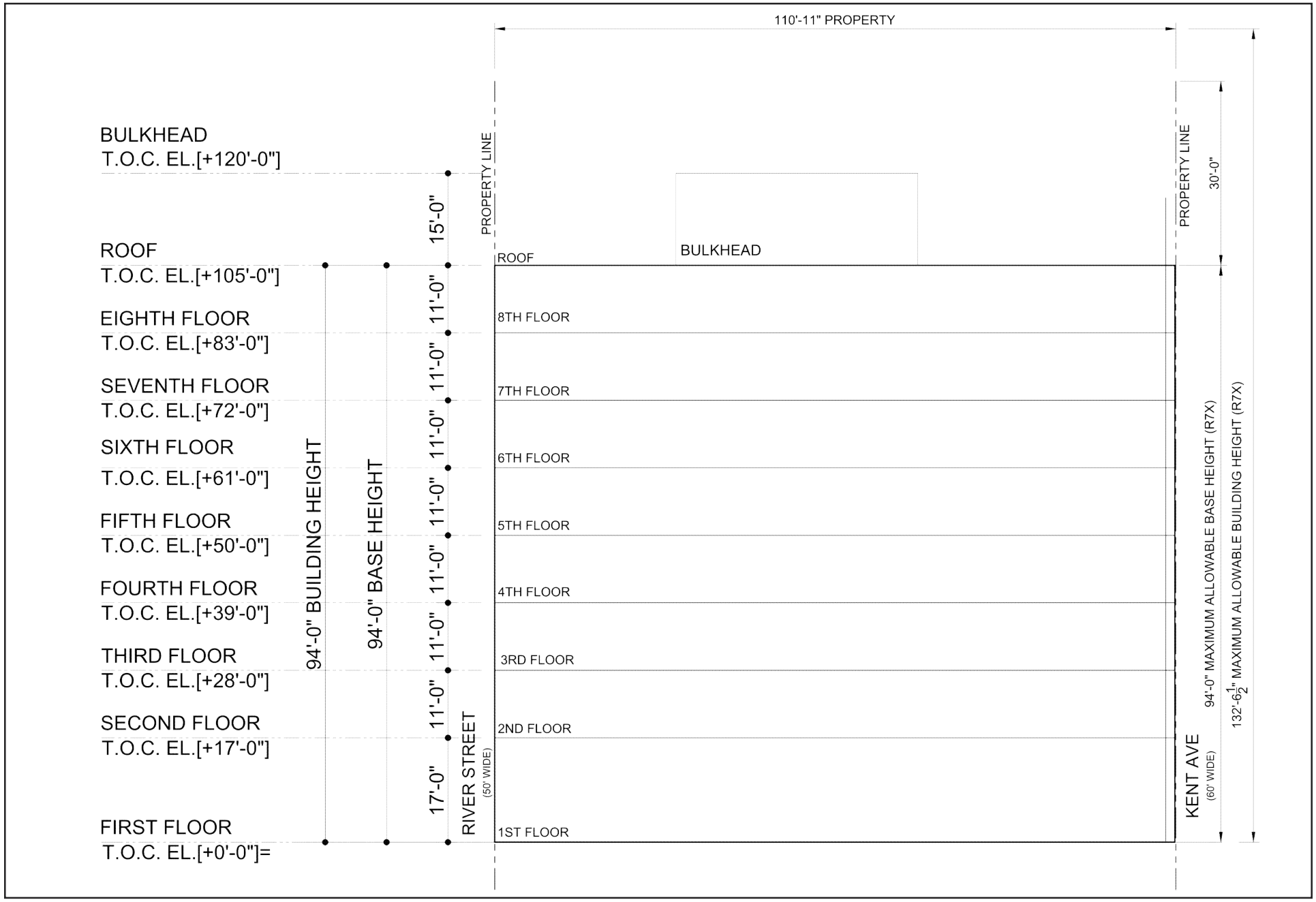
The Applicant proposes to redevelop Projected Development Site 1 (Block 2362, Lot 1) at 230 Kent Avenue with a new eight-story, approximately 43,095 gsf (32,848 zsf) mixed-use building, including approximately 37,036 gsf (29,525 zsf) of residential floor area (40 DUs) and 6,059 gsf (3,323 zsf) of commercial floor area (local retail).[4] The building would contain an approximately 5,742 gsf cellar split evenly between residential storage area and back-of-house area for the building's retail use, which are included in the gsf for each use for CEQR analysis purposes. As shown in the illustrative ground floor plan in **Figure A-3**, the residential component of the building would be accessible from River Street, whereas the ground floor retail uses are expected to be accessible from Kent Avenue. Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed Applicant building, which maximizes the allowable FAR, would be 105 feet tall, as shown in the illustrative section in **Figure A-4**, and would rise to

[3] *New York City Population Projections by Age/Sex & Borough, 2010–2040*, NYC Department of City Planning, December 2013.
[4] Although the Applicant plans to develop approximately 40 residential units, 44 units will be assumed in the reasonable worst case development scenario (RWCDS) for conservative analysis purposes.



For Illustrative Purposes Only

Figure A-3
Applicant Site - Illustrative Ground Floor Plan



For Illustrative Purposes Only

Figure A-4
Applicant Site - Illustrative Section

the maximum base height without any setbacks. Approximately 20 bicycle parking spaces are expected to be provided in accordance with zoning requirements.

VI. ANALYSIS FRAMEWORK

Identification of Development Sites

As discussed above, the proposed zoning map amendment would affect the Applicant-owned Projected Development Site 1, as well as one additional tax lot (Block 2362, Lot 3). Thus, in addition to the Applicant-owned Projected Development Site 1, there is an additional property that could be considered a "soft-site" under CEQR criteria. Per *CEQR Technical Manual* criteria, "soft sites are sites where a specific development is not currently proposed or being planned, but may reasonably be expected to occur by the projected build year". The *CEQR Technical Manual* lists factors to be considered when evaluating whether some amount of development would likely be constructed by the build year. Specifically, (a) buildings built to less than half of the maximum allowable FAR under existing zoning; and (b) lots with a size of 5,000 sf or more, are generally considered "soft" enough that there would be sufficient incentive to develop in the future.

Based on the *CEQR Technical Manual* criteria, the Proposed Actions could facilitate the development of one additional projected development site other than the known Applicant-owned Projected Development Site 1. Block 2362, Lot 3 (218 River Street) is a vacant approximately 12,552 sf lot owned by Con Edison. As this site would be rezoned to allow residential uses, is currently vacant, has a lot size greater than 5,000 sf, and is located in an area with a development trend of new mixed-use residential and commercial buildings, it is reasonable to assume that the site is likely to be redeveloped as a result of the Proposed Actions. The site will therefore be analyzed as Projected Development Site 2 and is discussed in greater detail below in the "With-Action Condition" section.

As such, two projected development sites have been identified in the Project Area for RWCDS purposes: Projected Development Site 1 (Lot 1), which is under the Applicant's control, and the non-Applicant Projected Development Site 2 (Lot 3).

Analysis Year

Construction of the Applicant's property (Projected Development Site 1) is expected to begin in early-2024, following approval of the Proposed Actions, and would be completed in approximately 12-14 months, by early-2025. Projected Development Site 1 is unimproved and fully remediated, and would not involve any demolition. The Applicant's proposed development consists of a single eight-story building totaling approximately 43,095 gsf and is anticipated to be constructed in a single phase.

As noted above and described in greater detail below, a non-Applicant-owned projected development site (Projected Development Site 2) has been identified within the Project Area that is likely to be developed as a result of the Proposed Actions (Lot 3). However, as no formal redevelopment plans exist for the non-Applicant-owned site, the selected analysis year of 2025 reflects a reasonable estimate of the time needed for developers to design the project, obtain design approvals, and construct the project. The non-Applicant site is currently vacant and unimproved, and would not involve any demolition. For RWCDS purposes, the non-Applicant site is assumed to be developed with a single 14-story building totaling approximately 94,670 gsf. A building of such size would be constructed in a single phase, and is estimated to be completed in approximately 14-18 months. For RWCDS purposes, it is assumed Projected

Development Site 2 could begin construction in mid-2024, following completion of site remedial activity, and be completed by late 2025.

Accordingly, the RWCDS assumes a 2025 build year for analysis of future conditions, which accounts for development of both the Applicant Site and the non-Applicant Projected Development Site 2.

Future without the Proposed Actions (No-Action Condition)

Under the No-Action condition, it is assumed that Lot 1, which is owned by the Applicant, would be developed on an as-of-right basis in accordance with the existing M1-4 zoning. It should be noted that the Applicant's site was identified as a projected development site in the River Ring Rezoning EIS (which rezoned the Project Area from M3-1 to M1-4), and was assumed to be developed with a 3-story (45-foot-tall) mixed-use building with approximately 20,223 gsf, with approximately 6,741 gsf of commercial space (local retail), 6,741 gsf of light industrial space (warehouse), and approximately 6,741 gsf of community facility space (medical office). The RWCDS for the proposed rezoning would assume this same program in the No-Action condition.

As Lot 3 is owned by Con Edison, and would continue to be zoned for manufacturing use in absence of the Proposed Actions, it is conservatively assumed to remain undeveloped in the No-Action.

No-Action assumptions for the Applicant Site have been developed in accordance with *CEQR Technical Manual* guidance, and are based on the analytical framework presented in the recently approved *River Ring Rezoning* EIS. M1-4 districts allow a maximum FAR of 2.0 for commercial and industrial uses. Although M1-4 zoning allows up to 6.5 FAR of community facility uses, development of more than the 1.0 FAR assumed for RWCDS purposes would be unlikely, given the Applicant Site's relatively small footprint, current market conditions, and recent development trends in the area. For the Non-Applicant site, No-Action assumptions are based on its ownership status (owned by a utility company) as well as the type of uses allowed by the existing M1-4 zoning.

Future with the Proposed Actions (With-Action Condition)

In the future with the Proposed Actions (With-Action condition), the proposed zoning map and zoning text amendments would be approved. As such, the special MX (M1-4/R7X) zoning district would be mapped along the Project Area and would be designated as a MIH area. Under the With-Action condition, residential uses would be allowed as-of right in the Project Area, at a maximum FAR of 6.0 FAR when fully utilizing the additional FAR under the MIH Program. The maximum allowable FARs for commercial/manufacturing and community facility uses would remain unchanged compared to the No-Action condition, at 2.0 and 6.5, respectively).

The number of units is based on approximately 850 gsf per dwelling unit.

Applicant's Projected Development Site 1

The With-Action scenario for Projected Development Site 1 is based on the Applicant's proposed plan for the site, i.e., an eight-story 40-unit residential building with 6,059 gsf of local ground floor retail. The proposed development maximizes the FAR under the proposed zoning and would therefore represent the RWCDS for all density-based analyses. Under MIH Option 1 (25% of residential floor area), 10 affordable DUs would be provided. Under MIH Option 2 (30% of residential floor area), 12 affordable DUs would be provided. As noted above, although the Applicant plans to develop approximately 40 residential units, 44 units will be assumed as a RWCDS (assuming an average unit size of 850 gsf) for conservative analysis purposes, with either 11 DUs (25 percent of residential floor area) or 13 DUs (30 percent of residential

floor area) being affordable pursuant to MIH. Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed massing for the Applicant's building, which maximizes the allowable FAR, would be 105 feet tall. Given the lot's relatively small footprint (5,472 sf), and the proposed zoning district's required setback at 105 feet, it would not be practical to design a taller building as the upper floors would be too shallow to allow a functional layout. However, in order to provide a more conservative CEQR analysis, the maximum allowable height of 145 feet is analyzed for shadows and urban design. The air quality assessment assumes the lower height of 105 feet, as that would be more conservative. As discussed above, parking would be waived for Projected Development Site 1. Per ZR 24-241 parking is required for 30 percent of market-rate units because the lot is less than 10,000 sf (approximately 8 or 9 spaces). Per ZR 25-251, parking is not required for the 10 or 12-income restricted units as the site is located in the Transit Zone. As less than 15 spaces would be required, pursuant to ZR 25-261, no accessory parking is required to be provided at the site.

Projected Development Site 2

The With-Action scenario for the non-Applicant Projected Development Site 2 has been developed in accordance with *CEQR Technical Manual* guidance, and is based on the amount and type of recent as-of-right development in the area; recent real estate trends in the area, as well as the type of uses allowed by the proposed M1-4/R7X zoning. For RWCDS purposes, Projected Development Site 2 is assumed to maximize its allowable residential FAR, resulting in an approximately 94,670 gsf building with an estimated 70,054 gsf of residential space (excluding cellar space) and 13,765 gsf of local retail space and approximately 10,850 gsf of parking area in the cellar. Assuming an average unit size of 850 gsf, Projected Development Site 2 is assumed to have approximately 82 DUs, with up to 25 DUs (30% of residential floor area) affordable pursuant to MIH. Under MIH Option 1, approximately 21 DUs (25% of residential floor area) would be affordable. The building height could be up to 145 feet, which is the maximum allowed by zoning, and this maximum height would be assumed for all applicable CEQR technical areas. Depending on the MIH Option selected, the development would include either 57 or 61 market-rate units. Therefore, either 29 or 31 accessory off-street parking spaces would be required and are assumed to be provided in an underground garage.

Possible Effects of the Proposed Actions

Table A-2 below provides a comparison of the No-Action and With-Action conditions identified for CEQR analysis purposes. As shown, the incremental (net) change that would result from the Proposed Actions is the addition of 107,090 gsf of residential uses, with approximately 126 DUs, of which approximately 32 would be affordable units (38 under MIH Option 2), and 13,083 gsf of local retail uses, as well as a net reduction in warehouse and community facility space, compared to the No-Action condition. No accessory parking would be provided at Projected Development Site 1, although approximately 29 spaces would be required for Projected Development Site 2 (32 spaces would be required under MIH Option 2). In terms of population, the Proposed Actions are expected to generate an estimated 306 incremental residents and 18 incremental employees, as compared to the 2025 No-Action condition.

TABLE A-2
Comparison of No-Action and With-Action Development Scenarios

	No-Action			With-Action			Increment		
Land Use	Site 1	Site 2	*Total*	Site 1	Site 2*	*Total*	**Site 1**	**Site 2**	***Total***
Residential (gsf)				37,036	70,054	*107,090*	37,036	70,054	***107,090***
Residential (DUs)				44	82	*126*	44	82	***126***
*Affordable DUs***				11 or 13	21 or 25	*32 or 38*	11 or 13	21 or 25	***32 or 38***
Local Retail (gsf)	6,741		*6,741*	6,059	13,765	*19,824*	-682	13,765	***13,083***
Warehouse (gsf)	6,741		*6,741*				-6,741	0	***-6,741***
CF - Medical Office (gsf)	6,741		*6,741*				-6,741	0	***-6,741***
Accessory Parking Spaces					29		0	29	***29***
Population/Employment***									
Residents				107	199	*306*	107	199	***306***
Workers	47		*47*	20	45	*65*	-27	45	***18***

** gsf shown excludes 10,850 sf at the cellar of Site 2, which is used for parking*

*** Number of affordable DUs will vary depending on which MIH option is selected. Lower estimate is for Option 1 and higher estimate is for Option 2.*

**** Residential population based on the average household size in Brooklyn Community District 1 (2.43 persons per household) per the 2020 Decennial Census. Estimate of workers based on standard rates of three employees per 1,000 sf of retail, and one employee per 25*

VII. REQUIRED APPROVALS

The proposed zoning map and text amendments are discretionary public actions that are subject to both the Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR).

The City's ULURP process, mandated by Sections 197-c and 197-d of the New York City Charter, is designed to allow public review of ULURP applications at four levels: the Community Board; the Borough President; the CPC and the City Council. The procedure has mandated time limits for review at each stage to ensure a maximum review period of approximately seven months. The process begins with certification by CPC that the ULURP application is complete. The application is then referred to the relevant Community Board (in this case Brooklyn Community Board 1). The Community Board has up to 60 days to review and discuss the proposal, hold a public hearing, and adopt an advisory resolution on the ULURP application. The Brooklyn Borough President then has up to 30 days to review the application. The CPC then has up to 60 days, during which time a public hearing is held on the ULURP application. If CPC approved, the application is then forwarded to the City Council, which has 50 days to review the ULURP application.

CEQR is a process by which agencies review discretionary actions to identify the effects those actions may have on the environment. The City of New York established CEQR regulations in accordance with the New York State Environmental Quality Review Act (SEQRA). In addition, the City has published a guidance manual for environmental review, the *CEQR Technical Manual*.

ATTACHMENT B

SUPPLEMENTAL SCREENING

I. INTRODUCTION

This Environmental Assessment Statement ("EAS") has been prepared in accordance with the guidance and methodologies presented in the 2021 *City Environmental Quality Review ("CEQR") Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a detailed technical analysis be undertaken. Using this guidance, preliminary screening assessments were conducted for the Proposed Actions to determine whether detailed analysis of any technical area may be appropriate.

As described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the construction of a new eight-story (105 feet tall), approximately 43,095 gsf mixed-use building on Projected Development Site 1, including approximately 37,036 gsf of residential floor area (44 DUs) and 6,059 gsf of commercial floor area (local retail). Depending on the MIH option selected during the public review process, either 25 percent (10 DUs) or 30 percent (12 DUs) of the residential floor area would be designated as affordable housing. It should be noted that although the Applicant plans to develop approximately 40 residential units, 44 units will be assumed in the reasonable worst case development scenario (RWCDS) for conservative analysis purposes, with either 11 DUs (25 percent) or 13 DUs (30 percent) being affordable pursuant to MIH. In addition, for reasonable-worst case development scenario (RWCDS) analysis purposes, it is assumed that the Proposed Actions would allow for redevelopment of Block 2362, Lot 3, which is not owned or controlled by the Applicant ("Projected Development Site 2"). As described in **Attachment A**, the RWCDS for Projected Development Site 2 consists of approximately 94,670 gsf, with an estimated 70,054 gsf of residential space (82 DUs including up to 25 affordable DUs), 13,765 gsf of local retail space and approximately 10,850 gsf of parking area in the cellar (29 non-attended accessory spaces)[1].

In absence of the Proposed Actions, it is assumed that Lot 1, which is owned by the Applicant, would be developed on an as-of-right basis in accordance with the existing M1-4 zoning, with a 3-story mixed-use building containing approximately 20,223 gsf, with approximately 6,741 gsf of commercial space (local retail), approximately 6,741 gsf of light industrial space (warehouse), and approximately 6,741 gsf of community facility space (medical office). As Lot 3 is owned by Con Edison, and would continue to be zoned for manufacturing use in absence of the Proposed Actions, it is conservatively assumed to remain undeveloped in the No-Action.

Part II of the EAS Form identifies those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the EAS Form, supplemental screening assessments are provided in this attachment. The supplemental screenings contained herein identified that additional analyses are required in the areas of Land Use, Zoning, and Public Policy, Open Space, Shadows, Historic Resources, Urban Design and Visual Resources, Transportation, and Air Quality. These analyses are provided in **Attachments C to I**, respectively, and are summarized in this attachment. The remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because the project increment did not trigger initial CEQR thresholds and/or are

[1] Projected Development Site 2 would provide between 29 and 31 non-attended accessory parking spaces depending on the MIH Option selected.

unlikely to result in significant adverse impacts. **Table B-1** presents a summary of analysis screening information for the Proposed Actions.

TABLE B-1
Summary of CEQR Technical Areas Screening

CEQR TECHNICAL AREA	SCREENED OUT PER EAS FORM	SCREENED OUT PER SUPPLEMENTAL SCREENING	ANALYSIS REQUIRED
Land Use, Zoning, & Public Policy			X
Socioeconomic Conditions	X		
Community Facilities and Services	X		
Open Space			X
Shadows			X
Historic & Cultural Resources		X	
Urban Design & Visual Resources			X
Natural Resources	X		
Hazardous Materials		X	
Water and Sewer Infrastructure	X		
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation - Traffic & Parking - Transit - Pedestrians		X X	X
Air Quality - Mobile Sources - Stationary Sources	X		X (detailed HVAC)
Greenhouse Gas Emissions	X		
Noise		X	
Public Health		X	
Neighborhood Character		X	
Construction		X	

II. SUPPLEMENTAL SCREENING AND SUMMARY OF DETAILED ANALYSES

Land Use, Zoning, and Public Policy

As outlined in the *CEQR Technical Manual*, a preliminary assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. The Proposed Actions include zoning map and zoning text amendments. Therefore, a land use, zoning, and public policy assessment is provided in **Attachment C, "Land Use, Zoning, and Public Policy."** As discussed therein, no significant adverse land use, zoning, or public policy impacts are expected in the future with the Proposed Actions. The Proposed Actions would facilitate new mixed-use development in an appropriate location within the New York City Coastal Zone that is well served by public facilities and infrastructure, and that is characterized by similar uses.

Open Space

Based on the *CEQR Technical Manual*, an open space assessment is typically warranted if an action would directly affect an open space or if it would increase the population by more than 200 residents or 500 workers. The RWCDS for the Proposed Actions is expected to result in an estimated 306 new residents and 18 (net) workers as compared to the No-Action Condition. As the Proposed Actions increase residents above the *CEQR Technical Manual* threshold for analysis, a residential open space analysis is provided in **Attachment D, "Open Space."** As discussed in detail in **Attachment D**, no significant adverse impacts to open space will occur as a result of the Proposed Actions.

Shadows

A shadows assessment considers proposed actions that result in new shadows long enough to reach a publicly accessible open space or sunlight-sensitive historic resource (except within an hour and a half of sunrise or sunset). For proposed actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight). According to the 2021 *CEQR Technical Manual*, some open spaces contain facilities that are not sunlight-sensitive, and do not require a shadow analysis including paved areas (such as handball or basketball courts) and areas without vegetation.

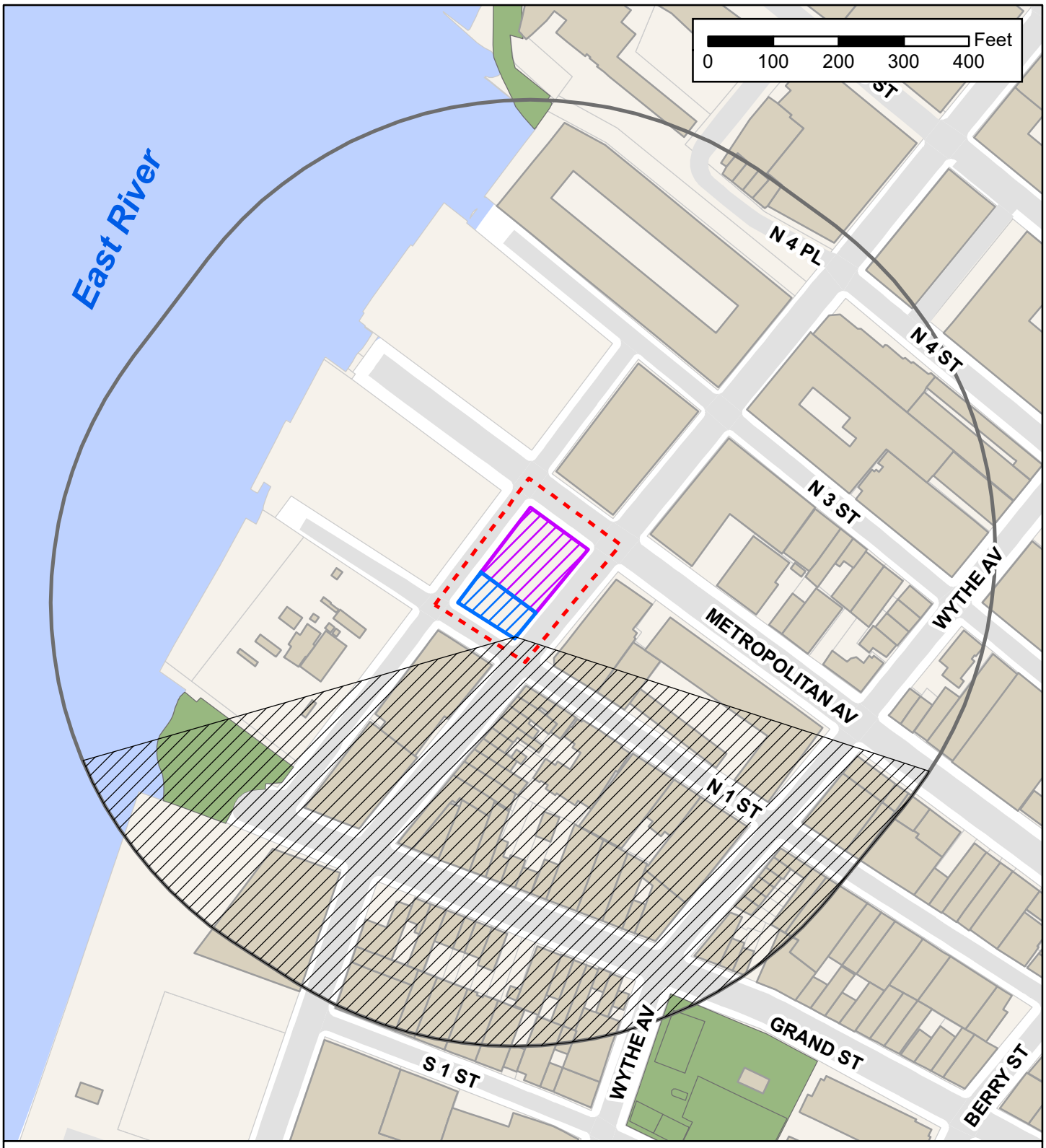
As a RWCDS, the Proposed Actions would facilitate the construction of two mixed-use buildings on two separate projected development sites, with a maximum height of 145 feet.[2] According to the *CEQR Technical Manual*, the longest shadow a structure would cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. Therefore, per *CEQR Technical* guidance, the maximum shadow radius (Tier 1 Assessment) for the RWCDS would be 623.5 feet. As shown in **Figure B-1**, there are four sunlight-sensitive resources within this longest shadow study area. These resources include the East River, Grand Ferry Park, the future open space planned for the River Ring development, and North 5th Street Pier and Park. Therefore, a further assessment of shadows is warranted and is provided in **Attachment E**. This assessment of project-generated shadows found no potential for adverse impact on sensitive resources. Although several historic resources fall within this maximum shadows radius (Grand Street Historic District, Metropolitan Avenue Warehouse, and Rokeach & Sons Warehouse, all S/NR-eligible, and the Austin Nichols & Co. Warehouse, which is S/NR-listed and LPC-eligible), they do not include any architectural features that depend on direct sunlight (i.e., any sunlight-sensitive resources). As such, the historic district and individual historic resources would not be adversely affected by any incremental shadows and further assessment of those resources is not warranted.

Historic and Cultural Resources

Historic and cultural resources are defined as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. These include properties that have been designated or are under consideration as New York City Landmarks or Scenic Landmarks, or are eligible for such

[2] Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed massing for the Applicant's building, which maximizes the allowable FAR, would be 105 feet tall. However, in order to provide a more conservative CEQR analysis, the maximum allowable height of 145 feet would be analyzed for shadows and urban design; air quality would assume the lower height of 105 feet for the Applicant's Projected Development Site 1, as that would be more conservative.

Figure B-1
Shadows Tier I and Tier II Screening



designation; properties within New York City Historic Districts; properties listed on the State and/or National Register of Historic Places (S/NR); and National Historic Landmarks. An assessment of architectural and archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

According to *CEQR Technical Manual* guidance, impacts on historic resources are considered on those sites affected by a proposed action(s) and in the area surrounding identified development sites. The historic resources study area is therefore defined as the area within a 400-foot radius of the Project Area. Pursuant to *CEQR Technical Manual* guidance, archaeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance compared to No-Action conditions.

In order to verify the presence of designated or eligible architectural resources in the surrounding area, a request letter was sent to LPC. In a letter dated July 28, 2022, LPC confirmed that neither of the Projected Development Sites contain any architecturally or archaeologically significant resources (refer to **Appendix 2**). Moreover, the Project Area does not contain any LPC-designated landmarks or any S/NR-listed resources. However, a number of historic architectural resources were identified within a 400-foot radius, including Grand Street Historic District, Metropolitan Avenue Warehouse, and Rokeach & Sons Warehouse, all of which are S/NR-eligible, and the Austin Nichols & Co. Warehouse, which is S/NR-listed and LPC-eligible. Therefore, an assessment of the potential indirect impacts of the Proposed Actions on architectural resources was conducted and is provided in **Attachment F, "Historic and Cultural Resources."** As detailed in **Attachment F**, the Proposed Actions would not result in significant adverse impacts on historic architectural resources. The RWCDS buildings would not eliminate or substantially obstruct significant public views of architectural resources, nor would they introduce incompatible elements to any historic resource's setting. The Proposed Actions would also not result in any construction-related impacts to historic resources, as none of the identified architectural resources falls within 90 feet of the Project Area.

Urban Design and Visual Resources

An area's urban components and visual resources together define the look and character of the neighborhood. The urban design characteristics of a neighborhood encompass the various components of buildings and streets in the area. These include building bulk, use and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For CEQR analysis purposes, this includes only views from public and publicly accessible locations and does not include private residences or places of business.

An analysis of urban design and visual resources is appropriate if a proposed action(s) would (a) result in buildings that have substantially different height, bulk, form, setbacks, size, scale, use or arrangement than exists in an area; (b) change block form, demap an active street or map a new street, or affect the street hierarchy, street wall, curb cuts, pedestrian activity or streetscape elements; or (c) would result in above-ground development in an area that includes significant visual resources.

The Proposed Actions involve the rezoning of the Project Area from M1-4 to M1-4/R7X, which would result in a development that would differ from what is currently permitted as-of-right, and as such, an analysis of urban design and visual resources is appropriate. This analysis is provided in **Attachment G, "Urban**

Design and Visual Resources." As discussed in **Attachment G**, there would be no significant adverse impacts to urban design and visual resources due to the Proposed Actions.

Hazardous Materials

As defined in the 2021 *CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semivolatile organic compounds (VOCs and SVOCs), methane, polychlorinated biphenyls (PCBs) and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). According to the *CEQR Technical Manual*, the potential for significant adverse impacts from hazardous materials can occur when: (a) hazardous materials exist on a site, and (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials.

Projected Development Site 1 (Applicant Site)

The Applicant Site (Lot 1) was previously occupied by a two-story full lot coverage wood frame building with a partial basement, which was demolished in 2019. Records indicate that the site was a paint and lacquer manufacturing facility (Fyn Paint & Lacquer Co., Inc.) from 1930 to 2010. The facility was a large hazardous waste generator with an assigned EPA number 001270867. The previous owner of the site entered into a Voluntary Cleanup Agreement (VCA) with the New York State Department of Environmental Conservation (NYSDEC) in April 2001. Based on the investigations performed at the site it was revealed that the soil, soil vapor and groundwater are contaminated with volatile organic compounds (VOCs). In March 2007, an Interim Remedial Measure (IRM) consisting of a groundwater pump and treatment system with an activated carbon filtration stage was installed and operated at the site. The Remedial Investigation (RI) was completed in January 2008. A Remedial Action Work Plan (RAWP) to address on-site and off-site contamination was approved by the NYSDEC in October 2009. In 2010, a pilot test for soil vapor extraction and dual phase extraction system was performed for additional remedial system design. In July 2011, the RCRA closure work plan was approved and RCRA closure activities continued through 2014. In May 2013 the supplemental remedial investigation work plan (SRIWP) was approved for off-site contamination plume. In 2014, the Remedial Design for a dual phase extraction system (DPES) was approved and the system was installed. As of November 2014, the SRIWP had not been implemented and the previous owner stopped paying for the remedial action. As a result, the Voluntary Cleanup Agreement for this site was terminated.

In March 2015, a new owner (the Applicant) applied and the site was accepted into the Brownfield Cleanup Program (BCP). All cleanup and remedial activities have since been completed (V00380, BCP site C224154). The Applicant Site received a Certificate of Completion from NYSDEC certifying that remedial activities have been completed in accordance with the Brownfield Cleanup Program (refer to **Appendix 3**). Remedial action has successfully achieved a Track 4 restricted residential cleanup, and an environmental easement was placed on the site pursuant to ECL Article 71, title 36, which restricts the use of groundwater and requires compliance with the NYSDEC-approved Site Management Plan (SMP). Restricted residential cleanup is intended for sites that are expected to be developed for residential uses, specifically, multi-family residential housing and other uses with potentially higher exposures than commercial and industrial uses, but with restrictions that prohibit single-family housing, vegetable gardens and use of on-site groundwater. The SMP requires, among other things, a vapor intrusion evaluation and the implementation of any necessary engineering controls to prevent soil vapors from entering the new building at the site at concentrations of potential concern.

As the Applicant Site has been fully remediated and the new building would be designed and constructed in accordance with the SMP, no significant adverse impacts related to hazardous materials would result from the construction and occupancy of a new building on Projected Development Site 1 as a result of the Proposed Actions.

At the request of DEP, an E-designation is being mapped on the Applicant's Projected Development Site 1 to ensure compliance with the NYSDEC-required SMP discussed above. The (E) designation text related to hazardous materials (E-723) for Block 2362, Lot 1, is as follows:

> **Task 1: Sampling Protocol**
>
> **Prior to construction, the Applicant must submit to the New York City Mayor's Office of Environmental Remediation (OER), for review and approval, a Phase II Investigation protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. No sampling should begin until written approval of a protocol is received by OER. The number and location of sample sites should be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.**
>
> **Task 2: Remediation Determination and Protocol**
>
> **A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER. If remediation is indicated for the test results, a proposed remedial action plan (RAP) must be submitted by OER for review and approval. The Applicant must complete such remediation as determined necessary by OER. The Applicant should then provide proper documentation that the work has been satisfactorily completed. An OER-approved construction-related health and safety plan (CHASP) would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This plan would be submitted to OER for review and approval prior to implementation.**

Projected Development Site 2

Projected Development Site 2 (Lot 3), a vacant approximately 12,552 sf lot owned by Con Edison, was ancillary to Con Edison's North First Street Terminal (NFST), a No. 6 fuel oil storage complex that operated from the 1960s until it was decommissioned in 2012. The former facility was a NYSDEC Major Oil Storage Facility (MOSF) (MOSF ID No. 2-1480). Lot 3 was used as the facility's office, control room, boiler house, and parking lot. Subsurface investigations were conducted on behalf of Con Edison from 1999 through 2012 in order to assess potential impact from the oil storage. The New York State Department of Environmental Conservation (NYSDEC) approved the work conducted for the MOSF assessment and issued a letter on July 24, 2012 indicating that no further action (NFA) was required specifically in relation to the former MOSF.

As the proposed rezoning would allow residential uses that are currently not allowed, and as Projected Development Site 2 formerly contained uses listed in Appendix 3 of the 2021 *CEQR Technical Manual* (oil storage), the construction activities associated with the Proposed Actions could increase pathways for human exposure. However, the potential for significant adverse impacts would be avoided by placing a hazardous materials (E) designation on Projected Development Site 2 (i.e., 2362, Lot 3) to ensure that further environmental investigations and remediation are undertaken.

The (E) designation would require that the fee owner of the lot with an (E) designation conduct a testing and sampling protocol and have an approved remediation plan where appropriate, to the satisfaction of the New York City Office of Environmental Remediation (OER). The New York City Department of Buildings (DOB) will typically issue the foundation permits when OER approves the remedial action work plan – the actual remediation is usually done concurrently with the construction. The remediation plan provided to OER to satisfy the (E) designation must also include a mandatory construction-related health and safety plan (CHASP), which must also be submitted to OER. The (E) designation text related to hazardous materials (E-723) for Block 2362, Lot 3, is as follows:

Task 1: Sampling Protocol

The Applicant shall submit to OER the Phase I report for the site along with a proposed soil and groundwater testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented.

If OER determines that site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of sample sites shall be selected to adequately characterize the site, the specific source of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine the appropriate remediation protocol (if any required) after review of sampling data.

Task 2: Remediation Determination and Protocol

A written report with findings and a summary of the data shall be submitted to OER after completion of the testing phase and laboratory analysis for review, approval, and a determination by OER as to whether remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER and no further action shall be required.

If remediation is determined to be necessary by OER, a proposed remediation plan shall be submitted to OER for review and approval. Once approved, the applicant shall undertake and complete such remediation in accordance with the OER-approved remediation plan. The Applicant shall provide proper documentation that the work has been satisfactorily completed.

A construction-related health and safety plan (CHASP) shall also be submitted to OER and implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. The CHASP shall be submitted to OER for review and approval prior to implementation.

With the (E) Designation in place and implementation of the preventative and institutional and engineering control measures described above, no significant adverse impacts related to hazardous materials would be expected to occur as a result of the Proposed Actions and resultant development on Projected Development Site 2.

Transportation

The *CEQR Technical Manual* identifies minimum development densities that have the potential to result in significant adverse impacts to transportation and therefore require a detailed transportation analysis. As shown in Table 16-1 of the *CEQR Technical Manual*, actions that result in fewer than 50 peak hour vehicle trips are generally not likely to cause significant adverse impacts. For projects in Zone 3 (which includes areas within 0.5-miles of a subway station in Brooklyn), the development thresholds requiring trip generation analysis are 200 DUs and 15,000 gsf of local retail space.

The RWCDS would result in the net increase of 126 DUs and approximately 13,083 gsf of local retail space compared to the No-Action. Although the uses individually do not exceed any thresholds in Table 16-1 of the *CEQR Technical Manual*, as the RWCDS involves a mix of land uses, per *CEQR Technical Manual* guidance, a preliminary trip generation assessment is warranted and has been provided in **Attachment H, "Transportation."** Per CEQR guidance, a screening assessment was completed to determine if the Proposed Actions and RWCDS warrant detailed analyses of traffic, parking, transit, or pedestrians. The screening assessment consisted of a Level 1 Project Trip Generation and a Level 2 Project-Generated Trip Assignment, presented in **Attachment H**.

As detailed in **Attachment H**, the Proposed Actions do not warrant detailed analyses of traffic, transit, parking or ferry service. The RWCDS would not generate 50 or more vehicle trips in any peak period, which is the CEQR threshold for a detailed traffic analysis. It is also not expected that any subway or bus lines near the Project Area would experience an increase of more than 200 peak hour rail or 50 peak hour bus transit riders, the CEQR thresholds for a detailed transit analysis. However, the RWCDS would generate 200 or more incremental pedestrian trips at two pedestrian elements (one corner and one sidewalk) adjacent to the Project Area. Conditions at the south sidewalk on Metropolitan Avenue between Kent Avenue and River Street and the southwest corner at Kent Avenue and Metropolitan Avenue were analyzed during the weekday PM and Saturday midday peak hours. As presented in **Attachment H**, incremental pedestrian trips generated by the RWCDS would not result in any significant adverse pedestrian impacts based on *CEQR Technical Manual* criteria. Therefore, no significant adverse impacts to traffic, transit, parking or pedestrians would be expected in the future with the Proposed Actions.

Air Quality

According to *CEQR Technical Manual* guidance, air quality analyses are conducted to assess the effect of an action on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the *CEQR Technical Manual*, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts.

Per *CEQR Technical Manual* Section 210, the threshold for detailed mobile source CO impact analysis is 170 vehicles per hour per intersection for this area of Brooklyn, and the threshold for $PM_{2.5}$ impact analysis is 13 to 23 heavy-duty diesel vehicles (HDDV) or its equivalent vehicular emission based on the type of

road. According to NYS DOT Highway Functional Classification (https://www.dot.ny.gov/gisapps/functional-class-maps), Kent Avenue is classified as a minor arterial road with a threshold of 23 HDDV trip-ends, whereas Metropolitan Avenue, North 1st Street and River Street are all classified as local roads, with a threshold of 13 HDDV trip-ends. Per the EAS Form and as shown in **Attachment H, "Transportation,"** the Proposed Actions and RWCDS would not generate peak hour vehicle volumes in exceedance of the CEQR threshold of 170 vehicle trips, and would not generate peak hour vehicle volumes in exceedance of the CEQR thresholds for heavy-duty diesel vehicle (HDDV) traffic or the vehicular emissions equivalent on adjacent roadways. **Table H-2** in **Attachment H** indicates that the maximum incremental vehicle trips generated by the Proposed Actions would be 33 during the Saturday midday peak period, which is well below the threshold for detailed CO impact analysis. Using the worksheet provided in *CEQR Technical Manual* Section 210, and conservatively assuming that up to two-thirds of the hourly trips could travel along any one of the four roadways fronting the Project Area, the resultant 22 vehicle trips would be equivalent to 11 HDDV trips on a local road or 1 HDDV trip on a minor arterial, which would be under the threshold for detailed $PM_{2.5}$ impact analysis. Therefore, no further assessment of potential for mobile source air quality impacts is warranted in accordance with *CEQR Technical Manual* guidance.

Stationary source impacts could occur with actions that create new stationary sources or pollutants, such as emission stacks for industrial plants, hospitals, or other large institutional uses, or a building's boiler stacks used for heating/hot water, ventilation, and air conditioning ("HVAC") systems, that can affect surrounding uses. Impacts from boiler emissions associated with a development are a function of fuel type, stack height, minimum distance of the stack on the source building to the closest building of similar or greater height, building use, and the square footage of the source building. In addition, stationary source impacts can occur when new uses are added near existing or planned emissions stacks, or when new structures are added near such stacks and those structures change the dispersion of emissions from the stacks so that they affect surrounding uses.

As a result of the analysis of the Applicant Site in the 2021 *River Ring FEIS* (CEQR No. 21DCP157K), an (E) designation was placed on Projected Development Site 1 (Block 2362, Lot 1) specifying fuel type in order to avoid a stationary source air quality impact. Specifically, the following commitment was made in the air quality (E) designation (E-636)[3]:

> *"Block 2362, Lot 1 – Any new commercial, manufacturing and/or community facility development on the above-mentioned property must exclusively use natural gas as the type of fuel for HVAC systems to avoid any potential significant air quality impacts."*

However, as the lot adjacent to the Applicant Site is assumed to be redeveloped as part of the RWCDS for the Proposed Actions, a detailed stationary source analysis of the RWCDS was conducted to determine whether the associated exhaust emissions from each Projected Development Site's HVAC system would have the potential to significantly affect sensitive receptors (windows) on nearby taller buildings, as well as the potential effects of each Projected Development Site building on the other Projected Development Site building (i.e., project-on-project), and is provided in **Attachment I, "Air Quality."** The detailed stationary source HVAC analysis provided therein determined that there would be no potential for significant adverse air quality impacts with the placement of an (E) designation (E-723) on Projected Development Sites 1 and 2 (Block 2362, Lots 1 and 3) to restrict fuel oil type and HVAC stack location. E-723 will supersede the E-636 on the Projected Site 1 (Block 2362, Lot 1).

[3] Refer to Chapter 13, "Air Quality" of the *River Ring FEIS (21DCP157K).*

In addition, the Project Area is located within 400 feet of the New York Power Authority's North First Street power plant, and therefore a major emission source analysis is warranted and is included in **Attachment I**. The analysis determined that no significant adverse impacts would result from the NYPA facility at either of the Projected Development Sites within the Project Area.

Based on a review of area land uses, there are no existing properties within 400 feet that have DEP light industrial air permits, and therefore no further analysis of air toxics is warranted.

Noise

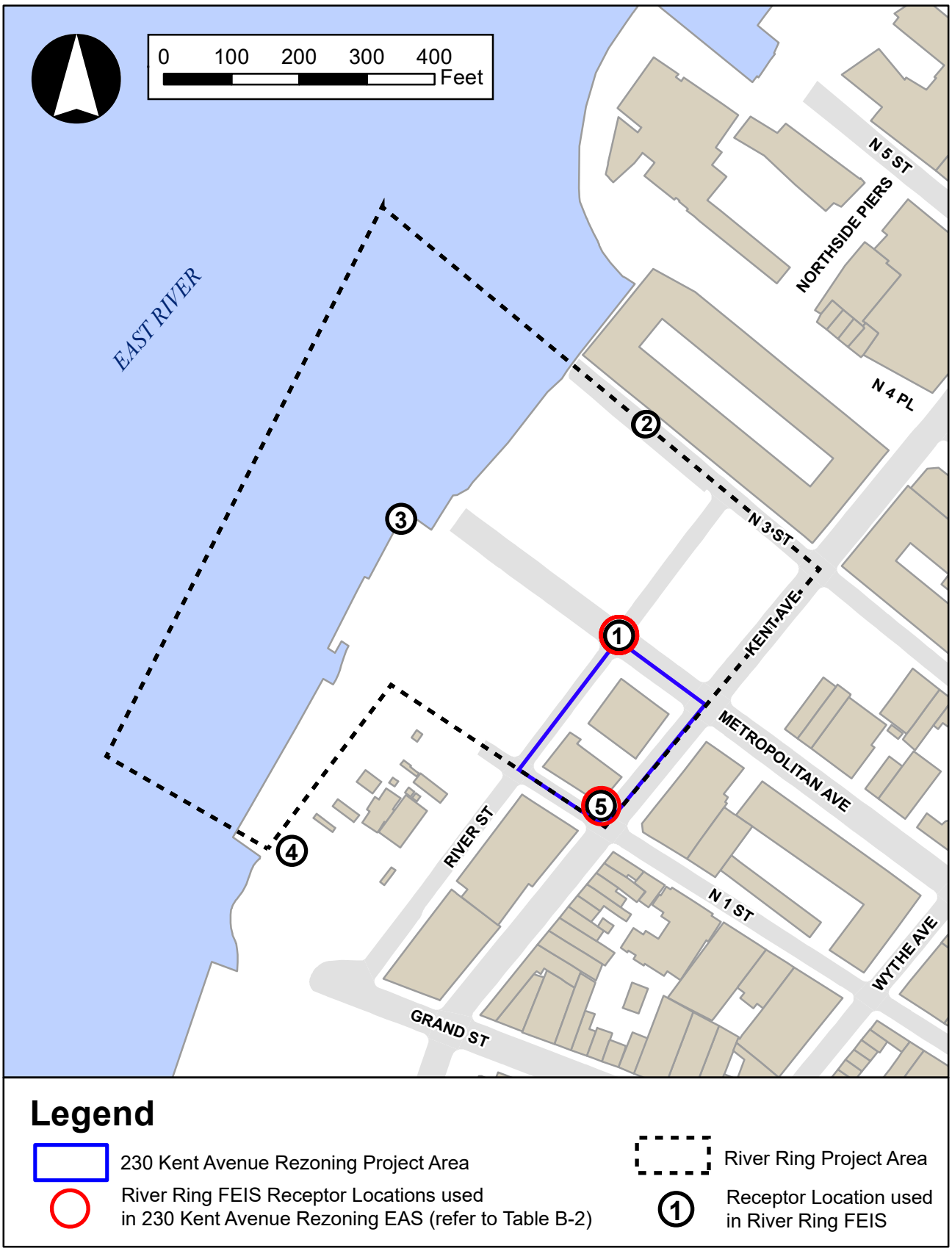
The purpose of a noise analysis is to determine both a proposed action's potential effects on sensitive noise receptors and the potential effects of ambient noise levels on new sensitive uses introduced by an action. The principal types of noise sources affecting the New York City environment are mobile sources (primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with manufacturing operations or building HVAC systems), and construction noise (e.g. trucks, bulldozers, power tools, etc.).

As described in **Attachment A, "Project Description,"** the Project Area was rezoned from M3-1 to M1-4 as part of the *River Ring* project, which was approved on December 15, 2021 (C 210166 ZMK). As part of the detailed noise analysis presented in the *River Ring FEIS (2021)*, noise data was collected at four locations (i.e., Receptor Locations 1 through 4; see **Figure B-2**). At each of the four receptor locations, 20-minute spot measurements of existing noise levels were performed for each of the three noise analysis peak periods – the weekday AM peak hour (7:30 to 8:30 AM), the weekday midday peak hour (12:00 to 1:00 PM, and the weekday PM peak hour (5:00 to 6:00 PM). Additionally, as per DCP guidance, an additional noise measurement site (Receptor Location 5) was included in the *River Ring FEIS*, and the noise data utilized for that location were based on noise measurements collected at receptor site 2 presented in Chapter 7, "Noise," of the *307 Kent Avenue Rezoning DEIS (2021)* (CEQR No. 20DCP100K). Based on the *307 Kent Avenue Rezoning DEIS*, noise monitoring was performed during the weekday AM (8:00 to 9:00 AM), midday (12:00 to 1:00 PM), and PM (4:30 to 5:30 PM) peak periods. It should also be noted that as part of the *River Ring FEIS'* detailed noise analysis, future (2027) No-Action and With-Action noise levels for Receptor Locations 1 through 5 were predicted using Traffic Noise Modeling (TNM) software. As Receptor Locations 1 and 5 from the *River Ring FEIS* are located adjacent to the Project Area (refer to **Figure B-2**), it is therefore considered appropriate to use noise data from the *River Ring FEIS* to determine whether attenuation would be required at Projected Development Sites 1 and 2 within the Project Area. As such, **Table B-2** below includes the existing and predicted No-Action and With-Action noise levels for Receptor Locations 1 and 5 presented in Chapter 15, "Noise," of the *River Ring FEIS*.

Table B-2 – River Ring FEIS Noise Monitoring Results

Receptor Location/Time[1]		Existing		No-Action[2]		With-Action[2]	
		L_{eq}	L_{10}	L_{eq}	L_{10}	L_{eq}	L_{10}
Receptor Location 1	*AM*	59.8	61.6	62.9	64.8	62.5	64.4
	MD	58.0	58.4	62.0	62.3	61.1	61.5
	PM	58.0	59.7	62.4	64.1	61.7	63.4
Receptor Location 5	*AM*	68.5	71.6	70.7	73.8	70.8	73.9
	MD	69.9	71.1	71.8	73.0	71.9	73.1
	PM	70.0	71.8	71.7	73.5	71.8	73.6

Figure B-2
Noise Receptor Locations



Notes: Field measurements at Receptor Location 1 was performed by Philip Habib & Associates on Tuesday, November 17, 2020. Field measurements at Receptor Location 5 were performed by AKRF, Inc. on Thursday, September 13, 2018 and Wednesday, October 3, 2018.
[1]Receptor Locations are based on the analysis presented in Chapter 15, "Noise," of the *River Ring FEIS* (21DCP157K)
[2] No-Action and With-Action noise levels at each receptor location was calculated using TNM

Based on the predicted With-Action noise levels at each of the receptor locations adjacent to the Project Area, L_{10} levels are expected to peak at 73.9 dBA along Kent Avenue (Receptor Location 5) placing this frontage in the "Marginally Unacceptable (II)" CEQR Noise Exposure category, whereas L_{10} noise levels along River Street (Receptor Location 1) are expected to peak at 64.4 dBA, placing this frontage in the "Acceptable" CEQR Noise Exposure category.

In terms of mobile sources, the number of incremental vehicle trips generated by the RWCDS associated with the Proposed Actions (as presented in **Table H-4** of **Attachment H, "Transportation"**) would be lower than the threshold that would require detailed traffic analysis. Therefore, the Proposed Actions would not result in sufficient traffic to have the potential to cause a significant adverse noise impact (i.e., it would not result in the doubling of noise passenger car equivalents [Noise PCEs], which would be necessary to cause a 3 dBA increase in noise levels). In addition, the two Projected Development Sites are assumed to have mechanical systems (i.e., heating, ventilation, and air conditioning systems) designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code and the New York City Department of Buildings Code [DOB]) to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, future ambient noise levels projected at Receptor Location 1 and Receptor Location 2 are considered representative for the future ambient noise levels at Projected Development Site 1 and Projected Development Site 2 under the Proposed Actions, and further noise analysis is not warranted.

As a result of the analysis of the Applicant Site in the 2021 *River Ring FEIS* (CEQR No. 21DCP157K), an (E) designation was placed on Projected Development Site 1 (Lot 1)[4] to create a mechanism for providing sufficient building noise attenuation. Specifically, the following requirement was included in the noise (E) designation (E-636)[5]:

> *"To ensure an acceptable interior noise environment, future community facility uses must provide a closed-window condition with a minimum of 31 dBA window/wall attenuation on all facades facing Kent Avenue and the facades facing North 1st Street within 50 feet of Kent Avenue and the facades facing Metropolitan Avenue within 50 feet of Kent Avenue to maintain an interior noise level not greater than 45 dBA for community facility uses, as illustrated in the EIS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning."*

As noted previously, OER is the city agency responsible for enforcement of the noise (E) Designation for project buildings. To demonstrate compliance with the noise (E) designation, a Noise Remedial Action Plan (RAP) must be submitted to OER for the Applicant's building, describing the specific façade construction and alternate means of ventilation that will be used to meet the noise (E) designation. If OER approves the RAP for the building, it will issue a Notice to Proceed (NTP) allowing construction to begin on the (E) designated site.

[4] Brooklyn Block 2362, Lot 1.
[5] Refer to Chapter 15, "Noise" of the *River Ring FEIS (21DCP157K).*

It should be noted however that pursuant to ZR §123-32, in Special Mixed-Use Districts, all new dwelling units shall be provided with a minimum 35 dBA of window wall attenuation to maintain an interior noise level of 45 dBA or less, with windows closed, and shall provide an alternate means of ventilation. However, upon application to the OER by the owner of the affected building, OER may modify the requirements of this Section, based upon new information, additional facts or updated standards, as applicable, provided that such modification is equally protective. In such instances, OER shall provide the Department of Buildings with notice of such modification, stating that it does not object to the issuance of a building permit, or temporary or final certificate of occupancy.

As the Proposed Actions would map the Project Area as a Special Mixed-Use District, any development within the Project Area must comply with the window wall attenuation requirement of 35 dBA pursuant to ZR §123-32. Based on the noise levels shown in **Table B-2** and comparing the building attenuation requirements pursuant to CEQR and ZR §123-32, the 35 dBA of attenuation required by the proposed special district pursuant to ZR §123-32 would ensure that the development within the Project Area would have interior noise levels of 45 dBA or less for residential uses, and would effectively satisfy any building attenuation requirement pursuant to CEQR. With these attenuation measures in place, there would be no potential for significant adverse noise impacts.

Public Health

Public health involves the activities that society undertakes to create and maintain conditions in which people can be healthy. Many public health concerns are closely related to air quality, water quality, hazardous materials, and noise.

According to the 2021 *CEQR Technical Manual*, a public health assessment may be warranted if a project results in (a) increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; (b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect groundwater to be used as a source of drinking water; (c) solid waste management practices that could attract vermin and result in an increase in pest populations; (d) potential significant adverse impacts to sensitive receptors from noise and odors; (e) vapor infiltration from contaminants within a building or underlying soil that may result in significant adverse hazardous materials or air quality impacts; (f) exceedances of accepted federal, state, or local standards; or (g) other actions that might not exceed the preceding thresholds but might, nonetheless, result in significant health concerns.

As detailed in the analyses provided in this EAS, the Proposed Actions and RWCDS would not result in significant adverse impacts in the areas of air quality, water quality, hazardous materials, or noise. Therefore, the Proposed Actions do not have the potential to result in significant adverse public health impacts, and further assessment is not warranted.

Neighborhood Character

According to the 2021 *CEQR Technical Manual*, an assessment of neighborhood character may be appropriate if a proposed action(s) has the potential to result in significant adverse impacts on land use, zoning, public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise, or when an action may have moderate effects on several of the elements that define a neighborhood's character. As the EAS provides assessments of land

use, zoning, and public policy (**Attachment C**), open space (**Attachment D**), urban design and visual resources (**Attachment G**), transportation (**Attachment H**) and noise (discussed above), a preliminary screening analysis is necessary to determine if a detailed neighborhood character analysis is warranted.

Neighborhood character is an amalgam of various elements that give neighborhoods their distinct "personality." According to the *CEQR Technical Manual*, a preliminary assessment may be appropriate if a project has the potential to result in any significant adverse impacts on any of the technical areas mentioned. Per the analyses provided in this EAS, although the Proposed Actions required supplemental screening or assessment of some of these technical areas, there would be no action-generated significant adverse impacts.

The *CEQR Technical Manual* also states that for projects not resulting in significant adverse impacts to any technical areas related to neighborhood character, additional analyses may be required to determine if the Proposed Actions would result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. However, the *CEQR Technical Manual* indicates that neighborhood character impacts are rare and it would be unusual that, in the absence of a significant adverse impact in any of the relevant technical areas, a combination of moderate effects in the neighborhood would result in any significant adverse impact to neighborhood character.

The Proposed Actions would not adversely affect any component of the surrounding area's neighborhood character, conflict with the surrounding activities, or significantly affect land use patterns. The development facilitated by the Proposed Actions would bring occupancy and activity to the two Projected Development Sites within the Project Area, which are currently vacant. The RWCDS residential and local commercial uses on two development sites would add market-rate and affordable housing and convenient amenities to the neighborhood, and are expected to further enhance the mixed-use character of the area. As the Proposed Actions would not be considered to have any significant adverse effects on any of the technical areas relating to neighborhood character, a neighborhood character assessment can be screened out, and no significant adverse neighborhood character impacts would occur. Therefore, no additional analysis is warranted for neighborhood character.

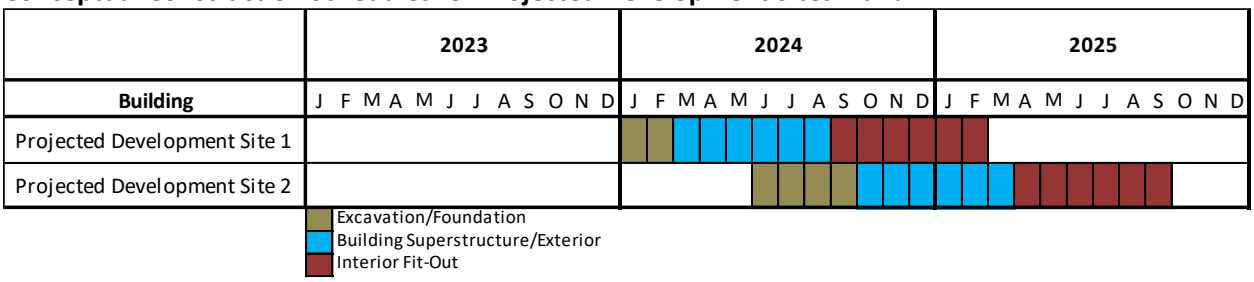
Construction

Although temporary, construction impacts can include noticeable and disruptive effects from an action that is associated with construction or could induce construction. Determination of the significance of construction impacts and need for mitigation is generally based on the duration and magnitude of the impacts. Based on *CEQR Technical Manual* guidance, when the duration of construction is expected to be short-term (less than two years), any impacts resulting from construction generally do not require detailed assessment. Construction impacts are usually important when construction activity could affect traffic conditions, archaeological resources, the integrity of historic resources, community noise patterns, and air quality conditions.

The proposed zoning changes are expected to facilitate the development of two mid-rise mixed-use residential and commercial buildings at Projected Development Sites 1 and 2, which would be constructed separately. **Table B-2** illustrates the conceptual construction sequencing of the two RWCDS Projected Development Sites associated with the Proposed Actions. Projected Development Site 1 is unimproved and fully remediated and would not involve any demolition, but would require some limited site excavation to construct a single cellar level (the site has already been excavated as part of the remedial activities). The Applicant's proposed development consists of a single eight-story building totaling

approximately 43,095 gsf and is anticipated to be constructed in a single phase. As shown in **Table B-2**, construction of the Applicant's property (Projected Development Site 1) is expected to begin at the start of 2024, following approval of the Proposed Actions, and would be completed in approximately 14 months, by early 2025.

TABLE B-2
Conceptual Construction Schedules for Projected Development Sites 1 and 2



In addition, a non-Applicant-owned projected development site (Projected Development Site 2) has been identified within the Project Area that is likely to be developed as a result of the Proposed Actions (Lot 3). However, as no formal redevelopment plans exist for the non-Applicant-owned site, the selected analysis year of 2025 reflects a reasonable estimate of the time needed for developers to design the project, obtain design approvals, and construct the project. The non-Applicant-owned site is currently vacant and unimproved, and would not involve any demolition. For RWCDS purposes, the non-Applicant-owned site is assumed to be developed with a single building totaling approximately 94,670 gsf. A building of such size would be constructed in a single phase, and is estimated to be completed in approximately 16 months. As shown in **Table B-2**, for RWCDS purposes, it is assumed that Projected Development Site 2 could begin construction in mid 2024, following completion of site remedial activity, and be completed by late 2025.

There would be an overlap of about nine months in the conceptual construction schedules of the two RWCDS Projected Development Sites (see **Table B-2**). However, as each building would have a construction duration of less than two years, the combined construction duration of both Projected Development Sites would total approximately 21 months and would be considered "short-term" pursuant to *CEQR Technical Manual* guidance.

Construction activities are not expected to adversely affect surrounding land uses. As required by City regulations, sidewalk protection bridges and full height plywood barriers would be installed to protect the public right of way. Construction of the RWCDS developments would follow applicable federal, state, and local laws for building and safety, as well as local noise ordinances, as appropriate. Construction specifications would require that construction contractors comply with all applicable legal requirements including environmental regulations and obtain necessary permits for the duration of construction.

The Proposed Actions and RWCDS would result in temporary disruptions including construction related traffic, dust, noise, or mobile source emissions. However, these effects would be temporary, as the duration of construction activities for the RWCDS Projected Development Sites, both individually and combined, would not exceed 24 months and would be considered short-term. As such, potential effects are expected to be minimal and the Proposed Actions are not expected to have any significant adverse construction impacts, and no further analysis is warranted.

ATTACHMENT C

LAND USE, ZONING, AND PUBLIC POLICY

I. INTRODUCTION

This attachment examines the Proposed Actions' compatibility and consistency with land use patterns in the surrounding area, ongoing development trends, land use and zoning policies, as well as other public policies. This assessment provides a description of the existing land use, zoning, and public policy conditions in the primary and secondary study areas, which are defined as the locations where the direct and indirect effects of the Proposed Action, respectively, may occur. The assessment also forecasts land use, zoning, and public policy conditions in the future without the Proposed Actions (the "No-Action" condition). The No-Action condition is determined by identifying developments and other relevant changes anticipated to occur by the time the Projected Development Sites would be redeveloped, which is expected to be 2025. The assessment forecasts land use, zoning, and public policy conditions in the future with the Proposed Actions (the "With-Action" condition) and determines the potential for significant adverse impacts on land use, zoning, and public policy.

As described in **Attachment A, "Project Description,"** the Proposed Actions consist of two discretionary actions: a zoning map amendment and zoning text amendment, affecting an area in the Williamsburg neighborhood of Brooklyn Community District (CD) 1. The actions being requested are: 1) a zoning map amendment to rezone Block 2362 in its entirety, comprised of Lots 1 and 3 ("Project Area"), from a M1-4 district to a M1-4/R7X Special Mixed-Use (MX) District (MX8); (2) a concurrent zoning text amendment to (a) amend Zoning Resolution (ZR) Appendix F to establish the Project Area within a Mandatory Inclusionary Housing (MIH) area; and (b) amend the table in ZR Section 123-63 to include R7X as a designated residence district in MX-8 in Brooklyn Community District 1 in which MIH is required.

Approval of the Proposed Actions would allow the Applicant, Kent Riverview LLC, to develop a new eight-story, approximately 43,095 gsf mixed-use building on Projected Development Site 1 (Lot 1), including approximately 37,036 gsf of residential floor area (44 DUs) and 6,059 gsf of commercial floor area (local retail). The building would contain an approximately 5,472 gsf cellar split evenly between residential storage area and back-of-house area for the building's retail use. Depending on the MIH option selected, either 25 percent (equivalent to approximately 11 DUs) or 30 percent (13 DUs) of residential floor area would be designated as affordable housing. Although the Applicant plans to develop approximately 40 residential units, 44 units will be assumed in the reasonable worst case development scenario (RWCDS) for conservative analysis purposes, with either 11 DUs (25 percent of residential floor area) or 13 DUs (30 percent of residential floor area) being affordable pursuant to MIH. Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed massing for the Applicant's building would be 105 feet tall; however, a height of 145 feet will be conservatively assumed as a RWCDS where applicable.

In addition, for RWCDS analysis purposes, it is assumed that the proposed zoning changes would allow for redevelopment of Block 2362, Lot 3, which is not owned or controlled by the Applicant ("Projected Development Site 2") pursuant to the proposed M1-4/R7X zoning regulations. As described further below, the RWCDS for Projected Development Site 2 consists of approximately 94,670 gsf, with an estimated

70,054 gsf of residential space (82 DUs including up to 25 affordable DUs)[1], 13,765 gsf of local retail space and approximately 10,850 gsf of parking area in the cellar (29 non-attended accessory spaces)[2]. The RWCDS assumes a 2025 build year for analysis, which accounts for development of both the Applicant-owned Projected Development Site 1 and the non-Applicant-owned Projected Development Site 2.

Under the No-Action condition, it is assumed that Applicant-owned Projected Development Site 1 would be developed on an as-of-right basis in accordance with the existing M1-4 zoning. It should be noted that the Applicant's site was identified as a projected development site in the River Ring Rezoning FEIS (which rezoned Block 2362 from M3-1 to M1-4), and was assumed to be developed with a 3-story mixed-use building with approximately 20,223 gsf (17,586 zsf), with approximately 6,741 gsf of commercial space (local retail), 6,741 gsf of light industrial space (warehouse), and 6,741 gsf of community facility space (medical office). The RWCDS used in the River Ring FEIS is assumed as the No-Action condition. As Lot 3 is owned by Con Edison, and would continue to be zoned for manufacturing use in absence of the proposed actions, it is conservatively assumed to remain undeveloped in the No-Action condition based on its ownership status (owned by a utility company).

The assessment provided in this attachment concludes that the proposed action would be compatible with and supportive of land use, zoning and public policies in the area. As shown in the analysis presented in this attachment, the proposed action would not result in significant adverse impacts related to land use, zoning, and public policy.

II. PRINCIPAL CONCLUSIONS

No significant adverse impacts on land use, zoning, or public policy, per the guidance found in the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, are anticipated in the future with the Proposed Actions in the Project Area (the primary study area) or within a 400-foot radius (secondary study area). Development resulting from the Proposed Actions would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with land uses, zoning, or public policies in the secondary study area. The proposed actions would facilitate development that reflects recent and ongoing land use trends in the surrounding neighborhood, supporting a growing demand for residential and commercial uses near the Williamsburg waterfront while continuing to insulate these developing uses from heavy industry. The proposed actions, with these beneficial elements, would not result in any significant adverse impacts to land use, zoning, or public policy.

III. METHODOLOGY

The purpose of this attachment is to examine the effects of the Proposed Actions on land use, zoning, and public policy and determine whether they would be compatible with those conditions or whether they may adversely affect them. The analysis methodology is based on the guidance of the *CEQR Technical Manual* and examines the Proposed Actions' consistency with land use patterns and development trends, zoning regulations, and other applicable public policies.

[1] Projected Development Site 2 could have 25 affordable DUs (30%) or 21 affordable DUs (25%), depending on which MIH option is selected.

[2] Projected Development Site 2 could have up to 31 non-attended accessory parking spaces depending on the MIH Option selected.

According to the *CEQR Technical Manual*, a detailed assessment of land use, zoning, and public policy may be appropriate when a change in land use and zoning would occur and a preliminary assessment cannot succinctly describe land use conditions in the study area. As the Proposed Actions involve a zoning map amendment and zoning text amendment that would result in changes to permitted densities, uses, and bulk, a detailed assessment is necessary to provide a sufficient description and assessment of the effects of the Proposed Actions. Therefore, this attachment includes a detailed analysis that involves a thorough description of existing land uses within the directly affected area and the broader study area. Following the guidance of the *CEQR Technical Manual*, the detailed analysis describes existing and anticipated future conditions in the 2025 analysis year to a level necessary to understand the relationship of the Proposed Actions to such conditions, assesses the nature of any changes on these conditions that would be created by the Proposed Actions, and identifies those changes, if any, that could be significant or adverse.

Analysis Year

As discussed in **Attachment A, "Project Description,"** the analysis year is the Applicant's Proposed Development's anticipated completion date of 2025. Therefore, the future No-Action condition accounts for land use and development projects, initiatives, and proposals that are expected to be completed by 2025.

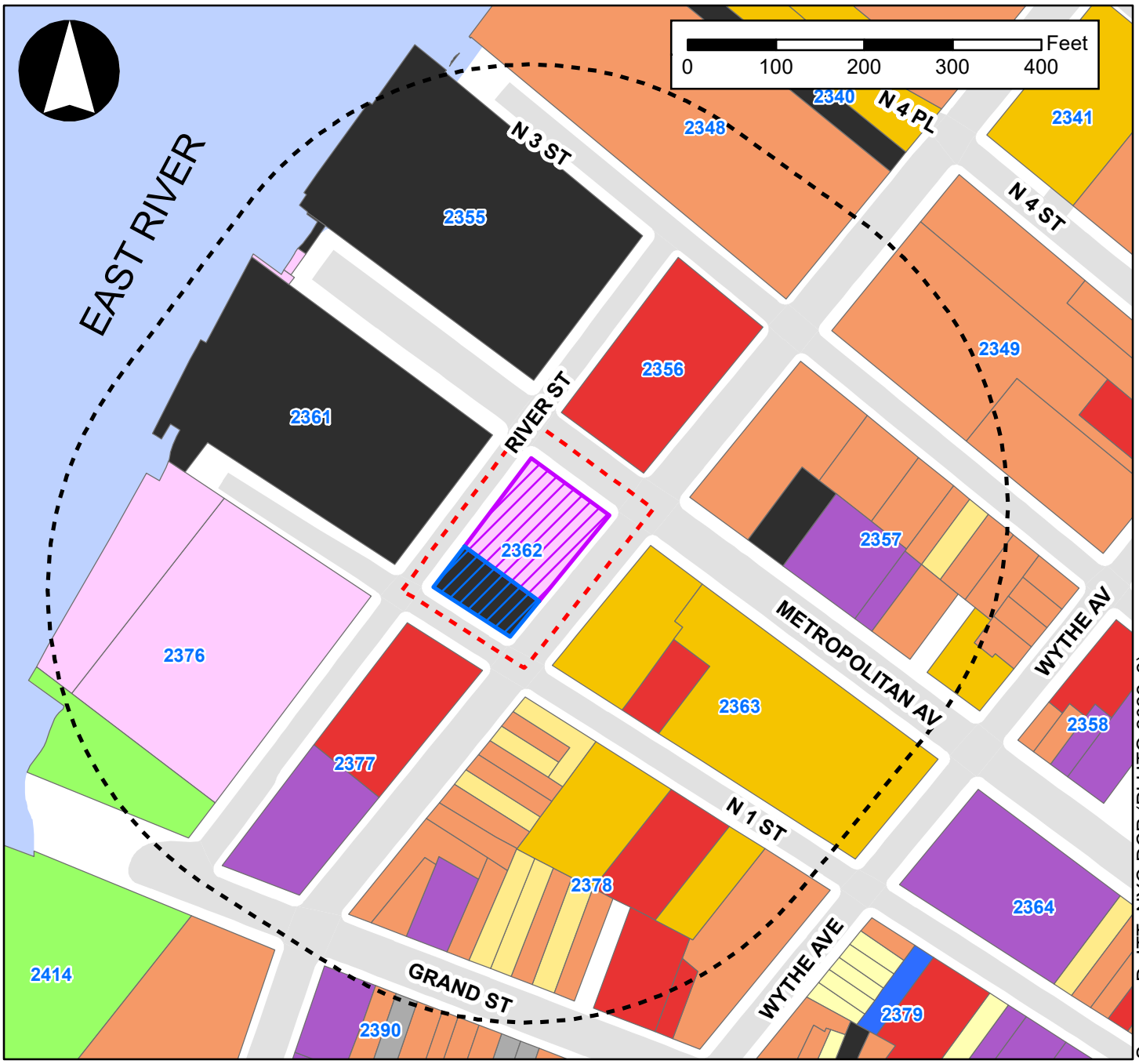
Study Area Definition

To identify and assess the direct and indirect effects of the Proposed Actions, this analysis has defined two study areas within which the Proposed Actions would have the potential to affect land use or land use trends. Following guidance provided in the *CEQR Technical Manual*, these include a primary study area, consisting of the Project Area (Applicant's Projected Development Site 1 and non-Applicant owned Projected Development Site 2) which would be directly affected by the Proposed Actions, and a secondary study area encompassing properties that have the potential to experience indirect impacts as a result of the Proposed Actions. According to the *CEQR Technical Manual*, the appropriate size of the secondary study area for land use, zoning, and public policy is related to the type and size of the proposed development, as well as the location and context of the area that could be affected by the project. Study area boundaries vary according to these factors, with suggested study areas ranging from 400 feet for a small project to a ½-mile for a very large project. Given the geographic scope of the Proposed Actions, and the scale of the Applicant's Proposed Development relative to the density of the surrounding area, as well as the anticipated development of Projected Development Site 2, a 400-foot radius from the Project Area has been selected as the secondary study area. As shown in **Figure C-1**, the secondary study area boundary generally extends to lots fronting North 3rd Street to the north, Wythe Avenue to the east, Grand Street to the south, and lots fronting the East River to the west.

Data Sources

Existing land uses were identified through review of a combination of sources, including the New York City (Primary Land Use Tax Lot Output (PLUTO™) 22v1 shapefiles and online Geographic Information Systems (GIS) databases such as the New York City Zoning and Land Use Map (ZoLa), developed by the NYC Department of City Planning. Other publications and approved environmental review documents that have been completed for projects in the area were also consulted. NYC Zoning Maps and the Zoning Resolution of the City of New York were consulted to describe existing zoning districts in the land use study area, and provided the basis for the zoning evaluation of the future No-Action and With-Action

Figure C-1
Land Use



Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)

Land Use

- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utilities
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land

conditions. Research was conducted to identify relevant public policies recognized by the NYC Department of City Planning (DCP) and other city agencies that pertain to the study areas.

IV. EXISTING CONDITIONS

Land Use

Primary Study Area/Project Area

The Primary Study Area is defined as the area that would be directly affected by the Proposed Actions. The Primary Study Area for this analysis is the area affected by the proposed zoning map amendment and zoning text amendment (the "Project Area"), which consists of the Applicant's Projected Development Site 1 (Block 2362; Lot 1) and the non-Applicant-owned Projected Development Site 2 (Block 2362; Lot 3) located in the Williamsburg neighborhood of Brooklyn near the East River. The two Projected Development Sites make up the entirety of Block 2362. As shown in **Figure C-1**, the Projected Development Sites are bounded to the north by Metropolitan Avenue, to the east by Kent Avenue, to the south by North 1st Street, and to the west by River Street.

Currently, Projected Development Site 1 (Block 2362; Lot 1) is undeveloped and overgrown with grass. The approximately 5,472-sf site was previously occupied by a two-story full lot coverage wood frame building with a partial basement, which was demolished in 2019. Records indicate that the site was a paint and lacquer manufacturing facility (Fyn Paint & Lacquer Co., Inc.) from 1930 to 2010. The facility was a large hazardous waste generator with an assigned EPA number. The Applicant's site was accepted into the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program and Brownfield Cleanup Program (BCP), and all cleanup and remedial activities have been completed.

Projected Development Site 2 (Block 2362; Lot 3), an approximately 12,552 sf lot owned by Con Edison, was ancillary to Con Edison's North First Street Terminal (NFST), a No. 6 fuel oil storage complex that operated from the 1960s until it was decommissioned in 2012, and which is now part of the site of the planned River Ring development. Lot 3 is currently vacant and unbuilt. Lot 3 was used as the facility's office, control room, boiler house, and parking lot. The former facility was a NYSDEC Major Oil Storage Facility (MOSF) (MOSF ID No. 2-1480). Subsurface investigations were conducted on behalf of Con Edison from 1999 through 2012 in order to assess potential impact from the oil storage. NYSDEC approved the work conducted for the MOSF assessment and issued a letter on July 24, 2012 indicating that no further action (NFA) was required specifically in relation to the former MOSF.

The entire Project Area is within historic limits of the East River. The original shoreline was about a block and a half east of River Street (between what is now Kent and Wythe Avenues). By 1874, the shoreline had been extended to its fullest extent with piers extending from North 2nd Street (now known as Metropolitan Avenue) and just south of North 3rd Street, and a ferry landing at the south end of the site. Another pier was added at North 1st Street around the turn of the century.

Secondary Study Area

As detailed above, the 400-foot study area for land use is generally bounded by lots fronting North 3rd Street to the north, Wythe Avenue to the east, Grand Street to the south, and lots fronting the East River to the west. As shown in **Table C-1** below, the 400-foot study area is comprised of predominately mixed-use residential and commercial buildings (40 percent of buildings in the secondary study area) and multi-family residential buildings (21.8 percent of buildings within the secondary study area). Additionally, commercial, transportation/utility, and industrial/manufacturing uses comprise approximately 10.9, 9.1,

and 7.3 percent of the buildings in the secondary study area, respectively. As shown in **Table C-1**, the residential and mixed-use residential and commercial buildings comprise approximately 84.1 percent of total building area in the secondary study area. One lot contains an open space use (Grand Ferry Park), comprising 6 percent of total lot area in the secondary study area. As shown in **Table C-1,** approximately 25.1 percent of lot area in the secondary study area is vacant. The majority of the vacant land in the study area consists of the River Ring development sites, which are under construction. There are no public facilities and institutions or parking facility uses within the secondary study area.

TABLE C-1
Existing Land Uses within the Secondary Study Area[1]

Land Use	Number of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential	12	21.8%	100,009 sf	10.3%	305,513 sf	20.9%
One & Two-Family Residential	0	0.0%	0 sf	0.0%	0 sf	0.0%
Multi-Family Walkup Buildings	7	12.7%	18,222 sf	1.9%	30,526 sf	2.1%
Multi-Family Elevator Buildings	5	9.1%	81,787 sf	8.5%	274,987 sf	18.8%
Mixed Commercial/Residential Buildings	22	40.0%	281,866 sf	29.2%	925,424 sf	63.2%
Commercial/Office Buildings	6	10.9%	63,672 sf	6.6%	163,785 sf	11.2%
Industrial/Manufacturing	4	7.3%	30,194 sf	3.1%	58,440 sf	4.0%
Transportation/Utility	5	9.1%	189,837 sf	19.6%	10,109 sf	0.7%
Public Facilities & Institutions	0	0.0%	0 sf	0.0%	0 sf	0.0%
Open Space	1	1.8%	57,894 sf	6.0%	1,100 sf	0.1%
Parking Facilities	0	0.0%	0 sf	0.0%	0 sf	0.0%
Vacant Land	5	9.1%	243,028 sf	25.1%	0 sf	0.0%
All Others or No Data	0	0.0%	0 sf	0.0%	0 sf	0.0%
Total	**55**	**100.0%**	**966500**	**100.0%**	**1464371**	**100.0%**

Source: NYC Map PLUTO (22v1) 2022
Notes:
[1] Includes all lots fully or partially within the secondary study area, including lots within the Project Area.

The secondary study area features a variety of lot sizes and building footprints, ranging from residential and mixed commercial and residential buildings on small, typically 25-foot-wide lots to very large residential and mixed commercial and residential condominium and loft complexes on lots that occupy significant portions of their respective blocks. In addition, the secondary study area contains a large transportation/utility use (the New York Power Authority power plant) as well as the River Ring development site, which consists of large waterfront lots that are currently vacant.

Buildings in the secondary study area range from small, one-to-four-story, residential and mixed-use buildings with rear yards to larger residential developments of four to six stories that feature high lot coverage on large lots. The historically industrial character of the surrounding area is reflected in the double-height ground floors, high ceilings, and large windows found throughout the secondary study area. The eastern portion of the secondary study area features a mix of residential and mixed-use buildings with several commercial and office buildings scattered throughout. These residential and mixed-use buildings generally range from small walk-ups with commercial ground floor uses along Kent Avenue and Grand Street in the south of the secondary study area, to larger and typically newer construction residential and mixed-use lofts in the north and east. West of Kent Avenue, commercial and transportation/utility uses

on large lots are predominate. These include the above mentioned power plant as well as two large commercial/office buildings between Kent Avenue and River Street.

There are several notable buildings within the secondary study area. The Austin Nichols House (formerly Austin, Nichols, and Co. Warehouse) at 184 Kent Avenue is a seven-story condominium building with 338 units, constructed in 1915 and converted from an industrial warehouse and distillery to residential use in 2010. The building received a New York City Landmarks Preservation Commission (LPC) designation in 2005, but it was overturned in 2006. Recently-completed 200 Kent Avenue is a six-story commercial and office building featuring a Trader Joe's grocery store. Beyond the secondary study area, other notable uses include Domino Park along the East River waterfront to the south of the study area. Ten Grand Street is a 42-story mixed residential and office building completed in 2020 and located beyond the 400-foot radius, directly south of the secondary study area adjacent to Domino Park. One North 4th Street is a 40-story residential high-rise building completed in 2014, outside of the secondary study area and to the north.

Directly to the west of the Project Area within the secondary study area, two large lots comprising the entirety of Blocks 2355 and 2361 make up the River Ring development sites. Facilitated by a rezoning adopted in 2021, mixed-use development will contain approximately 1,050 DUs, commercial and community facility uses within two buildings, as well as a 2.9-acre public waterfront open space. By the 2025 analysis year, the north tower of the River Ring development as well as approximately 2.9 acres of new waterfront public space will be completed.

Zoning

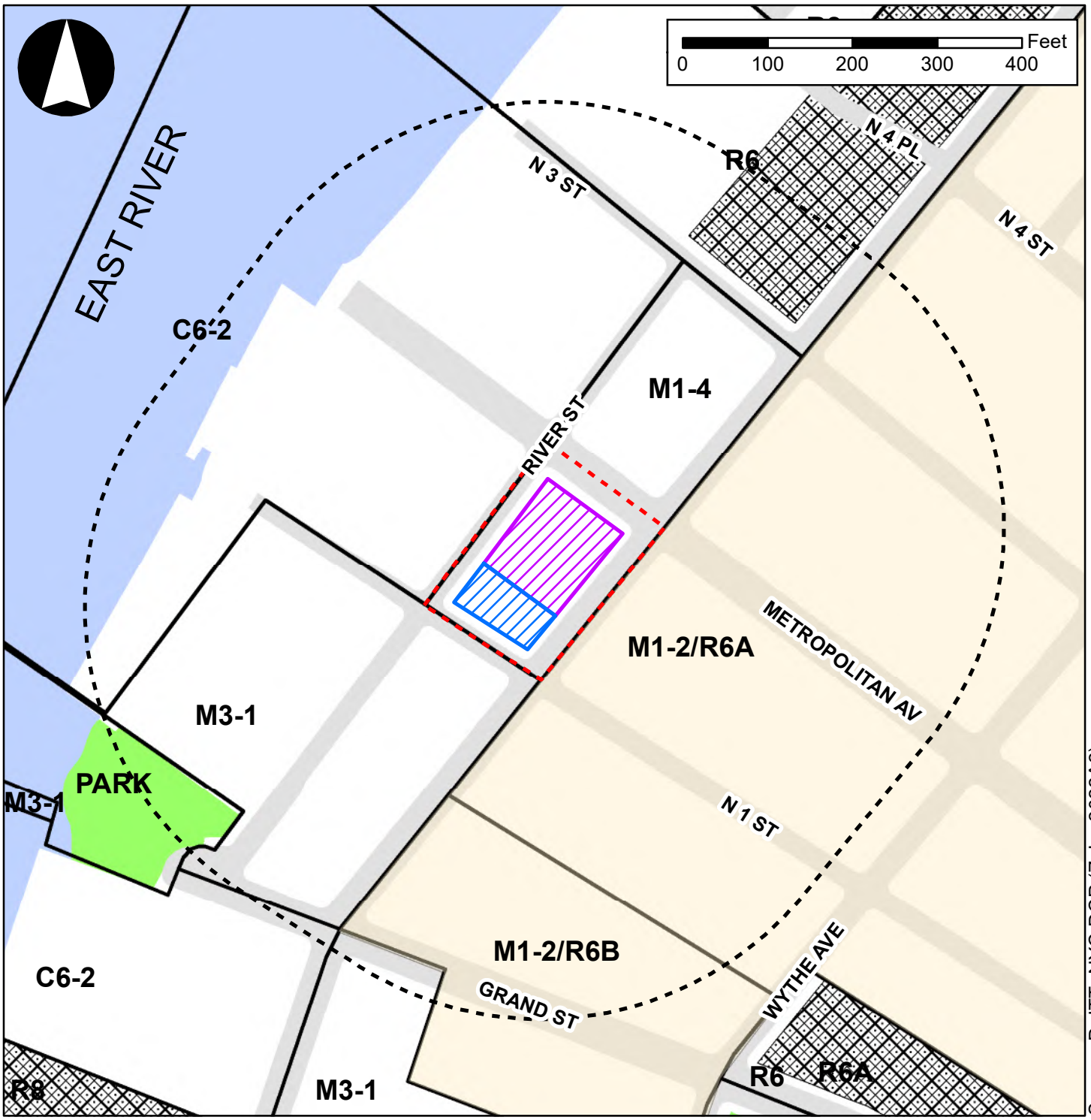
Primary Study Area/Project Area

The Project Area is located within a M1-4 zoning district. As shown in **Figure C-2**, the M1-4 district extends from River Street to Kent Avenue, between North 1st Street and North 3rd Street. M1-4 districts are light manufacturing districts, which have high performance standards and often serve as buffers separating adjacent residential or commercial districts from M2 and M3 medium and heavy manufacturing districts. The area to the north and east of the Project Area was rezoned with residential, commercial, and special mixed-use districts as a result of the 2005 Williamsburg rezoning. The Project Area, along with lots west of Kent Avenue between Grand Street and North 1st Street, were not included in the 2005 rezoning due to the presence of Con Edison utility uses on Projected Development Site 2 as well as nearby lots.

The Project Area was rezoned from M3-1 to M1-4 as a result of the River Ring Rezoning in 2021. The River Ring Rezoning sought to facilitate ongoing residential development trends along the Williamsburg waterfront, a formerly industrial neighborhood. The rezoning of the adjacent Block 2362 (the Project Area) from M3-1 to M1-4 as a result of the River Ring rezoning represented an effort to reduce the presence and potential for heavy industrial uses near the dense existing residential uses within the area and proposed under the River Ring development. Compared to M3-1 districts, M1-4 districts have strict performance standards for industrial uses and allow community facility uses.

M1 districts are often buffers between M2 or M3 districts and adjacent residential or commercial districts, and typically include light industrial uses, like repair shops and storage facilities. Nearly all industrial uses are allowed in M1 districts; office and most retail uses are also permitted. Hotels are only permitted by special permit. Certain community facilities, such as hospitals, are allowed by special permit, but houses of worship are allowed as-of-right. M1-4 districts have a maximum permitted manufacturing and

Figure C-2
Zoning



Source: DoITT; NYC DCP (ZoLa 2022A2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- Special Purpose District (MX-8)
- M3-1 Zoning District
- C2-4
- Open Space

commercial FAR of 2.0 and community facility FAR of 6.5. Accessory parking is not required for most uses. Requirements for loading berths differ according to district, size, and type of use.

Secondary Study Area

As shown in **Figure C-2,** the 400-foot study area includes a variety of residential, commercial, and manufacturing zoning districts, mixed-use districts, as well as several commercial overlays. Each zoning district's regulations are summarized in **Table C-2** and detailed below.

MX-8 (M1-2/R6A, M1-2/R6B)

The Greenpoint-Williamsburg Special Mixed Use District, designated MX-8 on the Zoning Map, was established in 2005 to encourage investment in, and enhance the vitality of, existing neighborhoods with mixed residential and industrial uses in close proximity, and create expanded opportunities for new mixed-use communities. As a result of the 2005 rezoning, new residential and non-residential uses (commercial, community facility, and light industrial) including Use Groups 16, 17 and 18 can be developed as-of-right and can be located side-by-side or within the same building. Within MX districts, residential uses are generally subject to the bulk controls of the governing residence district; commercial, industrial, and community facility uses are subject to the M1 district bulk controls, except that community facilities are subject to residential FAR limits. Most light industrial uses are permitted in each MX district as-of-right, others are subject to restrictions, and Use Group 18 uses are excluded altogether, except for small breweries.

As shown in **Figure C-2**, the Greenpoint-Williamsburg Special Mixed Use District is mapped to the south and east of the secondary study area. Within the secondary study area, the Special Mixed-Use District extends as far west as Kent Avenue. Refer to **Table C-2** for specific density permitted within each mixed-use sub-district.

R6

An R6 zoning district is mapped in the area north of the Project Area between North 3rd and North 4th streets, west of Kent Avenue. R6 zoning districts are medium-density residential districts ranging from large-scale "tower in the park" developments to neighborhoods with a diverse mix of building types. R6 districts have a maximum FAR of 2.43 with a maximum building height governed by a sky exposure plane, which begins 60 feet above the street line. Parking is required for 70 percent of dwelling units in R6 zoning districts. Developments in the R6 district mapped with Inclusionary Housing within 100 feet of a wide street can reach a maximum FAR of 3.6. Developments in the R6 district mapped with Inclusionary Housing along narrow streets can reach a maximum FAR of 2.43.

C6-2

A portion of the waterfront south of Grand Street as well as the River Ring development site west of River Street are zoned C6-2 (refer to **Figure C-2**). The C6-2 district is a high-density commercial district that is typically mapped outside of the city's central business cores. The C6-2 district is a non-contextual district that permits a maximum commercial FAR of 6.0 (refer to **Table C-2**). Commercial uses have no required parking. The C6-2 district has a R8 equivalent (refer to the discussion above for the R8 district for more

details) and permits a maximum residential FAR of 7.2 and a maximum community facility FAR of 6.5. Parking is required for 40 percent of dwelling units.

TABLE C-2
Existing Zoning within the Secondary Study Area

Zoning District	Building Type	Permitted Use Groups	Maximum FAR
M1-2/R6A	Special Mixed Use District	Refer to ZR 123-20	R: 3.0 R (IH): 3.6 C: 2.0 CF: 3.0 M: 2.0
M1-2/R6B	Special Mixed Use District	Refer to ZR 123-20	R: 2.0 R (IH): 2.2 C: 2.0 CF: 2.0 M: 2.0
R6	Medium-Density Residential	1-4	R: 2.43 R (IH): 3.6 CF: 4.8
C6-2	High-Density Commercial	1-12	R: 6.02-7.20 C: 6.0 CF: 6.5
M1-4	Light Manufacturing	4-14, 16	M: 2.0 CF: 6.5 C: 2.0
M3-1	Heavy Manufacturing	6-14, 16-18	M: 2.0 C: 2.0
C2-4 Overlay	Local Service Commercial Overlay	1-9, 14	C: 2.0

Notes: Refer to **Figure C-2**.

M3-1

An M3-1 district is mapped directly south of the Project Area, extending west of River Street and as far south as Grand Street. The M3-1 district is a heavy manufacturing district that is intended for uses that generate noise, traffic, or pollutants. Typical uses include power plants, solid waste transfer facilities and recycling plants, and fuel supply depots. Historically, M3 districts were located near the waterfront away from residential areas. However, in recent years, rezonings along the waterfront have reduced much of the manufacturing zoned areas and converted them to residential and commercial zones as the demand for housing has increased. The M3-1 zoning district has a maximum base height of 60 feet. Parking varies by use. For commercial retail uses, one accessory parking space is required per 300 sf of floor area. For industrial and manufacturing uses, one accessory parking space is required per three employees or 1 per 1,000 sf of floor area, whichever would require a larger number of spaces.

COMMERCIAL OVERLAYS

Commercial overlays are mapped within residential districts along streets that serve local retail needs. As shown in **Figure C-2**, C2-4 commercial overlays are mapped in the secondary study area on portions of Kent Avenue and Grand Street. Commercial overlays are mapped within residence districts along streets that serve local retail needs. In residential areas R6 through R10, commercial overlays provide a maximum commercial FAR of 2.0. Overlay districts differ from other commercial districts in that residential bulk is governed by the residence district within which the overlay is mapped. In mixed buildings, commercial

uses are limited to one or two floors, and must always be located below the residential uses. Typical commercial uses in overlays include neighborhood grocery stores, restaurants, and beauty parlors. C2 districts permit a slightly wider range of uses, such as funeral homes and repair services.

WATERFRONT ACCESS PLAN BK-1 (WAP BK-1): GREENPOINT-WILLIAMSBURG

As shown in **Figure C-3**, the Greenpoint-Williamsburg Waterfront Access Plan Area (WAP) is mapped to the north of the Project Area, covering a portion of the secondary study area. The Greenpoint-Williamsburg WAP, also known as WAP BK-1, was established as part of the 2005 Greenpoint-Williamsburg Rezoning and formalized within the Zoning Resolution. The Greenpoint-Williamsburg WAP identifies specific locations for required waterfront public access areas on private development parcels; establishes requirements for widened shore public walkways, supplemental public access areas, parks, and plazas; allows flexibility for different shore treatments and quality landscape design; and establishes parameters for consistency of design along the waterfront. It also specifies the locations of upland connections and visual corridors to be established as waterfront parcels are developed. As with most developments on waterfront blocks, developments on properties in the WAP BK-1 require certifications from the Chair of the CPC.

Public Policy

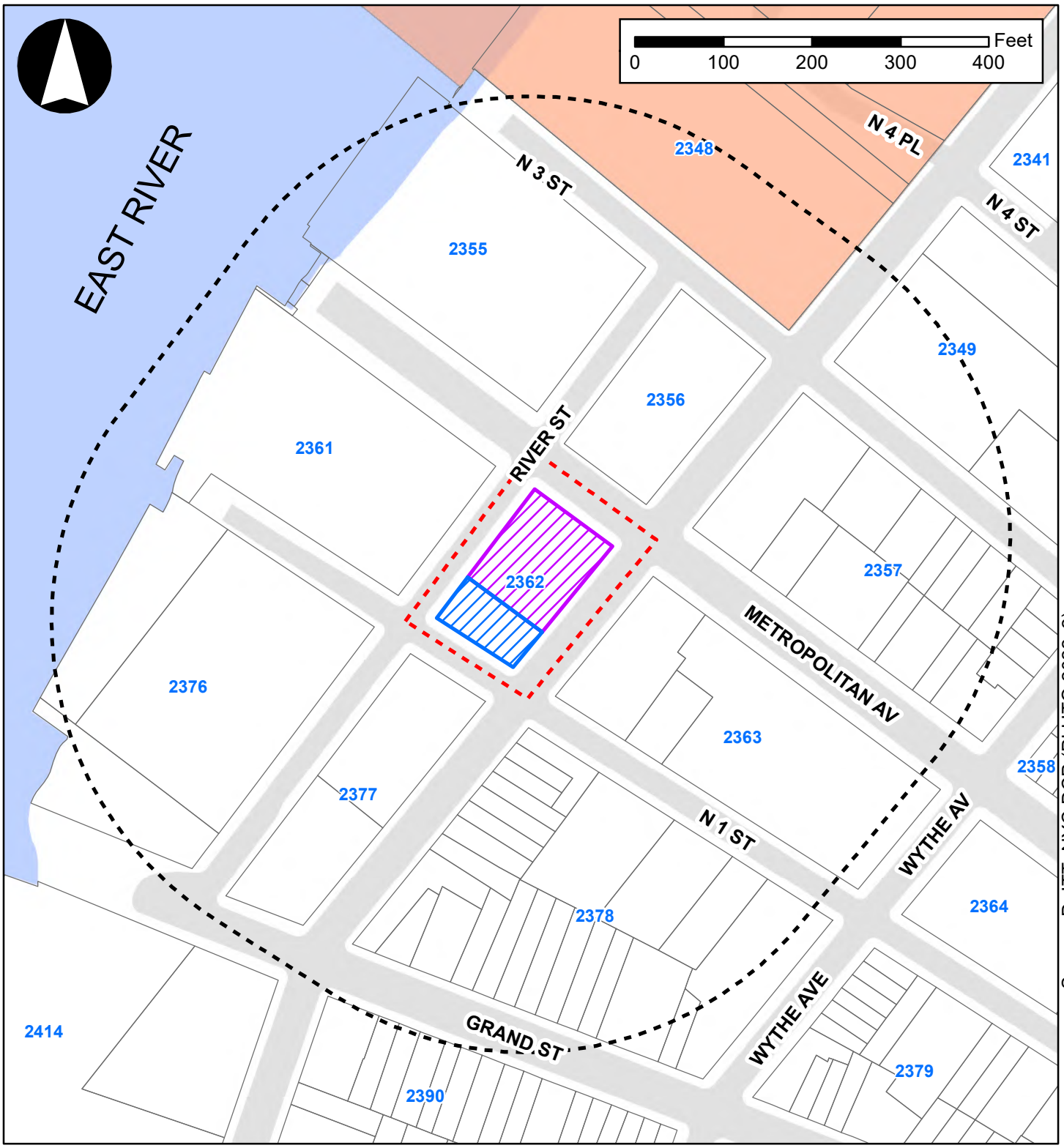
In addition to zoning, officially adopted public policies also describe the intended use applicable to an area in New York City. These include Urban Renewal Plans, 197-a Plans, Industrial Business Zones (IBZs), the New York City Comprehensive Waterfront Plan, the Criteria for the Location of City Facilities ("Fair Share" criteria), Solid Waste Management Plan, Business Improvement Districts ("BIDs"), the New York City Landmarks Law, the Waterfront Revitalization Program ("WRP"), and Sustainability, as defined by PlaNYC/OneNYC. Some of these policies have regulatory status, while others describe general goals. They can help define the existing and future context of the land use and zoning of an area.

The Project Area and portions of the 400-foot secondary study area are located within the Williamsburg 197-a Plan Boundary and the Coastal Zone Boundary.

Housing New York

On May 5, 2014, the City released *Housing New York*, a five-borough, ten-year strategy to build and preserve affordable housing throughout New York City in coordination with strategic infrastructure improvements to foster a more equitable and livable New York City through an extensive community engagement process. The plan outlines more than 50 initiatives to support the City's goal of building or preserving 200,000 units of high-quality affordable housing to meet the needs of more than 500,000 people by 2024. The plan emphasizes affordability for a wide range of incomes, with the program serving households ranging from middle- to extremely low-income (under $25,150 for a family of four). The plan, which was created through coordination with 13 agencies and with input from more than 200 individual stakeholders, outlines more than 50 initiatives to accelerate affordable construction, protect tenants, and deliver more value from affordable housing. The plan intends to do this through five guiding policies and principles: (1) fostering diverse, livable neighborhoods; (2) preserving the affordability and quality of the existing housing stock; (3) building new affordable housing for all New Yorkers; (4) promoting homeless, senior, supportive, and accessible housing; and (5) refining City financing tools and expanding funding sources for affordable housing. Housing New York further calls for fifteen neighborhood studies to be undertaken in communities across the five boroughs that offer opportunities for affordable housing.

Figure C-3
Waterfront Access Plan



Source: DoITT; NYC DCP (PLUTO 2022v2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- Waterfront Access Plan Area

Subsequently, on October 24, 2017, the City released *Housing New York 2.0*, which increased the affordable housing goal to 300,000 units by 2026. The updated and expanded plan outlines six goals: (1) creating more homes for seniors; (2) helping New Yorkers buy a piece of their neighborhoods; (3) building a firewall against displacement; (4) protecting affordability at Mitchell-Lama buildings; (5) capitalizing on advances in technology and innovative design to expand modular building and micro-units; and (6) unlocking the potential of vacant lots.

Williamsburg Waterfront 197-a Plan

The Williamsburg Waterfront 197-a Plan (proposed in 1998, and adopted in 2002) focuses on the East River waterfronts of three neighborhoods in the southern portion of Brooklyn Community District (CD) 1: Northside, Southside, and South Williamsburg. The Williamsburg Waterfront 197-a Plan area extends south from Bushwick Inlet (North 14th Street) to the point at which the BQE passes the Brooklyn Navy Yard, and is generally two blocks deep along the waterfront. The planning area extends farther inland at two points to connect to public open spaces: McCarren Park to the north and Continental Army Plaza at the foot of the Williamsburg Bridge in the central section of the area. As shown in **Figure C-4**, the Project Area and secondary study area are located within the Williamsburg Waterfront 197-a Plan.

The major goals of the Williamsburg Waterfront 197-a Plan were to: increase waterfront access and public open space; encourage growth along the waterfront consistent with the scale and character of adjacent neighborhoods; foster mixed-use development in the Northside and Southside and residential development in South Williamsburg; promote a clean and safe living and working environment; promote local economic development that provides jobs and strengthens the residential and retail sectors; and support and strengthen existing ethnic and income diversity. The plan's recommendations were largely addressed in the 2005 Greenpoint-Williamsburg Rezoning project.

Waterfront Revitalization Program (WRP)

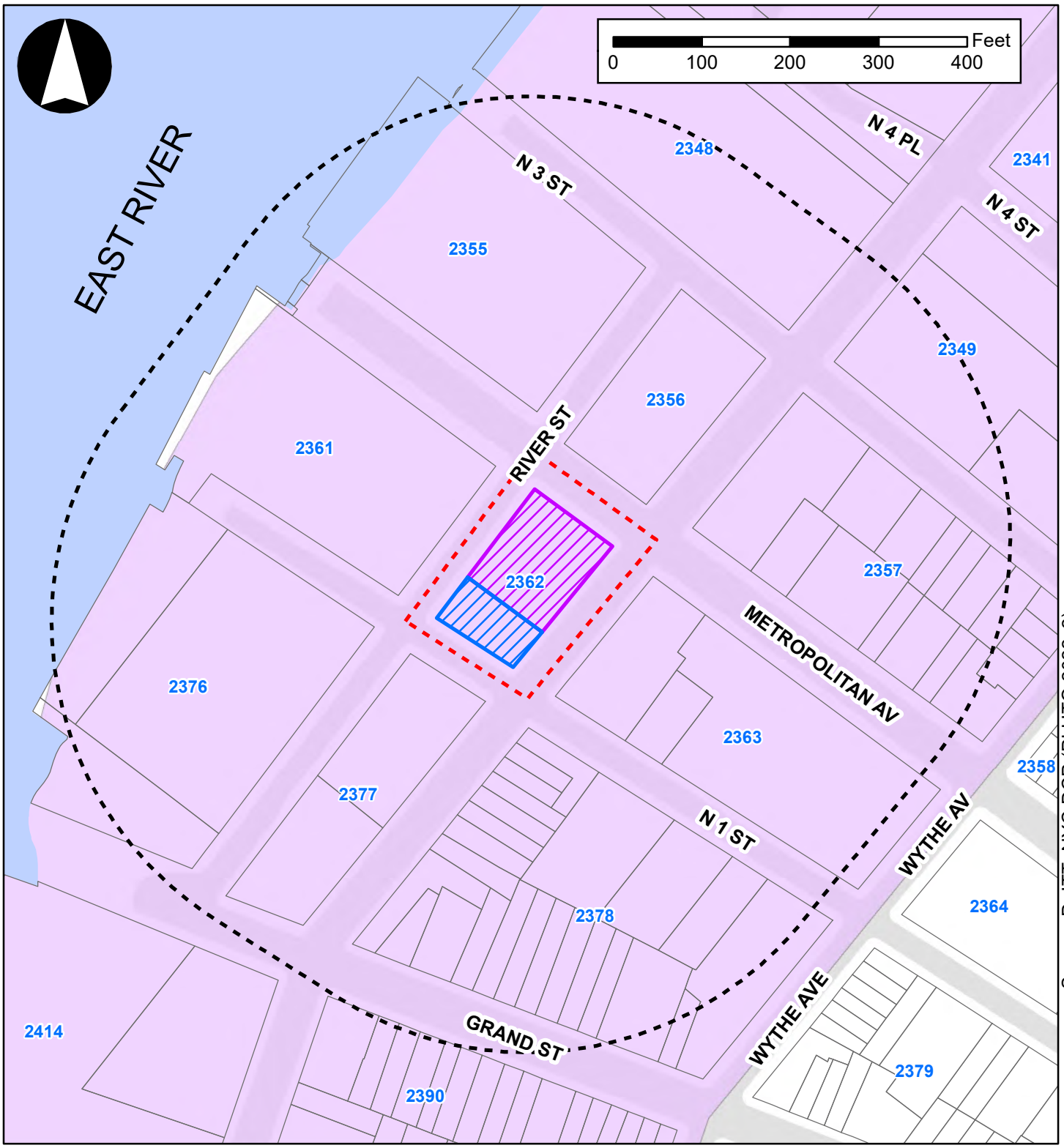
As shown in **Figure C-5**, the Project Area and the western portion of the secondary study area are located within the City's designated coastal zone. Proposed projects that are located within the designated boundaries of New York City's Coastal Zone must be assessed for their consistency with the City's WRP.

LEGISLATIVE AND REGULATORY BACKGROUND

The federal Coastal Zone Management Act (CZMA) of 1972 was enacted to support and protect the distinctive character of the waterfront and to set forth standard policies for reviewing proposed projects along coastlines. The program responded to City, State, and Federal concerns about the deterioration and inappropriate use of the waterfront. In accordance with the CZMA, New York State adopted its own Coastal Management Program (CMP), which provides for local implementation when a municipality adopts a local waterfront revitalization program (WRP), as is the case in New York City. The New York City WRP is the City's principal coastal zone management tool. The WRP was originally adopted in 1982 and approved by the New York State Department of State (NYSDOS) for inclusion in the New York State CMP. The WRP encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. NYSDOS administers the program at the State level, and DCP administers it in the City. The WRP was revised and approved by the City Council in October 1999. In August 2002, NYSDOS and federal authorities (i.e., the U.S. Army Corps of Engineers [USACE] and the U.S. Fish and Wildlife Service [USFWS]) adopted the City's ten WRP policies for most of the properties located within its boundaries.

In October 2013, the City Council approved revisions to the WRP in order to proactively advance the long-term goals laid out in *Vision 2020: The New York City Comprehensive Waterfront Plan*, released in 2011.

Figure C-4
197-a Plan Area



Source: DoITT; NYC DCP (PLUTO 2022v2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- Williamsburg 197-a Plan Area

The changes solidify New York City's leadership in the area of sustainability and climate resilience planning as one of the first major cities in the U.S. to incorporate climate change considerations into its Coastal Zone Management Program. They also promote a range of ecological objectives and strategies, facilitate interagency review of permitting to preserve and enhance maritime infrastructure, and support a thriving, sustainable working waterfront. The New York State Secretary of State approved the revisions to the WRP on February 3, 2016. The U.S. Secretary of Commerce concurred with the State's request to incorporate the WRP into the New York State CMP.

NEW YORK CITY PANEL ON CLIMATE CHANGE: PROJECTIONS

In 2013, the New York City Panel on Climate Change (NPCC) released a report (*Climate Risk Information 2013: Observations, Climate Change Projections, and Maps*) outlining New York City-specific climate change projections to help respond to climate change and accomplish PlaNYC goals. The 2013 NPCC report predicted future City temperatures, precipitations, sea levels, and extreme event frequency for the 2020s and 2050s. Subsequently, in January 2015, the Second NPCC (NPCC2) released an updated report that presented the full work of the NPCC2 from January 2013 to 2015 and includes temperature, precipitation, sea level, and extreme event frequency predictions for the 2081 to 2100 time period. While the projections will continue to be refined in the future, current projections are useful for present planning purposes and to facilitate decision-making in the present that can reduce existing and near-term risks without impeding the ability to take more informed adaptive actions in the future. Specifically, as shown in **Table C-3**, the NPCC2 report predicts that mean annual temperatures will increase by 2.0 to 2.8˚F, 4.1 to 5.7˚F, 5.3 to 8.8˚F, and 5.8 to 10.3˚F by the 2020s, 2050s, 2080s, and 2100, respectively; total annual precipitation will rise by one to eight percent, four to 11 percent, five to 13 percent, and -one to +19 percent by the 2020s, 2050s, 2080s, and 2100, respectively; sea level will rise by four to eight inches, 11 to 21 inches, 18 to 39 inches, and 22 to 50 inches by the 2020s, 2050s, 2080s, and 2100, respectively; heat waves and heavy downpours are also very likely to become more frequent, more intense, and longer in duration, with coastal flooding very likely to increase in frequency, extent, and elevation.

TABLE C-3
NPCC Projections

Time Period	Increase in Mean Annual Temperatures	Increase in Total Annual Precipitation	Increase in Sea Level
2020s	2.0 – 2.8 ˚F	1 – 8%	4 – 8 inches
2050s	4.1 – 5.7˚F	4 – 11%	11 – 21 inches
2080s	5.3 – 8.8˚F	5 – 13%	18 – 39 inches
2100	5.8 – 10.3˚F	-1 – 19%	22 – 50 inches

A WRP consistency assessment for the Proposed Actions is provided below under Section VI, "Future With the Proposed Actions." The WRP Consistency Assessment Form is provided in **Appendix B**.

Historic Districts and Landmarks

The New York City Landmarks Law of 1965 established the New York City Landmarks Preservations Commission (NYCLPC) and authorized the NYCLPC to designate individual buildings, historic districts, interior landmarks, and scenic landmarks of historical, cultural, and architectural significance. The Landmarks law defines a Historic District as an area that has a "special character or special historic or aesthetic interest," represents "one or more periods of styles of architecture typical of one or more eras in the historic of the City," and constitutes "a distinct section of the City." Historic district designation by NYCLPC protects buildings from demolition and development that is out of context or insensitive to the historic natural of the area. The Project Area does not encompass any historic or archaeological resources.

However, it is located across North 3rd Street from the S/NR-listed and LPC-eligible Austin Nichols & Co. Warehouse at 184 Kent Avenue, and is within 400 feet of the S/NR-eligible Grand Street Historic District and the Warehouse at 67-73 Metropolitan Avenue.

V. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Land Use

Primary Study Area/Project Area

Under the No-Action condition, it is assumed that Projected Development Site 1 (Block 2362, Lot 1), which is owned by the Applicant, would be developed on an as-of-right basis in accordance with the existing M1-4 zoning. It should be noted that the Applicant's site was identified as a projected development site in the River Ring Rezoning FEIS (which rezoned the Project Area from M3-1 to M1-4). As summarized in **Table C-4** below, in the No-Action scenario, Projected Development Site 1 is assumed to be developed with a 3-story mixed-use building with approximately 20,223 gsf (17,586 zsf), with approximately 6,741 gsf of commercial space (local retail), 6,741 gsf of light industrial space (warehouse), and approximately 6,741 gsf of community facility space (medical office). The RWCDS for the proposed rezoning would assume this same program in the No-Action condition.

As Projected Development Site 2 (Block 2362, Lot 3) is owned by Con Edison, and would continue to be zoned for manufacturing use in absence of the proposed actions, it is conservatively assumed to remain undeveloped in the No-Action.

TABLE C-4
No-Action Scenario on the Proposed and Projected Development Sites

Use	**Projected Development Site 1 No-Action Scenario**	**Projected Development Site 2 No-Action Scenario**
Medical Office	6,741 gsf	0 gsf
Local Retail	6,741 gsf	0 gsf
Warehouse	6,741 gsf	0 gsf
Parking	0 spaces	0 spaces
Population/Employment[1]	**Projected Development Site 1 No-Action Scenario**	**Projected Development Site 2 No-Action Scenario**
Residents	0	0
Workers	47	0

Notes:
[1] Estimate of workers is based on standard rates and are as follows: 3 retail workers per 1,000 sf, 4 office workers per 1,000 sf, 1 warehouse worker per 1,000 sf, and 1 worker per 50 parking spaces.

Secondary Study Area

Within the approximate 400-foot secondary study area, there are three known projects (other than the No-Action development that would be constructed on the Applicant's Projected Development Site 1) anticipated to be completed in the 2025 future without the Proposed Actions (refer to **Table C-5**). In total, 671 new residential units totaling 614,281 gsf, 30,508 gsf of commercial space, 56,986 gsf of community facility space, and 6,741 gsf of light manufacturing space would be developed within the 400-foot secondary study area (including the No-Action development on Projected Development Site 1) under the 2025 future No-Action conditions. The north tower of the River Ring development is one of the developments in the study area expected to be complete by the 2025 analysis year, though the entire

project including the south tower is not expected to be completed until 2027. The River Ring north tower is notable as the largest no-action development within the secondary study area, providing 592 DUs along with 50,000 gsf of community facility space and 11,500 gsf of office and local retail, and accounting for the majority of residential and community-facility development within the study area under the No-Action conditions.

Zoning

In the future without the Proposed Actions, no zoning changes are anticipated in the Project Area. The Project Area would maintain its existing M1-4 zoning designation. The proposed Mandatory Inclusionary Housing (MIH) designated area would not be mapped in the Project Area in absence of the Proposed Actions. In the future without the Proposed Actions, no known zoning changes are anticipated in the secondary study area.

Public Policy

There are no expected changes to public policy in the 400-foot study area in the 2025 future without the Proposed Actions.

TABLE C-5
No-Action Developments Within a 400-foot Radius

Project	Residential (DUs)	Residential (sf)	Commercial (sf)	Community Facility (sf)	Light Manufacturing (sf)	Parking Spaces
Primary Study Area						
Projected Development Site 1	-	-	6,741 sf	6,741	6,741	-
Secondary Study Area						
74 North 1st Street	55	65,371 sf	12,267 sf	-	-	-
61 Metropolitan Avenue	24	16,910 sf	-	245 sf	-	9
River Ring North Tower	592	532,000 sf	11,500 sf	50,000 sf	-	0[1]
TOTAL (Primary + Secondary)	**671**	**614,281 sf**	**30,508 sf**	**56,986 sf**	**6,741 sf**	**9**

Sources: NYC DOB New Building Permits; Articles from Curbed New York, YIMBY, The Real Deal
[1]River Ring is expected to provide a total of 250 parking spaces; however, the parking is expected to be completed along with the south tower after the analysis year.

VI. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

As discussed in **Attachment A, "Project Description,"** the Proposed Actions would consist of a zoning map amendment to rezone the Project Area from a M1-4 district to a M1-4/R7X Special Mixed-Use (MX) District (MX8); and a zoning text amendment to establish a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area. This section describes the land use and zoning conditions that would result from the Proposed Actions by 2025 and evaluates the potential for the Proposed Actions to result in significant adverse impacts related to land use and zoning and their consistency with the applicable public policies described earlier in this chapter.

As shown in **Table 2-6** below, compared to No-Action conditions, the Proposed Actions would result in an incremental (net) increase of 126 dwelling units (107,090 gsf), 13,083 gsf of commercial local retail, and 29-31 parking spaces. The Proposed Actions would result in a net decrease of approximately 6,741 gsf of warehouse uses and 6,741 gsf of community facilities (medical offices). **Table 2-6** also provides an estimate of the number of residents and workers generated by the Proposed Actions. As shown in the table, the Proposed Actions are estimated to result in a net increase of approximately 306 residents and an increase of 18 workers in the Project Area compared to No-Action conditions.

Land Use

Primary Study Area

Approval of the Proposed Actions would facilitate the development of two mixed-use buildings with residential, commercial, and community facility uses. Under the RWCDS, it is assumed that development resulting from the Proposed Actions would occur on Applicant-owned projected Development site 1 as well as non-Applicant-owned Projected Development Site 2.

Under the With-Action condition, the Applicant intends to develop Lot 1 (Projected Development Site 1) with a new eight-story, approximately 43,095 gsf mixed-use building including approximately 37,036 gsf of residential floor area and 6,059 gsf of commercial floor area (local retail). Under the RWCDS, it is assumed that the development would contain 44 DUs; depending on the MIH Option selected during ULURP (MIH Options 1, 2, and Workforce), either 25 percent (11 DUs) or 30 percent (13 DUs) of the residential floor area would be designated as affordable housing. Although the Applicant is proposing a building with a height of 105 feet (which maximizes the allowable FAR), for conservative analysis purposes, it is assumed under the RWCDS that the building envelope would reach the maximum height (145 feet) allowed in the proposed M1-4/R7X zoning district. The Applicant's Proposed Development would have an FAR of 6.0. No parking would be required at the Applicant's Proposed Development per ZR 25-241 and ZR 25-261.

Projected Development Site 2 at Block 2362 Lot 3, is expected to be redeveloped with an approximately 94,669 gsf mixed-use residential and commercial building containing 82 DU (70,054 gsf), and 13,765 gsf of ground floor local retail use. Up to 10,850 gsf of parking area would be provided in the cellar. Depending on the MIH Option selected, the number of permanently affordable units would either be 21 or 25. Depending on the MIH Option selected, approximately 29 or 31 accessory parking spaces would be required pursuant to the proposed zoning in a below-grade parking garage. For conservative analysis purposes, it is assumed that the non-Applicant Projected Development Site 2 would maximize the allowable zoning envelope and reach the maximum height (145 feet) allowed in the proposed M1-4/R7X zoning district. The number of units on the Applicant's Projected Development Site 1 is based on preliminary plans. For the non-Applicant Projected Development Site 2, approximately 850 gsf per dwelling unit is assumed.

Secondary Study Area

The Proposed Actions are not expected to affect land use patterns in the secondary study area. The consistency of the Proposed Actions with secondary study area land uses is discussed in the “Assessment” section, below.

TABLE 2-6
Comparison of No-Action and With-Action Development Scenarios

Use		No-Action Scenario [GSF]		With-Action Scenario [GSF]		Increment (TOTAL RWCDS)
		Projected Development Site 1	***Projected Development Site 2***	***Projected Development Site 1***	***Projected Development Site 2***	
Residential	*Affordable*	--	--	*11-13 DUs*	*21-25 DUs*	***+32 DUs - +38 DUs***
	Total	--	--	44 DUs (37,036 gsf)[2]	82 DUs (70,054 gsf)	**+126 DUs (+107,090 gsf)**
Community Facility		6,741	--	--		**-6,741 gsf**
Local Retail		6,741	--	6,059	13,765	**+13,083 gsf**
Warehousing		6,741	--	--		**-6,741 gsf**
Parking Spaces		--	--	--	29-31 spaces	**+29 spaces - +31 spaces**
Population/ Employment[1]		***Projected Development Site 1***	***Projected Development Site 2***	***Projected Development Site 1***	***Projected Development Site 2***	
Residents		0	--	106	200	**+306**
Workers		47	--	20	45	**+18**

Notes:
[1] Residential population based on the average household size in Brooklyn Community District 1 (2.43 persons per household) per the 2020 Decennial Census. Estimate of workers based on standard rates and are as follows: three employees per 1,000 sf of retail, one employee per 25 DU, three employees per 1,000 sf of community facility/medical office uses, 1 employee per 1,000 sf of warehouse uses

Assessment

PRIMARY STUDY AREA/PROJECT AREA

The Proposed Actions would not result in significant adverse impacts to land use in the Project Area. The Proposed Actions would allow a new mixed-use residential and commercial development to be constructed in an increasingly residential and mixed-use urban neighborhood where there is a strong demand for housing and local retail. Additionally, the Proposed Actions would result in the development of approximately 126 housing units, including 32 to 38 affordable housing units pursuant to the MIH program which would not be developed under No-Action conditions.

The Proposed Actions would activate an underutilized site, continuing a land use development trend in an area that has been experiencing increased residential and commercial development since the 2005 Greenpoint-Williamsburg Rezoning. The concentration of new development in this area is due to the availability of large, underutilized parcels and the desirability of the area for its proximity to transit and the waterfront. As such, the Applicant anticipates that the Proposed Actions would result in a new mixed-use development that, in addition to being appropriate for the Project Area, would complement the land use character of the 400-foot study area by redeveloping an underutilized site with a mix of affordable and market-rate residential units and local retail.

SECONDARY STUDY AREA

The Proposed Actions would not result in significant adverse impacts to land use in the secondary study area. The secondary study area, which includes a diverse assortment of existing land uses, would not

undergo any direct land use changes as a result of the Proposed Actions; the proposed changes would be limited to the Project Area and would introduce residential and commercial uses complementary to existing secondary study area land uses. As shown in **Table C-5**, three developments are expected to be constructed in the secondary study area by the 2025 analysis year, absent the Proposed Actions. These developments are expected to introduce mixed-use residential, community facility, and commercial developments to the area. In particular, the anticipated completion of the north tower of the River Ring development by 2025 is a significant change in the study area signaling the area's capacity for new mixed-use development, especially residential uses. River Ring is anticipated to reactivate and revitalize the portion of the East River waterfront directly west of the Project Area, especially when considering the provision of 2.9 acres of open space, which is expected to open to the public in 2025. The development of the north tower along the waterfront paves the way for similar mixed-use development at a smaller scale upland within the Project Area. The new residential and commercial uses in the Applicant's Proposed Development would be consistent with, and complementary to, the No-Action planned developments in the secondary study area, which all reflect a neighborhood-wide trend towards residential and mixed-use development on formerly underutilized sites. As such, the Proposed Actions would support existing land use trends in the secondary study area and would not introduce any new land uses that would be incompatible with their surroundings.

Zoning

The Proposed Actions consist of a zoning map amendment to Block 2362 from an M1-4 to a M1-4/R7X Special Mixed-Use (MX) District (MX8); and a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area. No other changes to zoning are anticipated in the secondary study area as a result of the proposed action.

The anticipated residential and commercial developments as a result of the Proposed Actions would be compatible with nearby mixed-use, commercial, and residential zoning districts.

Assessment

The Proposed Actions would not result in significant adverse impacts to zoning as a result of the proposed zoning map amendment and zoning text amendment. While the existing M1-4 zoning is reflective of the fact that the Project Area and much of the surrounding area was previously used for manufacturing purposes, there is no longer a concentration of industrial activity in the area. It is also a reflection of the goals of the River Ring Rezoning, one of which was to buffer the new residential developments from potential heavy industrial uses by removing the adjacent M3-1 district formerly mapped on the Project Area. A strong demand for affordable and market-rate housing still exists throughout the area. The Proposed Actions would create an opportunity for development of new mixed-use buildings with residential (including market rate and much needed affordable units) and local retail uses. The Proposed Actions would allow the Applicant to develop uses consistent with the increasingly residential character of the Williamsburg waterfront. The proposed zoning would also allow for development at an appropriate scale between the planned River Ring waterfront sites directly to the west, and the six- and seven-story apartment buildings located directly east of the Project Area. Mapping a special mixed-use M1-4/R7X district in the Project Area would result in the development of the Project Area in a manner more consistent with existing and planned development surrounding it.

The proposed zoning text amendments would allow the creation of new affordable housing in the proposed rezoning area, helping to address affordable housing goals set forth by the City in *Housing New York: A Five-Borough, Ten-Year Plan*.

The proposed zoning changes would provide a framework for development that, as noted above, would be consistent with current land use trends and market conditions in the study area. As such, the Proposed Actions are not expected to result in significant adverse zoning impacts.

Public Policy

Assessment

HOUSING NEW YORK

The Proposed Actions would be consistent with the City's *Housing New York* plan, a five-borough, ten-year strategy to build and preserve affordable housing throughout New York City in coordination with strategic infrastructure improvements to foster a more equitable and livable New York City through an extensive community engagement process. The plan outlines more than 50 initiatives to support the administration's goal of building or preserving 200,000 units of high-quality affordable housing to meet the needs of more than 500,000 people. Subsequently, on October 24, 2017, the City released *Housing New York 2.0*, which increased the affordable housing goal to 300,000 units by 2026. The updated and expanded plan outlines six goals: (1) creating more homes for seniors; (2) helping New Yorkers buy a piece of their neighborhoods; (3) building a firewall against displacement; (4) protecting affordability at Mitchell-Lama buildings; (5) capitalizing on advances in technology and innovative design to expand modular building and micro-units; and (6) unlocking the potential of vacant lots. The plan emphasizes affordability for a wide range of incomes, with the program serving households ranging from middle- to extremely low-income (under $25,150 for a family of four). The plan, which was created through coordination with 13 agencies and with input from more than 200 individual stakeholders, outlines more than 50 initiatives that will accelerate affordable construction, protect tenants, and deliver more value from affordable housing. The plan intends to do this through five guiding policies and principles: fostering diverse, livable neighborhoods; preserving the affordability and quality of the existing housing stock; building new affordable housing for all New Yorkers; promoting homeless, senior, supportive, and accessible housing; and refining City financing tools and expanding funding sources for affordable housing. It is the Applicant's intention that the provision of approximately 11-13 affordable dwelling units on the Applicant-owned site (with the potential for an additional 21-25 affordable units on non-Applicant-owned Projected Development Site 2) would support the Housing New York plan, utilizing the MIH initiative which would require a portion of the residential floor area subject to the City's MIH program to remain permanently affordable. The Proposed Actions would also facilitate the residential development of the Projected Development Sites consistent with *Housing New York 2.0*'s goal of unlocking the potential of vacant lots to create additional housing.

WILLIAMSBURG WATERFRONT 197-A PLAN

The Proposed Actions would be consistent with the Williamsburg Waterfront 197-a Plan. Approval of the Proposed Actions would be in line with the recommendations of the plan. Specifically, the Projected Developments would capitalize on development opportunities near the waterfront, supporting new demand for residential and commercial uses in the area. The developments facilitated by the Proposed Actions would activate underutilized property, in the form of lots that are currently vacant and unbuilt in

a rapidly developing area. In addition, the Proposed Actions would maintain income diversity in Williamsburg by offering 25% to 30% of units of permanently affordable housing through the MIH program, depending on the option selected.

WATERFRONT REVITALIZATION PROGRAM (WRP)

As the Project Area is located within the city's designated Coastal Zone the Proposed Actions are subject to review for consistency with the policies of the WRP. The WRP includes policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form (CAF) (see **Appendix 1**) lists the WRP policies and indicates whether the Proposed Actions would promote or hinder that policy, or if that policy would not be applicable. The development facilitated by the Proposed Actions would not hinder any of the applicable WRP policies, and as such is not likely to have any adverse effect on economic development, environmental preservation, and public use of the waterfront. This section provides additional information for the policies that have been checked "promote" in the WRP CAF.

Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas.

Compliance Statement: The Project Area is an appropriate location for residential and commercial development, as it is located among a growing mix of residential, retail, office and mixed land uses including several large residential and mixed-use developments to the east and north. The Project Area is near Grand Ferry Park, and is located in an area that is well-served by existing infrastructure and public transportation. The Project Area is not located within a Significant Maritime and Industrial Area (SMIA), Special Natural Waterfront Area (SNWA), Priority Maritime Activity Zone (PMAZ), Recognized Ecological Complex (REC), or West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA), as defined in the WRP, and is therefore not located in a special area that may be inappropriate for the development of new residential or commercial uses. Furthermore, the Development Sites are not located in either the FEMA 1%-chance or 0.2%-chance annual floodplains (see **Figures C-6a and C-6b**).

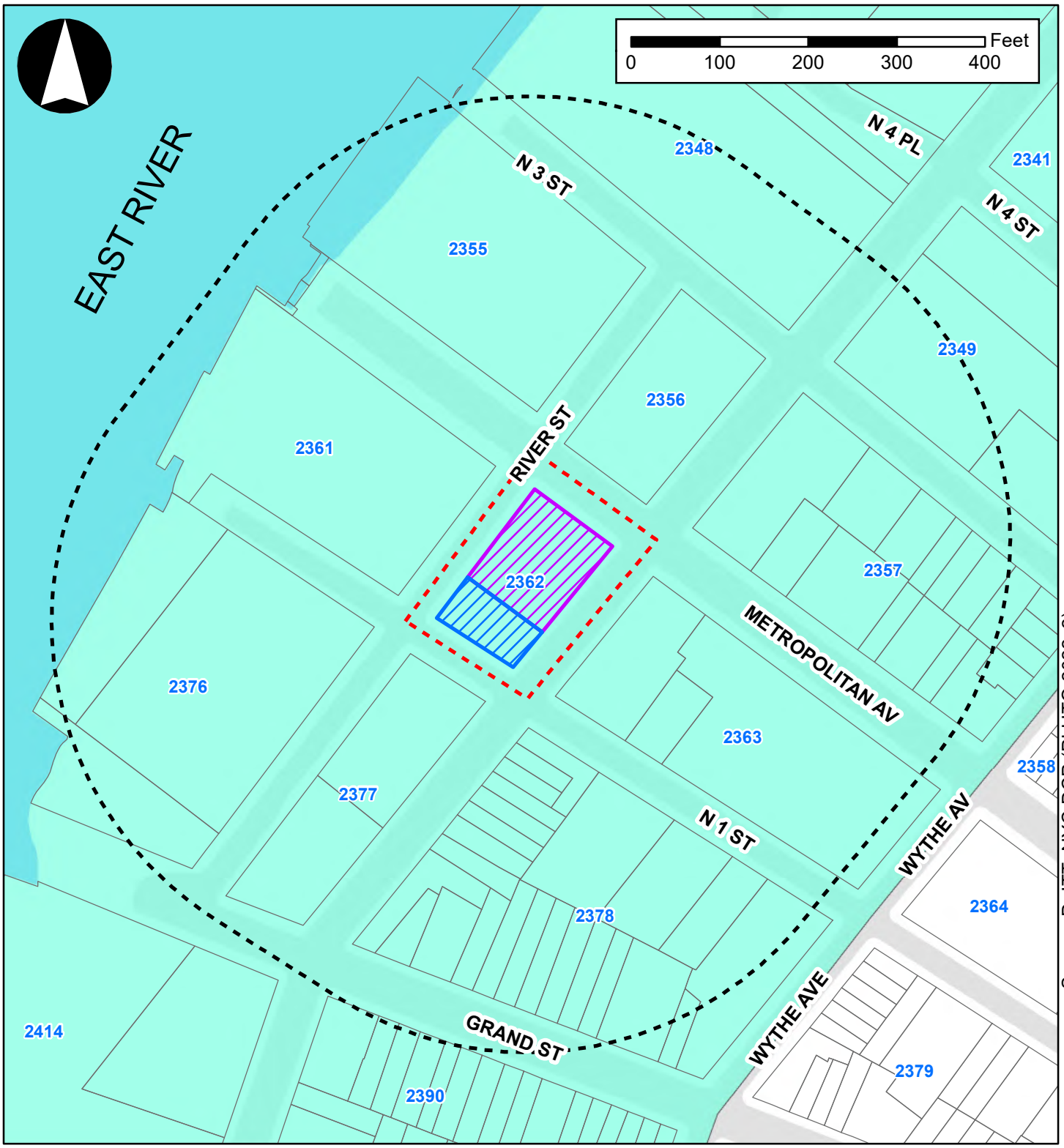
Under the With-Action condition, the Proposed Actions would facilitate the development of approximately 37,036 gsf of residential floor area and 6,059 gsf of commercial floor area supporting local retail uses on the Applicant-owned Projected Development Site 1 (Lot 1) as well as 70,054 gsf of residential floor area, 13,765 gsf of ground floor local retail commercial space, and 29 to 31 accessory parking spaces on non-Applicant-owned Projected Development Site 2. In total, there would be 126 DUs in the Project Area in the With-Action condition; 32 to 38 of the With-Action DUs would be affordable units pursuant to MIH, and 85 to 91 market-rate DUs.

For these reasons, the Proposed Actions would promote Policy 1.1 of the WRP and would facilitate residential and commercial development in an area well-suited to such development.

Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

Compliance Statement: The project would redevelop underutilized sites for residential and commercial uses in close proximity to mass transit infrastructure and would integrate the site into the surrounding area. Directly adjacent to the project site is the B32 New York City Transit (NYCT) bus route, which provides

Figure C-5
Coastal Zone

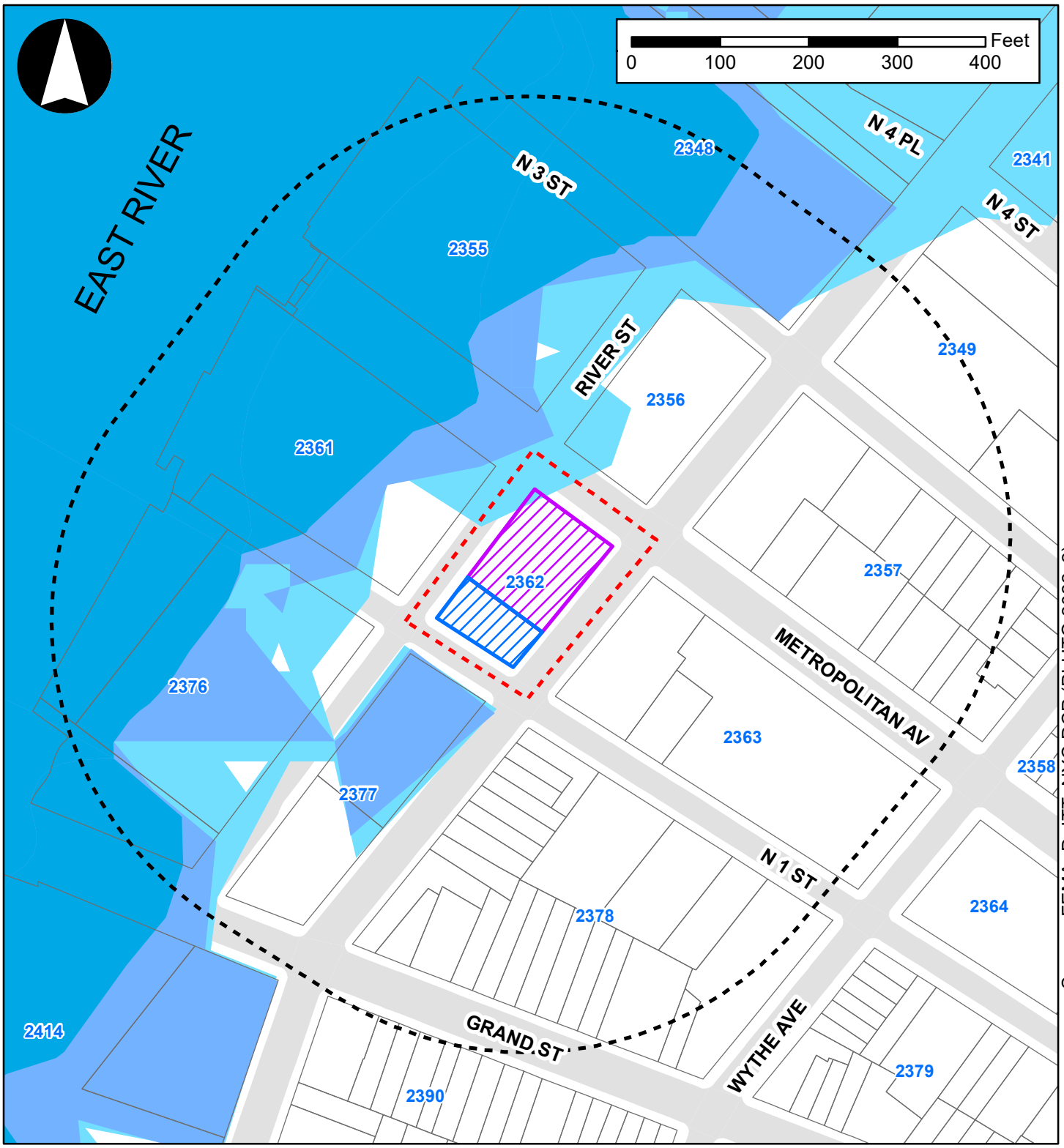


Source: DoITT; NYC DCP (PLUTO 2022v2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- NYC WRP Coastal Zone

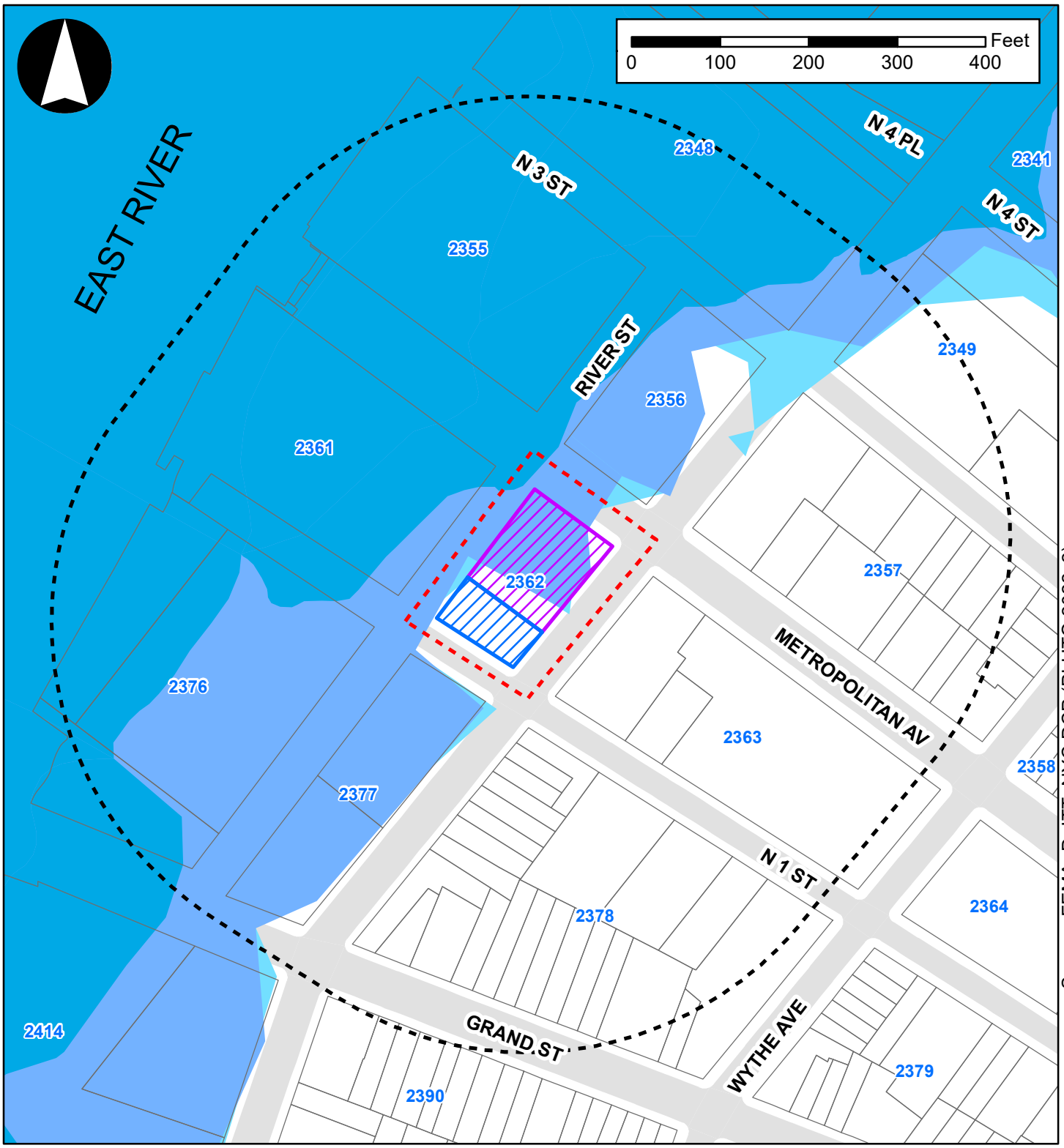
Figure C-6a
NPCC 1% Annual Chance Floodplain Projections



Legend

- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- Projected Development Site 1
- Projected Development Site 2
- 1 PCT ANNUAL CHANCE FLOOD HAZARD
- NPCC 2020s Projection
- NPCC 2050s Projection

Figure C-6b
NPCC 0.2% Annual Chance Floodplain Projections



Source: FEMA, DoITT; NYC DCP (PLUTO 2022v2)

Legend

- Project Area (Primary Study Area)
- 400-foot Radius (Secondary Study Area)
- Projected Development Site 1
- Projected Development Site 2
- 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
- NPCC 2020s Projection
- NPCC 2050s Projection

local service between Williamsburg and Long Island City. The Bedford Avenue (L) subway station is located approximately 0.5 miles east of the Project Area and is accessible via walking. The North Williamsburg NYC Ferry Landing is approximately 0.25 miles north of the Project Area. The surrounding area is served by several public open spaces including Domino Park, Bushwick Inlet Park, and Grand Ferry Park. Additional waterfront open space is in development at the nearby River Ring site. In addition, the project would include local retail space serving project occupants and the surrounding community.

Overall, the Proposed Actions would encourage development in an area adequately served by existing and future public facilities and infrastructure and would promote Policy 1.3 of the WRP.

Policy 5: Protect and improve water quality in the New York City coastal area.

Policy 5.1: Manage direct and indirect discharge to water bodies.

The Applicant's Proposed Project would improve the management and treatment of stormwater entering the East River from the project site. The Proposed Project will be required to comply with City stormwater management regulations applicable at the time of permit filing related to runoff and stormwater release rates to the combined sewer system and/or sewer outfalls, which would result in an improvement over the site's existing stormwater conditions and therefore would be beneficial to the water quality of the East River. In addition, the Applicant-owned Projected Development Site 1 at 230 Kent Avenue was investigated and remediated under the (NYSDEC) Voluntary Cleanup Program (VCP) and Brownfield Cleanup Program (BCP); and all cleanup and remedial activities have been completed (V00380, BCP site C224154). An environmental easement was granted for the site, which requires compliance with a Site Management Plan (SMP). The BCP Certificate of Completion is included in **Appendix 3**.

By facilitating development on a site that has completed the remediation process, complying with the SMP during construction and building occupation, and complying with City stormwater management regulations in the new construction, the Proposed Actions would promote Policy 5.1 of the WRP.

Policy 6: Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

Compliance Statement: The Proposed Project has considered potential risks related to coastal flooding to features specific to the Proposed Project, including, but not limited to, the location of critical mechanical, electrical, and plumbing ("MEP") services and residential dwelling units. As outlined in The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document, for site-specific actions that include (or would facilitate the development of) new vulnerable, critical, or potentially hazardous features, the detailed methodology approach should be utilized to assess a project or action's consistency with Policy 6.2.

STEP 1: IDENTIFY VULNERABILITIES AND CONSEQUENCES

The goal of this first step is to assess the project's vulnerabilities to future coastal hazards and what potential consequences may result.

Based on the Federal Emergency Management Agency ("FEMA") 2015 Preliminary Flood Insurance Rate Maps (PFIRMs), the primary study area intersects the 500-year flood zone (Zone X)[3] and would be located outside of the limit of the 100-year flood zone (Zone AE) (refer to **Figure C-6a and Figure C-6b**). However, Projected Development Site 1 and Projected Development Site 2 do not currently intersect either the 100-year or 500-year flood zones, and development would not occur within the current flood zone as a result of the Proposed Actions. Therefore, the primary study area does not have a Base Flood Elevation (BFE) or a Design Flood Elevation (DFE). The BFE of the nearby 100-year flood zone is approximately 12 feet (NAVD88); the Proposed Project's height measurements would be made from this base plane.

In June 2013, FEMA issued Preliminary Work Maps for New York City to show coastal flood hazard data. Subsequently, the city made immediate accommodations to zoning regulations and upgrades to the New York City Building Code to ensure that new construction would be built to these higher standards. In January 2015, FEMA issued Revised PFIRMs for New York City, which are considered the best available flood hazard data, replacing the FEMA Preliminary Work Maps. As noted previously, under the 2015 PFIRMs, the primary study area boundary interects the 500-year flood zone (Shaded Zone X), although the Applicant's Projected Development Site 1 does not (refer to **Figure C-6b**).

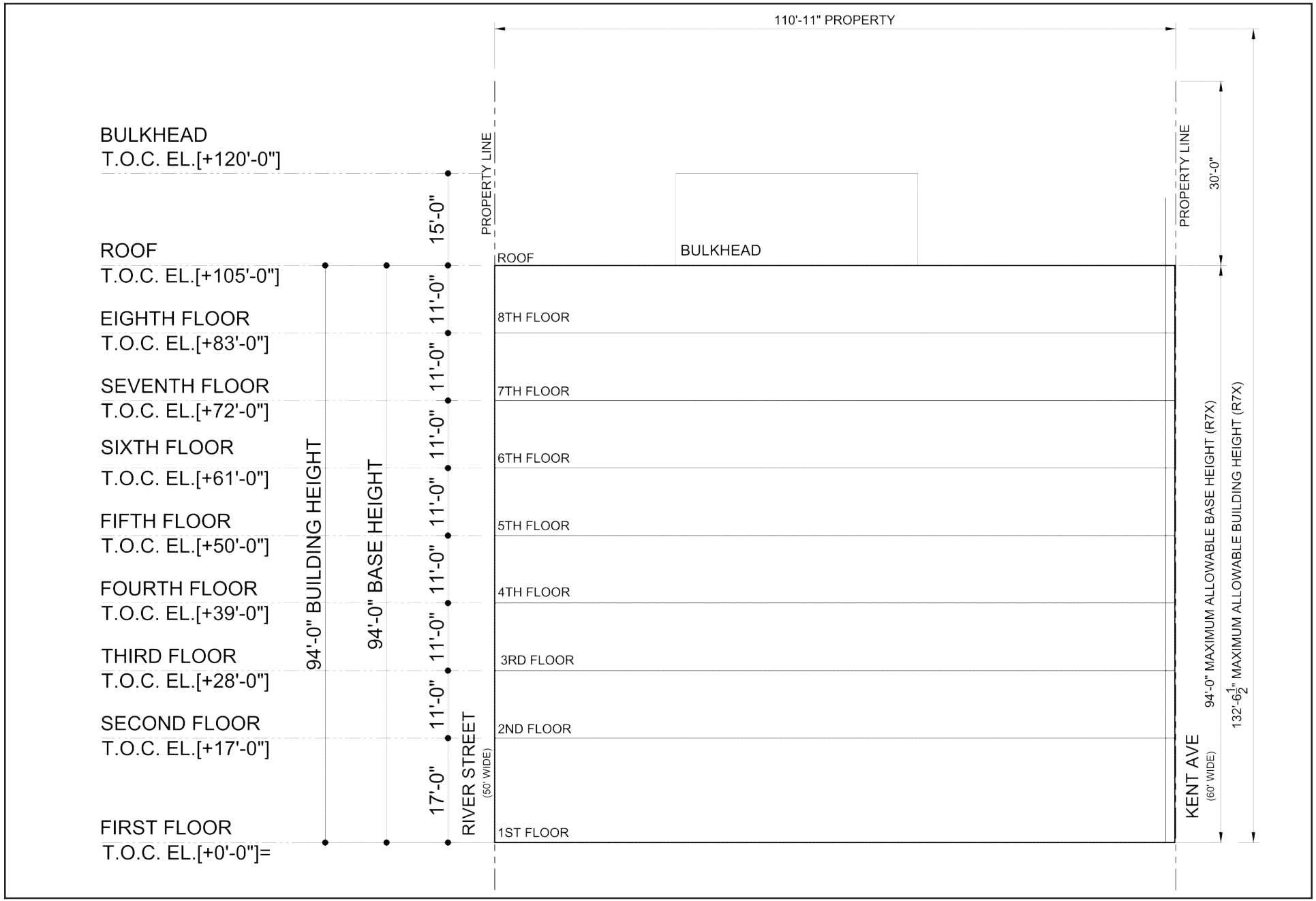
The New York city Panel on Climate Change ("NPCC") recommends assessing the impacts of projected sea level rise on the lifespan of projects. While the NPCC developed a series of flood projection maps that incorporate sea level rise projections with FEMA's January 2015 FIRMs, because of limitations in the accuracy of flood projections, the NPCC recommends that these flood projection maps not be used to judge site-specific risks. However, in general, the NPCC estimates that in the New York City area, sea level will rise up to a high estimate of 10 inches by the 2020s, and up to a high estimate of 30 inches by the 2050s. As such, areas not currently within the currently applicable 100-year and 500-year flood zones will be in the future based on the NPCC projections. Furthermore, the NPCC projects that the frequency, extent, and height of 100-year and 500-year floods will increase by the 2050s.

As illustrated **in Figure C-6a and Figure C6-b,** the primary study area is anticipated to intersect the boundary of the future projected 100-year and 500-year flood zone by the 2050s, as published by the NPCC. In the 2020s, the 500-year flood zone boundary is projected to reach the non-Applicant-owned Projected Development Site 2, while none of the primary study area is projected to be within the 100-year flood zone. In the 2050s, both Projected Development Sites are projected to be within the 500-year flood zone, while only the non-Applicant owned Projected Development Site 2 is projected to be within the 100-year flood zone.

Coastal storms could bring high winds in addition to flood hazards to the primary study area. However, the primary study area is not located within a Coastal A or V zone. The Proposed Project is not expected to make flooding on adjacent properties worse, nor would the Proposed Project conflict with other plans for flood protection on adjacent properties.

The East River, which is the body of water in the vicinity of the Primary Study Area, is a tidal estuary. Therefore, the flood elevation is controlled by the tidal conditions within New York Bay, Long Island Sound, and the Atlantic Ocean. Because the coastal floodplain adjacent to the primary study area is affected by coastal flooding, rather than local or fluvial flooding, the operation of the Proposed Project would not exacerbate flooding conditions on or near the primary study area. Furthermore, coastal floodplains are

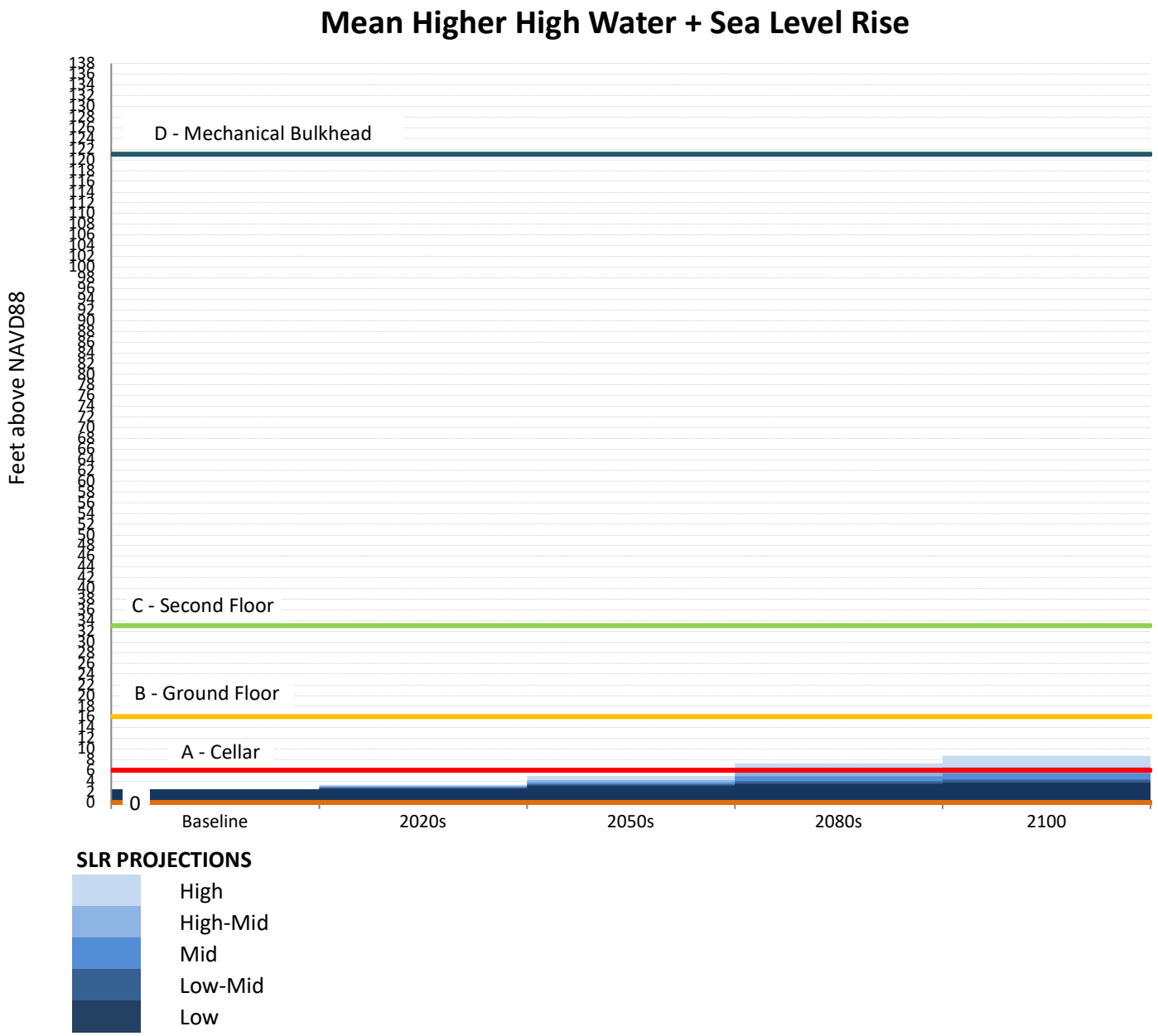
[3] As shown in **Figure C-6b**, the Project Area boundary technically extends to the street centerlines surrounding the project block, therefore falling partially within the 500-year flood zone (Zone X). However, development would not occur in Zone X given that it does not touch either Projected Development Site.



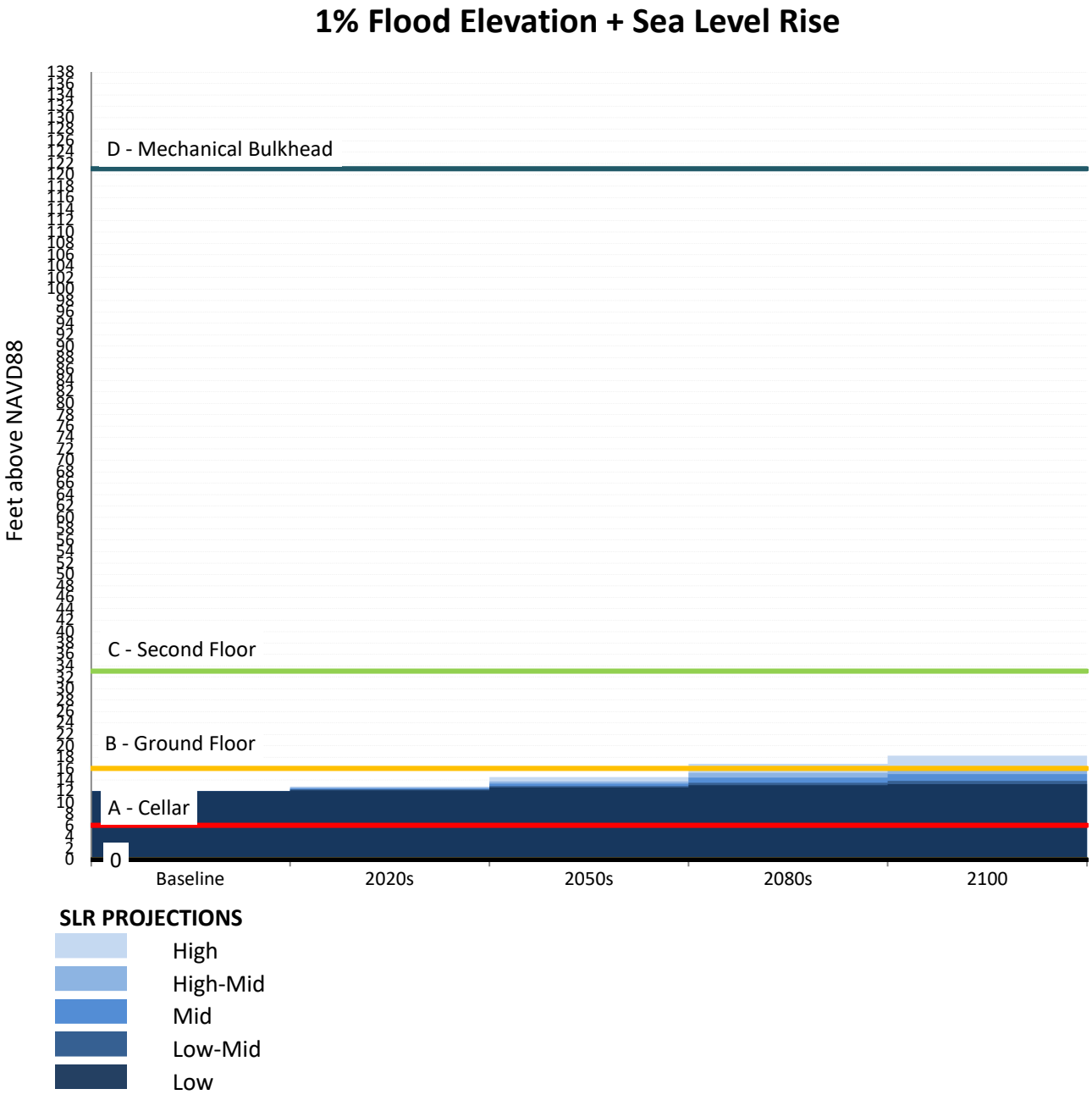
For Illustrative Purposes Only

Figure C-7
Applicant Site - Illustrative Section

WRP Policy 6.2 - Mean Higher High Water + Sea Level Rise



WRP Policy 6.2 - 1% Flood Elevation + Sea Level Rise



High Tide 2020s



LEGEND:

Primary Study Area (Proposed Rezoning Area)

High Tide 2020s

Low Estimate (2 inches SLR)

Low-Mid Estimate (4 inches SLR)

Middle Estimate (6 inches SLR)

Mid-High Estimate (8 inches SLR)

High Estimate (10 inches SLR)

Figure C-10b
High Tide 2050s



LEGEND:

Primary Study Area (Proposed Rezoning Area)

High Tide 2050s

Low Estimate (2 inches SLR)

Low-Mid Estimate (4 inches SLR)

Middle Estimate (6 inches SLR)

Mid-High Estimate (8 inches SLR)

High Estimate (10 inches SLR)

Figure C-10c
High Tide 2080s



LEGEND:

Primary Study Area (Proposed Rezoning Area)

High Tide 2080s

Low Estimate (2 inches SLR)

Low-Mid Estimate (4 inches SLR)

Middle Estimate (6 inches SLR)

Mid-High Estimate (8 inches SLR)

High Estimate (10 inches SLR)

influenced by astronomic tide and meteorological forces (e.g., northeasters and hurricanes) and not by fluvial flooding (e.g., rivers and streams overflowing their banks), and, as such, are not affected by the placement of obstructions (e.g., buildings) within the coastal floodplain. As shown in **Figures C-10a through C-10d**, between the 2020s and 2100s, the Proposed Project would not fall within an area that is anticipated to be impacted by tidal flooding.

Per 2021 *CEQR Technical Manual* guidance, the Flood Elevation Worksheet was prepared for the Proposed Project at the Applicant-owned Projected Development Site 1, and is provided in **Appendix 1**.

Building elevations for the Proposed Project are shown in **Figure C-7**. As shown in the Mean Higher High Water + Sea Level Rise graph (**Figure C-8**), only the Proposed Project's cellar, a vulnerable feature, would be located below the elevation of the Mean Higher High Water for part of the Proposed Project's lifespan. This would only occur in the 2080s and 2100s. No other critical and vulnerable features of the Proposed Project are anticipated to be located below the elevation of the Mean Higher High Water at any point over the Proposed Project's lifespan.

As shown in the 1% Flood Elevation + Sea Level Rise graph (**Figure C-9**), the Proposed Project's cellar, which would be split evenly between residential storage area and back-of-house area for the building's retail use, would feature a depth of approximately 10 feet below grade; this building feature would be located below the BFE of the future projected 100-year flood zone (12 feet [NAVD88]). The Proposed Project's ground floor (the lowest occupied floor of the Proposed Project), which would contain a residential lobby and local retail space, would feature a proposed elevation of approximately 16 feet (NAVD88); these building features would be located above the BFE of the future projected 100-year flood zone (12 feet [NAVD88]). However, beginning in the 2080s, the elevation of the Proposed Project's ground floor would fall below the elevation of the future one percent annual chance flood zone, under high sea level rise projections, and would remain below the elevation of the future one percent annual chance flood zone for the remainder of the Proposed Project's lifespan (approximately 20 years). As shown in **Figure C-8**, the Proposed Project's lowest residential units (elevation of approximately 33 feet [NAVD88]) and lowest mechanical bulkhead (elevation of approximately 121 feet [NAVD88]) would be located well above the current and future one percent annual chance flood zone under high sea level rise projections. The Proposed Project's lowest residential units and lowest mechanical bulkhead would remain above the elevation of the future one percent annual chance flood zone for the lifespan of the Proposed Project. If any of the Proposed Project's critical and vulnerable features were to fall below the elevation of the future one percent annual chance flood zone, future flooding events could result in a loss of building services, damage to property, loss of inventory, or potentially increased flood insurance costs. However, the NPCC recommends that these flood projection maps not be used to judge site-specific risks and they are subject to change.

The Proposed Project would be designed and constructed in accordance with all applicable city and state flooding and erosion regulations. Appendix G of the New York City Building Code would not apply to the Proposed Project, as the Applicant-owned site is not currently within the FEMA 100-year or 500-year flood zone.

STEP 2: IDENTIFY ADAPTIVE STRATEGIES

As illustrated in **Figure C-6b**, the Proposed Project is anticipated to fall within the future projected 500-year flood zone by the 2050s. The Proposed Project would remain within the future projected 500-year flood zone for the remaining lifespan of the Proposed Project.

Figure C-10d
High Tide 2100s



LEGEND:

Primary Study Area (Proposed Rezoning Area)

High Tide 2100s

Low Estimate (2 inches SLR)

Low-Mid Estimate (4 inches SLR)

Middle Estimate (6 inches SLR)

Mid-High Estimate (8 inches SLR)

High Estimate (10 inches SLR)

The Proposed Project would be designed and constructed in accordance with all applicable city and state flooding and erosion regulations, including New York City Administrative Code, Title 28, Section 104.9 ("Coastal Zones and Water-Sensitive Inland Zones"). As noted previously, Appendix G of the *New York City Building Code* would not apply to the Proposed Project; therefore, the Proposed Project's cellar is not required to be floodproofed at this time. However, the Proposed Project's foundation would be dry floodproofed and designed to resist hydrostatic pressure, though not under the jurisdiction of Appendix G of the *New York City Building Code*.

If the elevation of the floodplain increases, potential adaptive actions to be considered may include elevating critical features (i.e., the back of house spaces that would likely contain MEP equipment and telecom rooms) from the Proposed Project's cellar and ground floor to the Proposed Project's second floor. If elevated, these critical features would feature an elevation of approximately 33.1 feet (NAVD88) and would be located well above the current and future one percent annual chance flood zone under high sea level rise projections. An additional potential adaptive action may include the utilization of portable flood barriers at all of the Proposed Project's points of ingress and egress. Such portable flood barriers could be mobilized and installed prior to future storm events that may result in extreme flooding. In addition, potential retrofits could be pursued to floodproof, as appropriate, the cellar and ground floor of the Proposed Project. The Proposed Project is not expected to make flooding on adjacent properties worse, nor would the Proposed Project conflict with other plans for flood protection on adjacent properties.

The Proposed Project is not expected to make flooding on adjacent properties worse, nor would the Proposed Project conflict with other plans for flood protection on adjacent properties.

STEP 3: ASSESS POLICY CONSISTENCY

The Proposed Actions would advance Policy 6.2 and there would be no significant adverse impacts associated with the Proposed Actions within the 100-year 500-year flood zone. At present, the primary study area is susceptible to minimal flooding risk, and the areas within the primary study area where development could occur (within the lot boundaries of the Projected Development Sites) are not vulnerable to 100-year or 500-year floods. In the future, according to NPCC projections, the primary study area would be susceptible to minimal flooding risk. In addition, the NPCC recommends that these flood projection maps not be used to judge site-specific risks and they are subject to change. All new vulnerable, critical, or potentially hazardous features would be protected through flood damage reduction measures or future adaptive actions, where applicable. Therefore, the Proposed Project would be consistent with New York City policies regarding adaptation to climate change.

Policy 7: Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.

Compliance Statement: The Proposed Actions would promote WRP Policy 7 by facilitating development on sites where environmental remediation has been performed, therefore minimizing potential impacts on public health from pollutants and hazardous materials. As noted above, the Applicant-owned Projected Development Site 1 at 230 Kent Avenue was investigated and remediated under the (NYSDEC) Voluntary Cleanup Program (VCP) and Brownfield Cleanup Program (BCP); and all cleanup and remedial activities have been completed (V00380, BCP site C224154). As outlined in the Hazardous Materials section of **Attachment B, "Supplemental Screening,"** Remedial action has successfully achieved a Track 4 restricted residential cleanup, and an environmental easement was placed on the site pursuant to ECL Article 71,

title 36, which restricts the use of groundwater and requires compliance with the NYSDEC-approved Site Management Plan (SMP). Restricted residential cleanup is intended for sites that are expected to be developed for residential uses, specifically, multi-family residential housing and other uses with potentially higher exposures than commercial and industrial uses, but with restrictions that prohibit single-family housing, vegetable gardens and use of on-site groundwater. The SMP requires, among other things, a vapor intrusion evaluation and the implementation of any necessary engineering controls to prevent soil vapors from entering the new building at the site at concentrations of potential concern. The non-Applicant owned Projected Development Site 2 at 218 Kent Avenue, which makes up the remainder of the Project Area, is a former Major Oil Storage Facility (MOSF) that underwent subsurface investigation from 1999 through 2012 on behalf of property owner Con Edison, resulting in a No Further Action (NFA) declaration from NYSDEC. As also discussed in **Attachment B**, an (E) designation would be placed on the site in the future, ensuring that any necessary environmental investigations and remediation are undertaken.

Given the successful cleanup performed on the Applicant-owned Projected Development Site 1, and the implementation of the preventative and institutional and engineering control measures on Projected Development Site 2, the Proposed Actions would promote Policy 7 of the WRP by minimizing the potential for environmental degradation and adverse impacts due to hazardous materials within the Project Area.

The assessment provided herein and the CAF provided in **Appendix 1** found that the Proposed Actions would be consistent with all applicable WRP policies, and would promote policies 1, 5, 6, and 7. Therefore, the Proposed Actions are not expected to result in any significant adverse impacts related to the WRP.

HISTORIC DISTRICTS AND LANDMARKS

The Proposed Actions would not result in new development within LPC-designated and/or S/NR-listed historic districts. No significant material changes to existing regulations or policy would occur as a result of the Proposed Actions.

ATTACHMENT D

OPEN SPACE

I. INTRODUCTION

An open space assessment may be necessary if a proposed action(s) could potentially have a direct or indirect effect on open space resources in the project area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed action would be sufficient to diminish noticeably the ability of an area's open space to serve the existing or future population. Per the *City Environmental Quality Review (CEQR) Technical Manual*, if a project would generate more than 200 residents or 500 nonresidential users, an open space assessment should be conducted pursuant to CEQR.

While the Proposed Actions would not directly displace any existing open space resources, development facilitated by the Proposed Actions is expected to result in an incremental increase of up to 126 dwelling units (DUs) over the 2025 No-Action condition. This would result in an incremental increase of approximately 306 residents[1], as compared to the No-Action condition, which would exceed the *CEQR Technical Manual* preliminary screening threshold for an indirect open space analysis. Both quantitative and qualitative assessments were conducted to determine whether the Proposed Actions would significantly affect the use and enjoyment of publicly accessible open space in an identified study area. While the Proposed Actions are also expected to introduce a net increment of 18 employees[2] to the Project Area, as compared to the No-Action condition, this is below the *CEQR Technical Manual* preliminary screening threshold for analysis based on nonresidential users. Therefore, the analysis of indirect open space impacts focuses exclusively on the open space needs of the area's residential population.

II. METHODOLOGY

The analysis of open space resources has been conducted in accordance with *CEQR Technical Manual* guidance. Using CEQR methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio (OSR). This quantitative measure is then used to assess the changes in the adequacy of open space resources in the future, both without and with the Proposed Actions. In addition, qualitative factors are considered in assessing the Proposed Actions' potential effects on open space resources.

In accordance with *CEQR Technical Manual* methodology, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential projects and a quarter-mile radius for commercial projects with a significant worker population.

Open Space Study Area

Pursuant to *CEQR Technical Manual* guidance, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a half mile of the Project Area and all open

[1] The estimated number of residents is based on the average household size in Brooklyn Community District 1 (2.43 persons per household) per the 2020 Decennial Census.
[2] Estimate of workers based on standard rates and are as follows: three employees per 1,000 sf of retail, one employee per 25 DU, three employees per 1,000 sf of community facility/medical office uses, 1 employee per 1,000 sf of warehouse uses

spaces within it that are publicly accessible.[3] As described above, residents typically walk up to a half (1/2) mile for recreational spaces.

The Project Area comprises the entirety of Brooklyn Block 2362, between River Street and Kent Avenue, south of Metropolitan Avenue and north of North 1st Street. As shown in **Figure D-1**, the ½-mile open space study area includes the following census tracts in their entirety: census tracts 549, 551, 553, 555, and 557. The open space study area extends approximately to North 14th Street and North 8th Street in the north, South 8th Street in the south, Driggs Avenue in the east, and is bounded by the East River waterfront to the west.

Analysis Framework

Indirect Effects Analysis

As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if the project would add enough population, either workers or residents, to noticeably diminish the ability of an area's open space to serve the existing or future populations. Indirect effects may occur when the population generated by a proposed action overtaxes the capacity of existing public open spaces so that the service provided to existing and future populations in the area would be diminished substantially or noticeably.

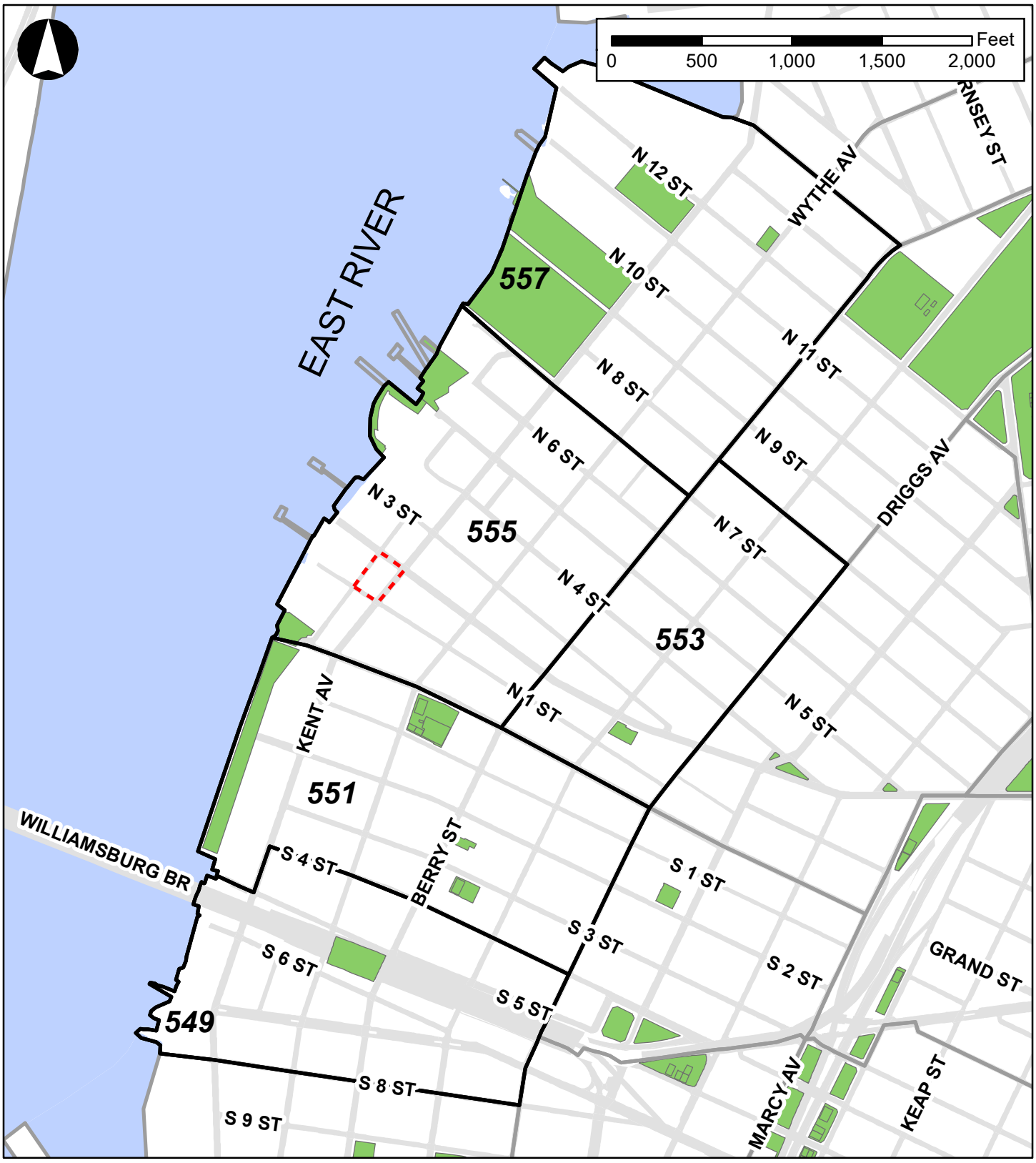
As part of the preliminary assessment for open space, a project should be reviewed to determine if it is located in an area of the City within a Walk to a Park Service Area. A Walk to a Park Service Area (WtPSA) is a part of the *OneNYC 2050 Building a Strong and Fair City* plan, in which New York City has laid out a goal for 85 percent of New York City residents living within a walking distance of a park by 2030. Existing areas located within a WtPSA are within a walking distance of a park (i.e. 0.5-miles). Areas not located within a WtPSA are considered "walk gaps"; they are areas of New York City that are not within walking distance to a park. As shown in **Figure D-2**, the Project Area and a majority of the ½-mile study area is located within an area that has been identified as a WtPSA as it is within a walking distance of a park (i.e. not a walk gap area).

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that can affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this attachment includes:

- Characteristics of the residential users. To determine the number of residents in the study area, 2020 Census data have been compiled for the census tracts comprising the open space study area.
- An inventory of all publicly accessible passive and active recreational facilities in the open space study area.
- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with the City's planning goal. In New York City, the optimal open space ratio for residential populations

[3] Pursuant to the *CEQR Technical Manual,* "public" open space that is analyzed under CEQR is defined as open space that is accessible to the public on a constant and regular basis for active and passive recreation, including for designated daily periods. Public open space may be under government or private jurisdiction.

Figure D-1
Open Space Study Area



Legend

- Project Area
- Residential Study Area
- 555 Census Tracts
- Open Space

Figure D-2
Walk to a Park Service Area



Legend

- Residential Study Area
- Project Area
- Open Space
- Walk to a Park Service Area

is 2.5 acres of open space per 1,000 residents. Ideally, this would be comprised of a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents).

- An evaluation of qualitative factors affecting open space use.
- A determination of the adequacy of open space in the residential open space study area for existing, No-Action, and With-Action conditions.

Preliminary Assessment

According to the *CEQR Technical Manual*, a preliminary assessment may be useful to determine if a detailed open space analysis is necessary, or whether the open space assessment can be targeted to a particular user group. This initial assessment calculates an open space ratio by relating the existing residential and nonresidential populations to the total open space in the study area. It then compares that ratio with the open space ratio in the future with the Proposed Actions. If there is a decrease in the open space ratio that would approach or exceed one percent in areas exhibiting low open space ratios that are 0.50 or less, a detailed analysis is warranted. The detailed analysis examines passive and active open space resources available to residents within the open space study area delineated in accordance with the *CEQR Technical Manual*, as outlined above. As the Proposed Actions would introduce a residential population in an area with a limited amount of available open space, which exhibits a low open space ratio under existing conditions, a detailed open space analysis is warranted and is provided below.

Impact Assessment

As described in the *CEQR Technical Manual,* the significance of an action's effects on an area's open spaces is determined using both quantitative and qualitative factors, as compared to the No-Action condition. The determination of significance is based upon the context of an action, including its location, the quality and quantity of the open space in the future With-Action condition, and any new open space provided by an action.

An action's potential effects on an area's open space are based, in part, on how a project would change the open space ratios in the study area, as well as other qualitative considerations. According to the *CEQR Technical Manual*, a project that would reduce the open space ratio by more than the general guidance for the open space percentage change shown in **Table D-1** may be considered significant, as these reductions may result in overburdening existing facilities or further exacerbating a deficiency in open space. As shown in **Table D-1**, the guidance for tolerated percent change in open space ratio is determined based on the open space ratio ranges outlined in the *CEQR Technical Manual*. In areas that are within a WtPSA, a greater percentage of change (more than five percent) may be tolerated.

TABLE D-1: Guidance for Percentage Change in Open Space Ratio

Open Space Ratio Range	Percent Change in Open Space Ratio
2.01 to 2.50 or Greater	5%
1.51 to 2.0	4%
1.01 to 1.5	3%
0.51 to 1.0	2%
0.50 or Less	1%
*2.5 open space ratio is the planning goal in New York City.	

Source: Table 7-1 in Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual.*

It should be noted that the City's optimal open space ratios and percentage reductions shown in **Table D-1** do not constitute an absolute impact threshold. The *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. Furthermore, as discussed in Section 321 of Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual*, projects located

outside of the WtPSA should be further assessed for qualitative impacts. As such, projects that may result in significant quantitative impacts on open space are typically further assessed in a qualitative assessment to determine the overall significance of the impact.

The qualitative assessment supplements the quantitative assessment and considers the distribution of open space, whether a site is within the WtPSA, the distance from the site to regional parks, the connectivity of open space(s), and any additional open space created by the Proposed Actions not available to the general public, if applicable, and determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment.

III. DETAILED ANALYSIS

Existing Conditions

Study Area Population

To determine the residential population served by existing open space resources, 2020 Census data were compiled for the census tracts comprising the ½-mile study area. As shown in **Table D-2**, the study area has a total residential population of approximately 24,700.

Within a given area, the age distribution of a population affects the way open spaces are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children. Children ages five through nine typically use traditional playgrounds, as well as grassy and hard-surfaced open spaces, which are important for activities such as ball playing, running, and skipping rope. Children ages ten through 14 use playground equipment, court spaces, Little League fields, and ball fields. Teenagers' and young adults' needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, *ad hoc* active sports such as Frisbee®, and recreational activities in which all ages can participate. Senior citizens engage in active recreation such as tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

TABLE D-2: Existing Residential Population in the ½-Mile Study Area

Census Tract	Residential Population
549	4,748
551	6,343
553	3,078
555	8,688
557	1,843
Total	***24,700***

Source: 2020 Census

The residential population of the study area was also broken down by age group.[4] As shown in **Table D-3**, people between the ages of 20 and 64 make up the majority (77.1 percent) of the residential population. Children and teenagers (0 to 19 years old) account for approximately 16.5 percent of the entire residential population, and persons 65 years and over account for approximately 6.4 percent of the residential study area population. Based on this data, the peak hours of open space demand would be expected to be

[4] Aside from age groups under/over 18 years of age, the 2020 US Census data does not include detailed information about residential age groups. As such, the residential population age groups were determined based on the percentage of age group characteristics provided in the 2015-2019 Five-Year American Community Survey (ACS) data, and applied to 2020 Census data.

concentrated during weekends and the early morning and late afternoon to evening hours during the week, as it could be assumed that most residents aged 20 to 64 would work or attend school on weekdays.

TABLE D-3: Residential Population Age Distribution in the ½-Mile Study Area

Age Category*	Residential Population	Percent of Population
Under 5 years old	1,927	7.8%
5 to 9 years	692	2.8%
10 to 14 years	790	3.2%
15 to 19 years	667	2.7%
20 to 64 years	19,044	77.1%
65 years and older	1,581	6.4%

Note: *Age group percentages based on 2015-2019 Five Year ACS data
Source: 2020 Census and 2015-2019 Five-Year American Community Survey (ACS)

Inventory of Publicly Accessible Open Space

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under CEQR guidance, whereas private open space is not accessible to the public on a regular basis, and is therefore only considered qualitatively. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

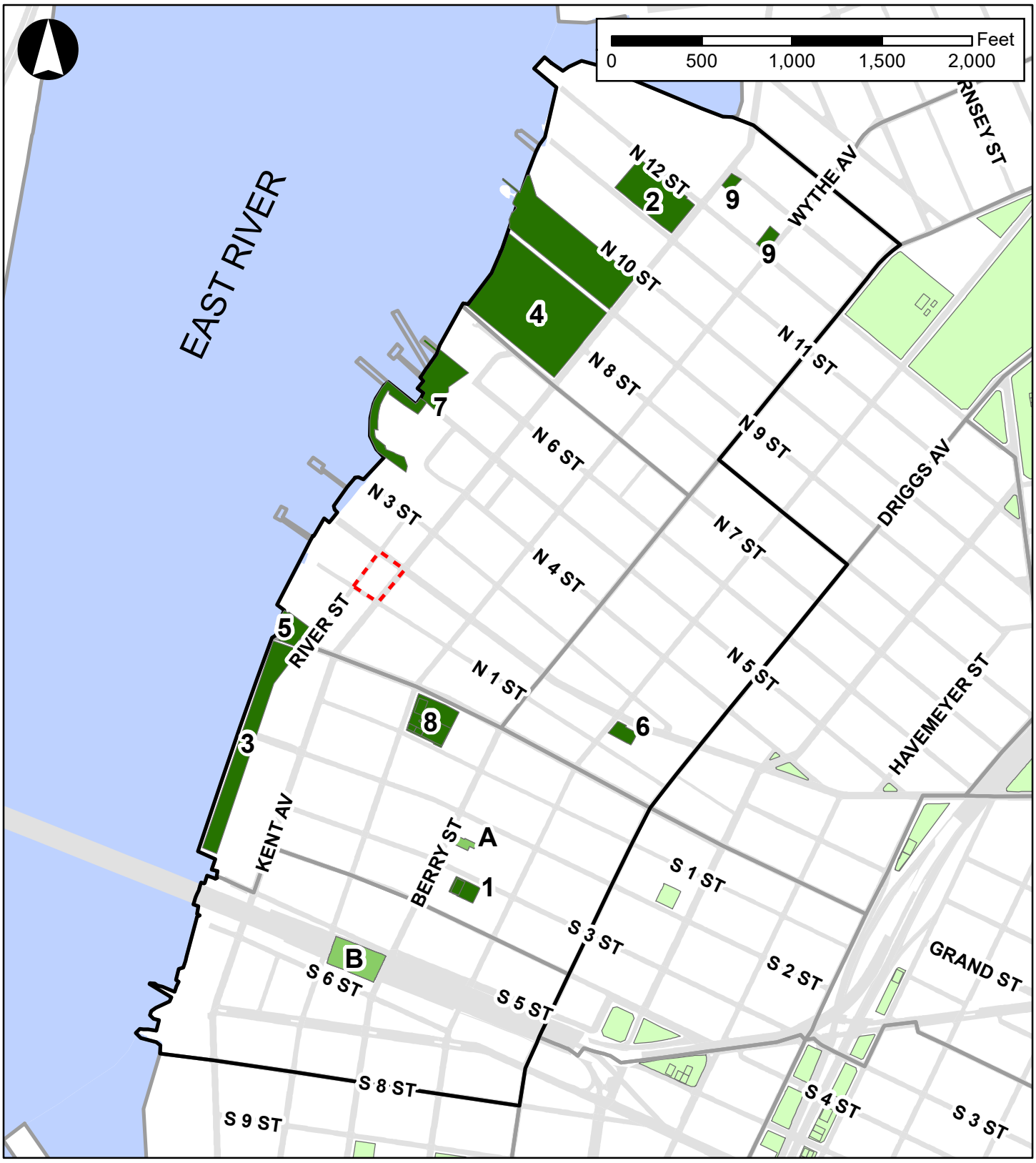
An open space is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, and multi-purpose play areas (open lawns and paved areas for active recreation such as running games, informal ball-playing, skipping rope, etc.). Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas.

Within the defined study area, all publicly accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. The information used for this analysis was gathered through field inventories conducted in August 2022, DPR's website, and other secondary sources of information.

The condition of each open space facility was categorized as "Excellent," "Good," "Fair," or "Poor." A facility was considered in excellent condition if the area was clean and attractive and if all equipment was present and in good repair. A good facility had minor problems such as litter or older but operative equipment. A fair or poor facility was one that was poorly maintained, had broken or missing equipment or lack of security, or other factors that would diminish the facility's attractiveness. Determinations were made based on a visual assessment of the facilities.

Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday afternoon. If a facility seemed to be at or near capacity (i.e. the majority of benches or equipment was in use), then utilization was considered heavy. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. **Table D-4** identifies the address, ownership, hours, and acreage of active and passive open spaces in the study area, as well as their condition and utilization. **Figure D-3** maps their location in the study area.

Figure D-3
Open Space Analysis



Legend

- Project Area
- Residential Study Area
- Census Tracts
- Open space Included in Analysis (Refer to Table D-4)
- Open Space Not Included in Analysis (Refer to Table D-4)
- Open Space Outside Study Area

Open Space Resources

As shown in **Table D-4**, approximately 24.53 acres of open space are included in the quantitative analysis, of which approximately 9.17 acres are considered active open space and 15.36 acres are passive open space. Most of the open spaces in the study area are neighborhood parks and playgrounds. A typical neighborhood park within the study area includes facilities for passive use (such as benches, landscaping, lawns, picnic tables, and comfort stations) and active recreation (such as sports fields, dog runs, and basketball courts), and is generally used by people of all ages. The typical playground might include play equipment and sports facilities as well as passive seating areas, and would generally be used by children.

The 5.85-acre portion of Bushwick Inlet Park (Map No. 2) considered in the quantitative analysis represents the initial phase of the larger 35.53-acre Bushwick Inlet Park which will, once completed, span 5.5 blocks along the East River waterfront between North 9th Street and Quay Street (refer to the "Future Without the Proposed Actions" section below for further discussion).

A majority of the publicly accessible open space resources included in the quantitative indirect open space impact assessment are in good to excellent condition. In terms of utilization, all of the study are open space resources exhibit low to moderate utilization.

TABLE D-4: Inventory of Existing Open Space and Recreational Resources in Study Area

Map No. [1]	Name	Address	Owner/ Agency [2]	Amenities	User Groups	Hours of Access	Total Acres	Active		Passive		Condition & Utilization
								%	Acres	%	Acres	
Open Space Resources Included in Quantitative Assessment												
1	Berry Playground	South 3rd St. between Berry St. and Bedford Ave.	NYC Parks	Basketball Courts, Playgrounds, Spray Showers, Benches	Children, Teenagers, Adults	6AM to 9PM	0.33	95	0.31	5	0.02	Fair / Low
2	Bushwick Inlet Park	Kent Ave., North 9th and 10th Sts.	NYC Parks	Comfort Station, Playgrounds, Soccer/Ball Fields, Lawn, Spray Showers, Seating Areas	Children, Teenagers, Adults, Senior Citizens	9AM to 10PM	5.85	50	2.93	50	2.93	Excellent / Moderate
3	Domino Park	River St.	Two Trees Mgmt	Playground, Volleyball, Bocce, Fields, Elevated Walkway, Benches, Spray Showers, Dog Run, Lawns, Restaurant, Picnic Tables	Children, Teenagers, Adults, Senior Citizens	6AM to 1AM	5.00	50	2.50	50	2.50	Excellent / Moderate
4	Marsha P. Johnson Sate Park	90 Kent Ave.	NYS OPRHP	Dog Run, Playgrounds, Lawns, Picnic Tables, Benches, WiFi Access, Comfort Station	Children, Teenagers, Adults, Senior Citizens	9AM – 9PM	7.00	25	1.75	75	5.25	Excellent / Moderate
5	Grand Ferry Park	River St.	NYC Parks	Walkways, Lawns, Dog-Friendly Areas, Benches	Teenagers, Adults, Senior Citizens	6AM to 1AM	1.70	5	0.09	95	1.62	Fair / Moderate
6	Metropolitan Recreation Center	261 Bedford Ave.	NYC Parks	Indoor Pool, Locker Room, Recreation Centers, WiFi Access	Teenagers, Adults, Senior Citizens	7AM – 9:30PM (Mon. – Fri.) 7AM – 5:30PM (Saturday) 10AM–5:30PM (Sunday)	0.18	100	0.18	0	0.00	Good / Moderate
7	North 5th Street Pier and Park	Kent Ave., North 4th and 6th Sts.	NYC Parks	Benches, Walkway, Lawns, Picnic Areas, Lounge Chairs	Children, Teenagers, Adults, Senior Citizens	6AM to 1AM	3.08	10	0.31	90	2.77	Excellent / Moderate
8	William Sheridan Playground	Wythe Ave., Grand and South 1st Sts.	NYC Parks/DOE	Spray Showers, Playgrounds, Basketball & Handball Courts, Field, Comfort Station	Children, Teenagers, Adults, Senior Citizens	6am – 9pm	1.17	95	1.11	5	0.06	N/A[3]
9	25 Kent POPS	25 Kent Ave.	19 Kent Acquisition	Benches, Tables, Landscaping	Adults, Senior Citizens	6am – 12am	0.22	0	0.00	100	0.22	Excellent / Low
						½-Mile Study Area Total	**24.53**	**37.4**	**9.17**	**62.6**	**15.36**	

Sources: NYC OASIS, NYC Parks, August 2022 field visits.

Notes:

[1] Refer to **Figure D-3**.

[2] NYC Parks = New York City Department of Parks and Recreation; DOE=New York City Department of Education

[3] William Sheridan Playground is currently closed for construction. It is undergoing renovations with an expected completion in early 2023

TABLE D-4 (Continued): Inventory of Existing Open Space and Recreational Resources in Study Area

Open Space Resources Not Included in Quantitative Assessment												
Map No. [1]	**Name**	**Address**	**Owner/ Agency [2]**	**Amenities**	**User Groups**	**Hours of Access**	**Total Acres**	**Active**		**Passive**		**Condition & Utilization**
								%	**Acres**	**%**	**Acres**	
A	Berry Street Garden	301 Berry Street	NYC Parks	Community Garden	Adults, Senior Citizens	20hrs/week Apr 1 – Oct 31	0.14	0	0.00	100	0.14	Excellent / Low
B[3]	Lot	Berry Street between South 5th Street and South 6th Street	NYC Parks	-	-	-	-	-	-	-	-	-
½-Mile Study Area Total							**0.14**	**0%**	**0.00**	**100%**	**0.14**	

Sources: NYC OASIS, NYC Parks, August 2022 field visits.

Notes:

[1] Refer to **Figure D-3**.

[2] NYC Parks = New York City Department of Parks and Recreation; DOE=New York City Department of Education

[3] Lot beneath Williamsburg Bridge approach included in NYC Parks Open Space dataset; area is currently fenced-off and vacant

Assessment of Open Space Adequacy

Quantitative Assessment

The following analysis of the adequacy of existing open space resources within the study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents. As an optimal planning goal, the City tries to achieve an overall residential open space ratio of 2.5 acres per 1,000 residents (80 percent [2 acres] active and 20 percent [0.5 acres] passive) for large-scale plans and proposals. Although a typical population mix may call for such a goal, it is often not feasible for many areas of the City (especially higher density areas). As such, the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold.

In calculating the open space ratio per 1,000-user population for the study area, all of the resources listed in the "Open Space Resources Included in the Quantitative Analysis" section of **Table D-4** were included; Resource A was not included in the calculations pursuant to *CEQR Technical Manual* guidance, as it has limited accessibility/hours. Resource B was not included in the quantitative analysis, as it is listed in the NYC Parks open space dataset, but is vacant and fenced-off as of a site visit in August 2022. **Table D-5** shows that, with an existing study area residential population of approximately 24,700 people, the existing total open space ratio in the study area is approximately 0.993 acres per 1,000 residents; the study area has 0.371 acres of active open space per 1,000 residents and 0.622 acres of passive open space per 1,000 residents. As indicated in **Table D-5**, the existing total and active residential open space ratio is below the City's open space planning goals of 2.5 and 2.0 acres per 1,000 residents, respectively. The existing passive open space ratio is above the City's open space planning goals of 0.5 acres per 1,000 residents

TABLE D-5: Adequacy of Open Space Resource in the Study Area – Existing Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	24,700	24.53	9.17	15.36	0.993	0.371	0.622	2.5	2	0.5

Qualitative Assessment

The total and active open space resources that exist within the open space study area fall below the City's quantitative guidelines, as discussed above. This quantitative deficiency may be partially ameliorated by several factors. The study area has been the site of significant investment in open space along the Williamsburg waterfront and upland, by city and state agencies as well as private developers. Several open spaces considered in the quantitative analysis were recently constructed or expanded, including Bushwick Inlet Park, Domino Park, Marsha P. Johnson State Park (formerly East River State Park), North 5th Street Pier and Park, and the 25 Kent Avenue POPS. All of these resources were found to be in excellent condition during field observations in August 2022. These open spaces feature up-to-date facilities for active recreation, including playgrounds, sports fields, dog runs and dog-friendly areas, and spray showers.

William Sheridan Playground is currently undergoing an $8 million renovation and expansion slated for completion in early 2023. The playground is closed to the public as the renovations take place.

As shown in **Figure D-3** and listed in **Table D-4**, there is one additional open space resource located within the study area boundary, which provides an additional 0.14 acres of open space that are not included in the quantitative analysis. This space is a community garden, which is considered a passive open space use.

It should also be noted that there are significant publicly accessible open spaces located just beyond the study area boundary, which could add considerable accessible active and passive open spaces for the

study area's population. McCarren Park, comprising approximately 36.49 acres, is located approximately 0.6 miles northeast of the Project Area. As detailed in the *CEQR Technical Manual*, residents may travel farther than a ½-mile to frequent regional parks. The park includes a plethora of recreational options, including barbequing areas, baseball fields, basketball courts, bocce courts, dog-friendly areas, fitness equipment, football fields, handball courts, media labs, outdoor pools, playgrounds, recreation centers, a running track, skate park, soccer fields, spray showers, and tennis courts. Nevertheless, as McCarren Park is not located within the ½-mile open space study area, it is not included in the quantitative analysis pursuant to CEQR guidance.

Continental Army Plaza is located outside the study area but is partially within a ½-mile radius of the Project Area. It features 0.53 acres of passive open space including seating areas and a historic statue of George Washington.

These parks provide an additional 37.02 acres of open space for residents in the study area. It is expected that a proportion of open space users in the study would frequent these spaces given their proximity, size, and range of amenities that are not found at other open spaces within the residential study area.

The Future Without the Proposed Actions (No-Action Condition)

In the absence of the Proposed Actions, it is expected that the Applicant's Projected Development Site 1 would be developed on an as-of-right basis in accordance with the existing M1-4 zoning. The development would be an approximately three-story 20,223 gsf building containing 6,741 gsf of medical office space, 6,741 gsf of local retail, and 6,741 gsf of warehouse space. Projected Development Site 2 would remain vacant under No-Action conditions.

Study Area Population

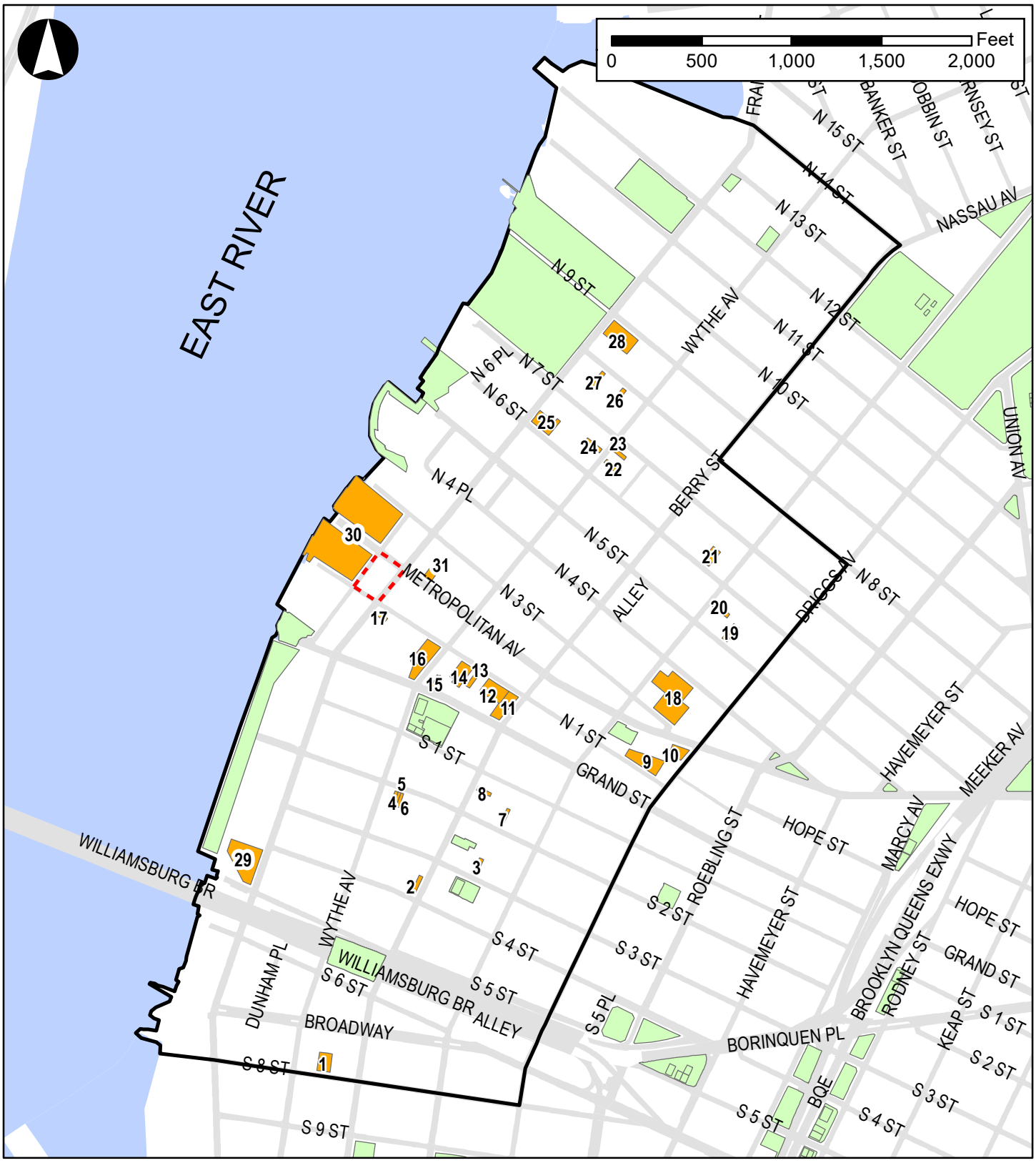
As presented below in **Table D-6** and shown in **Figure D-4**, a considerable amount of new development is currently planned or anticipated to be completed within the ½-mile open space study area in the future without the Proposed Actions by 2025, which would increase the residential population within the study area. These No-Action developments are anticipated to add 1,487 new residential units to the study area. **Table D-6** shows that these No-Action developments are anticipated to increase the ½-mile study area population by approximately 3,613 residents,[5] for a total residential population of 28,255 by 2025.

TABLE D-6: Known Planned No-Action Developments within the ½-Mile Study Area

Map No.[1]	Address	Dwelling Units (DUs)	Estimated Residents [2]
1	75 S. 8th Street	8	19
2	89 S. 4th Street	4	10
3	107 S. 3rd Street	7	17
4	74 S. 2nd Street	1	2
5	74A S. 2nd Street	1	2
6	76 S. 2nd Street	1	2
7	121 S. 2nd Street	2	5
8	277 Berry Street	1	2
9	171 N. 1st Street	59	143
10	658 Driggs Avenue	20	49
11	236 Berry Street	50	122
12	106 N. 1st Street	38	92
13	96 N. 1st Street	5	12
14	88 N. 1st Street	46	112
15	81 Grand Street	2	5
16	296 Wythe Avenue	55	134

[5] The estimated number of residents added due to No-Action development is based on average household sizes of 2.43 persons for Brooklyn Community District (CD) 1 according to the 2020 Census.

Figure D-4
No-Action Residential Developments



Legend

- Project Area
- Residential Study Area
- Open Space
- No-Action Residential Development (Refer to Table D-6)

17	225 Kent Avenue	3	7
18	156 N. 1st Street	23	56
19	161 N. 5th Street	6	15
20	203 Bedford Avenue	2	5
21	141 N. 6th Street	12	29
22	155 Wythe Avenue	2	5
23	147 Wythe Avenue	1	2
24	174 Wythe Avenue	27	66
25	131 Kent Avenue	18	44
26	76 N. 8th Street	3	7
27	64 N. 8th Street	7	17
28	56 N. 9th Street	45	109
29	350 Kent Avenue	422	1,025
30	105 River Street (River Ring North Tower)	592	1,439
31	61 Metropolitan Avenue	24	58
	Half-Mile Total	***1,487***	***3,613***

Source: NYC DOB, September 2022
Notes:
[1] Refer to **Figure D-4**
[2] The estimated number of residents is based on the average household size in Brooklyn Community District 1 (2.43 persons per household) per the 2020 Decennial Census.

Open Space Resources

Based on the construction schedule presented in River Ring FEIS, the River Ring development's proposed open space is expected to be open to the public by the 2025 analysis year. The River Ring Open Space will include the development of approximately 2.9 acres (approximately 126,308 sf) of publicly accessible open space, plus 2.32 acres of accessible secondary contact in-river space and 0.86 acres of intertidal area. For CEQR analysis purposes, only the 2.9 acres of upland open space is included in the quantitative analysis. Similar to the open space analysis presented in the River Ring FEIS, it is assumed that the 2.9 acres of upland open space included in the quantitative analysis would include 2.01 acres of passive open space and 0.89 acres of active open space. As such, open space in the ½-mile open space study area would total 27.43 acres, comprised of 10.06 acres of active open space and 17.37 acres of passive open space.

Bushwick Inlet Park is undergoing a $90-million phased design and construction process. At the time of this open space analysis, a total of approximately 5.85 acres (consisting of parcels at 86 Kent and 50 Kent) of the park's eventual total of 35.53 acres have been completed and are open to the public. A portion of the completed park along the Bushwick Inlet waterfront will fall outside of the study area, though all of the area considered in the quantitative analysis is within the study area. By the analysis year of 2025, it is anticipated that at least an additional 8.53 acres of the park (the parcel between North 10th and North 11th Streets) will be completed and open to the public within the study area. This open space is expected to feature both active and passive facilities, including play areas, a bike path, performance space, and waterfront amenities. As it is unclear if the construction of the additional 8.53 acres of Bushwick Inlet Park will be completed by the 2025 analysis year, it is conservatively excluded from the quantitative analysis below.

William Sheridan Playground is currently undergoing an $8 million renovation and expansion slated for completion in early 2023. The new playground is expected to be in use by the 2025 analysis year. The renovated playground will total 1.17 acres and feature a new turf field and running track, spray showers, toddler play area, basketball court, and adult fitness equipment.

Berry Playground will undergo a $3-5 million renovation, which is currently in the design and scoping phase. It is expected that the renovations will be completed by the 2025 analysis year. It is expected that upon completion of the renovations, both Berry Playground and William Sheridan Playground will be in good or excellent condition.

Open Space Adequacy

Table D-7, below, presents the No-Action open space ratios for the ½-mile study area, based on the anticipated population increases outlined previously. Similar to existing conditions, the total and active open space ratios in the No-Action condition would be less than the City's total and active open space planning goals of 2.5 and 2.0 acres of open space per 1,000 residents, respectively. The passive open space ratio of 0.614 acres per 1,000 residents would continue to meet the City's goal of 0.5 acres per 1,000 residents. The total open space ratio is expected to decrease to 0.969 acres per 1,000 residents in the No-Action condition, with No-Action active and passive open space ratios of 0.355 and 0.614 acres per 1,000 residents, respectively.

TABLE D-7: Adequacy of Open Space Resource in the Study Area – No-Action Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	28,313	27.43	10.06	17.37	0.969	0.355	0.614	2.5	2	0.5

The Future with the Proposed Actions (With-Action Condition)

This section describes the open space conditions that would result from the Proposed Actions by 2025. It evaluates the potential for the Proposed Actions to result in significant adverse indirect impacts to open space resources based on a comparison of the No-Action condition (described above) to the With-Action condition.

Study Area Population

As described in **Attachment A, "Project Description,"** in the future with the Proposed Actions, the Proposed Project would introduce approximately 126 DUs to the proposed development site. Using the same planning assumptions as the No-Action conditions of 2.43 residents per DU, the Proposed Actions are expected to introduce a net increase of approximately 306 residents, and would therefore increase the study area's population to 28,619 residents in the 2025 With-Action condition.

Open Space Resources

The Proposed Actions would not introduce any new active or passive open space resources to the study area as part of the Proposed Project. As such, under the With-Action condition, open space in the ½-mile open space study area would total 27.43 acres, comprised of 10.06 acres of active open space and 17.37 acres of passive open space

Open Space Adequacy

As noted above, the open space impact analysis consists of both quantitative and qualitative assessments. The quantitative assessment considers how a proposed action(s) could change the open space ratios in the study area.

Under the With-Action condition, the total open space ratio in the study area would decrease from 0.969 in the No-Action to 0.959 acres per 1,000 residents in the With-Action (see **Table D-8**). The active open space ratio would also decrease compared to No-Action conditions, from 0.355 to 0.352 acres per 1,000 residents, which would continue to be below the city's guidance ratio of 2.0 acres per 1,000 residents.

The passive open space ratio per 1,000 residents would decrease from 0.614 to 0.607 acres per 1,000 residents as compared to No-Action conditions, but would remain above the city's guideline ratio of 0.50.

TABLE D-8: Adequacy of Open Space Resource in the Study Area – With-Action Conditions

		Open Space Acreage			Open Space per 1,000 Residents			City Open Space Planning Goals		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	28,619	28.43	10.56	17.87	0.993	0.369	0.624	2.5	2	0.5

Potential Effects of the Proposed Actions on Publicly Accessible Open Space

Quantitative Assessment

According to the 2021 *CEQR Technical Manual*, a significant adverse open space impact may occur if proposed actions would reduce the open space ratio by more than the general guidelines for the open space percentage change provided in **Table D-9**.

TABLE D-9: Detailed Assessment – Percentage Change Guidance to Determine Possible Open Space Impact

Total Open Space Ratio Range*	Active Open Space Ratio Range*	Passive Open Space Ratio Range*	Percentage Change in Open Space ratio Signifying a Possible Adverse Open Space Impact
2.01 to 2.50 Or greater	1.61 to 2.0 Or greater	0.41 to 0.50 Or greater	5%
1.51 to 2.00	1.21 to 1.60	0.31 to 0.40	4%
1.01 to 1.50	0.81 to 1.20	0.21 to 0.30	3%
0.51 to 1.00	0.41 to 0.80	0.11 to 0.20	2%
0.50 or less	0.01 to 0.40	0.01 to 0.10	1%
* 2.5 open space ratio is the planning goal in NYC, with optimal distribution goal of 2.0 active open space ratio and 0.5 passive open space ratio.			

Source: Table 7-5 in Chapter 7, "Open Space" of the 2021 *CEQR Technical Manual.*

Table D-10 expresses the percentage change from No-Action to With-Action conditions for the study area. As noted previously, in the future with the Proposed Actions, ratios of total and active open spaces to residents would continue to be lower than the optimal planning goals furnished by DCP, while passive open space resources would remain adequate. As shown in **Table D-10**, the study area's total open space ratio in the future with the Proposed Actions would be 0.959 acres per 1,000 residents, which represents a reduction of approximately 1 percent (0.01 acres per 1,000 residents) from No-Action conditions. The passive open space ratio in the study area would decrease from 0.614 acres per 1,000 residents to 0.607 acres per 1,000 residents in the With-Action condition, a 1.1 percent decrease. The active open space ratio for residents would decrease from 0.355 to 0.352 acres per 1,000 residents in the With-Action condition, a 0.85 percent decrease.

TABLE D-10: Comparison of No-Action to With-Action Open Space Ratios in the ½-Mile Study Area

Ratio	*CEQR Technical Manual* Open Space Optimal Planning Goal (acres per 1,000)	Open Space Ratios Per 1,000			Percent Change
		Existing	No-Action	With-Action	Future No-Action to Future With-Action
Total – Residents	2.50	0.993	0.969	0.959	-1%
Active – Residents	0.50	0.371	0.355	0.352	-0.85%
Passive – Residents	2.00	0.622	0.614	0.607	-1.1%

As shown in **Table D-10**, the Proposed Actions would result in a percentage change in open space ratio below the threshold signifying a possible adverse impact for total open space and passive open space. The expected 1% decrease in the total open space ratio and the 1.1 decrease in passive open space ratios would be a smaller decrease than the applicable 2% and 5% decrease figures referenced in **Table D-9** for considering the significance of changes to the total and passive open space ratios, respectively. However, the expected 0.85% decrease in the active open space ratio would be less than the applicable 1.0% decrement figure referenced for active open space in **Table D-9**. However, according to *CEQR Technical Manual* guidance, these optimal open space ratios and percentage reductions do not of themselves constitute a significant impact threshold and a project's location, the quality, quantity, and types of nearby open space, and the balance of passive and active open space should be considered in the determination of significance.

Under the With-Action condition, passive open space in the study area is still sufficient to exceed the City's goal of 0.5 acres per 1,000 residents. The decrease in open space ratios are small enough that they do not suggest a potential adverse impact on either total or passive open space. As noted above, study area open spaces are in good condition, provide a variety of facilities, and are moderately used. In addition, as shown in **Figure D-2**, the Project Area is located within a WtPSA and, therefore, is not located within a walk gap area (i.e., an area of the City that is not within a walking distance to a park). However, projects that may result in quantitative impacts on open space are typically further assessed in a qualitative assessment approach to determine the overall significance of the impact. The qualitative assessment below also indicates that the quality and number of the study area open spaces, combined with the availability of open spaces outside the study area, would help to ameliorate the open space shortfall in the future With-Action conditions.

Qualitative Assessment

In the future with the Proposed Actions, the study area would continue to have a shortfall of total and active open space similar to the existing and No-Actions conditions (though the passive open space ratio would continue to exceed the City's guidelines). Although these open space ratios in the study area would remain less than the DCP planning goals, the deficiency of open space resources in the study area would be ameliorated by several factors. Most of the open space resources included in the quantitative analysis were found to be in good or excellent condition. Furthermore, significant capital improvements to existing and new open spaces within the study area are underway, leading to an increase in the amount of public open space within the study area and an improvement in the quality of the existing facilities under renovation. Several open spaces in the study area will have undergone extensive renovations by the time of the analysis year, including Berry Playground and William Sheridan Playground. By the 2025 analysis year, a new section of Bushwick Inlet Park will have opened within the study area, and the River Ring open space is expected to be complete. These waterfront capital projects will link the open spaces along the East River from North 5th Street Pier and Park to Grand Ferry Park, providing a continuous network of public waterfront access. The new and updated open space resources are expected to include new active facilities, such as a new sports field, running track, and fitness area in William Sheridan Playground, and new children's play area and bike path in Bushwick Inlet Park. These new facilities will help to address some of the deficiency in both total and active open space programming. The existing open spaces offer a variety of passive and active recreational amenities, ranging from sitting areas, playgrounds, basketball and handball courts, dog runs, spray showers, and indoor pools. In particular, the rich variety of facilities for active recreation within the study area will help to offset the deficiency in active open space area.

The demand for open space generated by the Proposed Actions is not expected to exacerbate significantly the No-Action deficiency, with just over a one percent decrease in the study area's total and active open space ratios. The population added because of the Proposed Actions is not expected to noticeably affect

utilization of the area's open spaces. As noted above, most of the study area open space resources are in good condition and offer a variety of amenities which, therefore, could likely handle some increased demand. In addition, the population generated by the Proposed Actions is not expected to have any special characteristics, such as a disproportionately older or younger population, that would place heavy demands on facilities that cater to specific user groups; the residents in the future with the Proposed Actions are expected to exhibit similar characteristics to the current residents of the study area and the breakdown of the population is expected to remain the same.

Additionally, the proximity of the large, approximately 36.49-acre McCarren Park would continue to be a factor in alleviating the study area's open space deficiency. McCarren Park is located adjacent to but just outside of the study area boundary. The park contains a wide range of recreational amenities including extensive indoor and outdoor active facilities. It is expected that a portion of open space users in the study area would likely frequent this space given its proximity, size, and range of amenities.

IV. CONCLUSIONS

The Proposed Actions would not result in significant adverse open space impacts. While the residential open space study area would continue to have a shortfall of total and active open space in the future with the Proposed Actions, the demand for open space generated due to the Proposed Actions is not expected to exacerbate significantly the No-Action deficiency. Moreover, the population added due to the Proposed Actions is not expected to affect utilization adversely of the area's open spaces. The Proposed Actions would result in a 1 percent decrease in total open space ratio, a 0.85 percent decrease in active open space ratios, and a 1.1 percent decrease in passive open space ratio as compared to No-Action conditions.

The study area's open space resources are numerous and in good to excellent condition, offering a range of amenities, and could therefore handle the limited additional anticipated demand resulting from the Proposed Actions. By the time of the analysis year, it is expected that several open space resources in the study area will have undergone renovations, improving their condition and likely adding new amenities. Furthermore, it is expected that new open space will be added to the study area as Bushwick Inlet Park is expanded and open space provided by the River Ring development is completed and opened to the public. Residents of the study area would continue to use additional open space resources not included in the quantitative assessment. Therefore, while the Proposed Actions would result in an incremental decrease in total and active open space ratios in the future, given the level of decrease anticipated, the number, condition and array of amenities of study area open spaces, and the availability of additional open spaces conservatively not included in the quantitative analysis, the Proposed Actions are not expected result in a significant adverse impact on open space. In addition, the Proposed Actions would not have a direct effect on any study area open spaces due to construction or operation. The Proposed Actions would not result in the imposition of noise, air pollutant emissions, odors, or significant new shadows on public open spaces that may alter usability. Therefore, the Proposed Actions would not result in a significant adverse indirect open space impact, and further analysis is not warranted.

ATTACHMENT E

SHADOWS

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions and associated reasonable worst-case development scenario (RWCDS) to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the *City Environmental Quality Review* (CEQR) *Technical Manual*, a shadows assessment is warranted if a proposed action(s) would result in structures (or additions to existing structures) of 50 feet in height or greater, or those that would be located adjacent to, or across the street from, a sunlight sensitive resource. As discussed in **Attachment B, "Supplemental Screening,"** the Proposed Actions would facilitate the development of new buildings that would be greater than 50 feet in height. As such, a shadows analysis was prepared in accordance with 2021 *CEQR Technical Manual* guidance to determine the potential for the Proposed Actions to result in significant adverse shadows impacts on sunlight-sensitive resources.

II. METHODOLOGY

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. For projects or actions resulting in structures less than 50 feet tall, a shadow assessment is generally not necessary, unless the site is adjacent to a park, historic resource, or important natural feature (if the feature that makes the structure significant depends on sunlight).

First, a preliminary screening assessment must be conducted to ascertain whether shadows resulting from an action or project could reach any sunlight-sensitive resource at any time of year. The *CEQR Technical Manual* defines sunlight-sensitive resources as those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. The following are considered sunlight-sensitive resources[1]:

- *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in an open space establishes its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots, particularly plots for food production in community gardens. The amount of sunlight typically considered the minimum that plantings and vegetation would need is six to eight hours of direct sunlight. However, certain plantings and vegetation can tolerate partial sun, with a reduced minimum

[1] According to the *CEQR Technical Manual*, city streets, sidewalks, and private open spaces (such as private residential front and back yards, stoops, and vacant lots) are not considered sunlight-sensitive resources.

requirement of four to six hours of direct sunlight. Examples of areas that can tolerate partial sun are established tree canopies, shrubs or perennials.

- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features of an architectural resource are considered in a shadows analysis. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids, such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychromy [multicolored] features found on Victorian Gothic Revival or Art Deco facades); historic landscapes, such as scenic landmarks, including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.
- *Natural resources where the introduction of shadows could alter the resource's condition or microclimate.* Such resources could include community gardens, surface water bodies, wetlands, or designated resources, such as coastal fish and wildlife habitats.

The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around each of the development sites representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier, which reduces the area that could be affected by action-generated shadows by accounting for a specific range of angles that can never receive shade in New York City due to the path of the sun in the northern hemisphere. If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by new shadows by looking at specific representative days of the year and determining the maximum extent of shadow over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow – or the additional, or new, shadow that a building or other built structure resulting from a proposed action would cast on a sunlight-sensitive resource during the year – resulting from the proposed project. Incremental shadows are determined by establishing a baseline condition (the No-Action condition) and comparing it to the future condition resulting from the Proposed Actions (i.e., the With-Action condition), thus illustrating the shadows cast by existing or future buildings and distinguishing the additional (incremental) shadows cast by the Proposed Actions. In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern were modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21 vernal equinox (or the September 21 autumnal equinox, which is approximately the same), the June 21 summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6 or August 6 (which are approximately the same). For the cold weather months, the December 21 winter solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive resources.

The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

The detailed analysis provides the data needed to assess the shadow impacts. The effects of incremental shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The results of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text. As described in the *CEQR Technical Manual*, an incremental shadow is generally not considered significant when its duration is ten minutes or less at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of ten minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- *Vegetation:* a substantial reduction in sunlight duration available to sunlight-sensitive features of the resource to less than the time of its minimum sunlight needs (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum sunlight needs).
- *Historic and cultural resources:* a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.
- *Open space utilization:* a substantial reduction in the usability of open space because of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected times.
- *For any sunlight-sensitive feature of a resource:* complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

In general, a significant adverse shadow impact occurs when the incremental shadow added by a proposed action falls on a sunlight-sensitive resource and substantially reduces or eliminates completely direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

III. PRELIMINARY SCREENING

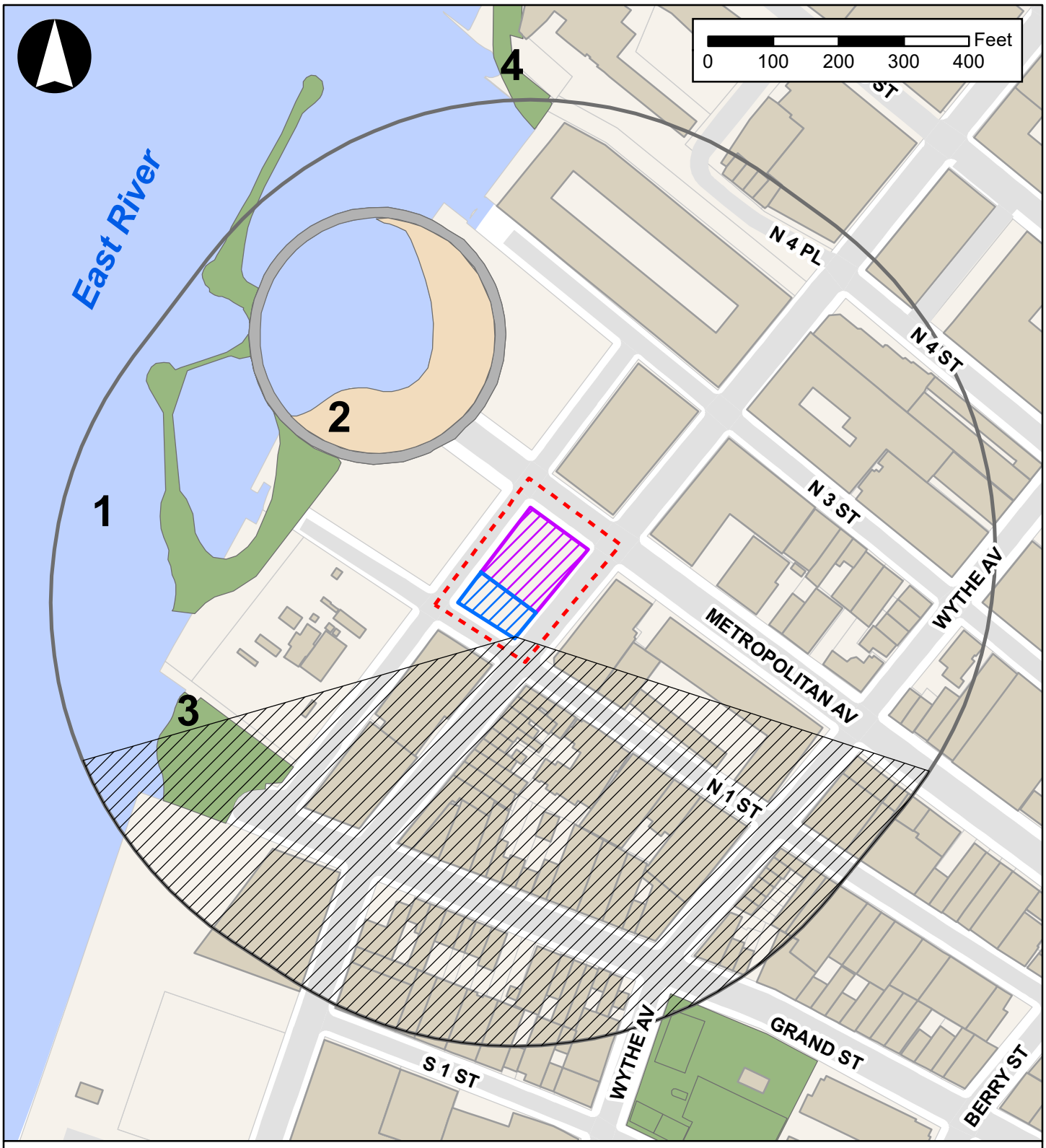
Tier 1 Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. The maximum radius for the two Projected Development Sites warranting a preliminary shadow analysis was determined using each site's maximum allowable building height. The longest shadows that could be cast by new 145-foot-tall buildings on each Projected Development Site would be approximately 623.5 feet in length.[2]

Within the maximum shadow radius for the two Projected Development Sites, there are five identified potentially sunlight-sensitive open spaces and natural resources, including four open spaces and one natural resource (refer to **Figure E-1**). Additionally, the Tier I area includes the S/NR-listed and NYCL-eligible Austin, Nichols & Co. Warehouse, the S/NR-eligible Metropolitan Avenue Warehouse, the S/NR-eligible Rokeach & Sons Warehouse, and the northwest portion of the S/NR-eligible Grand Street Historic

[2] Although the Applicant is proposing a building with a height of 105 feet (which maximizes the allowable FAR), for conservative analysis purposes it is assumed that the building envelope would reach the maximum height (145 feet) allowed in the proposed M1-4/R7X zoning district.

Figure E-1
Shadows Tier I and Tier II Screening



Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area
- Tier I: Longest Shadow Study Area (623.5' Radius)
- Tier II: Areat that Cannot be Shaded
- Existing Buildings
- Open Space
- 1 Note: Resources keyed to Table E-1

District. As none of these historic resources is sunlight sensitive, further screening will be focused on the open spaces and natural resource listed above.

Tier 2 Screening Assessment

Due to the path of the sun across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given development site. In New York City, this area lies between -108 and +108 degrees from true north. The purpose of the Tier 2 screening is to determine whether the sunlight-sensitive resources identified in the Tier 1 screening are located within portions of the longest shadow study area that could receive incremental shadows from the proposed developments.

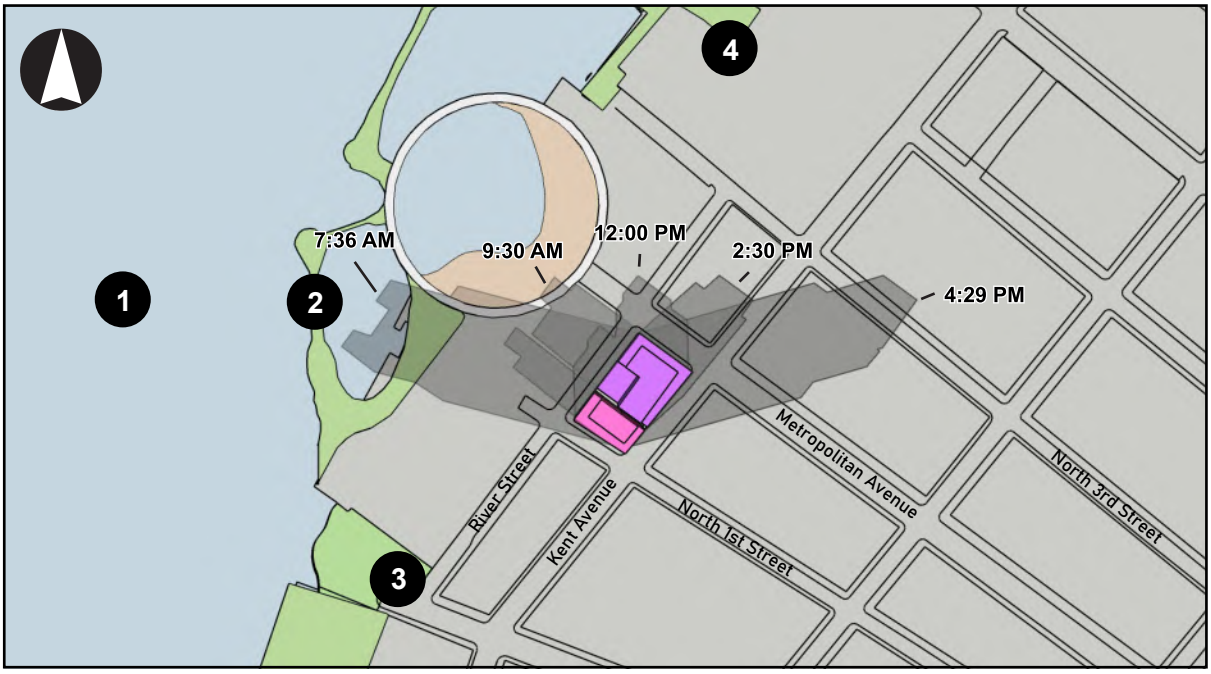
Figure E-1 illustrates the results of the Tier 1 and Tier 2 screening assessments (i.e., the portion of the longest shadow study area lying within -108 degrees from the true north and +108 degrees from true north as measured from the southernmost portions of the development sites). As shown in Figure E-1, Domino Park is located within the Tier 2 area (the area that cannot be shaded) and therefore would not be cast in any shadow from the Proposed Actions. Four sunlight-sensitive resources were identified as sunlight-sensitive resources that warranted further assessment (refer to **Table E-1** below).

Tier 3 Screening Assessment

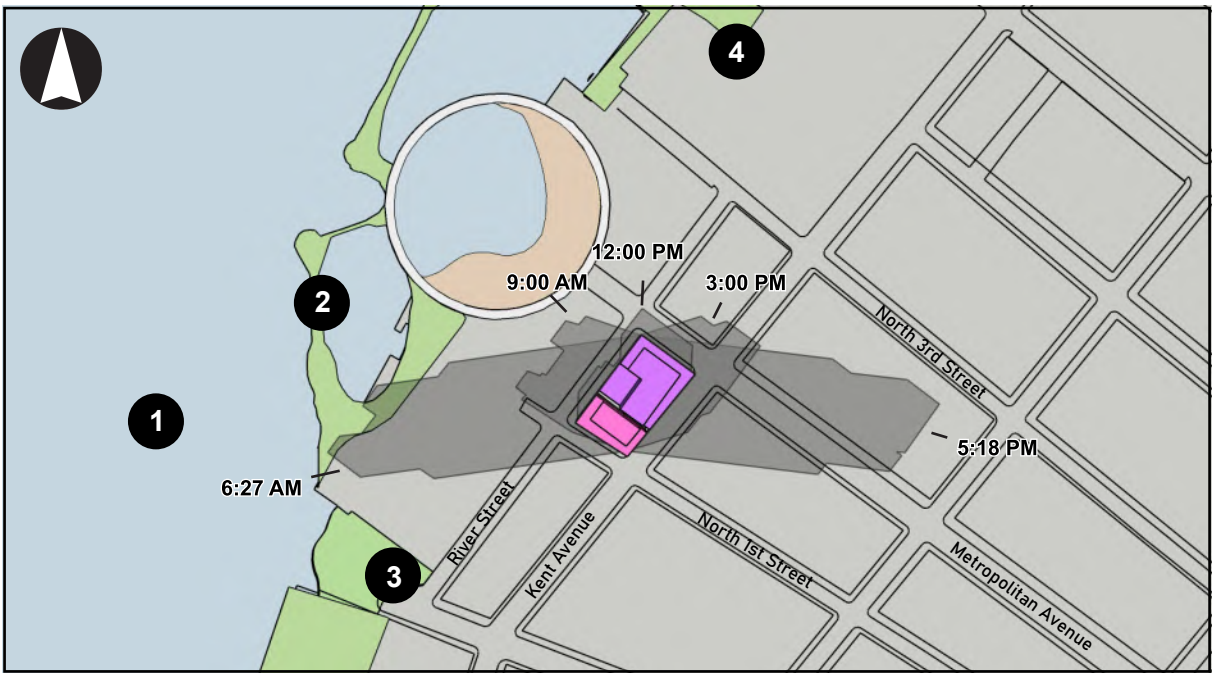
According to the *CEQR Technical Manual*, a Tier 3 screening assessment should be performed to determine if, in the absence of intervening buildings, shadows resulting from a proposed action(s) could reach a sunlight-sensitive resource, thereby warranting a detailed shadow analysis. The Tier 3 screening assessment is used to determine if shadows resulting from a proposed action(s) can reach a sunlight-sensitive resource at any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis dates.

A Tier 3 assessment was performed using three-dimensional (3D) computer mapping software for the Projected Development Sites to calculate and display action-generated shadows on individual representative analysis dates. The model contained 3D representations of the elements in the base map used in the preceding assessments and a 3D model of the Projected Development Sites as a result of the Proposed Actions. At this stage of the assessment, surrounding buildings within the study area were not included in the model so that it may be determined whether action-generated shadows would reach any sunlight sensitive resources.

As shown in **Figures E-2a** and **Figure E-2b**, the Tier 3 results determined that the East River, the publicly accessible open space at the nearby planned River Ring project, and Grand Ferry Park, could each receive incremental shadows from the With-Action RWCDS developments, and therefore require a detailed shadows analysis.



MARCH/SEPTEMBER 21



MAY/AUGUST 6

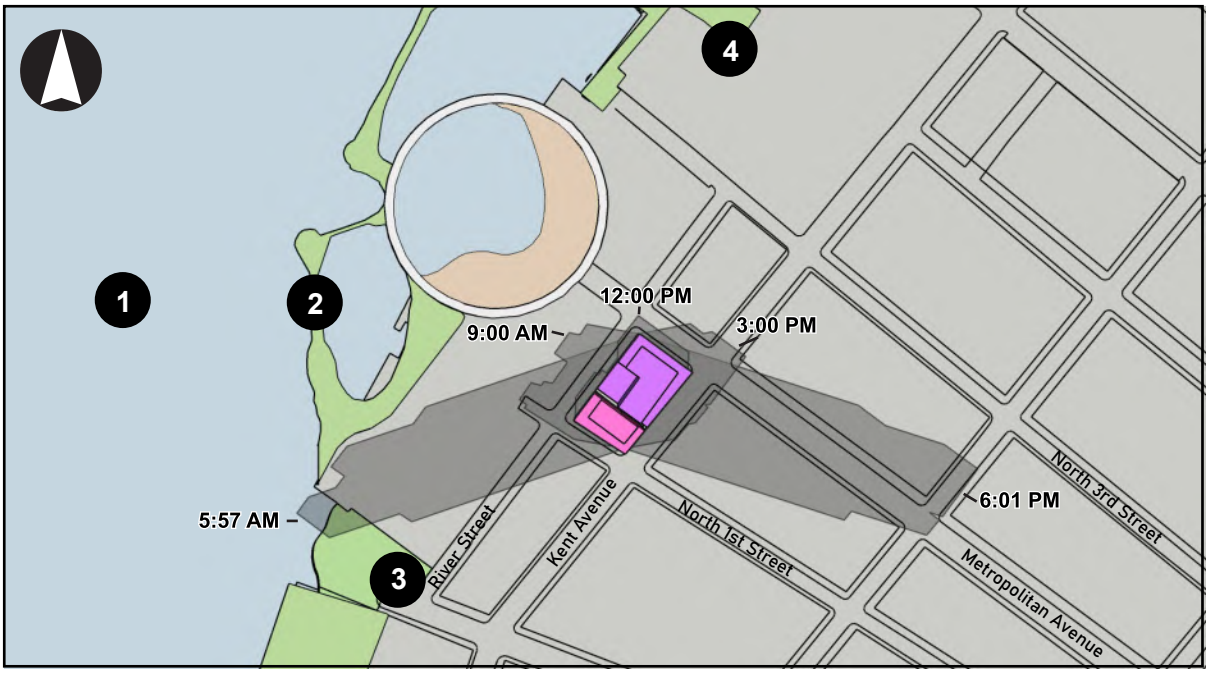
Projected Development Site 1

Projected Development Site 2

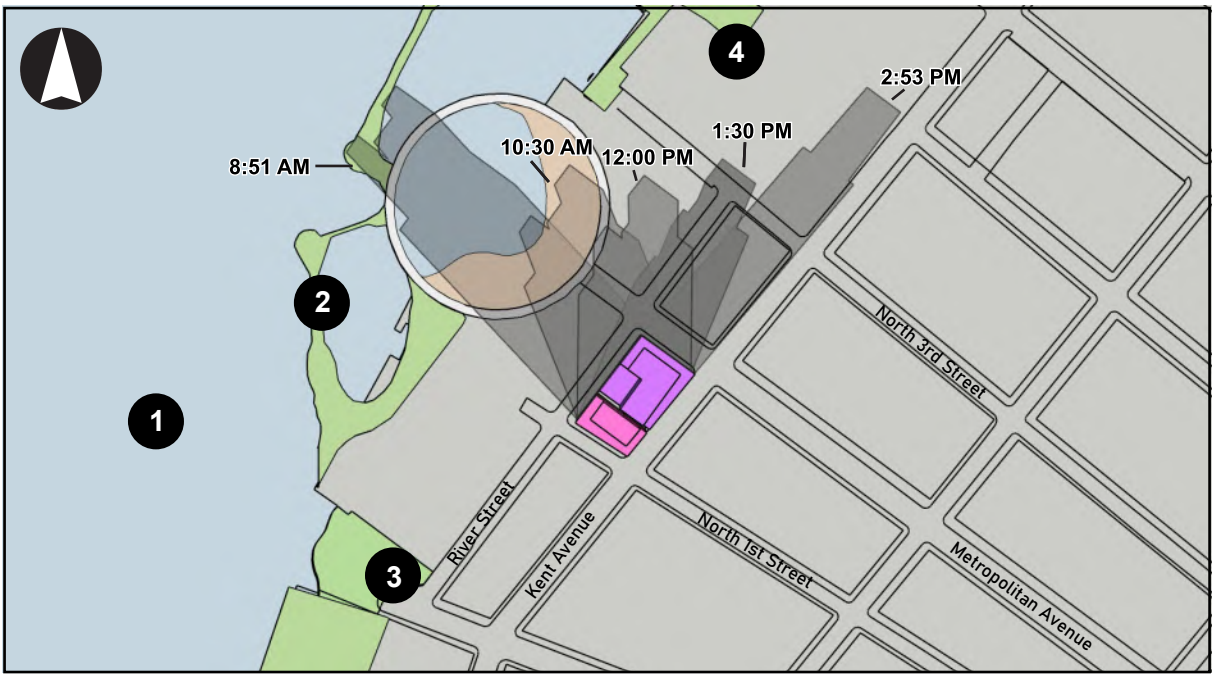
1 Sunlight-Sensitve Resource

Note: Resources keyed to Table E-1

Project-Generated Shadow



JUNE 21



DECEMBER 21

Projected Development Site 1

Projected Development Site 2

1 Sunlight-Sensitve Resource

Note: Resources keyed to Table E-1

Project-Generated Shadow

TABLE E-1
Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening

No.[1]	Name	March 21/Sept. 21 7:36AM - 4:29PM	May 6/August 6 6:27AM - 5:18PM	June 21 5:57AM - 6:01PM	December 21 8:51AM - 2:53PM	Number of Analysis Days
1	East River	**YES**	**NO**	**YES**	**YES**	**3**
2	River Ring Open Space	**YES**	**YES**	**NO**	**YES**	**3**
3	Grand Ferry Park	**NO**	**NO**	**YES**	**NO**	**1**
4	North 5th Street Pier and Park	**NO**	**NO**	**NO**	**NO**	**0**

Notes:
[1] Numbers keyed to sunlight-sensitive resources shown in **Figures E-2a and E-2b.**

E. DETAILED ANALYSIS OF SHADOW IMPACTS

Resources Affected by Project-Generated Shadows

East River

The East River is a salt water tidal estuary that connects Upper New York Bay to the south and Long Island Sound to the north. The lower East River is classified by the NYSDEC as a Class I water body, with aquatic life suspected to exist within this portion of the East River adjacent to the Project Area. As the Project Area is located near the eastern shore of the East River, development as a result of the Proposed Actions could result in incremental shadows on portions of the East River during the morning hours.

River Ring Open Space

Directly west of the Project Area is the planned River Ring development, which was approved in December 2021 (C 210166 ZMK). As part of the approved River Ring project, approximately 126,308 sf (2.9 acres) of new waterfront public space (plus 2.32 acres of secondary contact accessible in-river space and 0.86 acres of intertidal area) would be provided on the site of the Project Area, which was rezoned from M3-1 to C6-2 to facilitate the River Ring project. Per the *River Ring FEIS*, both the project-generated open space and the project's north tower are expected be completed by the 2025 analysis year for the Proposed Actions.

The waterfront public space at the River Ring development is planned to include a public beach on the new cove, stepped seating area facing the beach with granite block seating, a ramped boat launch for non-motorized watercraft (e.g., kayaks, paddleboards), a nature play area, and landscaped plantings. The beach is designed to provide secondary-contact recreation access, and per NYS Department of Health regulations, swimming will be prohibited. In accordance with waterfront zoning requirements, an approximately 900-foot-long shore public walkway would be provided along the East River; a portion of the shore public walkway would extend over a portion of the new salt marsh and tide pools being created along the south end of the cove.

As the River Ring open space is located west of the Project Area, the Proposed Actions could result in incremental shadows on portions of this open space during the morning hours.

Grand Ferry Park

Grand Ferry Park is a 1.70-acre park located along the East River waterfront at the terminus of Grand Street. The open space includes passive seating areas and dog-friendly areas. Grand Ferry Park is

connected with the planned River Ring open space to the north, and existing Domino Park to the south. As Grand Ferry Park is located southwest of the Project Area, the Proposed Actions could result in incremental shadows on portions of this open space during the morning hours.

Detailed Shadow Analysis

Per *CEQR Technical Manual* guidance, shadow analyses were performed for the four sunlight-sensitive resources identified above on four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of shadows over the course of the year. CEQR guidance defines the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. As discussed above, the results of the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions (see **Table E-2**). Under No-Action conditions, it is assumed that the Applicant's site would be redeveloped with a 3-story, 45-foot tall commercial and manufacturing building. It is also assumed that the north tower of the River Ring Development would be completed, as well as the project's open space.

Figures E-3 through **Figure E-6b** provided at the end of this attachment show representative incremental shadows cast on each of the three sunlight sensitive resources on the four representative analysis days.

It should be noted that, per the *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early November. As such, the times reported in this attachment for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect the Eastern Daylight Saving Time.

TABLE E-3
Duration of Incremental Shadows on Sunlight-Sensitive Resources (Increment Compared to No-Action)

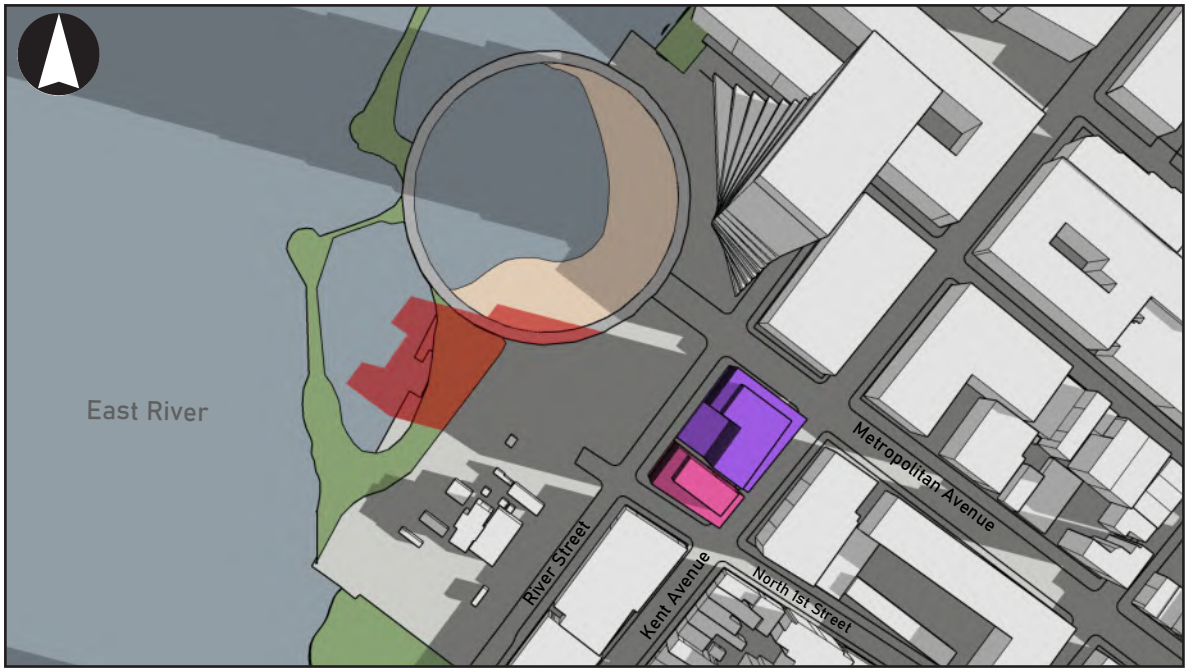
Resource	Analysis Day	March 21/Sept. 21 7:36 AM – 4:29 PM	May 6/August 6 6:27 AM – 5:18 PM	June 21 5:57 AM – 6:01 PM	December 21 8:51 AM – 2:53 PM
East River	Shadow enter-exit time	7:36 – 8:03 AM	-	5:57 – 6:06 AM	8:51 – 10:51 AM
	Incremental shadow duration	27 minutes	-	9 minutes	2 hours
River Ring Open Space	Shadow enter-exit time	7:36 – 10:10 AM	6:27 – 6:48 AM	-	8:51 AM – 12:12 PM
	Incremental shadow duration	2 hours 34 minutes	21 minutes	-	3 hours 21 minutes
Grand Ferry Park	Shadow enter-exit time		-	5:57 – 6:07 AM	-
	Incremental shadow duration		-	10 minutes	-

Notes:
[A] All times are Eastern Standard Time.
[B] Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.

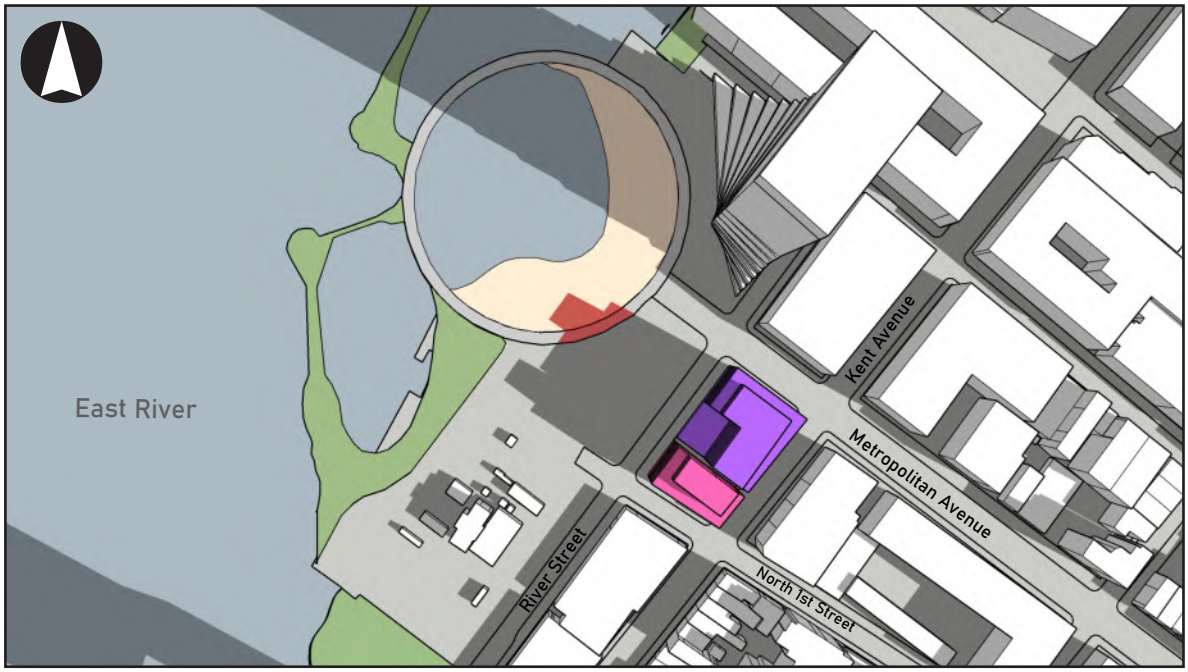
March 21/September 21

The analysis period for March 21/September 21 begins at 7:36 AM and continues until 4:29 PM. On this analysis day, development as a result of the Proposed Actions would cast incremental shadow on the East River for 27 minutes and 2 hours and 34 minutes on the River Ring Open Space (refer to **Table E-2**).

Figure E-3
Incremental Shadows on March 21/September 21



7:36 AM



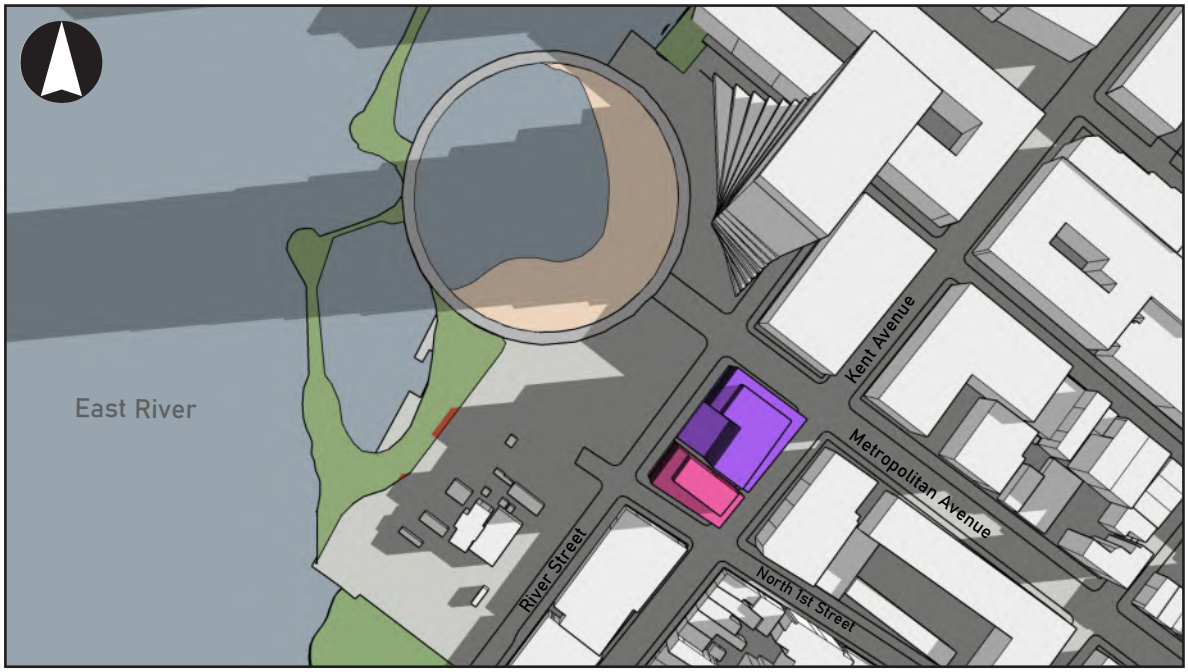
8:45 AM

Projected Development Site 1
Projected Development Site 2
Open Space
East River
Incremental Shadow

Figure E-4
Incremental Shadows on May 6/August 6



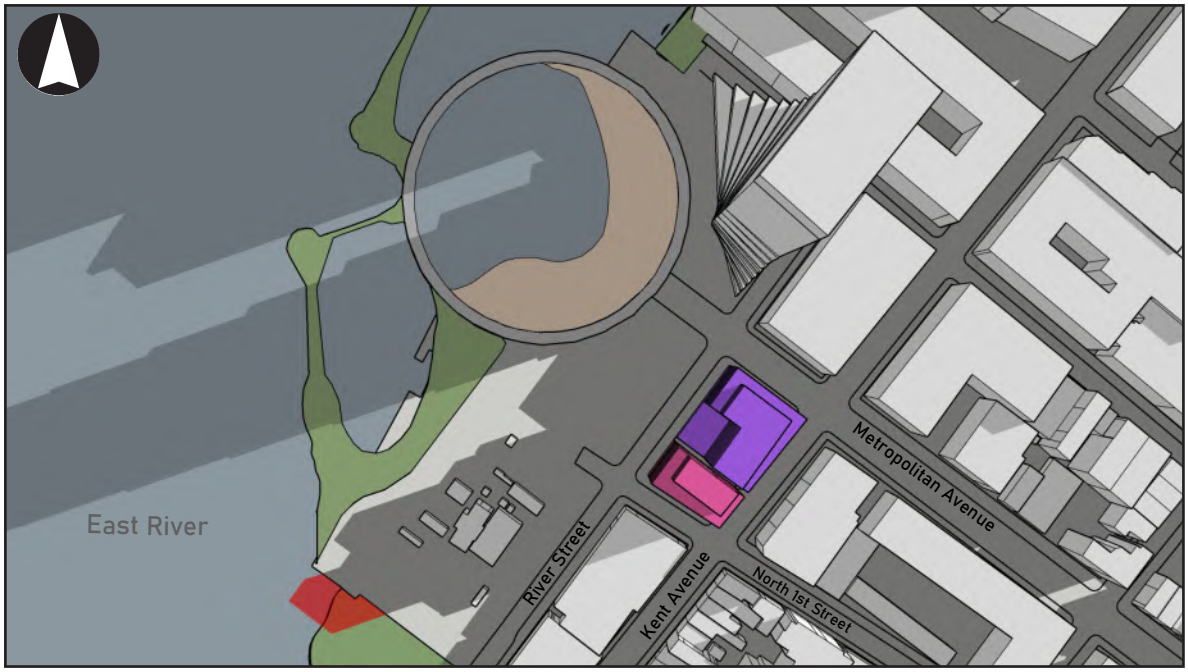
6:27 AM



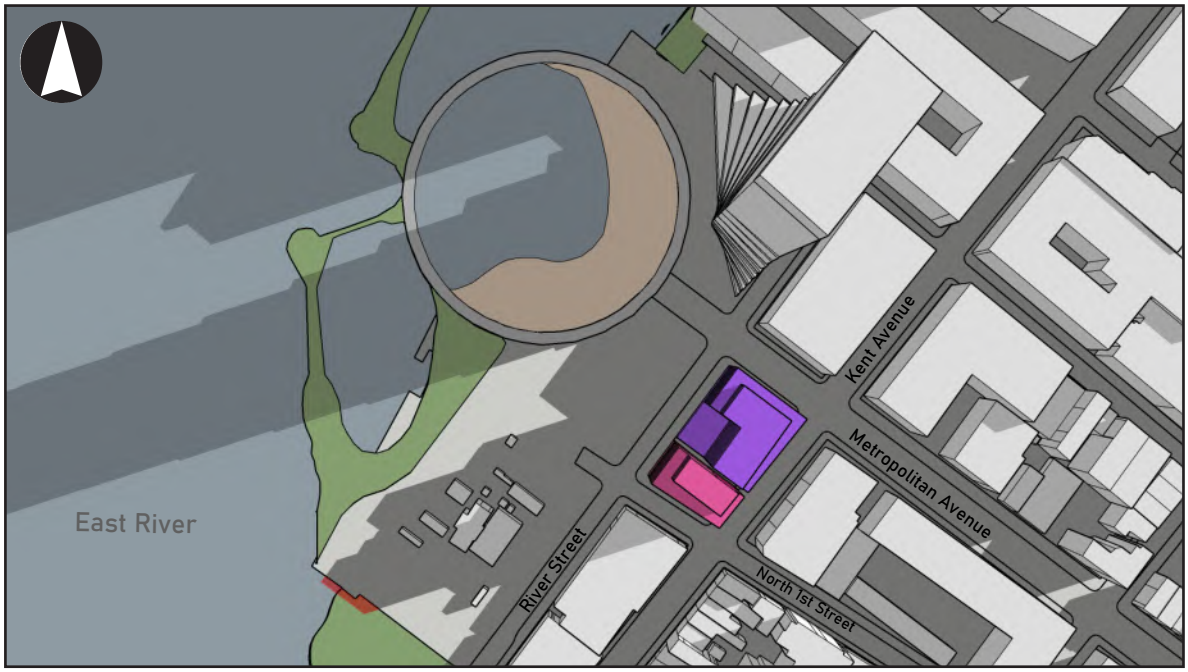
6:45 AM

Projected Development Site 1
Projected Development Site 2
Open Space
East River
Incremental Shadow

Figure E-5
Incremental Shadows on June 21



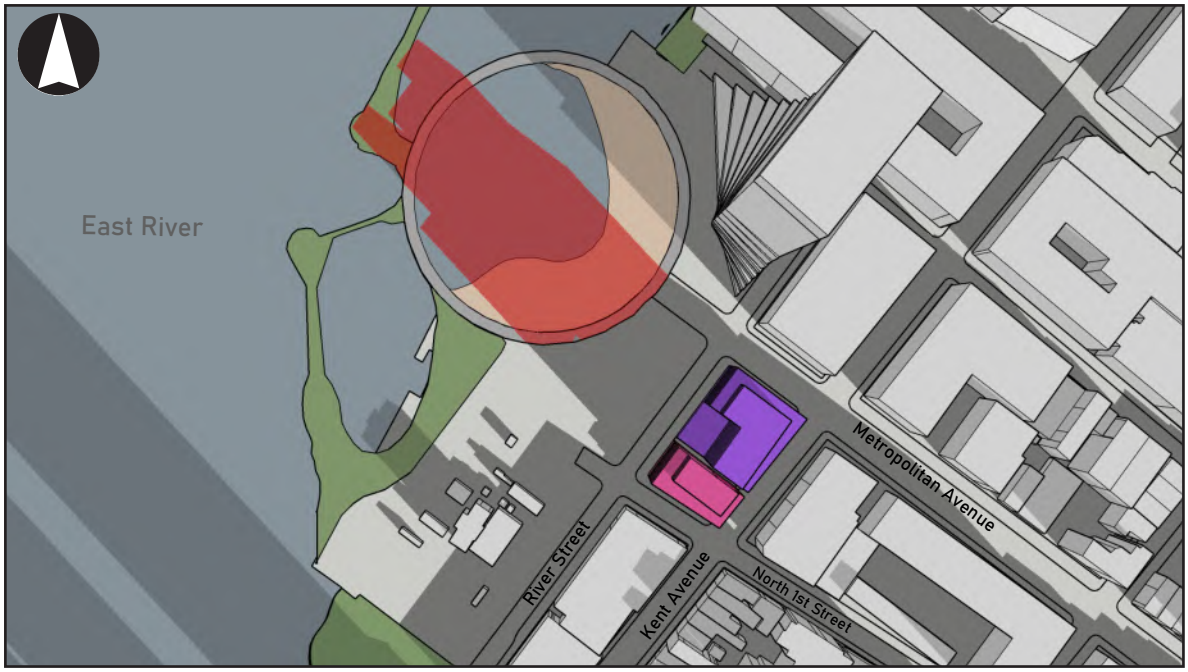
5:57 AM



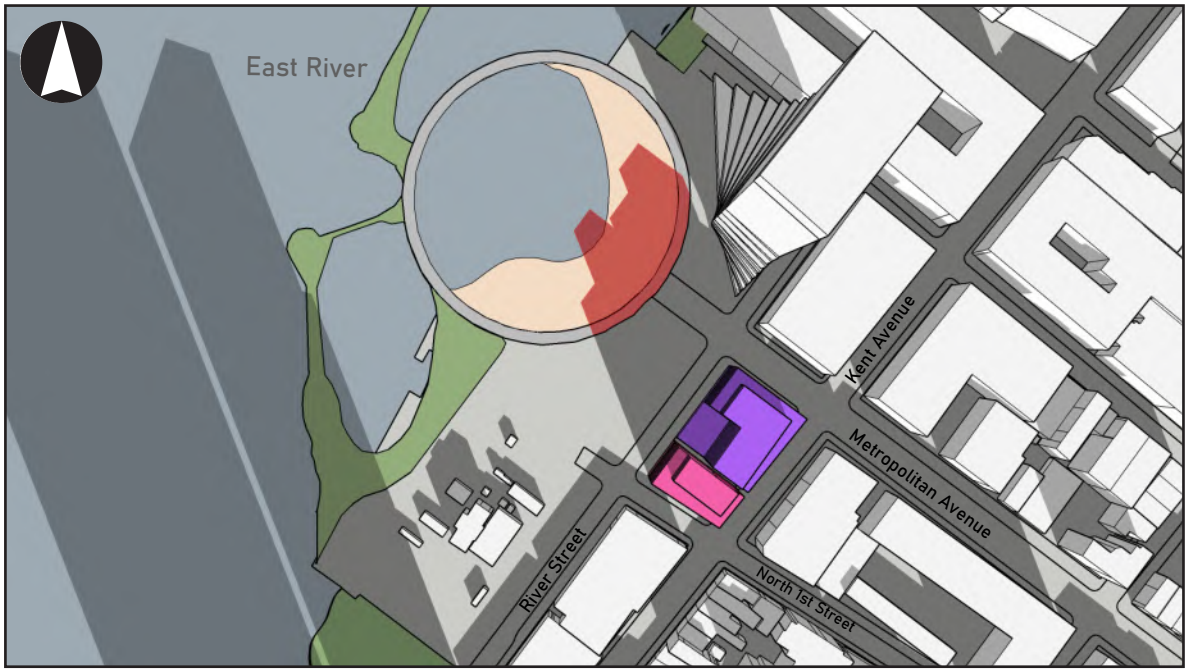
6:05 AM

Projected Development Site 1
Projected Development Site 2
Open Space
East River
Incremental Shadow

Figure E-6a
Incremental Shadows on December 21



8:51 AM



10:30 AM

Projected Development Site 1

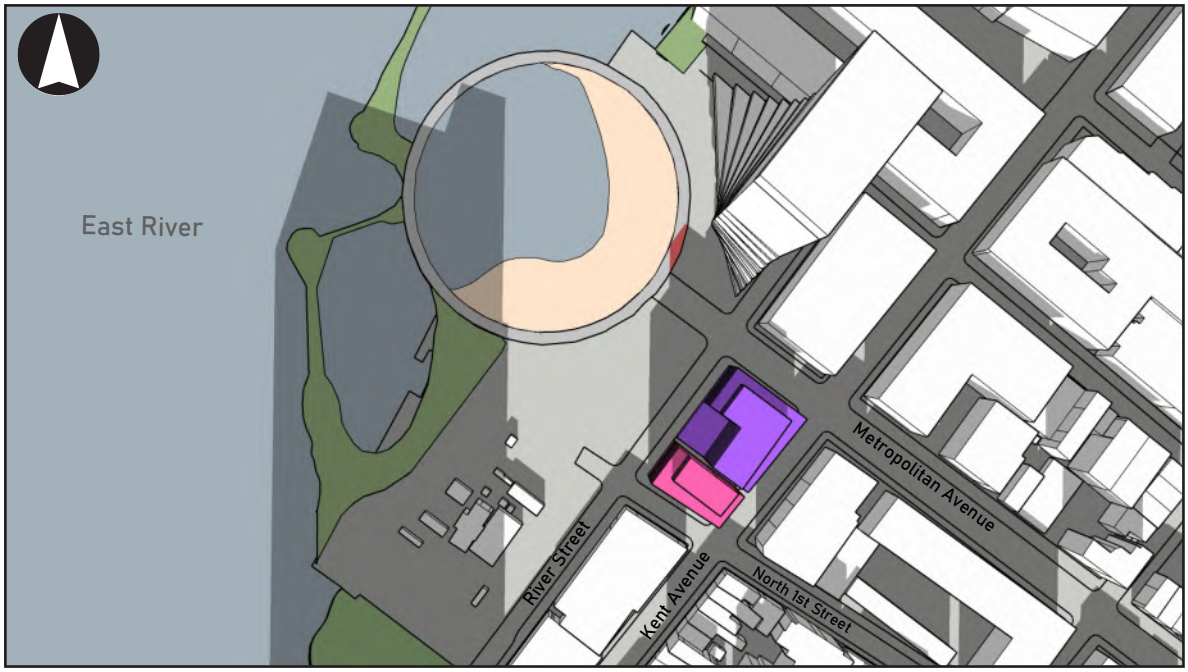
Projected Development Site 2

Open Space

East River

Incremental Shadow

Figure E-6b
Incremental Shadows on December 21



12:00 PM

Projected Development Site 1
Projected Development Site 2
Open Space
East River
Incremental Shadow

As shown in **Figure E-3**, incremental shadow would be cast over a small portion of the East River and would move eastward until exiting the natural resource at approximately 8:03 AM. Incremental shadow from the Projected Development Sites would be cast over the southwest portion of the River Ring Open Space. Specifically, incremental shadow would be cast over portions of the shore public walkway, the public beach, and landscaped plantings. Incremental shadow would be limited to the public beach and a portion of the ring public walkway by approximately 8:45 AM (refer to **Figure E-3**). Incremental shadow would decrease throughout the morning, moving in a westerly direction before exiting the open space at approximately 10:10 AM.

Based on the extent and duration of the incremental shadow shown in **Figure E-3** and in **Table E-2**, the majority of the open space would continue to receive direct sunlight throughout the day, and no single sunlight-sensitive feature would receive direct sunlight for less than six to eight hours, which, according to the *CEQR Technical Manual,* is the general minimum requirement for the survival of vegetation during the growing season. Due to the weather in March/September, it is not likely that any incremental shadow would affect the utilization of the beach area.

May 6/August 6

On May 6/August 6, the analysis period begins at 6:29 AM and lasts until 5:18 PM. On this analysis day, the Projected Development Sites would cast incremental shadow on the southern portion of the River Ring Open Space for approximately 21 minutes.

As shown in **Figure E-4**, the area affected by incremental shadows would include portions of the shore public walkway and landscaped plantings. Incremental shadow from the Projected Development Sites would occur from 6:27 to 6:48 AM, a duration of approximately 21 minutes. The extent and duration of incremental shadows on the open space would be minimal. A majority of the open space would continue to receive direct sunlight throughout the analysis day, and no single sunlight-sensitive feature would receive direct sunlight for less than the six to eight hours recommended by the *CEQR Technical Manual*.

June 21

The analysis period for June 21 begins at 5:57 AM and continues until 6:01 PM. Incremental shadows from the Projected Development Sites would be cast on the East River and Grand Ferry Park for approximately nine and ten minutes, respectively (refer **to Table E-2**).

As shown in **Figure E-5**, incremental shadow would be cast over a small portion of the East River and the northern portion of Grand Perry Park. Incremental shadow would move west before exiting the East River and Grand Ferry Park by 6:06 AM and 6:07 AM, respectively. Due to the minimal extent and duration of incremental shadow, no sunlight-sensitive resource would receive less than the six to eight hours of direct sunlight recommended by *CEQR* as a result of the Proposed Actions on the June 21 analysis day.

December 21

December 21 (the winter solstice), is the day with the least amount of sunlight. The sun is low in the sky, creating shadows that are at their longest. The analysis period for this day begins at 8:51 AM and ends at 2:53 PM. On this analysis day, incremental shadows from the Projected Development Sites would be cast on the East River and the River Ring Open Space for two hours and three hours and 21 minutes, respectively.

At 8:51 AM, incremental shadow would be cast over portions of the public beach, inner cove, and ring public walkway (refer to **Figure E-6a**). Incremental shadow would move west throughout the morning and would decrease in size. By approximately 10:30 AM, incremental shadow would be cast over a small portion of the inner cove and the eastern-most portion of the public beach. By 12:00 PM, incremental shadow would be limited to a small portion of the ring walkway at the eastern edge of the open space.

The December 21 analysis day is not considered part of the growing season, and, thus, the viability of any existing vegetation within the open space would not be threatened.

Assessment

The Projected Development Sites would cast incremental shadows on the East River and River Ring Open Space on three of the four analysis days. Incremental shadow would be cast on Grand Ferry Park on one of the four analysis days (refer to **Table E-2**). Incremental shadow would range from 9 minutes to 2 hours over the East River, between 21 minutes and three hours and 21 minutes for the River Ring Open Space, and 10 minutes on Grand Ferry Park.

East River

The current moves swiftly in the East River and would move phytoplankton and other natural elements quickly through the area to be affected by any incremental shadows. Therefore, project-generated shadows would not be expected to affect primary productivity. Due to the movement of the sun throughout the early morning hours, incremental shadows would not affect one specific area of the East River.

As shown in **Figures E-3** through **E-6b**, there will be no intervening structures between the Projected Development Site and the East River and the River Ring Open Space by the 2025 build year. However, by 2027, the south tower of the River Ring development is expected to be completed. The south tower would create an intervening structure between the Projected Development Sites and the East River and River Ring open space, meaning that the majority of incremental shadow cast by the Projected Development Sites would be temporary until the completion of the River Ring south tower in 2027.

Therefore, as the extent and duration of the incremental shadows would (1) not significantly reduce direct sunlight exposure on the natural resource, and (2) would not threaten the viability of vegetation or other resources, incremental shadows on the East River as a result of the Proposed Actions would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

River Ring Open Space

As discussed above, incremental shadow from the Projected Development Sites would be cast over the Ring open apace for durations ranging between 21 minutes and three hours and 21 minutes, depending on the analysis day (refer to **Table E-2**). Incremental shadow from the Projected Development Sites would be cast over portions of the public beach, shore walkway, ring walkway, and landscaped plantings. No particular portion of the open space would be cast in shadow for an extended amount of time. During the growing season, the open space would continue to receive six to eight hours of direct sunlight. Shadows occurring during the cold-weather months generally do not affect the growing season of

vegetation. On each of the analysis days, areas with access to direct sunlight would remain in the open space. Project-generated shadow would be limited or non-existent depending on the analysis day during the summer months and would therefore not affect the utilization or enjoyment of the beach area (refer to **Table E-2**).

As discussed above, the construction of the south tower of the River Ring development in 2027 would significantly reduce, or entirely eliminate, incremental shadow cast by the Projected Development Sites onto the River Ring open space.

Therefore, as the extent and duration of the incremental shadows would (1) not significantly reduce or completely eliminate direct sunlight exposure on any of the sunlight-sensitive resources found within this open space; and (2) would not significantly alter the public's use of the beach, public walkways, or threaten the viability of vegetation or other resources located within the open space, incremental shadows on the River Ring open space would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

Grand Ferry Park

As shown in **Table E-2**, incremental shadows would be cast by the Projected Development Sites for approximately 10 minutes on the June 21 analysis day. Based on the limited extent and duration of incremental shadow, the Proposed Actions would not have a significant adverse impact to Grand Ferry Park.

ATTACHMENT F

HISTORIC AND CULTURAL RESOURCES

I. INTRODUCTION

Historic and cultural resources include both architectural and archaeological resources. The 2021 *City Environmental Quality Review* ("CEQR") *Technical Manual* identifies historic and cultural resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks ("NYCL"); properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission ("LPC"); properties listed on the State/National Registers of Historic Places ("S/NR") or contained within a district listed on or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks ("NHL"); and properties not identified by one of the programs listed above, but that meet their eligibility requirements. An assessment of historic and archaeological resources is usually needed for projects that are located adjacent to historic or landmark structures or within historic districts, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

According to 2021 *CEQR Technical Manual* guidance, impacts on historic architectural resources are considered on those sites affected by a proposed action and within the area surrounding the project area. The historic resources study area is therefore defined as the Project Area plus an approximate 400-foot radius surrounding the Project Area (refer to **Figure F-1**), which is typically adequate for the analysis of historic architectural resources, in terms of physical, visual, and historical relationships. The Project Area is located within 400 feet of the S/NR-listed and NYCL-eligible Austin, Nichols & Co. Warehouse, the S/NR-eligible Metropolitan Avenue Warehouse, the S/NR-eligible Rokeach & Sons Warehouse, and the northwest portion of the S/NR-eligible Grand Street Historic District. As such, an assessment of the potential effects of the Proposed Actions on historic architectural resources in provided in this attachment.

Archaeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance as compared to the No-Action scenario; these are limited to sites that may be developed as a result of a proposed action. As determined by LPC in an environmental review letter dated July 28, 2022 (provided in **Appendix 2**), neither of the two lots comprising the Project Area have archaeological significance. Therefore, the Proposed Actions would not result in any significant adverse archaeological impacts and an archaeological analysis is not warranted. As such, this attachment focuses exclusively on historic architectural resources.

II. DEVELOPMENT BACKGROUND

Prior to the arrival of the European colonists in the 17th century, Brooklyn was inhabited by Canarsie Native Americans, a largely autonomous tribe of the Leni Lenape. The Project Area and surrounding land were purchased from the Native Americans in 1638 by the Dutch West India Company. The area was largely used as farmland until 1802, when it was purchased by real estate speculator Richard M. Woodhull. An engineer named Colonel Jonathan Williams surveyed the area; Woodhull later named the area Williamsburgh in his honor. In 1812, the Grand Street Ferry was established, connecting Grand Street in Manhattan to North 2nd Street in the Project Area (now Metropolitan Avenue), and the surrounding land was divided into blocks and lots for redevelopment.

In 1827, the area was incorporated as the Village of Williamsburgh. The following year, 1st Street (now Kent Avenue) was constructed, along with new wharves and docks along the East River waterfront. The area between Grand Street and North 4th Street subsequently became the center of the newly incorporated village. In 1836, the Peck Slip Ferry was established, connecting the South Street Seaport in Manhattan with Broadway in Brooklyn, further contributing to Williamsburgh's growth in popularity and prosperity.

Williamsburg was annexed to the City of Brooklyn in 1855 (dropping its ending "h"); in 1898, Brooklyn was consolidated into the City of New York. During this time, the East River waterfront in Williamsburg grew into an important industrial area with shipyards for raw materials and factories to process the raw materials, including Standard Oil, Domino Sugar, Pfizer Pharmaceutical, and Schaefer Brewery. The Williamsburg Bridge opened in 1903, further contributing to the neighborhood's growth and development throughout the early-20th century as residents left the crowded Lower East Side to settle in the area.

Williamsburg remained primarily industrial and residential until the mid-20th century, when manufacturing in New York City began to decline. In 1947, the ferry terminal in the Project Area was demolished, and a wharf was constructed to replace the ferry docks and to accommodate shipping. Between 1966 and 1974, the Project Area was covered by fuel storage tanks, and the Metropolitan Avenue Pier was demolished. Concurrently, during the City's financial crises of the 1970s, many of the buildings in the surrounding Williamsburg neighborhood were abandoned. In the late-20th century, artists began moving to the area, attracted by the low rents.

In 2005, the City rezoned Williamsburg and neighboring Greenpoint in order to accommodate the development of mixed-use, high-density buildings with public parks along the East River waterfront, which led to rapid changes in the area. The construction of new, high-rise residential and commercial buildings along the once industrial waterfront revitalized the neighborhood, spurring the conversion of former industrial buildings further inland to residential and commercial uses. The Project Area was rezoned from M3-1 to M1-4 as part of the River Ring project, which was approved in December 2021 (C 210166 ZMK).

III. ARCHTECTURAL RESOURCES

Criteria and Regulations

Once the study area was determined, an inventory of officially recognized architectural resources was compiled. Criteria for listing on the National Register are in the Code of Federal Regulations, Title 36, Part 63. As recommended in the 2021 *CEQR Technical Manual*, Chapter 9, Section 160, LPC has adopted these criteria for use in identifying National Register listed and eligible architectural resources for review pursuant to CEQR. Following these criteria, districts, sites, buildings, structures, and objects are eligible for the National Register if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and: (1) are associated with events that have made a significant contribution to the broad patterns of history (Criterion A); (2) are associated with significant people (Criterion B); (3) embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C); or (4) may yield [archaeological] information important in prehistory or history. Properties younger than 50 years of age are ordinarily not eligible, unless they have achieved exceptional significance. Official determinations of eligibility are made by the New York State Office of Parks, Recreation and Historic Preservation ("NYS OPRHP").

In addition, LPC designates historically significant properties in New York City as NYCLs and/or Historic Districts, following the criteria provided in the Local Laws of the City of New York, New York City Charter, Administrative Code, Title 25, Chapter 3. Buildings, properties, or objects are eligible for landmark status when a part is at least 30 years old. Landmarks have a special character or special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the city, state, or nation. There are four types of NYCLs: individual landmarks, interior landmarks, scenic landmarks, and historic districts.

Existing Conditions

Project Area

In a letter dated July 28, 2022 (provided in **Appendix 2**), LPC determined that there are no designated or eligible historic architectural resources on the two lots comprising the Project Area (Block 2362, Lots 1 and 2), both of which are currently vacant.

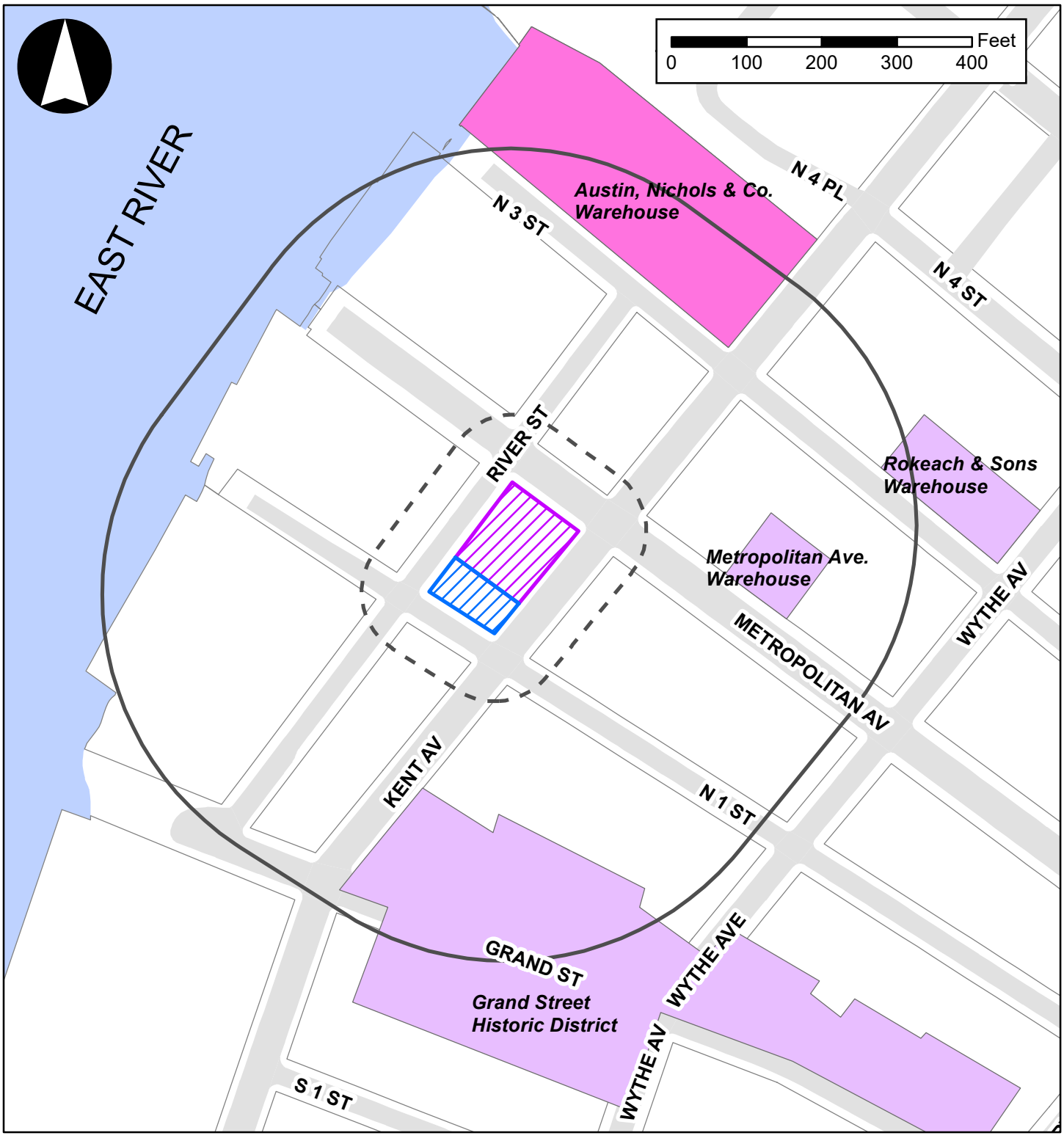
400-Foot Study Area

As shown in **Figure F-1**, there are several historic architectural resources located within the 400-foot study area surrounding the Project Area: the S/NR-listed and NYCL-eligible Austin, Nichols & Co. Warehouse; the S/NR-eligible Metropolitan Avenue Warehouse; the S/NR-eligible Rokeach & Sons Warehouse; and the northwest portion of the S/NR-eligible Grand Street Historic District. A brief description of each resource is presented below, and photos are provided in **Figure F-2**.

AUSTIN, NICHOLS & CO. WAREHOUSE (S/NR-LISTED, NYCL-ELIGIBLE): 184 KENT AVENUE (BLOCK 2348, LOT 7501)

Designed by prominent architect Cass Gilbert, the Austin, Nichols & Co. Warehouse is notable for its pioneering use of reinforced concrete technology on an unprecedented scale. Constructed in 1914-15 with steel-reinforced, poured-in-place concrete, the six story warehouse, factory, and office building was one of the largest food storage and distribution facilities in the U.S. at the time. The building's location at 184 Kent Avenue (see **Figure F-1**) was ideal for its accessibility to water, rail, and road. As shown in **Figure F-2a**, the building's clean, austere style celebrated the strength and beauty of reinforced concrete at a time when it was more common to conceal structural elements in other materials and detail exteriors with historicist facades. Coated in white paint, the building has a slightly irregular rectangular box shape with walls that slope inward and are crowned by a concrete cornice. Regular groupings of paired and tripartite windows arranged in columns appear throughout all four of the building's elevations. The north, east, and south facades contain ground-level loading bays which were once topped with a continuous concrete marquis supported by curved concrete brackets; only a small portion of the marquis remains on North 3rd Street. The Kent Avenue elevation has a large entrance topped with a similar concrete marquis (see **Figure F-2a**). The building, which was converted into apartments in the 1980s, is significant as an engineering marvel, satisfying programs of food processing, storage, refrigeration, and delivery in one structure, and served as a prototype for future reinforced concrete warehouses and factories, such as the Brooklyn Army Terminal. The Austin, Nichols & Co. Warehouse is listed on the S/NR and eligible for designation as a NYCL.

Figure F-1
Historic Resources Map



Legend

- Projected Development Site 1
- Projected Development Site 2
- 90-foot Radius
- 400-foot Radius
- S/NR Eligible Resource
- S/NR Listed & NYCL Eligible Resource



View looking north from Kent Avenue and North 3rd Street.



View looking north on River Street adjacent to the Project Area



Southern facade on North 3rd Street, looking southwest from the East River waterfront.

METROPOLITAN AVENUE WAREHOUSE (S/NR-ELIGIBLE): 67-73 METROPOLITAN AVENUE (BLOCK 2357, LOT 25)

The warehouse at 67-73 Metropolitan Avenue was constructed circa 1906 for the Igoe Brothers as a paper storage facility. The reinforced concrete warehouse is five stories tall and five bays wide, defined by piers with multi-light industrial sash and paneled spandrels in each bay (see **Figure F-2b**). The building's bays are emphasized by vertical rows of large, deeply-set, multi-light windows, all square in shape except for those on the fourth floor, which are arched and topped with simple, square keynotes. The fourth floor of the warehouse is also topped with a cornice line with simple ornament. Other decorative elements include deep-set panels between the windows on each floor, and a raised pedimented roof on the central bay. The ground-floor of the warehouse has large, square openings covered in metal roll-down gates; a marquis projects from the central ground-floor opening. The building is significant for its association with turn-of-the-century industrial growth and development in Williamsburg, and retains a relatively high degree of period integrity, making it a representative example of local industrial architecture of the period. The warehouse at 67-73 Metropolitan Avenue is eligible for listing on the S/NR.

ROKEACH & SONS WAREHOUSE (S/NR-ELIGIBLE): 63-81 NORTH 3RD STREET/242-250 WYTHE AVENUE (BLOCK 2349, LOT 23)

The former Rokeach & Sons Warehouse is a four-story concrete slab industrial building constructed as a kosher food plant in 1929. As shown in **Figure F-2b**, the building features large window openings with nine bays fronting North 3rd Street and four bays fronting Wythe Avenue, all of which are separated by slightly projecting piers topped with double-pointed geometric shapes. The ground-level of the North 3rd Street façade contains three large arched openings for vehicular access, and the remaining ground-floor openings on both Wythe Avenue and North 3rd Street contain metal roll-down gates. Most of the original windows of the building have been replaced. The warehouse is eligible for listing on the S/NR for its association with the early-20th century industrial growth and development of Williamsburg, as a representative example of the local industrial architecture of the period.

GRAND STREET HISTORIC DISTRICT (S/NR-ELIGIBLE): NOS. 30-72, 126-170, AND 31-171 GRAND STREET

As shown in **Figure F-1**, the northwestern portion of the S/NR-eligible Grand Street Historic District is located within the 400-foot study area. The S/NR-eligible Grand Street Historic District contains approximately 70 buildings on Grand Street between Kent and Bedford Avenues that are associated with the early commercial development of Williamsburg in the mid- to late-19th century as a result of the Grand Street Ferry to Manhattan. Most buildings in the S/NR-eligible Grand Street Historic District are three and four stories tall and clad in red brick, designed in the Italianate or Romanesque Revival styles with ground-floor commercial spaces and residences above. Many of the buildings in the Historic District feature decorative elements such as arched window hoods, projecting cornices, and stone lintels.

One notable building in the 400-foot study area is the former Northside Savings Bank at 33-35 Grand Street (shown in **Figure F-2c**). Designed by prominent local architect Theobald Engelhardt and constructed in 1889, the distinctive Romanesque Revival commercial building has a rusticated stone façade with three large round-arched openings. A parapet with an ornately raised, multi-curved pediment tops the single-story structure. Other contributing buildings of the S/NR-eligible Grand Street Historic District located within 400-feet of the Project Area include two- to five-story Italianate red brick residential buildings, some with ground-floor commercial spaces, as well as simple, one-story brick commercial and industrial buildings (see **Figure F-2c**).



Metropolitan Avenue Warehouse (S/NE-eligible) - view from Metropolitan Avenue looking northeast



Rokeach & Sons Warehouse - (S/NR-eligible) - view from Wythe Avenue and North 3rd Street looking northwest.



North side of Grand Street between Kent and Wythe Avenues in the Grand Street Historic District.



Grand Street Historic District: Northside Savings Bank at 33-35 Grand Street



North side of Grand Street east of Wythe Avenue in the Grand Street Historic District.



Grand Street Historic District: View east along Grand Street from Wythe Avenue, with one of the Domino Sugar buildings in the background.

The Future without the Proposed Actions (No-Action Condition)

Under No-Action conditions, the status of historic resources could change. S/NR-eligible architectural resources could be listed in the Registers, and properties found eligible for consideration for designation as NYCLs could be calendared and/or designated. Changes to the historic resources identified above or to their settings could also occur irrespective of the Proposed Actions. Future projects could affect the settings of architectural resources. It is possible that some architectural resources in the area surrounding the Project Area could deteriorate, while others could be restored. In addition, future projects could accidentally damage architectural resources through adjacent construction.

Properties that are designated NYCLs are protected under the New York City Landmarks Law, which requires LPC review and approval before any alteration or demolition of those resources can occur. All properties within LPC-designated historic districts also require LPC permit and approval prior to new construction, addition, enlargement, or demolition. The owners of a property may work with LPC to modify their plans to make them appropriate. Properties that have been calendared for consideration for designation as NYCLs are also afforded a measure of protection insofar as, due to their calendared status, permits may not be issued by DOB for any structural alteration to the buildings for any work requiring a building permit, without at least 40 days prior notice being given to LPC. During the 40-day period, LPC has the opportunity to consider the case and, if it so chooses, schedule a hearing and move forward with designation.

The New York City Building Code provides some measures of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. Additional protective measures apply to designated NYCLs and S/NR-listed historic buildings located within 90 linear feet of a proposed construction site. For these structures, the DOB's TPPN #10/88 applies. TPPN #10/88 supplements the standard building protections afforded by the Building Code by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent NYCL-designated or S/NR-listed historic resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

Additionally, historic resources that are listed on the S/NR or that have been found eligible for listing are given a measure of protection from the effects of federally-sponsored, or federally-assisted projects under Section 106 of the National Historic Preservation Act, and are similarly protected against impacts resulting from state-sponsored or state-assisted projects under the New York State Historic Preservation Act. Although preservation is not mandated, federal agencies must attempt to avoid adverse impacts on such resources through a notice, review, and consultation process. Private property owners using private funds can, however, alter or demolish their S/NR-listed or S/NR-eligible properties without such a review process.

Anticipated Developments in the No-Action Condition

PROJECT AREA

As described in **Attachment A, "Project Description,"** under the No-Action condition, it is assumed that Lot 1, which is owned by the Applicant, would be developed on an as-of-right basis in accordance with the existing M1-4 zoning. It should be noted that the Applicant's site was identified as a projected development site in the *River Ring EIS* (which rezoned the Project Area from M3-1 to M1-4), and was assumed to be developed with a 3-story (45-foot-tall) mixed-use building with approximately 20,223 gsf, comprising approximately 6,741 gsf of commercial space (local retail), 6,741 gsf of light industrial space

(warehouse), and approximately 6,741 gsf of community facility space (medical office). As Lot 3 is owned by Con Edison, and would continue to be zoned for manufacturing use in absence of the Proposed Actions, it is assumed to remain undeveloped in the No-Action.

At a height of 3 stories, the as-of-right No-Action building on Lot 1 in the Project Area would likely not be visible behind any of the identified architectural resources in the study area (such as the Austin, Nichols & Co. Warehouse when looking south; the Metropolitan Avenue Warehouse when looking west along Metropolitan Avenue; or when looking north in the S/NR-eligible Grand Street Historic District). As such, the No-Action building on Lot 1 would be unlikely to alter the settings of these historic architectural resources, given that they are located in a densely-developed urban environment.

400-FOOT STUDY AREA

As detailed in **Attachment C, "Land Use, Zoning, and Public Policy,"** there are three mixed-use buildings expected to be completed within the 400-foot study area by the Analysis year of 2025. This includes 296 Wythe Avenue, a 6-story mixed-use building to the southeast of the Project Area, 61 Metropolitan Avenue, a seven-story mixed-use building to the northeast of the Project Area, as well as the 49-story North Tower of the River Ringer development to the west of the Project Area. These No-Action projects could alter the context and setting of surrounding historic resources, creating new backdrops for the Austin, Nichols & Co. Warehouse, Metropolitan Avenue Warehouse, Rokeach & Sons Warehouse, and S/NR-eligible Grand Street Historic District in the future without the Proposed Actions.

The Future with the Proposed Actions (With-Action Condition)

According to the *CEQR Technical Manual*, generally, if a project would affect those characteristics that make a resource eligible for NYCL designation or S/NR listing, this could be a significant adverse impact. This section assesses the Proposed Actions' potential to result in significant adverse impacts on identified architectural resources in the study area, including impacts resulting from construction of the two RWCDS Projected Developments, project-generated shadows, or other indirect effects on existing historic resources in the study area.

The Proposed Actions were assessed in accordance with guidance established in the *CEQR Technical Manual* (Chapter 9, Part 420), to determine (a) whether there would be a physical change to any designated or listed property as a result of the Proposed Actions; (b) whether there would be a physical change to the setting of any designated or listed resource, such as context or visual prominence, as a result of the Proposed Actions; and (c) if so, whether the change is likely to diminish the qualities of the resource that make it important. Whereas this attachment focuses specifically on the Proposed Actions' effects on the visual context of historic resources, an assessment of the Proposed Actions' effects on the visual character of the study area in general is provided separately in **Attachment G, "Urban Design and Visual Resources**."

As detailed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the redevelopment of the Applicant Site (Projected Development Site 1) with an eight-story residential building (approximately 44 units) with 6,059 gsf of local ground floor retail. Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed massing for the Applicant's building, which maximizes the allowable FAR, would be 105 feet tall.

Moreover, as detailed in **Attachment A**, the With-Action RWCDS for the Proposed Actions assumes the non-Applicant Projected Development Site 2 would be developed with a building that maximizes its allowable residential FAR, resulting in an approximately 14-story residential building (82 DUs) with

approximately 13,765 gsf of local retail space and approximately 10,850 gsf of parking area in the cellar. For analysis purposes, the building height is assumed to be 145 feet, which is the maximum allowed by zoning.

Direct (Physical) Impacts

Historic resources can be directly affected by physical destruction, demolition, damage, alteration, or neglect of all or part of a historic resource. For example, alterations, such as the addition of a new wing to a historic building or replacement of the resource's entrance could result in significant adverse impacts, depending on the design. Direct effects also include changes to an architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features.

The Proposed Actions are site-specific, and, as discussed above, the Project Area does not contain any existing designated or eligible historic resources. Therefore, the Proposed Actions would not result in any direct impacts to historic architectural resources.

Indirect (Contextual) Impacts

Contextual impacts may occur to architectural resources under certain conditions. According to the *CEQR Technical Manual*, possible impacts to architectural resources may include isolation of the property from, or alteration of, its setting or visual relationships with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor. Significant indirect impacts can occur if the Proposed Actions would cause a change in the quality of a property that qualifies it for listing on the S/NR or for designation as a NYCL.

The Proposed Actions would not result in significant adverse indirect impacts on historic architectural resources. Development facilitated by the Proposed Actions would not significantly alter the context or setting of the NYCL-eligible and S/NR-listed Austin, Nichols & Co. Warehouse, the S/NR-eligible Metropolitan Avenue Warehouse, the S/NR-eligible Rokeach & Sons Warehouse, or the S/NR-eligible Grand Street Historic District as compared to No-Action conditions. As detailed above, the Proposed Actions would facilitate the development of two buildings on Projected Development Sites 1 and 2, which would rise eight and 14 stories (approximately 105 and 145 feet), respectively. The upper floors of these buildings in the Project Area would be visible behind the Austin, Nichols & Co. Warehouse when looking south on North 4th Place and southwest on Kent Avenue; and beyond the Metropolitan Avenue Warehouse when looking west along Metropolitan Avenue, and when looking north in the S/NR-eligible Grand Street Historic District.

Although the Proposed Actions and resultant RWCDS buildings would alter the backdrops of these historic architectural resources, these changes would not be significant or adverse. The study area is a dense urban environment with multiple existing mid- and high-rise buildings that currently form the setting and context of these historic resources irrespective of the Proposed Actions. Existing taller buildings that form the backdrop for historic resources in the area include the 40-story building at 2 North 6th Street, the 30-story tower at 164 Kent Avenue, and the 41-story building at 1 North 4th Street, all to the north of the Project Area, as well as the newly constructed 42-story mixed-use tower at 260 Kent Avenue (a.k.a. One South First/Ten Grand), just south of the Project Area. Additionally, as described above, two 6- and 7-story mixed-use buildings are expected to be constructed to the southeast and northeast of the Project Area in the No-Action, and a 49-story building is expected to be constructed to the west of the Project Area, which would alter the context and setting of surrounding historic resources in the future without the Proposed Actions. As such, development facilitated by the Proposed Actions would not substantially change the

visual setting of any surrounding historic architectural resource so as to affect those characteristics that make it eligible for listing on the S/NR and/or designation by the LPC.

Additionally, in the future with the Proposed Actions, no incompatible visual, audible, or atmospheric elements would be introduced to any historic resource's setting. Development facilitated by the Proposed Actions would not alter the relationship of any identified historic architectural resources to the streetscape, as all historic resources' relationships to the street would remain unchanged in the future with the Proposed Actions. The RWCDS buildings within the Project Area would not eliminate or screen public views of any historic architectural resources, which would remain visible in view corridors on adjacent public streets and sidewalks, including Kent Avenue, Metropolitan Avenue, Grand Street, and North 3rd Street. No primary facades, significant architectural ornamentation, or notable features of surrounding historic architectural resources would be obstructed by the RWCDS buildings.

The Proposed Actions would not result in development that would diminish the qualities that make the NYCL-eligible and S/NR-listed Austin, Nichols & Co. Warehouse, the S/NR-eligible Metropolitan Avenue Warehouse, the S/NR-eligible Rokeach & Sons Warehouse, or the S/NR-eligible Grand Street Historic District historically and architecturally significant. As such, the Proposed Actions would not result in any significant adverse indirect or contextual impacts on historic architectural resources.

Construction-Related Impacts

Any new construction taking place within historic districts or adjacent to individual landmarks has the potential to cause damage to contributing buildings to those historic resources from ground-borne construction vibrations. As noted above, the New York City Building Code provides some measure of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. Additional protective measures apply to LPC-designated and S/NR-listed historic resources located within 90 linear feet of a proposed construction site. For these structures, DOB's TPPN #10/88 applies. TPPN #10/88 supplements the standard building protections afforded by the Building Code by requiring, among other things, a monitoring program to reduce the likelihood of construction damage to adjacent LPC-designated or S/NR-listed resources (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

As there are no historic architectural resources located within 90 feet of the Project Area (Refer to **Figure F-1**), the Proposed Actions would not result in any significant adverse construction-related impacts to historic resources.

Shadows Impacts

The Proposed Actions would not result in any significant adverse shadows impacts on historic resources. As detailed in **Attachment E, "Shadows,"** the Proposed Actions would not generate incremental shadows on sunlight-sensitive features of surrounding historic resources. Therefore, the Proposed Actions would not result in any significant adverse shadows impacts on historic resources.

ATTACHMENT G

URBAN DESIGN & VISUAL RESOURCES

I. INTRODUCTION

The 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* states that the urban design components and visual resources determine the "look" of a neighborhood – its physical appearance, including the street pattern, the size and shape of buildings, their arrangement on blocks, streetscape features, natural resources, and noteworthy views that may give an area a distinctive character. Pursuant to CEQR methodology, actions that would allow a project to potentially obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings may warrant a detailed urban design and visual resources analysis. Since the proposed action/RWCDS would facilitate the construction of buildings that would be different in bulk, type, and/or height than what is allowed or required by existing zoning, a detailed urban design and visual resources analysis was prepared.

This attachment considers the potential for the proposed action to affect urban design characteristics and visual resources of the project area and the surrounding study area. The technical analysis presented in this attachment follows the guidance of the *CEQR Technical Manual* and addresses each of the previously listed characteristics for existing conditions, the future without the Proposed Actions (the No-Action condition), and the future with the Proposed Actions (the With-Action condition) for Proposed and Projected Development.

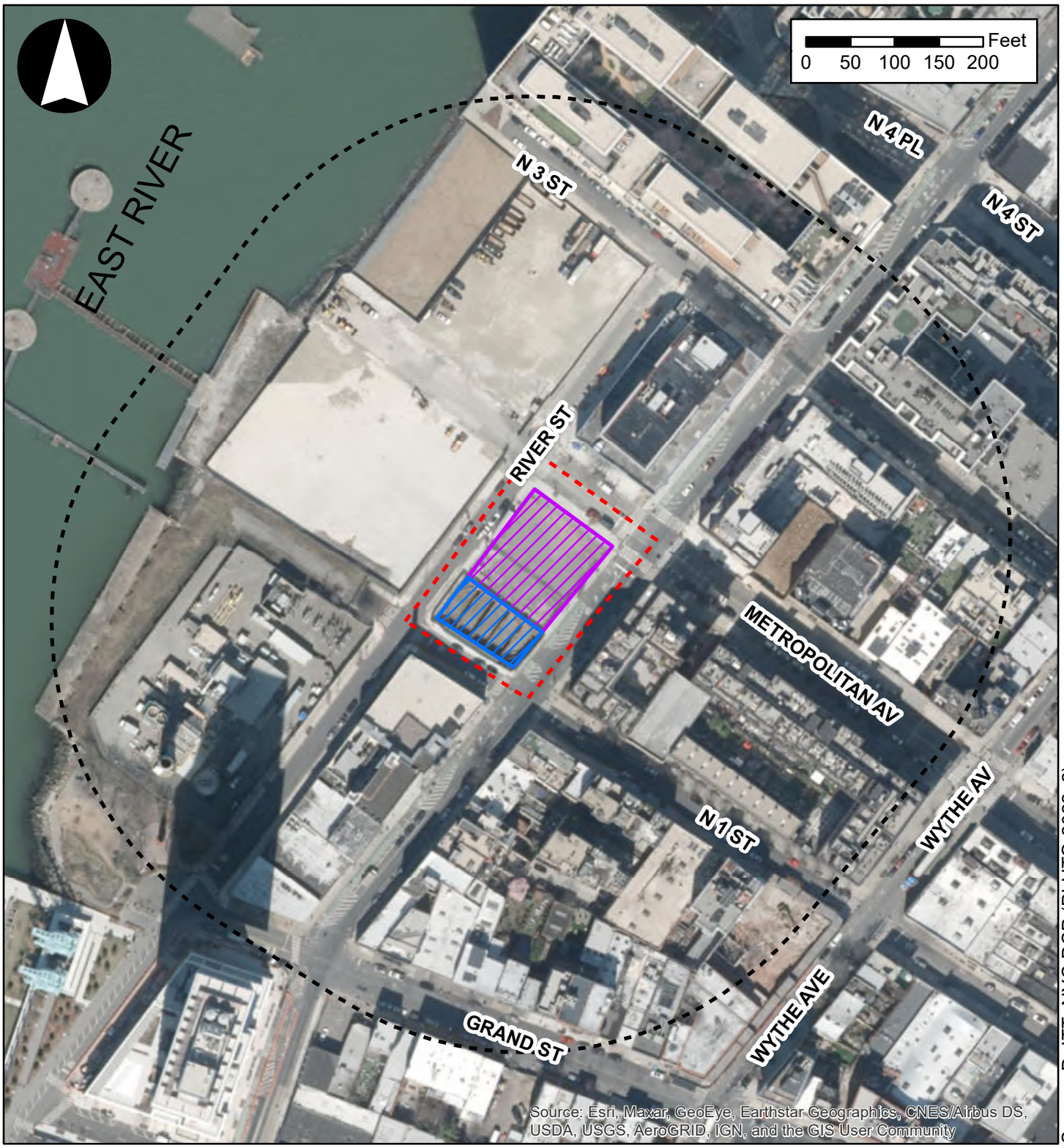
As described in **Attachment A, "Project Description,"** the Proposed Actions consist of two discretionary actions: a zoning map amendment and zoning text amendment, affecting an area in the Williamsburg neighborhood of Brooklyn Community District (CD) 1. The actions being requested are: (1) a zoning map amendment to rezone Brooklyn Block 2362 in its entirety, comprised of Lots 1 and 3, ("Project Area") from a M1-4 district to a M1-4/R7X Special Mixed-Use (MX) District (MX8); and (2) a concurrent zoning text amendment to (a) amend Zoning Resolution (ZR) Appendix F to establish the Project Area within a Mandatory Inclusionary Housing (MIH) area; and (b) amend the table in ZR Section 123-63 to include R7X as a designated residence district in MX-8 in Brooklyn Community District 1 in which MIH is required. The Proposed Actions would affect a total land area of approximately 18,024 square feet (sf).

As also described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the Applicant's proposed development at Block 2362, Lot 1 ("Projected Development Site 1"), an approximately 5,472-sf corner lot. It is assumed that the Proposed Actions would result in one additional development at Block 2362, Lot 3 ("Projected Development Site 2"), an adjacent, approximately 12,552-sf corner lot. Both sites are shown in **Figure G-1**.

Under the With-Action condition, a 43,095 gsf mixed-use building would be constructed at Projected Development Site 1 (Block 2362, Lot 1), consisting primarily of residential uses with ground-floor retail. Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed massing for the Applicant's building would be 105 feet tall; however, a height of 145 feet will be conservatively assumed as a RWCDS where applicable.

Under the RWCDS for the With-Action condition, it is assumed that the proposed zoning changes would allow for redevelopment of Block 2362, Lot 3, which is not owned or controlled by the Applicant

Figure G-1
Aerial Map



Source: DoITT; NYC DCP (PLUTO 2022v2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area (Primary Study Area)
- 400-ft Radius

("Projected Development Site 2") pursuant to the proposed M1-4/R7X zoning regulations. The RWCDS for Projected Development Site 2 is a 14-story 145-foot-tall approximately 94,670 gsf building consisting of primarily residential uses with ground-floor retail. The RWCDS assumes a 2025 build year for analysis, which accounts for development of both the Applicant-owned Projected Development Site 1 and the non-Applicant-owned Projected Development Site 2.

Under the No-Action condition, it is assumed that Applicant-owned Projected Development Site 1 would be developed on an as-of-right basis in accordance with the existing M1-4 zoning, with a 3-story mixed-use building with approximately 20,223 gsf of local retail, commercial warehouse, and medical office space. As Lot 3 is owned by Con Edison, and would continue to be zoned for manufacturing use in absence of the proposed actions, it is conservatively assumed to remain undeveloped in the No-Action condition based on its ownership status (owned by a utility company).

As discussed in **Attachment C, "Land Use, Zoning, and Public Policy,"** the existing M1-4 district mapped on the rezoning area allows a maximum FAR of 2.0 for manufacturing and commercial uses, and 6.50 for community facility uses. The M1-4 district allows for a maximum base height of 60 feet before being subject to the sky exposure plane and also requires a 20-foot minimum rear yard.

As the Proposed Actions would result in the construction of new development built due to a rezoning that would change bulk regulations and increase permitted density, and urban design and visual resources analysis is warranted.

II. PRINCIPAL CONCLUSIONS

No significant adverse impacts on urban design and visual resources, per the guidance found in the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, are anticipated in the future with the Proposed Actions in the Project Area (the primary study area) or within a 400-foot radius (secondary study area). The Proposed Actions would permit development that is similar to the existing buildings within and surrounding the Project Area. The analysis in this attachment finds that the proposed action would not result in development that would alter views of any visual resources from publicly-accessible locations within the rezoning and surrounding study area.

III. METHODOLOGY

Together, the urban design components and visual resources of an area define the distinctive identity of a neighborhood. In an urban design assessment under CEQR, one considers whether and to what degree a project may change the visual experience of a pedestrian in the study area. The assessment focuses on the components of the proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment from the pedestrian point of view. These components include building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. The concept of bulk is created by the size of a building and the way it is massed on a site. Height, length, and width define a building's size; volume, shape, setbacks, lot coverage, and density define its mass. A visual resources analysis identifies and assesses the effects of the proposed action on the study area's visual resources, which are its unique, or important public view corridors, vistas, or natural or built features. Waterfront views, public parks, landmarked structures, landmarked districts, and natural resources are examples of visual resources. As

per the guidance of CEQR, only views of visual resources from public and publicly-accessible locations will be assessed. The analysis in this attachment addresses each of these characteristics of existing conditions and the future without and with the Proposed Actions for the year 2025.

In accordance with the *CEQR Technical Manual*, this assessment considers the effects of the proposed action/RWCDS on the following elements that play an important role in the pedestrian's experience of public space:

- ***Streets*** – the arrangement and orientation of streets define location, flow of activity, street views, and create blocks on which buildings and open spaces are arranged. Other elements including sidewalks, plantings, streetlights, curb cuts, and street furniture also contribute to an area's streetscape.
- ***Buildings*** – building size, shape, pedestrian and vehicular entrances, lot coverage and orientation to the street are important urban design components that define the appearance of the built environment.
- ***Open Space*** – open space consists of public and private areas that do not include structures, such as parks and other landscaped areas, cemeteries, and parking lots.
- ***Natural Features*** – natural features include vegetation, geologic and aquatic features that are natural to the area.
- ***View Corridors and Visual Resources*** – visual resources include significant natural or built features, such as important view corridors, public parks, landmark structures or districts, or otherwise distinct buildings.
- ***Wind*** – Channelized wind pressure from between tall buildings and down-washed wind pressure from parallel tall buildings may cause winds that may jeopardize pedestrian comfort and safety.

As the Proposed Actions would result in physical changes within the Project Area beyond the bulk and form currently permitted as-of-right, it has the potential to result in development that could alter the arrangement, appearance, and functionality of the built environment and, therefore, change a pedestrian's experience of the Project Area. Therefore, it is appropriate to assess the Proposed Actions potential impacts to urban design and visual resources. As described in **Attachment A, "Project Description,"** this analysis assumes that the With-Action condition would attempt to maximize the building envelope permitted through zoning. The urban design analysis presented below follows the guidance of the *CEQR Technical Manual.*

Wind Screening

As per Section 230 of the CEQR Technical Manual, projects involving multiple, tall buildings at or in close proximity to the waterfront may result in an exacerbation of wind conditions due to "downwash" effects that may affect the pedestrian experience in the area. The Proposed Actions are not expected to result in the construction of unusually tall buildings. Under the Proposed Actions, building heights in the Project Area are expected to be approximately 145 feet tall (not including mechanical equipment), which is not significantly taller than other buildings in the area. Though the Project Area is in the vicinity of the East River, it is far enough from the waterfront that its proximity would not result in high wind conditions. Furthermore, future development between the Project Area and the waterfront expected in the future (the construction of the River Ring development) is expected to further buffer the Project Area from the waterfront. Therefore, a study of wind conditions and their effect on pedestrian level safety is not warranted.

Study Area Definition

The *CEQR Technical Manual* defines the urban design study area as the area "where the project may influence land use patterns and the built environment, and is generally consistent with [the study area] used for the land use analysis." The urban design study area is divided into the Project Area (where urban design effects of the proposed action are direct), also referred to as the primary study area, and a secondary study area (where the effects of the proposed action are indirect). As discussed in **Attachment C**, **"Land Use, Zoning, and Public Policy,"** the secondary study area for this analysis has been identified as a 400-foot radius from the Project Area, with that boundary extended to include lots with buildings that fall substantially within the 400-foot radius. This is considered the area within the surrounding area whose land use and built environment have the potential to be indirectly affected by the Proposed Actions. As shown in **Figure G-1**, the secondary study area boundary generally extends to lots fronting North 3rd Street to the north, Wythe Avenue to the east, Grand Street to the south, and lots fronting the East River to the west.

The analysis is based on field visits, aerial views, photographs, and other graphic images of the rezoning area and surrounding study area. Zoning calculations, including floor area calculations, and building height information is also provided. An aerial photo of the study area is provided in **Figure G-1**. **Figures G-2a through G-2g** present photos and display urban design characteristics of the study area.

IV. PRELIMINARY ASSESSMENT

Under CEQR, a preliminary assessment of urban design is appropriate when there is the potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning, including the following: 1) projects that permit the modification of yard, height, and setback requirements; and 2) projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the proposed action. According to the CEQR Technical Manual, detailed analyses are generally appropriate if an action introduces a new building requiring exception to existing zoning and would result in changes in height and setback requirements. As the proposed action includes a zoning map amendment that would facilitate a building with bulk characteristics and density beyond what is permitted as-of-right, a detailed urban design and visual resources assessment is warranted.

V. EXISTING CONDITIONS

Primary Study Area/Project Area

The Primary Study Area is defined as the area that would be directly affected by the Proposed Actions. The Primary Study Area for this analysis is the area affected by the proposed zoning map amendment and zoning text amendment (the "Project Area"), Brooklyn Block 2362, which consists of Lot 1 (Projected Development Site 1) and Lot 3 (Projected Development Site 2).

Streets

As shown in **Figure G-1**, the Project Area is roughly rectangular in shape, occupying the entirety of Block 2362. The Project Area is bounded to the north by Metropolitan Avenue, to the east by Kent Avenue, to

the south by North 1st Street, and to the west by River Street. The Project Area has approximately 107 feet of frontage along Metropolitan Avenue, 170.75 feet of frontage along Kent Avenue, 100.75 feet of frontage along North 1st Street, and 175.33 feet of frontage along River Street. **Figure G-2a** shows the streetscape in the Project Area

Metropolitan Avenue has a total width of approximately 80 feet (considered a Wide Street by zoning) with an approximately 44-foot wide roadbed and 18-foot wide sidewalks. It is a two-way street, that runs east-west, with two moving lanes and on-street parking on both sides. Streetscape elements include standard signage and street trees. Ground-floor windows of a commercial office building face the Project Area across Metropolitan Avenue

Kent Avenue is an approximately 60-foot wide, northbound one-way street with an approximately 40-foot wide roadbed and 10-foot wide sidewalks (the western sidewalk narrows to approximately 6 feet along the frontage of Projected Development Site 1 due to a construction fence). Of the streets bounding the Project Area, Kent Avenue is the most active pedestrian corridor, directly serving commercial lots to the south of the Project Area. There is a single moving vehicle lane flanked by on-street parking on both sides. On the west side, there is a dedicated two-way bike lane between the parking lane and the sidewalk. Approaching the intersection with Metropolitan Avenue (the only signalized intersection adjacent to the Project Area), the western parking lane is replaced by a left-turn lane. The streetscape features several street trees as well as planters at the property line along the eastern sidewalk. There are curb cuts on both sides of the street; the curb cut on the eastern sidewalk serves a windowless, ground-floor residential parking garage.

North 1st Street is a 50-foot wide, westbound one-way street with an approximately 25-foot wide roadbed and approximately 12.5-foot wide sidewalks (a construction fence at Projected Development Site 1 extends approximately 5 feet into the northern sidewalk). North 1st Street has one moving lane and on-street parking on both sides. Streetscape elements are limited; apart from standard signage and a fire hydrant, there is a metal ramp along the side of the commercial loft building across North 1st Street, which has large ground-floor windows facing the Project Area.

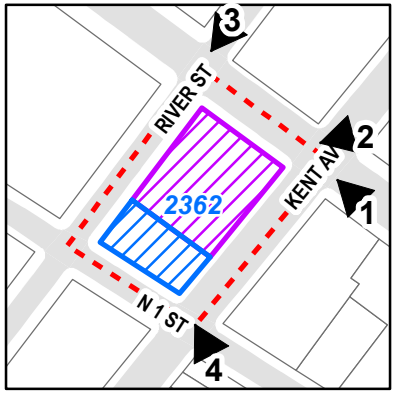
River Street is an approximately 50-foot wide, two-way street with an approximately 25-foot wide roadbed and approximately 12.5-foot wide sidewalks. There is on-street parking on both sides, and no lane markings. River Street has comparatively less pedestrian and vehicle activity than other streets bordering the Project Area. Construction fences border both sides of the street (the River Ring development site is directly across from the Project Area, and is currently an unbuilt construction site), and there are few streetscape elements.

Buildings

The Project Area does not include any buildings; both Projected Development Site 1 and Projected Development Site 2 are unbuilt. Projected Development Site 1 (Block 2362, Lot 1) was previously occupied by a two-story wood frame building with a partial basement, which had full lot coverage and was demolished in 2019. It is currently vacant and unbuilt, surrounded by a construction fence. Projected Development Site 2 (Block 2362, Lot 3) was ancillary to Con Edison's North First Street Terminal (NFST), a No. 6 fuel oil storage complex that operated from the 1960s until it was decommissioned in 2012. It is also currently vacant and unbuilt, and is surrounded by a chain-link fence. Refer to **Attachment C, "Land Use, Zoning, and Public Policy"** for more information. Refer to **Figure G-2b** for views of the existing conditions within the Project Area.



1. Looking west along Metropolitan Avenue, Project Area at left





2. View of the Project Area llooking southwest from the intersection of Metropolitan and Kent Avenues



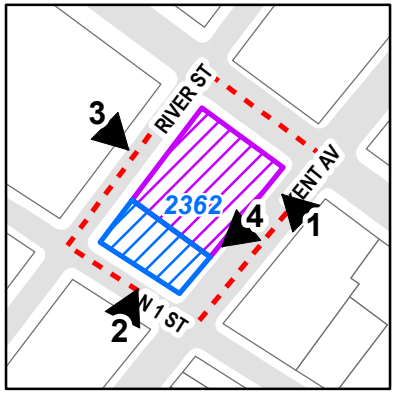
3. Looking south along River Street, Project Area at left



4. View of the Project Area looking west from the intersection of North 1st Street and Kent Avenue



1. View of Projected Development Site 2 looking west across Kent Avenue





2. View of Projected Development Site 1 looking north across North 1st Street



3. Looking east across River Street towards Projected Development Site 2



4. View of the Project Area along Kent Avenue looking south

Visual Resources

There are no notable visual resources located within the Project Area. Visible from the Project Area facing west are views of the Manhattan skyline (shown in **Figure G-2e**). The Williamsburg Bridge is visible looking south along Kent Avenue and River Street.

Open Space

As defined by the CEQR Technical Manual for the purposes of urban design assessment, open space is defined as unenclosed areas including public and private areas such as parks, yards, cemeteries, parking lots, and privately owned public spaces (POPS). There are no parks or landscaped areas in the Project Area. Both Projected Development Sites 1 and 2 are unbuilt but enclosed by fences and not accessible to the public.

Natural Features

Elevations within the Project Area range from +14 to +20 feet (NAVD88). The terrain within the Project Area generally slopes downward towards the west (approaching the East River waterfront). As mentioned in the discussion of open space above, there are no green spaces or unique natural features in the Project Area.

Secondary Study Area

The larger secondary study area contains all or part of 11 tax blocks. As discussed previously, the study area extends to lots fronting North 3rd Street to the north, Wythe Avenue to the east, Grand Street to the south, and lots fronting the East River to the west (see **Figure G-1**).

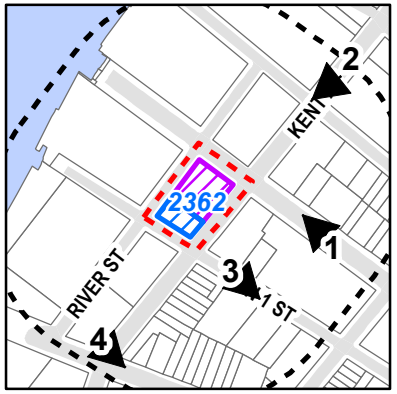
Streets

The street pattern in the secondary study area is irregular, forming blocks of varying shapes and sizes. At the center of the study area, Kent Avenue and River Street, the main north-south oriented streets within the study area, form three narrow blocks, including the Project Area (Block 2362). These blocks are surrounded by much larger blocks to the west, east, and north of the study area. North 3rd Street, Metropolitan Avenue, North 1st Street, and Grand Street run roughly east-west within the study area. Along the East River waterfront (the western edge of the secondary study area), segments of both North 1st Street and Metropolitan Avenue, west of River Street, were demapped as part of the River Ring rezoning, resulting in a limited street network and large, unbroken waterfront lots (including the River Ring development sites). Streets in the western portion of the study area closer to the waterfront are generally narrower and less active, with limited streetscape elements, while upland streets in the east of the study area generally support more pedestrian activity and feature more varied streetscapes. **Figure G-2c** shows existing streetscapes within the secondary study area.

As discussed above, River Street is a 50-foot wide, two-way street with no lane markings. In the secondary study area, the western side of River Street is bordered by the River Ring development sites and a Con Ed facility; there are no ground-floor street-facing windows and no buildings built out to the property line. The Manhattan skyline and East River waterfront are visible at points along River Street. River Street terminates to the north within the study area at its intersection with North 3rd Street. Between North 3rd Street and Metropolitan Avenue, on-street parking is limited to loading and unloading on the east (northbound) side of the street, and there are curb cuts for garages and loading docks serving the adjacent commercial building, which has large ground-floor windows facing the street. There are few streetscape elements along this street segment, with the exception of standard signage, bollards, and unoccupied tree



1. Looking east along Metropolitan Avenue between Kent and Wythe Avenues





2. Looking south along Kent Avenue near the intersection of North 3rd Street



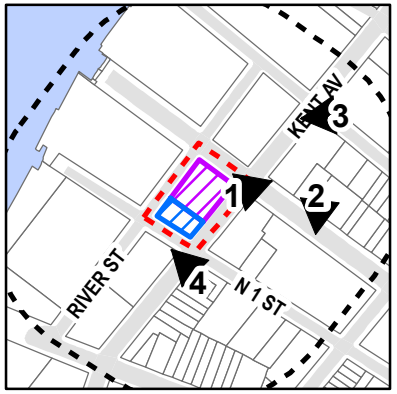
3. Looking east along North 1st Street between Kent and Wythe Avenues



4. Looking East along Grand street at the intersection of Kent Avenue



1. View of a mixed-use building at 187 Kent Avenue looking northeast across Kent Avenue





2. View across Metropolitan Avenue showing residential condominium



3. View of commercial office building at 206 Kent Avenue



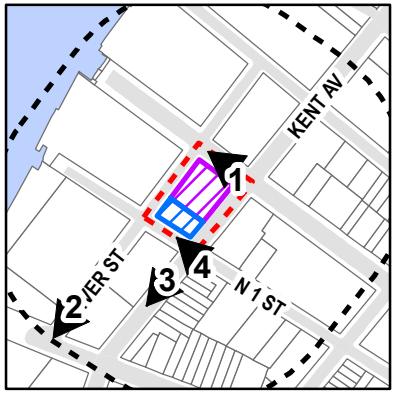
4. View of commercial loft building looking across Kent Avenue



1. View of the Manhattan skyline and East River from Metropolitan Avenue



2. View of Williamsburg Bridge along River Street





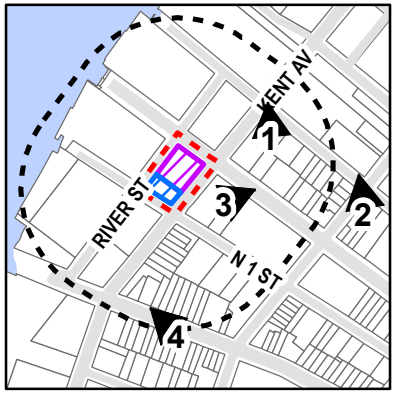
3. View of Williamsburg Bridge along Kent Avenue



4. View of the Manhattan skyline from North 1st Street



1. View of the S/NR-listed and NYCL-eligible Austin, Nichols, & Co. Warehouse from Kent Avenue





2. View of S/NR-eligible Rokeach & Sons Warehouse from Wythe Avenue



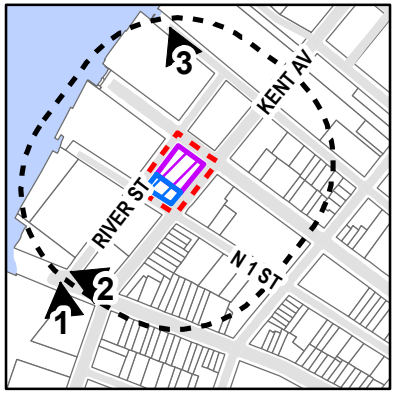
3. View of the S/NR-eligible Metropolitan Avenue Warehouse across Metropolitan Avenue



4. View of the S/NR-eligible Grand Street Historic District looking west along Grand Street



1. Looking northwest towards Grand Ferry Park





2. View of reconstructed smokestack in Grand Ferry Park



3. Public plaza with seating and waterfront views at the end of North 3rd Street

pits. South of the Project Area, between North 1st Street and Grand Street, there is on-street parking only on the northbound side of the street, which includes curb cuts for commercial and industrial garages. Large windows face the street along the east side near North 1st Street, while further south a blank brick wall with graffiti faces the street. Opposite these buildings is a Con Ed utility site, which is set back from the property line behind a tall fence. There is a small portion of Grand Ferry Park along the west side of River Street in the southernmost part of the study area. The southern part of River Street in the study area features more extensive streetscape elements including bike racks and street trees.

Kent Avenue is an approximately 60-foot wide, northbound one-way street, as described above. It features a single moving lane flanked by on-street parking on both sides (with the western parking lane replaced by a left turn lane on approach to intersections). A two-way dedicated bike lane runs between the western parking lane/left turn lane and the sidewalk. North of the Project Area, Kent Avenue is generally faced by ground-floor commercial uses with large windows. This pattern is similar south of the project area along Kent Avenue, where there are additionally several curb cuts for loading bays serving warehouse buildings along the eastern side of the street. Streetscape elements including street tree pits, mailboxes, and bike racks are more abundant north of North 3rd Street and south of North 1st Street within the secondary study area.

North 3rd Street is an approximately 50-foot wide street, with an approximately 26-foot wide roadbed and 12-foot wide sidewalks, running east-west through the northern portion of the study area. North 3rd Street terminates in a dead end at the East River waterfront at the western edge of the study area. West of its intersection with Kent Avenue, North 3rd Street is a two-way street with two moving lanes and on-street parking on the north (westbound) side. Windows of a large residential building face the street at ground level on the northern side, where there is also a curb cut for a loading dock. Along the south side, the River Ring development site borders the portion west of River Street; between River Street and Kent Avenue, a commercial building with large ground-floor windows and a loading dock faces the street. Streetscape elements are limited along this part of North 3rd Street East of Kent Avenue, North 3rd Street becomes a one-way, eastbound street with one moving lane and on-street parking on both sides. There are no lane markings throughout. Moving east from Kent Avenue, large, ground-floor windows of retail uses give way to several loading docks and garages at the midblock, and more ground-floor retail windows further east. Streetscape elements in this area include street trees and benches. Since the ground levels of several buildings in this area are slightly above grade, staircases often extend into the sidewalk.

Metropolitan Avenue is an approximately 80-foot wide, two-way street with on-street parking on both sides. Its western terminus is directly west of the Project Area at its intersection with River Street. The portion of Metropolitan Avenue west of River Street was demapped as part of the River Ring rezoning, and now lies within the River Ring development site. The segment between Kent Avenue and Wythe Avenue is within the secondary study area. Along the south side of the street, a single large residential building features ground-level windows facing the street, a loading dock with a curb cut, and a small, fenced-off private open space. The northern side of the street is lined by a mix of residential and commercial ground-floor windows, fenced parking lots, and windowless facades. Streetscape elements are relatively dense along this street, and include fenced street tree pits, bike racks, and bollards. As with North 3rd Street, due to the east-west slope, some ground floor levels are above grade, necessitating staircases that extend out into the sidewalk.

North 1st Street is a 50-foot wide, westbound one-way street with one moving lane and parking on both sides. Directly west of the Project Area, most of the dead-end portion of North 1st Street approaching the waterfront was demapped as a result of the River ring rezoning, but a small portion remains mapped. This portion is blocked by bollards and planters in the roadbed, and is closed to vehicle traffic. It does not have

parking. East of the Project Area, the segment between Kent Avenue and Wythe Avenue is within the secondary study area. The street in this area is predominately fronted by ground-floor windows of residential buildings, and there are several garages with curb cuts at midblock. Streetscape elements are abundant along this street, including many street trees, bike racks, planters, and an ATM.

A portion of Grand Street lies within the secondary study area, extending from midblock between Kent Avenue and Wythe Avenue to River Street. Grand Street is a two-way, approximately 70-foot wide street with an approximately 44-foot wide roadbed and approximately 13-foot wide sidewalks. Between River Street and Kent Avenue, the street is faced by the ground-floor windows of a commercial building opposite a warehouse with loading docks. Further east, ground-floor windows of a mix of commercial and residential uses face the street. There are many street trees along this street, along with other streetscape elements such as bike racks and mailboxes.

Buildings

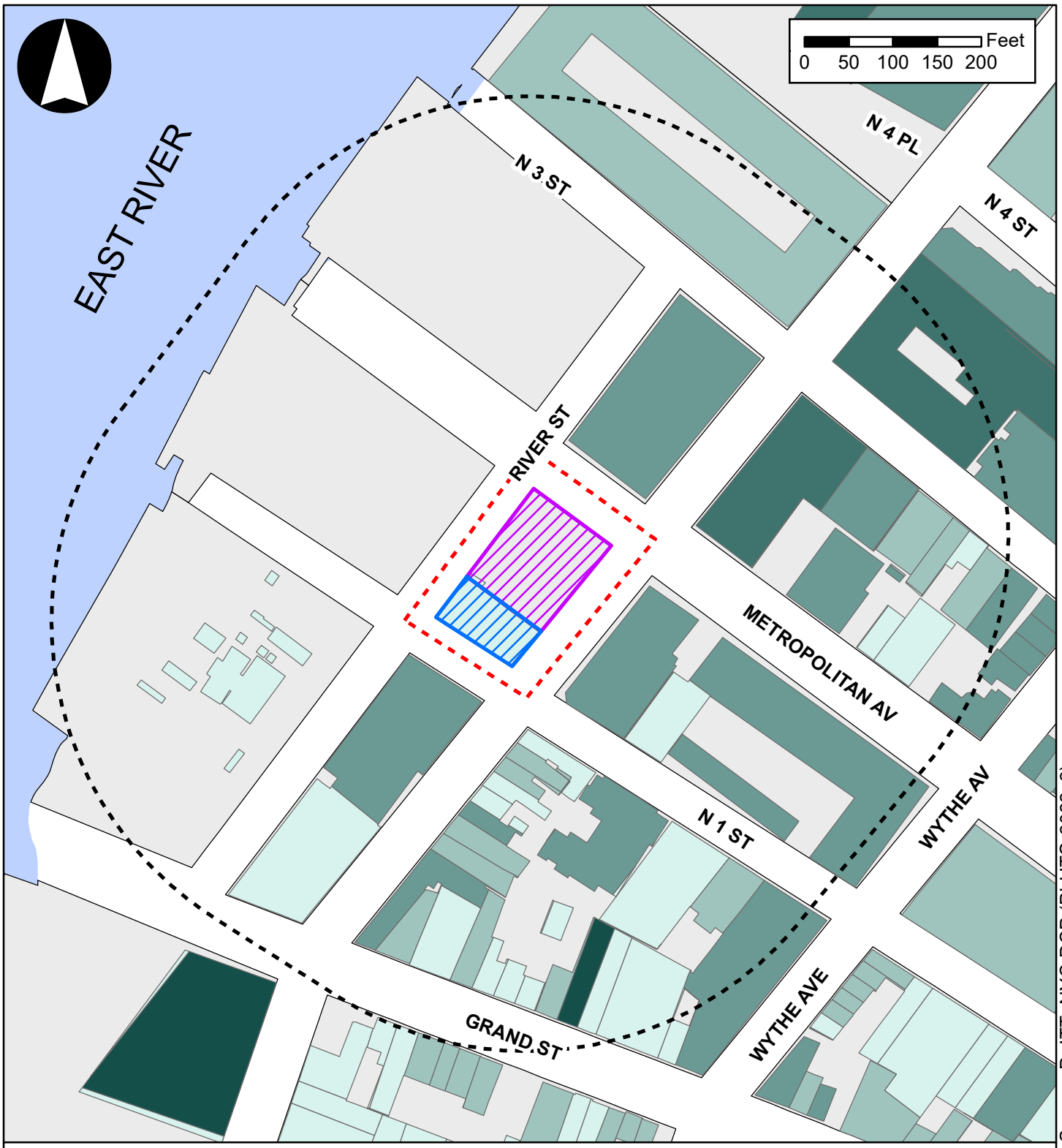
There are approximately 51 buildings in the secondary study area (excluding power generating structures at the Con Ed facility at 49 River Street, which contains several utility structures). These buildings can be categorized into several general typologies. **Figure G-2d** shows photos of buildings within the secondary study area; **Figures G-3 and G-4,** respectively, show built densities and heights of buildings throughout the study area.

Warehouses and lofts that have either been maintained for manufacturing/industrial uses or have been repurposed for other uses can be found throughout the study area, ranging from small one- to three-story brick warehouse buildings (commonly found at midblock along streets between Kent Avenue and Wythe Avenue, and along Kent Avenue south of the Project Area) to much larger warehouse and loft buildings rising to six stories and occasionally occupying entire blocks. These buildings are characterized by high bulk and lot coverage, and either large windows and high ceilings (lofts) or blank walls with loading bays or garages facing the street. The loft building at 240 Kent Avenue, the largest building in the study area, is an example of a repurposed warehouse building hosting commercial retail and office uses. The building at 184 Kent Avenue (S/NR-listed and NYCL-eligible Austin, Nichols & Co. Warehouse, now known as the "Austin Nichols House") is the largest building in the study area; it is a six-story former warehouse building designed in the Egyptian Revival style and repurposed as residential condominium apartments.

Small (usually three- to four-story) residential walk-up apartment buildings with brick construction are another common typology in the secondary study area. The ground floors of these buildings often feature high ceilings and usually support retail or other commercial uses. They are generally found along North 1st Street, Grand Street, and Kent Avenue towards the south and east of the secondary study area (buildings of this type along North 1st Street in the study area do not have ground-floor retail uses). Additionally, scattered in the study area on North 1st Street, Metropolitan Avenue, and North 3rd Street are several medium-size (five- to seven-story) apartment buildings on interior lots, generally of relatively new construction and with no ground-floor retail use.

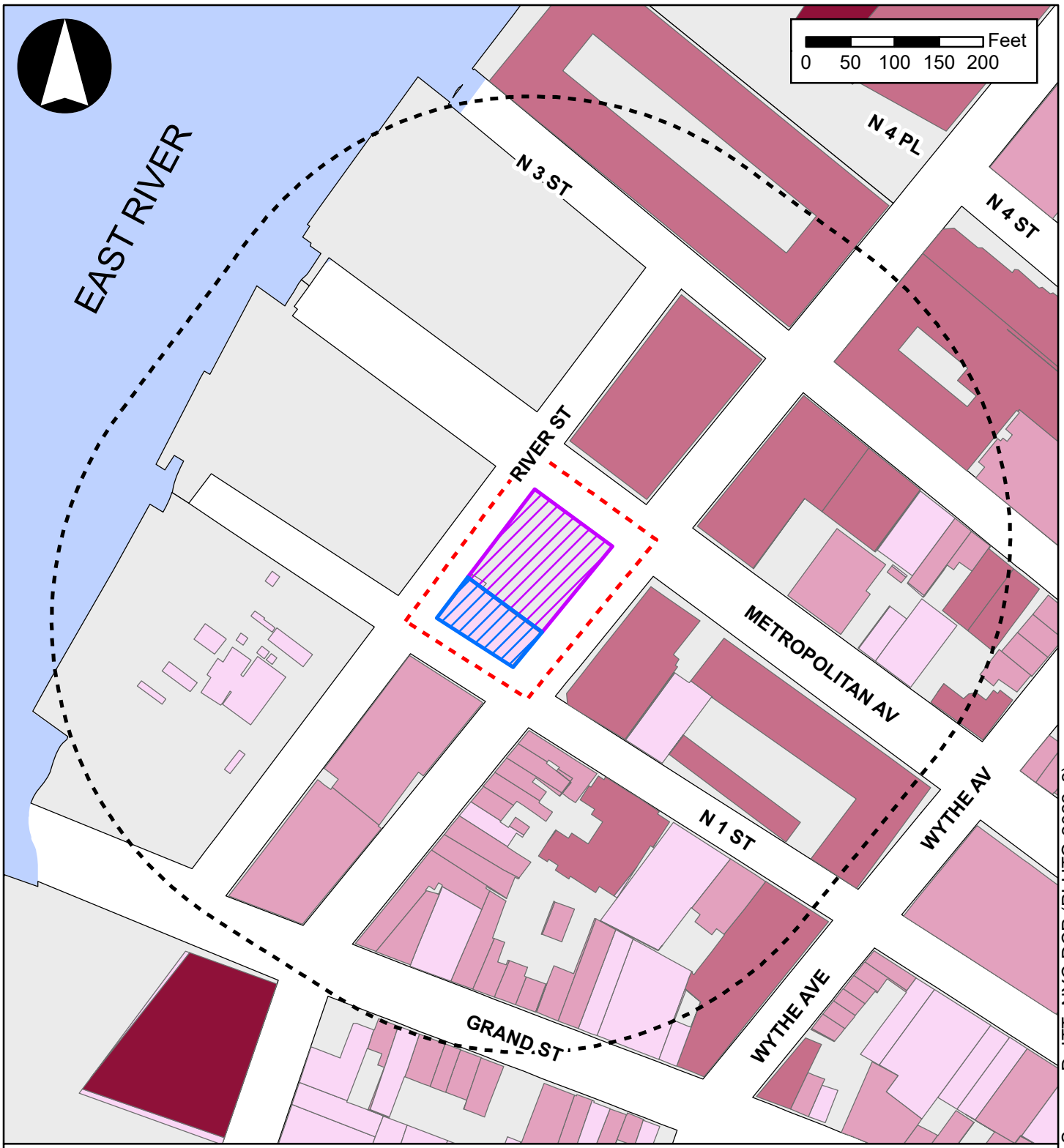
New or recent large-scale residential developments occupy large lots in the north and east of the study area. These buildings range from five to seven stories in height, sometimes with lofted ground floors. Several of these buildings, especially those on corner lots (187 Kent Avenue and 53 North 3rd Street, for example) feature ground-floor retail uses. These developments generally feature design elements in character with the surrounding buildings and the historical industrial character of the neighborhood, such as brick construction, high lofted ceilings, and large windows. These buildings also generally follow a pattern of high bulk and lot coverage, rather than tower construction. 53 North 3rd Street and 80

Figure G-3
Built Density



Source: DoITT; NYC DCP (PLUTO 2022v2)

Figure G-4
Building Heights



Source: DoITT; NYC DCP (PLUTO 2022v2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area (Primary Study Area)
- 400-ft Radius

Number of Floors

- 0 - 2 stories
- 3 - 5 stories
- 6 - 10 stories
- 11 - 20 stories
- Over 20 stories

Metropolitan Avenue are notable in that they are the second- and third-largest buildings in the study area, respectively.

200 Kent Avenue is a recently-constructed six-story commercial retail and office building with full lot coverage, occupying its entire block. The ground floor features large windows, while the second and third floors are wrapped in metal paneling with geometric patterns. The top floors are glass and concrete construction.

Buildings in the secondary study area generally form continuous streetwalls, and buildings are mostly built out to property lines within the area. However, there are some exceptions to this. Residential apartment buildings at the midblock of North 1st Street between Kent Avenue and Wythe Avenue are set back approximately five feet from the property line, with planters and stair entryways occupying that space. Several buildings, such as the apartment building at 62 North 3rd Street, feature recessed entryways.

Visual Resources

Views of the Manhattan skyline are visible at points along River Street and Kent Avenue. The Williamsburg Bridge is visible looking south along Kent Avenue and River Street. Despite the proximity of the Project Area and 400-foot secondary study area to the East River waterfront, fences around the River Ring development sites and the Con Ed facility at the waterfront obstruct views from River Street. The S/NR-listed and NYCL-eligible Austin, Nichols & Co. Warehouse at 184 Kent Avenue is visible from the Project Area and throughout the northern part of the secondary study area. The S/NR eligible Igoe Brothers warehouse at 67-73 Metropolitan Avenue is visible along Metropolitan Avenue. The S/NR eligible former Northside Savings Bank building at 35 Grand Street is visible along Grand Street. The S/NR eligible Rokeach and Sons warehouse at 63-81 North 3rd Street is visible along North 3rd Street. Grand Ferry Park is visible in the southwest corner of the secondary study area. The park features a red brick smokestack which was once a part of a pharmaceutical molasses plant. Refer to **Figures G-2e and G-2f** for photos of visual resources in the study area.

Open Space

A portion of Grand Ferry Park is within the secondary study area. Grand Ferry Park is a 1.7-acre public park featuring seating areas, dog-friendly areas, and views of the East River waterfront. A small public plaza at the end of North 3rd Street has benches and a landscaped area. **Figure G-2g** contains photos of open space in the secondary study area.

Natural Features

The topography of the secondary study area is more varied than that of the Project Area. Elevations in the study area range from 0 to +32 feet (NAVD88), generally sloping downward from the upland eastern portion of the study area to the waterfront, where bulkheads rise to approximately +6 feet (NAVD88). The topography within the study area creates noticeable slopes along east-west streets including North 3rd Street, Metropolitan Avenue, North 1st Street, and Grand Street. The East River waterfront is within the secondary study area and is accessible along several points including Grand Ferry Park and the terminus of North 3rd Street.

VI. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Primary Study Area/Project Area

Under the No-Action condition, it is assumed that Projected Development Site 1 (Block 2362, Lot 1), which is owned by the Applicant, would be developed on an as-of-right basis under the existing M1-4 zoning. This would result in the construction of a three-story, approximately 45-foot tall, mixed-use building of approximately 20,223 gsf with approximately 6,741 gsf of commercial space (local retail), 6,741 gsf of light industrial space (warehouse), and approximately 6,741 gsf of community facility space (medical office). In accordance with M1-4 zoning regulations, no parking spaces are assumed to be provided on this site in the No-Action condition. As the height of the building would not reach 60 feet or four stories (above which setback regulations in an M1-4 district would be governed by the sky exposure plane) the building would be built out to the lot line with no setbacks.

As Projected Development Site 2 (Block 2362, Lot 3) is owned by Con Edison, and would continue to be zoned for manufacturing use in absence of the Proposed Actions, it is conservatively assumed to remain undeveloped in the No-Action condition.

Visual Resources

Under the No-Action condition, there are no changes to visual resources expected within the Project Area, as there are no existing visual resources in the Project Area and the Proposed Actions would not result in the addition of new visual resources to the Project Area.

Secondary Study Area

Within the approximate 400-foot secondary study area, there are three known projects (other than the No-Action development that would be constructed on the Applicant's Projected Development Site 1) anticipated to be completed in the 2025 future without the Proposed Actions.

At 296 Wythe Avenue, a six-story, mixed-use building of 65,371 gsf with 45 DUs and ground-floor retail space is under construction. Work is underway on the structure and it is expected to be complete and occupied by the time of the 2025 analysis year. When completed, the corner lot building will extend to the property lines, and will feature a stepped roof reaching its maximum height of approximately 72 feet at the corner facing Wythe Avenue and North 1st Street. The glass and stone façade will form a continuous streetwall with adjacent buildings on North 1st Street and Grand Street.

A seven-story, 24,275-gsf mixed residential and community facility building is expected to complete at 61 Metropolitan Avenue by the 2025 analysis year. The building is expected to have 24 DUs. The interior-lot building will extend to the property line at the ground level, forming a continuous streetwall with adjacent buildings, and will have a 10-foot setback above the sixth floor in compliance with sky-exposure regulations.

By the 2025 analysis year, construction is expected to be completed on the north tower of the River Ring development at River Street and North 3rd Street. The north tower is expected to reach 49 stories and 560 feet in height.

Construction on the public waterfront open space provided by the River Ring development is expected to be completed by 2025. The development will provide 2.9 acres of public space, which is expected to connect the existing open spaces (Grand Ferry Park and North 5th Street Pier and Park) along the East River waterfront within the study area. It is likely that the addition of this public open space would lead to an increase in pedestrian activity in the Project Area and secondary study area, particularly along River Street and streets leading to and from the waterfront.

Visual Resources

Under the No-Action condition, the assumed development on Applicant-owned Projected Development Site 1 would obstruct views of the S/NR-listed and NYCL-eligible Austin, Nichols & Co. Warehouse from North 1st Street adjacent to the Project Area. Views of the East River waterfront and the Manhattan skyline that are currently visible all along Kent Avenue bordering the Project Area would also be partially obstructed by the as-of-right development on Projected Development Site 1. Views of the Williamsburg Bridge along River Street and Kent Avenue would not be affected.

VII. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

Primary Study Area/Project Area

Under the With-Action condition, Projected Development Site 1 (Block 2362, Lot 1) would be developed by the Applicant with a new eight-story, mixed-use building with approximately 44 DUs and ground floor local retail uses. The proposed building would maximize the allowable FAR under the proposed MX zoning. The building would total approximately 43,095 gsf including approximately 37,036 gsf of residential floor area and 6,059 gsf of commercial floor area. The building would contain an approximately 5,742 gsf cellar split evenly between residential storage area and back-of-house area for the building's retail use. The building would extend to the property line along all three of its frontages (River Street, North 1st Street, and Kent Avenue) and rise to the maximum base height with no setbacks. Although the proposed zoning district would allow a maximum building height of 145 feet, the proposed massing for the Applicant's building, which maximizes the allowable FAR, would be 105 feet tall. However, in order to provide a more conservative CEQR analysis, the maximum allowable height of 145 feet is be used for this analysis of urban design (See **Attachment A, "Project Description"**). Therefore, the building would feature 15-foot setbacks along its three frontages (all on narrow streets) after the 105-foot maximum base height specified by the proposed zoning.

Under the With-Action condition, Projected Development site 2 is assumed to maximize its allowable residential FAR, resulting in an approximately 94,670 gsf building with an estimated 70,054 gsf of residential space (excluding cellar space) and 13,765 gsf of local retail space and approximately 10,850 gsf of parking area in the cellar. Assuming an average unit size of 850 gsf, Projected Development Site 2 is assumed to have approximately 82 DUs, with up to 25 DUs (30%) affordable pursuant to MIH. Under MIH Option 1, approximately 21 DUs (25%) would be affordable. The building height is assumed to be 145 feet, which is the maximum allowed by zoning. Depending on the MIH Option selected, the development would include either 57 or 61 market-rate units. Therefore, either 29 or 31 accessory off-street parking spaces would be required and are assumed to be provided in an underground garage. The building is assumed to have full lot coverage, forming a continuous streetwall with the Applicant's proposed development at Projected Development Site 1. The building would feature 15-foot setbacks along its frontages on River

Street and Kent Avenue, and a 10-foot setback along Metropolitan Avenue (a Wide Street) after the 105-foot maximum base height specified by the proposed zoning.

The Proposed Actions would likely lead to increased pedestrian activity in the streets directly bordering the Project Area as well as the surrounding street network. Both the residential and commercial uses in the Project Area under the With-Action conditions could contribute to increased foot traffic as opposed to the existing and No-Action conditions. The Proposed Actions are not expected to result in changes to natural features or open space in the Project Area.

Visual Resources

In the With-Action condition, development facilitated by the Proposed Actions would not obstruct any view corridors or alter any visual resources in the primary study area, as the new development would occur on an existing block that contains no visual resources, and no new visual resources are anticipated to be introduced within the primary study area as a result of the Proposed Actions..

Secondary Study Area

Though the Proposed Actions would facilitate the development of buildings with a greater bulk, height, and density than what is permitted under existing zoning, as well as facilitating residential use that would not be permitted under existing zoning, they would not result in any changes to buildings, streets, natural resources, or open space within the secondary study area.

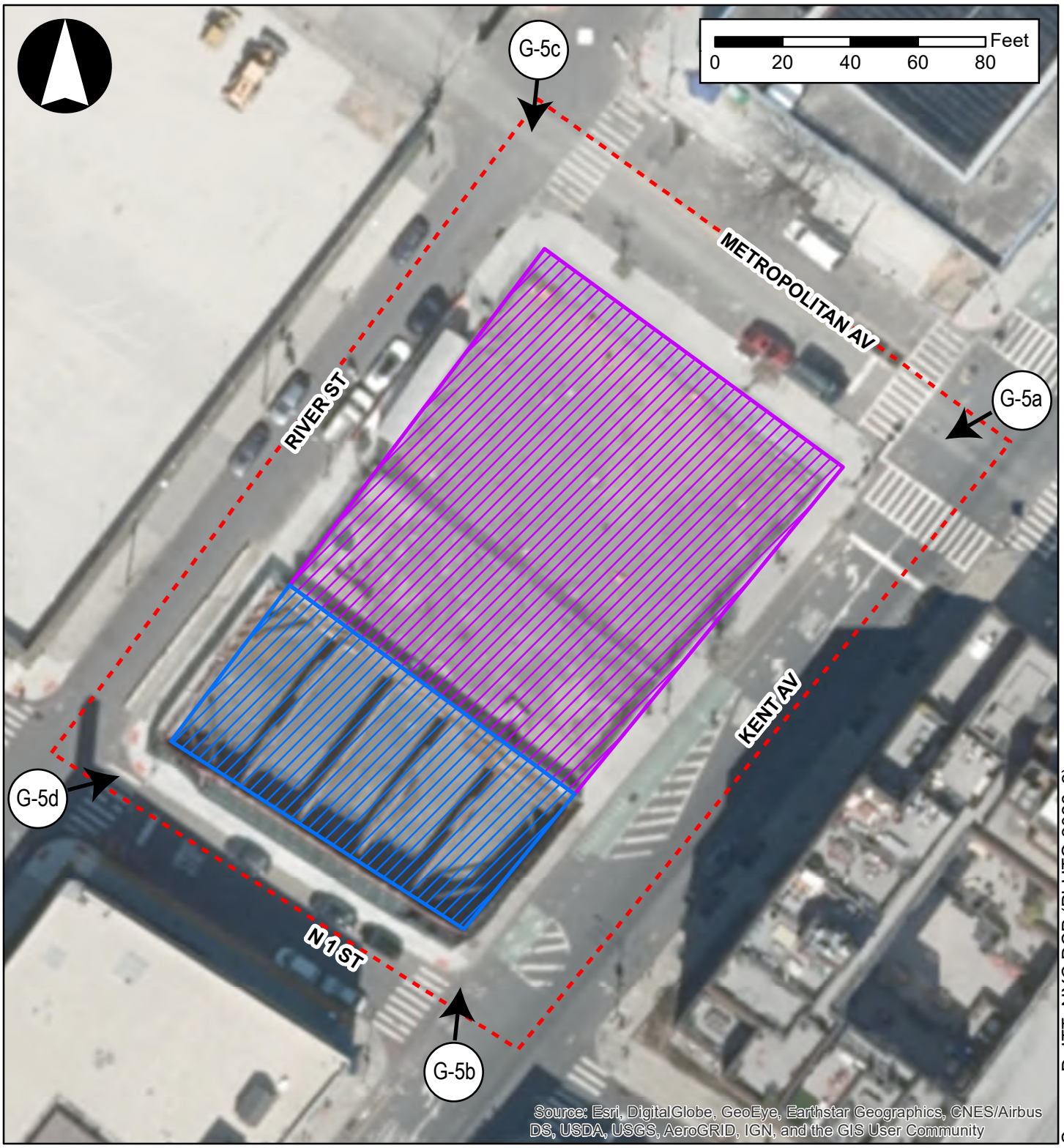
Visual Resources

As in the No-Action condition described above, development facilitated by the Proposed Actions in the Project Area would obstruct views of the S/NR-listed and NYCL-eligible Austin, Nichols & Co. Warehouse from North 1st Street adjacent to the Project Area. Views of the East River waterfront and the Manhattan skyline that are currently visible all along Kent Avenue bordering the Project Area would also be obstructed. Views of the Williamsburg Bridge along River Street and Kent Avenue would not be affected, nor would views of the waterfront and Manhattan skyline along western-facing streets and sidewalks in the study area.

Assessment

The Proposed Actions would facilitate development that is not currently permitted as-of-right in the Project Area, which would create a change in the urban design character of the area. Compared to the future without the Proposed Actions, the visual appearance, and the pedestrian experience of the Project Area, would change. The Proposed Actions would facilitate developments that would reach a height of approximately 145 feet, an approximately 100-foot increment over the No-Action development on Projected Development Site 1. Approval of the Proposed Actions would also facilitate the development of Projected Development Site 2, which is expected to remain unbuilt in the No-Action Condition. However, this change would not constitute a significant adverse urban design impact as it would not alter the arrangement or functionality of the Project Area, thus not negatively affecting a pedestrian's experience. Rather, development anticipated in the Project Area in the future with the Proposed Actions is expected to positively affect the urban design of the area and improve the pedestrian experience through the redevelopment of a currently unbuilt and underutilized former industrial site. **Figures G-5a – G-5d** show a visual comparison of pedestrian views of the Project Area in the No-Action and With-Action conditions.

Figure G-5
No-Action v. With-Action Index Map



Source: DoITT; NYC DCP (PLUTO 2022v2)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area (Primary Study Area)

Illustrative Street View - Facing Southwest from Metropolitan and Kent Avenue



No-Action



45’ (No-Action)

Projected Development Site 1

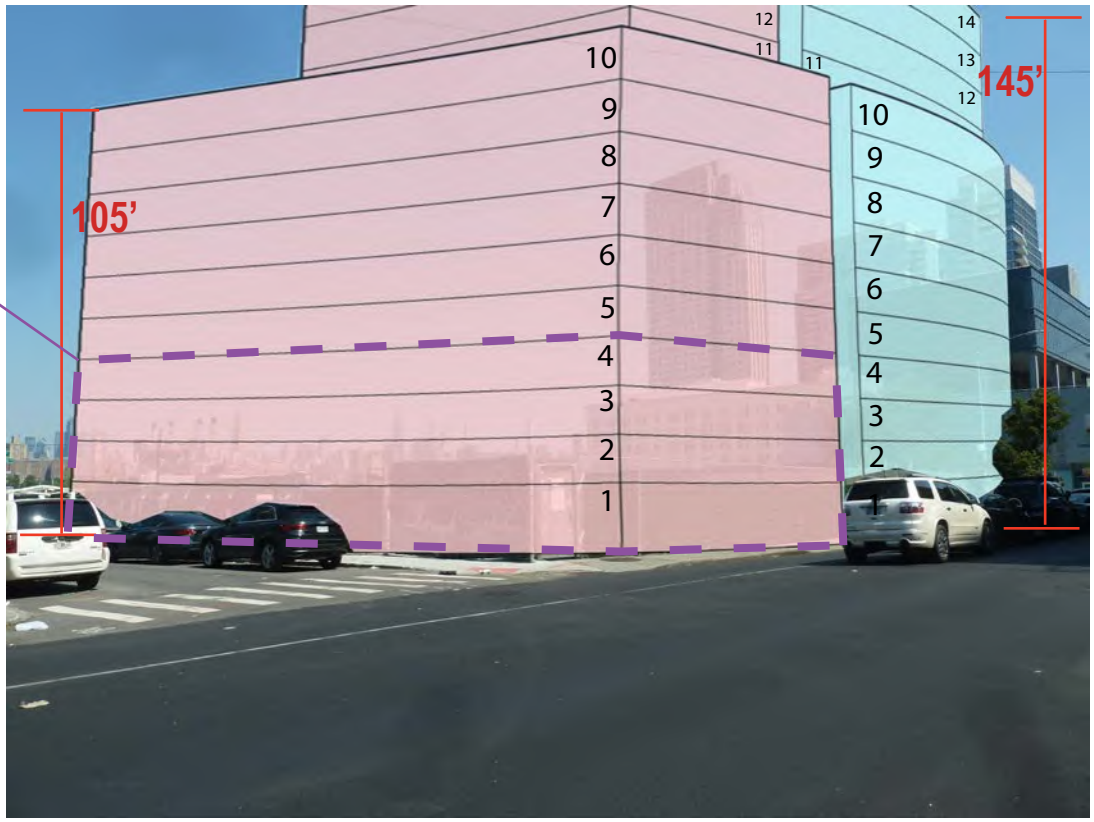
Projected Development Site 2

With-Action

Illustrative Street View - Facing northwest from Metropolitan Avenue and North 1st Street



No-Action

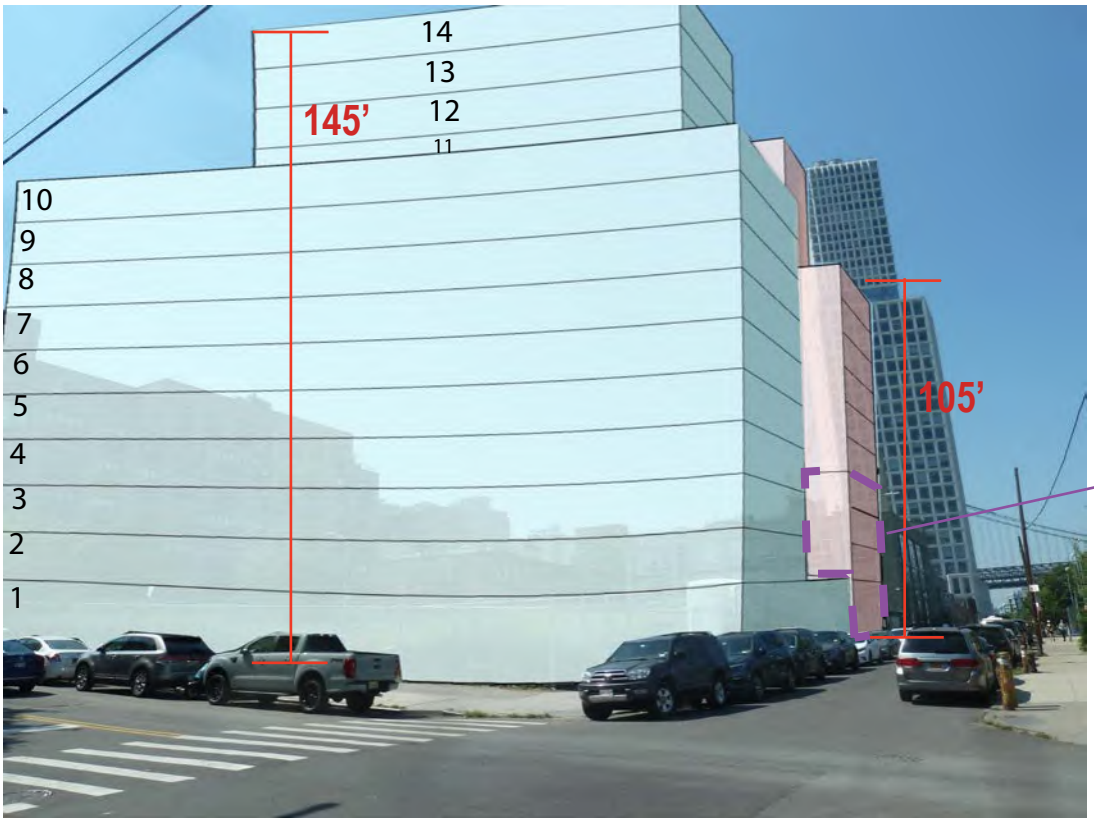


With-Action

Illustrative Street View - Facing South from River Street and Metropolitan Avenue



No-Action

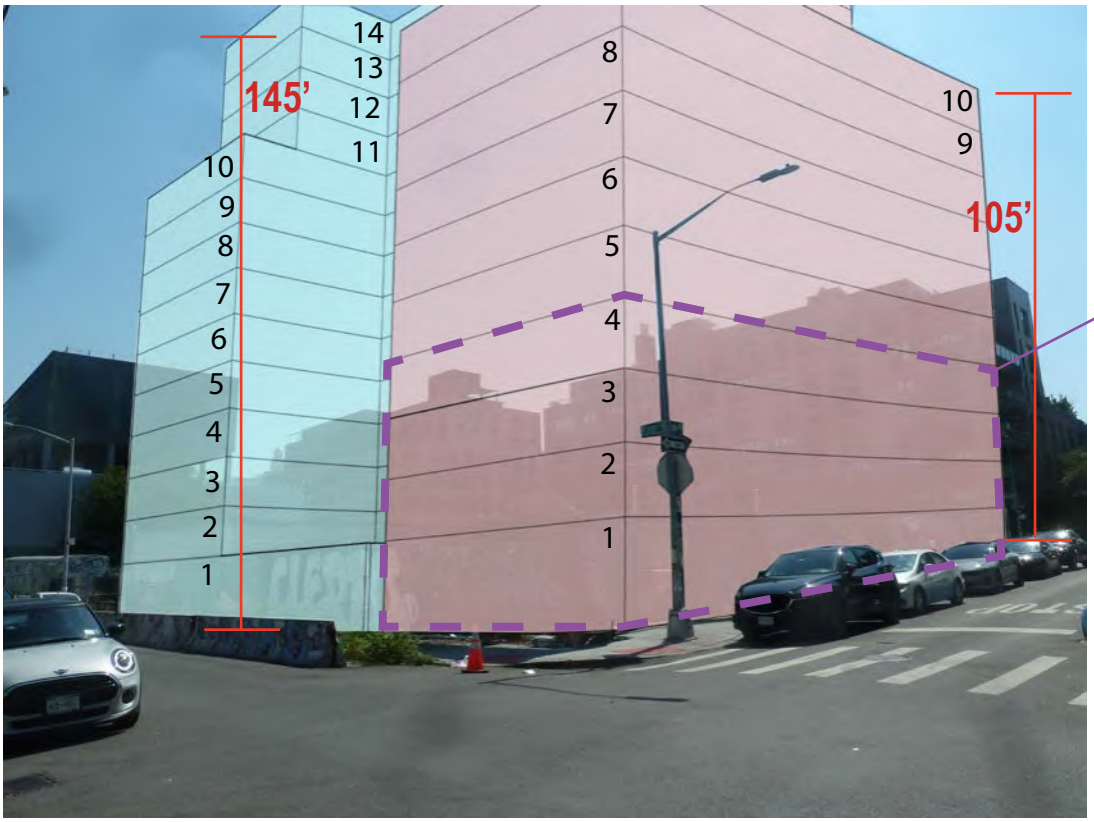


With-Action

Illustrative Street View - Facing Northeast from River Street and North 1st Street



No-Action



Projected Development Site 1

Projected Development Site 2

With-Action

As detailed further in **Attachment C, "Land Use, Zoning, and Public Policy,"** the proposed zoning would be compatible with the surroundings Project Area, resulting in the extension of an existing special mixed-use district (MX-8) that is already mapped throughout the surrounding study area to the east of the Project Area. Based on the increasingly residential character of the secondary study area and the high demand for housing in the surrounding area, developments resulting from the Proposed Actions would be more in line with the neighborhood context, compared to a No-Action development without residential uses. The secondary study area includes dense residential and mixed-use buildings of comparable height and bulk to the With-Action developments.

As the With-Action buildings in the Project Area would be constructed on existing blocks, the current viewsheds of the East River and Manhattan skyline when looking west along east-west streets in the secondary study area, such as Metropolitan Avenue, would not be obstructed. As under No-Action conditions, views of the East River and Manhattan skyline, as well as the NYCL-eligible Austin, Nichols & Co Warehouse would be obstructed from certain vantage points by the Proposed Development. As detailed in **Attachment F, "Historic and Cultural Resources,"** while the Proposed Development would alter the backdrop of the S/NR-listed and NYCL-eligible Austin, Nichols & Co. Warehouse, this change would not be significant or adverse, as the study area is a dense urban environment with multiple mixed-use buildings with high bulk and lot coverage that currently form the setting and context of the historic resource. As compared to the No-Action condition, incremental obstructions of these visual resources would be limited, and more proximate views of these significant visual resources would remain on public streets and sidewalks in the vicinity of these resources under With-Action conditions.

The developments facilitated by the Proposed Actions within the Project Area would represent a change in urban design as compared to what is permitted under existing zoning. However, this change would not negatively affect the pedestrian experience in the Project Area or secondary study area. Rather, it would represent the activation of underutilized parcels and streetscape with contextual and compatible mixed-use development. Though the With-Action developments would obstruct pedestrian views of visual resources at some locations (and to a limited extent as compared to the No-Action development), these visual resources would remain readily visible throughout the majority of the Project Area and secondary study area. The Proposed Actions would not result in any impacts on pedestrian access to open spaces within the secondary study area. As such, the Proposed Actions would not have a significant adverse impact on urban design or visual resources within the Project Area or in the 400-foot secondary study area.

ATTACHMENT H

TRANSPORTATION

I. INTRODUCTION

This attachment describes and assesses the transportation characteristics and effects of the two discretionary actions (the "Proposed Actions") sought to facilitate development of the Applicant-owned site at 230 Kent Avenue (Block 2362, Lot 1; the "Applicant Site" or "Projected Development Site 1") in the Williamsburg neighborhood of Brooklyn Community District (CD) 1. The Proposed Actions are: (1) a zoning map amendment to rezone Block 2362 in its entirety, comprised of Lots 1 and 3 ("Project Area"), from a M1-4 district to a M1-4/R7X Special Mixed-Use (MX) District (MX8); and (2) a zoning text amendment to (a) Appendix F of the New York City Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area and (b) to the table in ZR § 123-63 to include R7X as a designated residence district in MX8 in Community District 1, Brooklyn in which MIH is required.

As shown in **Figure H-1**, the Project Area is bounded to the north by Metropolitan Avenue, to the east by Kent Avenue, to the south by North 1st Street, and to the west by River Street. The Project Area encompasses a total lot area of approximately 18,024 square feet (sf). This includes the Applicant-controlled Projected Development Site 1 with a lot area of 5,862 sf, and the adjacent lot to the north, an approximately 12,552 sf lot that is owned by Con Edison ("Projected Development Site 2"). The Project Area is served by transit via the L subway route at the Bedford Avenue station, within a half-mile from the Project Area. The Project Area is also served by the B32 bus route on Kent and Wythe Avenues.

In order to assess the potential effects of the Proposed Actions, a RWCDS for both "future without the Proposed Actions" (No-Action) and "future with the Proposed Actions" (With-Action) conditions is analyzed for an analysis year of 2025. As per the RWCDS, the No-Action scenario assumes that the Applicant Site (Lot 1) would be developed on an as-of-right basis pursuant to the existing M1-4 zoning. The Applicant Site was identified as a projected development site in the *River Ring FEIS* (which rezoned the Project Area from M3-1 to M1-4), and was assumed to be developed with a 3-story (45-foot-tall) mixed-use building with approximately 20,223 gsf, with approximately 6,741 gsf of commercial space (local retail), 6,741 gsf of light industrial space (warehouse), and approximately 6,741 gsf of community facility space (medical office). The RWCDS for the Proposed Actions would assume this same program in the No-Action condition. As Lot 3 is owned by Con Edison, and would continue to be zoned for manufacturing use in the absence of the Proposed Actions, it is conservatively assumed to remain undeveloped in the No-Action.

In the future with the Proposed Actions (With-Action condition), the proposed zoning map and zoning text amendments would be approved. As such, the special MX (M1-4/R7X) zoning district would be mapped along the Project Area and would be designated as a MIH area. In the With-Action scenario for the Applicant Site (Projected Development Site 1), an eight-story 40-unit residential building with 6,059 gsf of local ground floor retail is proposed. Although the Applicant plans to develop approximately 40 residential units, 44 units will be assumed as a RWCDS (assuming an average unit size of 850 gsf) for conservative analysis purposes, with either 11 DUs (25 percent) or 13 DUs (30 percent) being affordable pursuant to MIH. Parking would be waived for the Applicant Site, and no accessory parking would be provided at Projected Development Site 1.

Figure H-1
Project Location - Aerial View



Source: DoITT; NYC DCP (PLUTO 2021v4)

Legend

- Projected Development Site 1
- Projected Development Site 2
- Project Area



The With-Action scenario for the Projected Development Site 2 has been developed in accordance with *CEQR Technical Manual* guidance, and is based on the amount and type of recent as-of-right development in the area. For RWCDS purposes, Projected Development Site 2 is assumed to maximize its allowable residential FAR, resulting in an approximately 94,670 gsf building with an estimated 70,054 gsf of residential space (excluding cellar space) and 13,765 gsf of local retail space and approximately 10,850 gsf of parking area in the cellar. Assuming an average unit size of 850 gsf, Projected Development Site 2 is assumed to have approximately 82 DUs, with up to 25 DUs (30 percent) or 21 DUs (25 percent) affordable pursuant to MIH. For transportation analysis purposes, Projected Development Site 2 is assumed to include 29 accessory off-street parking spaces in an underground garage (as opposed to 31, depending on MIH option).

As shown in **Table H-1**, compared to the No-Action condition, the Proposed Actions would result in a net incremental increase of 126 DUs and 13,083 gsf of local retail space. There would also be a net incremental decrease of 6,741 gsf of medical office space and 6,741 gsf of warehouse space. On-site accessory parking within the Project Area would increase by approximately 29 spaces.

TABLE H-1
2025 RWCDS No-Action and With-Action Land Uses

Land Use	No-Action Condition		With-Action Condition		Net Increment (Total RWCDS)
	Applicant's Development Site	Projected Development Site	Applicant's Development Site	Projected Development Site	
Residential					
Residential	---	---	44 DU	82 DU	126 DU
Commercial					
Local Retail	6,741 gsf	---	6,059 gsf	13,765 gsf	13,083 gsf
Industrial/Warehouse/Distribution					
Warehousing	6,741 gsf	---	---	---	- 6,741 gsf
Community Facility					
Medical Office	6,741 gsf	---	---	---	- 6,741 gsf
Parking					
Parking Spaces	---	---	---	29 spaces	29 spaces

II. PRELIMINARY ANALYSIS METHODOLOGY

The 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine whether quantified operational analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the number of person and vehicle trips attributable to the proposed action's RWCDS. According to the *CEQR Technical Manual*, if the RWCDS is expected to result in fewer than 50 peak-hour vehicle trips, fewer than 200 peak-hour transit or pedestrian trips, and fewer than 50 peak-hour citywide ferry service (CWFS) trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Level 2) are to be performed to estimate the incremental trips that could be incurred at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the RWCDS would generate 50 or more peak-hour vehicle trips at an intersection, 200 or more peak-hour subway trips at a station, 50 or more peak-hour bus trips in one direction along a bus route, 25 or more peak-hour passenger ferry trips

in a single direction on a single route, 50 or more peak-hour passengers at a ferry landing, or 200 or more peak-hour pedestrian trips traversing a sidewalk, corner area, or crosswalk, then further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, and parking.

III. LEVEL 1 SCREENING ASSESSMENT

In accordance with *CEQR Technical Manual* guidance, a Level 1 trip generation screening assessment was conducted to estimate the number of person and vehicle trips by mode expected to be generated by the Proposed Actions during the weekday AM, midday, and PM peak hours, and Saturday peak hour. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday (typical peak periods for retail demand). The person and vehicle trip estimates were then compared to the *CEQR Technical Manual* analysis thresholds to determine if a Level 2 screening and/or quantified operational analyses may be warranted. The travel demand assumptions used for the assessment are discussed below and a detailed travel demand forecast is provided.

Transportation Planning Factors

The trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies and truck trip factors used to forecast travel demand for the RWCDS's residential, local retail, warehouse, and medical office uses are summarized in **Table H-2**. They were based on factors cited in the 2021 *City Environmental Quality Review (CEQR) Technical Manual;* 2015-2019 American Community Survey (ACS) journey-to-work data for Brooklyn census tracts in proximity to the Project Area (tracts 551, 553, 555 and 557); 2012-2016 American Association of State Highway Transportation Officials (AASHTO) Census Transportation Planning Products (CTPP) reverse journey-to-work data; data from surveys of the travel demand characteristics at medical office and retail uses; data provided by the New York City Department of Transportation (DOT); and factors developed for recent environmental reviews. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand).

Residential

Residential person trip rates, temporal distribution, and directional in/out splits reflect data from the *CEQR Technical Manual.* The modal splits and auto -vehicle occupancies were based on ACS 2015-2019 5-year journey-to-work data for census tracts in the vicinity of the Project Area. The taxi vehicle occupancy was based on the data from the 2021 *River Ring Rezoning FEIS*. Truck generation rates and temporal distributions reflect those cited in the *CEQR Technical Manual*.

Retail

The trip generation rates, temporal distributions, and directional in/out splits for local retail use were based on data from the *CEQR Technical Manual*. The modal splits and vehicle occupancy rates were based on data provided by DOT. Truck trip generation rates were also based on data from the *CEQR Technical Manual*.

Table H-2
Transportation Planning Factors

Land Use:	Residential		Local Retail		Warehouse		Medical Office	
Trip Generation:	(1)		(1)		(3)		(1)	
Weekday	8.18		329		2.36		74.6	
Saturday	9.08		358		0.20		37.0	
	per DU		per 1,000 gsf		per 1,000 gsf		per 1,000 gsf	
Temporal Distribution:	(1)		(1)		(3)		(1)	
AM	9.3%		4.8%		10.0%		11.0%	
Midday	5.6%		8.0%		9.0%		12.6%	
PM	8.5%		10.9%		11.0%		8.5%	
Saturday	8.4%		11.7%		33.0%		16.6%	
Modal Splits:	(2)		(4)		(5)		(4)	
	All Periods		All Periods		All Periods		All Periods	
Auto	11.2%		11.0%		29.7%		24.0%	
Taxi	1.0%		0.0%		0.9%		6.0%	
Subway	66.1%		3.0%		40.6%		59.0%	
Transit Bus	1.7%		2.0%		6.3%		9.0%	
Ferry	8.4%		0.0%		0.0%		0.0%	
Walk/Other	11.5%		84.0%		22.5%		2.0%	
	100.0%		100.0%		100.0%		100.0%	
In/Out Splits:	(1)		(1)		(3)		(1)	
	In	Out	In	Out	In	Out	In	Out
AM	22%	78%	52%	48%	77%	23%	62%	38%
Midday	50%	50%	50%	50%	53%	47%	53%	47%
PM	62%	38%	50%	50%	27%	73%	39%	61%
Saturday	55%	45%	50%	50%	64%	36%	54%	46%
Vehicle Occupancy:	(2)(3)		(4)		(3)(5)		(4)	
	All Periods		All Periods		All Periods		All Periods	
Auto	1.11		1.20		1.10		1.50	
Taxi	1.50		1.20		1.30		1.50	
Truck Trip Generation:	(1)		(1)		(3)		(3)	
Weekday	0.06		0.35		0.91		0.29	
Saturday	0.02		0.04		0.08		0.29	
	per DU		per 1,000 gsf		per 1,000 gsf		per 1,000 sf	
Truck Temporal Distribution:	(1)		(1)		(3)		(3)	
AM	12%		8.0%		9.9%		3.0%	
MD	9%		11.0%		8.0%		11.0%	
PM	2%		2.0%		7.0%		1.0%	
Saturday	9%		11.0%		28.0%		0.0%	
Truck Directional Distribution:	In	Out	In	Out	In	Out	In	Out
AM	50%	50%	50%	50%	67%	33%	50%	50%
MD	50%	50%	50%	50%	57%	43%	50%	50%
PM	50%	50%	50%	50%	60%	40%	50%	50%
Saturday	50%	50%	50%	50%	42%	58%	50%	50%

Notes:
(1) 2021 *City Environmental Quality Review (CEQR) Technical Manual.*
(2) 2015-2019 ACS journey-to-work data for Brooklyn Census Tracts 551, 553, 555, and 557.
(3) *River Ring FEIS* 2021
(4) Based on data provided by NYCDOT.
(5) 2012-2016 AASHTO CTTP reverse journey-to-work data for Brooklyn Census Tracts 551, 553, 555, and 557.

Warehouse

The trip generation rates, temporal and directional distributions and truck trip factors for warehouse space were based on data from the 2021 *River Ring Rezoning FEIS.* The modal splits were based on 2012-2016 AASHTO CTTP reverse journey-to-work data. Vehicle occupancies were also based on 2012-2016 AASHTO CTTP reverse journey-to-work data, as well as data from the *River Ring Rezoning FEIS.*

Medical Office

The trip generation rates, temporal distributions, and directional distributions for medical office space based on data from the *CEQR Technical Manual*. The modal splits and vehicle occupancy rates were based on data provided by DOT. Truck trip factors were based on data from the 2021 *River Ring Rezoning FEIS.*

Travel Demand Forecast

Tables H-3 and **H-4** provide the person and vehicle trips expected to result from the Proposed Actions for each user type, respectively. **Table H-5** provides an overall summary of the travel demand forecast for the Proposed Actions. As shown in **Table H-3**, the Proposed Actions would generate a net increase of approximately 194 person trips (in and out combined) in the weekday AM peak hour, 251 person trips in the weekday midday peak hour, 394 person trips in the weekday PM peak hour and 468 trips in the Saturday peak hour. As shown in **Table H-5**, peak hour vehicle trips (including auto, taxi and truck trips) would increase by a net total of approximately 13, 18, 32, and 38 during the weekday AM, midday, PM, and Saturday peak hours, respectively. Subway demand would increase by approximately 34, 10, 40, and 50 trips in the weekday AM, midday, PM, and Saturday peak hours, respectively. Bus demand would decrease by two trips in the weekday AM peak hour and increase by approximately four and six trips in the weekday PM and Saturday peak hours, respectively. There would be no change in bus trips during the weekday midday peak hour. There would also be an increase of approximately eight, four, eight, and nine incremental trips by ferry during these same periods, respectively. Lastly, trips made entirely on foot (walk-only trips) or by other non-motorized modes would increase by approximately 143, 218, 306, and 359 during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively.

Traffic

Based on *CEQR Technical Manual* guidance, a quantified traffic analysis is typically required if a proposed action would result in 50 or more vehicular trip ends in a peak hour at one or more intersections. As shown in **Table H-5**, under the Proposed Actions, the vehicle trips – 13 in the weekday AM, 18 in the weekday midday, 32 in the weekday PM, and 38 in the Saturday peak hours – would not exceed the 50-trip threshold in any peak hour. As such, Level 2 screening and details analyses are not required.

Table H-3
Travel Demand Forecast – Incremental Person Trips

Land Use:		Local Retail		Residential		Warehouse		Medical Office			
Size/Units:		13,083 gsf		126 DUs		-6,741 gsf		-6,741 gsf			
Peak Hour Trips:										Total Trips	
	AM	156		96		-2		-56		194	
	Midday	258		58		-1		-64		251	
	PM	352		88		-2		-44		394	
	Saturday	412		98		0		-42		468	
Person Trips:											
AM		In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	8	8	2	8	0	0	-8	-5	2	11
	Taxi	0	0	0	1	0	0	-2	-1	-2	0
	Subway	3	2	14	50	-1	0	-21	-13	-5	39
	Public Bus	1	1	0	1	0	0	-3	-2	-2	0
	Ferry	0	0	2	6	0	0	0	0	2	6
	Walk/Other	69	64	2	10	-1	0	-1	0	69	74
	Total	81	75	20	76	-2	0	-35	-21	64	130
Midday		In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	15	15	4	4	0	0	-8	-7	11	12
	Taxi	0	0	0	0	0	0	-2	-2	-2	-2
	Subway	4	4	20	20	-1	0	-19	-18	4	6
	Public Bus	3	3	0	0	0	0	-3	-3	0	0
	Ferry	0	0	2	2	0	0	0	0	2	2
	Walk/Other	107	107	3	3	0	0	-1	-1	109	109
	Total	129	129	29	29	-1	0	-33	-31	124	127
PM		In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	19	19	6	4	0	0	-4	-6	21	17
	Taxi	0	0	1	0	0	0	-1	-2	0	-2
	Subway	5	5	35	22	0	-1	-10	-16	30	10
	Public Bus	3	3	1	1	0	0	-2	-2	2	2
	Ferry	0	0	5	3	0	0	0	0	5	3
	Walk/Other	149	149	6	4	0	-1	0	-1	155	151
	Total	176	176	54	34	0	-2	-17	-27	213	181
Saturday		In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	22	22	6	5	0	0	-5	-5	23	22
	Taxi	0	0	1	0	0	0	-1	-1	0	-1
	Subway	6	6	35	29	0	0	-13	-13	28	22
	Public Bus	4	4	1	1	0	0	-2	-2	3	3
	Ferry	0	0	5	4	0	0	0	0	5	4
	Walk/Other	174	174	6	5	0	0	0	0	180	179
	Total	206	206	54	44	0	0	-21	-21	239	229

Table H-4
Travel Demand Forecast – Incremental Vehicle Trips

Vehicle Trips :		Local Retail		Residential		Warehouse		Medical Office		Total Trips	
AM		In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	7	7	2	7	0	0	-5	-3	4	11
	Taxi	0	0	0	1	0	0	-1	-1	-1	0
	Taxi (Balanced)	0	0	1	1	0	0	-2	-2	-1	-1
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	7	7	3	8	0	0	-7	-5	3	10
Midday		In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	12	12	4	4	0	0	-5	-5	11	11
	Taxi	0	0	0	0	0	0	-1	-1	-1	-1
	Taxi (Balanced)	0	0	0	0	0	0	-2	-2	-2	-2
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	12	12	4	4	0	0	-7	-7	9	9
PM		In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	16	16	5	4	0	0	-3	-4	18	16
	Taxi	0	0	1	0	0	0	-1	-1	0	-1
	Taxi (Balanced)	0	0	1	1	0	0	-2	-2	-1	-1
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	16	16	6	5	0	0	-5	-6	17	15
Saturday		In	Out	In	Out	In	Out	In	Out	In	Out
	Auto	18	18	5	5	0	0	-3	-3	20	20
	Taxi	0	0	1	0	0	0	-1	-1	0	-1
	Taxi (Balanced)	0	0	1	1	0	0	-2	-2	-1	-1
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	18	18	6	6	0	0	-5	-5	19	19

Notes:
25% Pass-by trip credit appled to local retail uses.

Table H-5
Travel Demand Forecast Summary

Peak Hour	Vehicle Trips[1]			Person Trips																	
				Subway			Bus			Ferry			Walk/Other			Walk to/From Off-Site Parking[2]			Total Pedestrian Trips[3]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	3	10	13	-5	39	34	-2	0	-2	2	6	8	69	74	143	-6	-1	-7	58	118	176
Midday	9	9	18	4	6	10	0	0	0	2	2	4	109	109	218	-5	-5	-10	110	112	222
PM	17	15	32	30	10	40	2	2	4	5	3	8	155	151	306	-2	-4	-6	190	162	352
Saturday	19	19	38	28	22	50	3	3	6	5	4	9	180	179	359	-2	-2	-4	214	206	420

Notes:
[1]Includes auto, taxi, and truck trips.
[2]Site 1 incremental auto person trips would be accommodated off-site.
[3]Includes walk-only trips and pedestrians walking to/from subway stations, bus and ferry stops, and off-site parking.

Transit

According to the general thresholds used by the MTA and specified in the *CEQR Technical Manual*, detailed transit analyses are required if a proposed action would result in 50 or more bus passengers being assigned to a single bus line (in one direction), or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line. Transit analyses typically focus on the weekday AM and PM commuter peak hours, as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in **Table H-5**, the Proposed Actions would generate a net increase of approximately 34 and 40 subway trips in the weekday AM and PM peak hours, respectively. The Proposed Actions would also generate a net decrease of approximately two bus trips in the weekday AM peak hour and a net increase of approximately four bus trips in the PM peak hour. As such, subway and bus trips would not exceed the *CEQR Technical Manual* threshold of 200 or more subway passengers and 50 or more bus passengers in any peak hour. Therefore, detailed subway and bus analyses are not warranted.

Citywide Ferry Service (CWFS)

According to *CEQR Technical Manual* guidance, detailed analyses of the CWFS are not typically required if the Proposed action would result in 50 or fewer peak hour CWFS peak hour ferry riders to a ferry landing. As shown in **Table H-5**, the Proposed Actions are expected to generate a net total of approximately eight, four, eight, and nine incremental ferry trips in the weekday AM, midday, and PM, and Saturday peak hours, respectively. As these numbers of trips would not exceed the 50-trip *CEQR Technical Manual* analysis threshold, further analysis is not warranted and significant adverse impacts to ferry services are not expected to occur under the Proposed Actions.

Pedestrians

According to *CEQR Technical Manual* guidance, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area, or crosswalk). As shown in **Table H-5**, the Proposed Actions would generate a net increase of approximately 176, 222, 352, and 420 total pedestrian trips (including walk-only, subway, ferry, bus, and auto person trips) in the weekday AM, midday, PM, and Saturday peak hours, respectively. As the number of trips would exceed the 200-trip threshold in the weekday midday, weekday PM, and Saturday peak hours, a Level 2 screening assessment is warranted to determine which, if any, pedestrian elements required quantified analysis.

Parking

Under *CEQR Technical Manual guidance*, on- and off-street parking analyses may be warranted if a quantified traffic analysis is necessary based on the Levels 1 and 2 screening analyses. Based on the screening analyses detailed above, a quantified traffic analysis would not be warranted for the Proposed Action. Therefore, based on *CEQR Technical Manual* guidance, quantified on- and off-street parking analyses would also not be warranted.

IV. LEVEL 2 SCREENING ASSESSMENT

A Level 2 screening assessment involves the assignment of project-generated trips to the study area's pedestrian elements and street network, and the identification of specific locations where the incremental increase in demand may potentially exceed *CEQR Technical Manual* analysis thresholds and, therefore, require a quantitative analysis. As the incremental pedestrian trips generated by the Proposed Actions exceed the *CEQR Technical Manual* thresholds, a Level 2 screening was conducted and is discussed below.

Transportation Network

Pedestrians

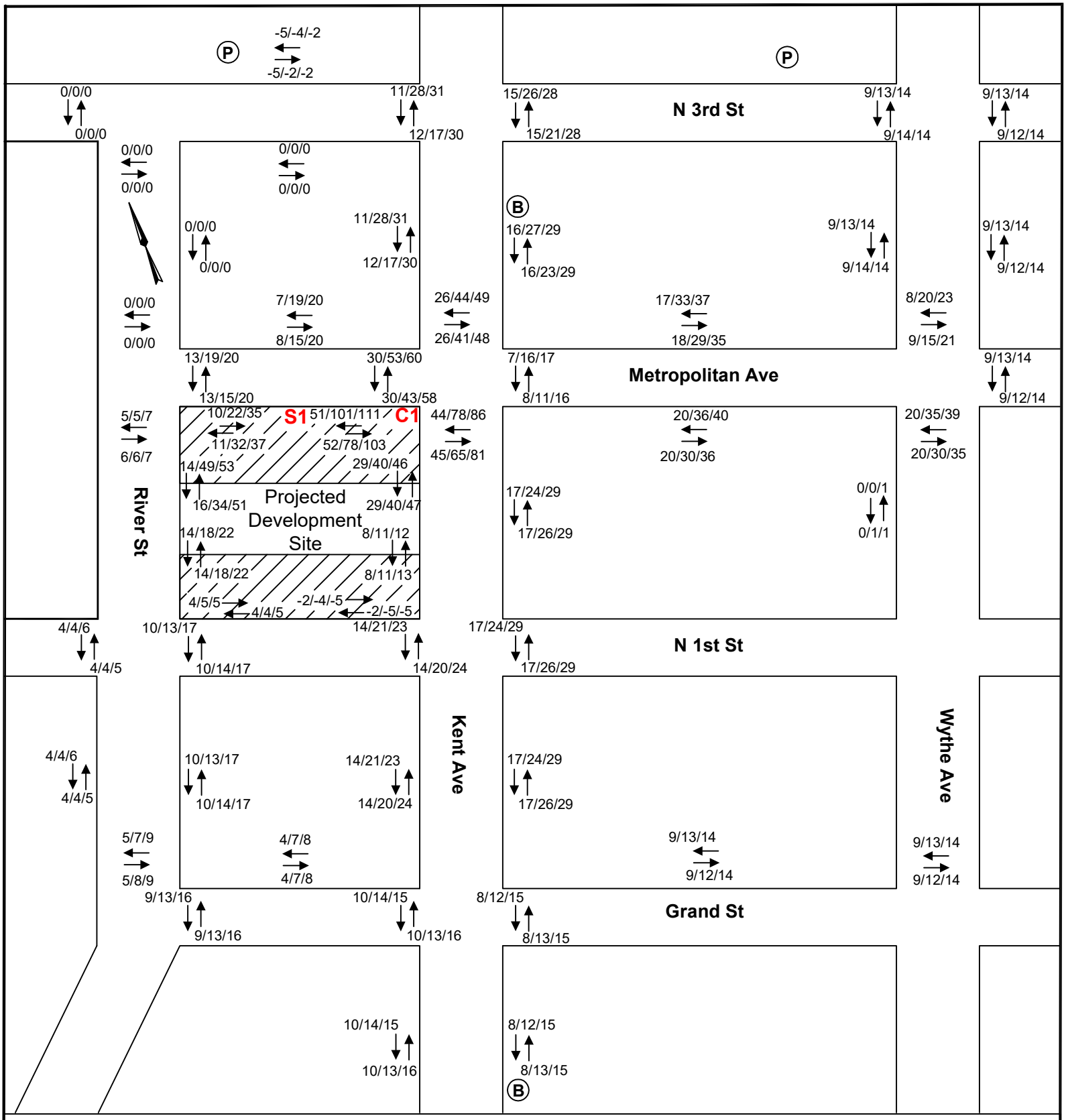
Many project-generated trips would include a walk component using local sidewalks, street corners, and crosswalks, to access the project site. As shown above in **Table H-5**, the Proposed Actions' RWCDS would generate a net total of 176, 222, 352, and 420 pedestrian trips (including walk-only trips, subway, bus, and ferry trips, and off-site auto person trips) during the weekday AM, midday, PM and Saturday peak hours, respectively. As the number of project generated pedestrian trips would exceed the 200-trip *CEQR Technical Manual* threshold during the weekday midday, weekday PM, and Saturday peak hours, a Level 2 screening is required.

The project-generated pedestrian trips (walk-only, subway, bus, ferry and auto person trips) were assigned to pedestrian elements (sidewalks, corner area, and crosswalks) in the vicinity of the Project Area, during the weekday midday, PM, and Saturday peak hours. In the weekday PM peak hour, new pedestrian trips would be most concentrated on sidewalks and crosswalks adjacent to the Project Area and nearby subway station entrances and bus stops. In the midday and Saturday peak hours, pedestrian trips would tend to be more dispersed, as people travel throughout the area for lunch, shopping, and/or errands. Based on a preliminary assignment (refer to **Figure H-2**), the Proposed Actions would generate an increase of 200 or more pedestrian trips in the weekday PM and Saturday peak periods at two pedestrian elements (one sidewalk and one corner area), which have therefore been selected for analysis. These two pedestrian elements are: the south sidewalk on Metropolitan Avenue between Kent Avenue and River Street and the southwest corner at Kent Avenue and Metropolitan Avenue.

V. PEDESTRIAN ASSESSMENT METHODOLOGY

Data on peak period pedestrian flow volumes were collected along the analyzed sidewalk and corner area in the vicinity of the Project Area, at the southwest corner of Metropolitan and Kent Avenues, in September 2022. The data accounts for the recently opened Trader Joe's located directly across from the Project Area on the northwest corner of Kent Avenue and Metropolitan Avenue. Peak hours were determined by comparing rolling hourly averages, and the highest 15-minute volumes within the selected peak hours were used for analysis. Based on existing peak pedestrian volumes along major corridors in the study area, the peak hours selected for analysis include the 5:30 to 6:30 PM period during the weekday PM peak hour and 2 to 3 PM during the Saturday peak hour.

Peak 15-minute pedestrian flow conditions during the weekday PM and Saturday midday peak hours are analyzed using the *Highway Capacity Manual 2010* methodology and procedures outlined in the *CEQR*



230 Kent Avenue Rezoning EAS

Figure H-2

Incremental Peak Hour Pedestrian Volumes

Technical Manual. Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volume, measuring the sidewalk width, determining the available pedestrian capacity, and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared with level-of-service (LOS) standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street corners is more complicated as these spaces cannot be treated as corridors due to the time incurred waiting for traffic lights. To effectively evaluate these facilities a "time-space" analysis methodology is employed, which takes into consideration the traffic light cycle at intersections.

LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. **Table H-6** defines the LOS criteria for pedestrian crosswalk/corner area and sidewalk conditions, as based on the *Highway Capacity Manual* methodology.

The analysis of sidewalk conditions includes a "platoon" factor in the calculation of pedestrian flow to more accurately estimate the dynamics of walking. "Platooning" is the tendency of pedestrians to move in bunched groups or "platoons" once they cross a street where cross traffic required them to wait. Platooning generally results in an LOS one level poorer than that determined for average flow rates.

Significant Impact Criteria

Sidewalks

As many of the analysis elements are not located within a Central Business District (CBD), the *CEQR Technical Manual* impact criteria for a non-central business district (non-CBD) location are used to identify significant adverse impacts due to the Proposed Actions. These criteria define a significant adverse sidewalk impact to have occurred under platoon conditions if the average pedestrian space under the No-Action condition is greater than or equal to 44.3 square feet/pedestrian (sf/ped), and the average pedestrian space under the With-Action condition is 40.0 sf/ped or less (LOS D or worse). If the average pedestrian space under the With-Action condition is greater than 40.0 sf/ped (LOS C or better), the impact should not be considered significant. If the No-Action pedestrian space is between 6.4 and 44.2 sf/ped, a reduction in pedestrian space under the With-Action condition should be considered significant based on **Table H-7**, which shows a sliding-scale that identifies what decrease in pedestrian space is considered a significant impact for a given pedestrian space value in the No-Action condition. If the reduction in pedestrian space is less than the value in **Table H-7**, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than or equal to 6.3 sf/ped, then a reduction in pedestrian space greater than or equal to 0.3 sf/ped, under the With-Action condition, should be considered significant.

TABLE H-6
Pedestrian Corner Area and Sidewalk Levels of Service Descriptions

LOS	Corner	Corner Area Criteria (sf/ped)	Sidewalk Criteria (sf/ped)
A	(Unrestricted)	> 60	> 530
B	(Slightly Restricted)	> 40 to 60	> 90 to 530
C	(Restricted but fluid)	> 24 to 40	> 40 to 90
D	(Restricted, necessary to continuously alter walking stride and direction)	> 15 to 24	> 23 to 40
E	(Severely restricted)	> 8 to 15	> 11 to 23
F	(Forward progress only by shuffling; no reverse movement possible)	≤ 8	≤ 11

Notes:
Based on average conditions for 15 minutes
sf/ped – square feet of area per pedestrian
Source: 2021 *CEQR Technical Manual*

Corner Areas

For non-CBD areas, *CEQR Technical Manual* criteria define a significant adverse corner area impact to have occurred if the average pedestrian space under the No-Action condition is greater than or equal to 26.6 sf/ped and, under the With-Action condition, the average pedestrian space decreases to 24 sf/ped or less (LOS D or worse). If the pedestrian space under the With-Action condition is greater than 24 sf/ped (LOS C or better), the impact should not be considered significant. If the average pedestrian space under the No-Action condition is between 5.1 and 26.5 sf/ped, a decrease in pedestrian space under the With-Action condition should be considered significant based on **Table H-8**. This table shows a sliding scale that identifies what decrease in pedestrian space is considered a significant impact for a given amount of pedestrian space in the No-Action condition. If the decrease in pedestrian space is less than the value in **Table H-8**, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than or equal to 5.0 sf/ped, then a decrease in pedestrian space greater than or equal to 0.2 sf/ped should be considered significant.

TABLE H-7
Significant Impact Criteria for Sidewalks in a non-CBD Location

No-Action Condition Pedestrian Flow (sf/ped)	With-Action Condition Pedestrian Flow Increment to be Considered a Significant Impact(sf/ped)
≥44.3	With-Action Condition ≤ 40.0
43.5 to 44.2	Reduction ≥ 4.3
42.5 to 43.4	Reduction ≥ 4.2
41.6 to 42.4	Reduction ≥ 4.1
40.6 to 41.5	Reduction ≥ 4.0
39.7 to 40.5	Reduction ≥ 3.9
38.7 to 39.6	Reduction ≥ 3.8
37.8 to 38.6	Reduction ≥ 3.7
36.8 to 37.7	Reduction ≥ 3.6
35.9 to 36.7	Reduction ≥ 3.5
34.9 to 35.8	Reduction ≥ 3.4
34.0 to 34.8	Reduction ≥ 3.3
33.0 to 33.9	Reduction ≥ 3.2
32.1 to 32.9	Reduction ≥ 3.1
31.1 to 32.0	Reduction ≥ 3.0
30.2 to 31.0	Reduction ≥ 2.9
29.2 to 30.1	Reduction ≥ 2.8
28.3 to 29.1	Reduction ≥ 2.7
27.3 to 28.2	Reduction ≥ 2.6
26.4 to 27.2	Reduction ≥ 2.5
25.4 to 26.3	Reduction ≥ 2.4
24.5 to 25.3	Reduction ≥ 2.3
23.5 to 24.4	Reduction ≥ 2.2
22.6 to 23.4	Reduction ≥ 2.1
21.6 to 22.5	Reduction ≥ 2.0
20.7 to 21.5	Reduction ≥ 1.9
19.7 to 20.6	Reduction ≥ 1.8
18.8 to 19.6	Reduction ≥ 1.7
17.8 to 18.7	Reduction ≥ 1.6
16.9 to 17.7	Reduction ≥ 1.5
15.9 to 16.8	Reduction ≥ 1.4
15.0 to 15.8	Reduction ≥ 1.3
14.0 to 14.9	Reduction ≥ 1.2
13.1 to 13.9	Reduction ≥ 1.1
12.1 to 13.0	Reduction ≥ 1.0
11.2 to 12.0	Reduction ≥ 0.9
10.2 to 11.1	Reduction ≥ 0.8
9.3 to 10.1	Reduction ≥ 0.7
8.3 to 9.2	Reduction ≥ 0.6
7.4 to 8.2	Reduction ≥ 0.5
6.4 to 7.3	Reduction ≥ 0.4
≤ 6.3	Reduction ≥ 0.3

Source: 2021 *CEQR Technical Manual.*

TABLE H-8
Significant Impact Criteria for Corners and Crosswalks in a non-CBD Location

No-Action Condition Pedestrian Space (sf/ped)	With-Action Condition Pedestrian Space Reduction to be Considered a Significant Impact (sf/ped)
≥ 26.6	With-Action Condition ≤24.0
25.8 to 26.5	Reduction ≥ 2.6
24.9 to 25.7	Reduction ≥ 2.5
24.0 to 24.8	Reduction ≥ 2.4
23.1 to 23.9	Reduction ≥ 2.3
22.2 to 23.0	Reduction ≥ 2.2
21.3 to 22.1	Reduction ≥ 2.1
20.4 to 21.2	Reduction ≥ 2.0
19.5 to 20.3	Reduction ≥ 1.9
18.6 to 19.4	Reduction ≥ 1.8
17.7 to 18.5	Reduction ≥ 1.7
16.8 to 17.6	Reduction ≥ 1.6
15.9 to 16.7	Reduction ≥ 1.5
15.0 to 15.8	Reduction ≥ 1.4
14.1 to 14.9	Reduction ≥ 1.3
13.2 to 14.0	Reduction ≥ 1.2
12.3 to 13.1	Reduction ≥ 1.1
11.4 to 12.2	Reduction ≥ 1.0
10.5 to 11.3	Reduction ≥ 0.9
9.6 to 10.4	Reduction ≥ 0.8
8.7 to 9.5	Reduction ≥ 0.7
7.8 to 8.6	Reduction ≥ 0.6
6.9 to 7.7	Reduction ≥ 0.5
6.0 to 6.8	Reduction ≥ 0.4
5.1 to 5.9	Reduction ≥ 0.3
≤ 5.0	Reduction ≥ 0.2

Source: 2021 *CEQR Technical Manual.*

VI. PEDESTRIAN ASSESSMENT

Existing Conditions

As discussed previously in Section IV "Level 2 Screening Assessment", two pedestrian elements (one sidewalk and one corner area) have been selected for detailed analysis as they are locations where project-generated pedestrian trips are expected to exceed the 200-trip *CEQR Technical Manual* analysis threshold. **Tables H-9 and H-10** show the existing average pedestrian space (in square feet per pedestrian) and levels of service at analyzed sidewalk and corner, respectively. As shown in **Tables H-9 and H-10**, all analyzed pedestrian elements currently operate at an uncongested LOS A in all analyzed peak hours.

Table H-9: Sidewalk Analysis – Existing Conditions

Location	Sidewalk	Effective Width (ft)	Peak Hour Volume		Average Pedestrian Space (SFP)		Platoon-Adjusted LOS	
			PM	SAT	PM	SAT	PM	SAT
Metropolitan Ave between Kent Ave and River St	South	10	21	41	5,657.1	2,820.3	A	A

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

Table H-10: Corner Analysis – Existing Conditions

Location	Corner	Average Pedestrian Space (SFP)		Platoon-Adjusted LOS	
		PM	SAT	PM	SAT
Kent Ave and Metropolitan Avenue	SW	242.0	220.4	A	A

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

The Future Without the Proposed Action (No-Action)

Increased pedestrian demand due to background growth was added to existing volumes to determine future volumes absent the Proposed Actions. An annual compounded background growth rate of 0.50 percent was applied to existing travel demand through 2025 pursuant to *CEQR Technical Manual* criteria. In addition, pedestrian volumes are expected to increase as a result of the No-Action development projects in the surrounding area (see Attachment C, "Land Use, Zoning and Public Policy,"). The No-Action development projects include the approved development from the 2021 *River Ring Rezoning FEIS* and two other sites within quarter-mile of the Project Area.

Tables H-11 and H-12 show the forecasted No-Action average pedestrian space and LOS along the analyzed sidewalks and corner, respectively, during the weekday PM and Saturday peak hours. As shown in **Table H-11**, under No-Action conditions, the analyzed sidewalk's level of service would slightly worsen to an acceptable, platoon LOS A in all analyzed peak hours. Under No-Action conditions, the analyzed corner areas would continue to operate at an acceptable LOS A in all analyzed peak hours (see **Table H-12**).

Table H-11: Sidewalk Analysis – 2025 No-Action Conditions

Location	Sidewalk	Effective Width (ft)	Peak Hour Volume		Average Pedestrian Space (SFP)		Platoon-Adjusted LOS	
			PM	SAT	PM	SAT	PM	SAT
Metropolitan Ave between Kent Ave and River St	South	10	327	320	363.2	361.2	B	B

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

Table H-12: Corner Analysis – 2025 No-Action Conditions

Location	Corner	Average Pedestrian Space (SFP)		Platoon-Adjusted LOS	
		PM	SAT	PM	SAT
Kent Ave and Metropolitan Avenue	SW	121.9	124.5	A	A

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

The Future With the Proposed Action (With-Action)

As discussed previously, the Proposed Actions' RWCDS is expected to generate a net total of 352 and 420 pedestrian trips (including walk-only trips and pedestrians en route to and from subway stations, bus stops, ferry landings, and off-site parking) during the weekday PM and Saturday peak hours, respectively (refer to **Table H-5**). These pedestrian volumes were added to the projected No-Action volumes to generate the With-Action pedestrian volumes for analysis which were used to determine the pedestrian elements for analysis. The analyzed pedestrian elements are shown in **Figure H-2**.

Tables H-13 and H-14 shows the average pedestrian space and levels of service at the analyzed sidewalk and corner area during each analyzed peak hour under the 2025 With-Action conditions, respectively. As shown in **Table H-13**, under the With-Action conditions, the analyzed sidewalk element would continue to operate at an acceptable, platoon LOS B in all analyzed peak periods. Under the With-Action conditions, the analyzed corner area would continue to operate at an acceptable LOS A in all analyzed peak periods (see **Table H-14**). Therefore, based on *CEQR Technical Manual* criteria, the Proposed Action would not result in any significant adverse impacts to any analyzed pedestrian elements in any peak hour.

Table H-13: Sidewalk Analysis – 2025 With-Action Conditions

Location	Sidewalk	Effective Width (ft)	Project Increment		Peak Hour Volume		Average Pedestrian Space (SFP)		Platoon-Adjusted LOS	
			PM	SAT	PM	SAT	PM	SAT	PM	SAT
Metropolitan Ave between Kent Ave and River St	South	10	179	214	506	534	234.6	216.3	B	B

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

Table H-14: Corner Analysis – 2025 With-Action Conditions

Location	Corner	Average Pedestrian Space (SFP)		Platoon-Adjusted LOS	
		PM	SAT	PM	SAT
Kent Ave and Metropolitan Avenue	SW	91.0	89.9	A	A

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.

ATTACHMENT I

AIR QUALITY

I. INTRODUCTION

The Applicant, 230 Kent Avenue LLC, seeks to facilitate development of the Applicant-owned site at 230 Kent Avenue (Block 2362, Lot 1; the "Applicant Site" or "Projected Development Site 1") in the Williamsburg neighborhood of Brooklyn. In addition, for Reasonable Worst Case Development Scenario (RWCDS) analysis purposes, it is assumed that the Proposed Actions would allow for the redevelopment of 218 River Street (Block 2362, Lot 3), which is not owned or controlled by the Applicant ("Projected Development Site 2"). The locations of these sites are shown on **Figure I-1**.

As described in **Attachment A, "Project Description,"** the Applicant Site would be developed with an 8-story, approximately 105-foot-tall, building and it is assumed that Projected Development Site 2 would be developed with a 145-foot-tall building, which is the maximum height allowed by the proposed zoning district. It is also assumed that each building would use a traditional natural gas-fired boiler.

Both sites are located within 400 feet of the future River Ring development's South and North Towers, which are described in the *River Ring Final Environmental Impact Statement* (FEIS), which was issued by the NYC Department of City Planning (DCP) in November 2021. For the purposes of this analysis, it is conservatively assumed that both of the River Ring towers would be completed by the 2025 analysis year for the Proposed Actions. The two development sites are also within 400 feet of the existing New York Power Authority's (NYPA) North 1st Street Power Plant.

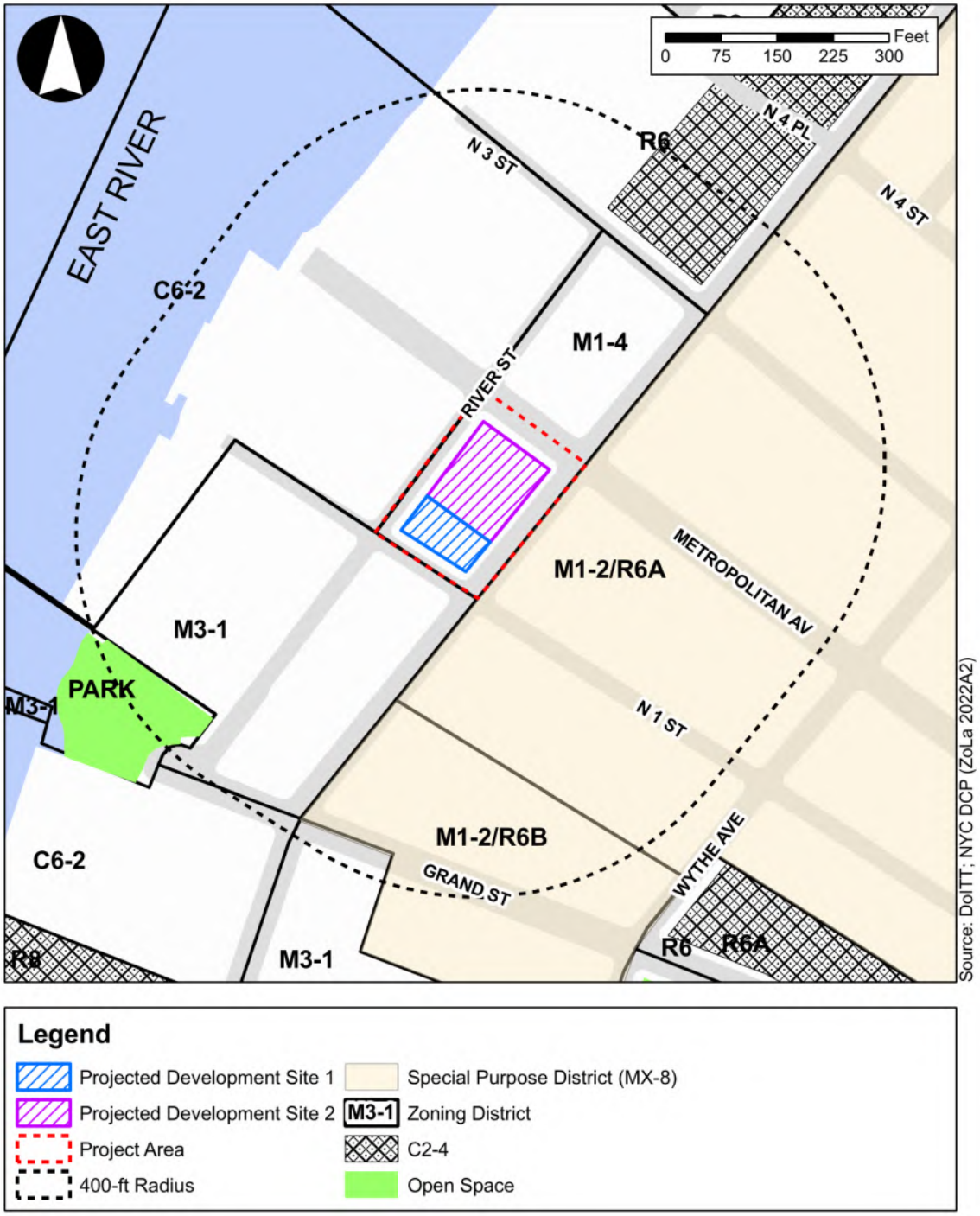
It should be noted that as a result of the analysis of the Applicant Site in the 2021 *River Ring FEIS* (CEQR No. 21DCP157K), an (E) designation was placed on the Applicant Site (Block 2362, Lot 1) specifying the use of natural gas as the type of fuel for HVAC systems to avoid any potential significant air quality impact (E-636)[1]. However, as the lot adjacent to the Applicant Site is now being assumed to be redeveloped as part of the RWCDS for the Proposed Actions, an analysis is required to determine whether the heating, ventilation, and air conditioning (HVAC) emissions from the shorter proposed (Applicant) building could potentially impact the projected taller (Projected Development Site 2) building and whether the combined HVAC emissions from both buildings could impact the future River Ring residential towers. There are no other existing taller buildings within 400 feet of the two Projected Development Sites. In addition, an analysis is required to determine whether each of the buildings would be impacted by emissions from the nearby NYPA power plant.

Two industrial facilities were identified in the 400-foot study area depicted on **Figure I-1** from the upgraded New York City Clean Air Tracking System (CAT) database – one is for a facility located at 237 Kent Ave that is no longer in operation, and the other is for a facility that will be replaced by the building on Projected Development Site 2. As such, no industrial source analysis is warranted for the Proposed Actions.

The following air quality analyses were conducted for the Proposed Actions and are presented in this chapter:

[1] Refer to Chapter 13, "Air Quality" of the *River Ring FEIS (21DCP157K).*

Figure I-1: Aerial View of Projected Developments with River Ring Towers and Existing Buildings



- A project-on-project analysis to determine whether the HVAC emissions from the building planned on the Applicant Site would have the potential to significantly impact the building on Projected Development Site 2;
- A project-on-existing analysis to determine whether the combined HVAC emissions from both RWCDS buildings would have the potential to significantly impact the River Ring towers; and
- A major emission source analysis to determine whether the NYPA Power Plant emissions have the potential to significantly impact either of the two RWCDS buildings.

Analyses followed the procedures and methodologies prescribed in the *2021 City Environmental Quality Review (CEQR) Technical Manual*.

II. HVAC ANALYSIS

Relevant Air Pollutants

The EPA has identified several pollutants, which are known as criteria pollutants, as being of concern nationwide. As the two RWCDS buildings' HVAC systems are assumed to use natural gas, the two critical criteria pollutants associated with natural gas combustion – nitrogen dioxide (NO_2) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) – would be the primary concern. The other three additional pollutants (PM_{10}, SO_2, and CO) would be also of concern for the NYPA Power Plant analysis, as they are listed in the facility permit.

Applicable Air Quality Standards and Significant Impact Criteria

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA. The NAAQS are concentrations set for each of the criteria pollutants to protect public health and the nation's welfare, and New York has adopted the NAAQS as the State ambient air quality standards.

In addition to considering the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply $PM_{2.5}$ significant impact criteria or *de minimis* criteria (based on concentration increments) developed by the New York City Department of Environmental Protection (DEP) to determine whether potential adverse $PM_{2.5}$ impacts would be significant. If the maximum estimated impacts of a proposed project are less than these increments, the impacts are not considered to be significant.

This analysis addresses compliance of the potential impacts with the 24-hour/annual $PM_{2.5}$ CEQR significant incremental impact criteria as well as with $PM_{2.5}$ NAAQS and 1-hour/annual NO_2 NAAQS. The current standards and CEQR significant impact criteria that were applied to this analysis, together with their health-related averaging periods, are provided in **Table I-1**.

$PM_{2.5}$ CEQR Significant Impact (De Minimis) Criteria

CEQR Technical Manual guidance includes the following criteria for evaluating significant adverse $PM_{2.5}$ incremental impacts:

> *Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour $PM_{2.5}$ background concentration and the 24-hour standard.*

The 3-year (2017-2019)[2] average of the 98th percentile 24-hour $PM_{2.5}$ background concentration for Brooklyn JHS 126 monitoring station from the New York State Department of Environmental Conservation (NYSDEC) 2019 monitoring Report is 17.8 ug/m^3 (2017= 17.2 ug/m^3, 2018=17.9 ug/m^3, and 2019=18.4 ug/m^3).[3] Half the difference between the 24-hour $PM_{2.5}$ NAAQS of 35 ug/m^3 and the background value of

[2] Although data for 2018-2020 are available, the 2017-2019 data set is being used in this analysis for consistency with the NYPA analysis previously conducted in the *River Ring* FEIS, and potential problems with ozone data due to Covid19.

[3] NEW YORK STATE AMBIENT AIR QUALITY REPORT FOR 2019 (ny.gov)

17.8 ug/m^3 is 8.6 ug/m^3. As such, a significant impact threshold of 8.6 ug/m^3 (or de minimis) was used for determining whether a potential 24-hour PM2.5 impact is significant.

TABLE I-1
Applicable National Ambient Air Quality Standards and CEQR Significant Impact Criteria

Pollutant	Averaging Period	NAAQS	CEQR De Minimis
NO_2	1 Hour[1]	188 µg/m^3	--
	Annual	100 µg/m^3	--
$PM_{2.5}$	24 Hour[2]	35 µg/m^3	8.6 µg/m^3
	Annual[3]	12 µg/m^3	0.3 µg/m^3
PM_{10}	24 Hour[4]	150 µg/m^3	-
SO_2	1 Hour[5]	195 µg/m^3	-
CO	1 Hour[6]	35 ppm	-
	8 Hour[6]	9 ppm	-

[1] 98th percentile of 1-hour daily maximum, averaged over 3 years.
[2] 98th percentile, averaged over 3 years.
[3] Annual mean, averaged over 3 years.
[4] Not to be exceeded more than once per year on average over 3 years.
[5] 99th percentile of 1-hour daily maximum, averaged over 3 years.
[6] Not to be exceeded more than once per year; ppm = parts per million

For an annual average adverse $PM_{2.5}$ incremental impact, according to CEQR guidance:

> *Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 ug/m^3 at any receptor location for stationary sources.*

The 3-year average (2017-2019) annual $PM_{2.5}$ background concentration from JHS-126 is 7.6 µg/m^3.

The above 24-hour and annual significant impact criteria were used to evaluate the significance of predicted $PM_{2.5}$ HVAC emissions from both RWCDS developments.

NO_2 NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x gradually convert to NO_2, which is the pollutant of concern, in the atmosphere in the presence of ozone and sunlight as these emissions travel downwind of a source.

The 1-hour NO_2 NAAQS of 0.100 ppm (188 µg/m^3) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that are comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100 percent) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NO_x/NO_2 ratio of 80 percent to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module which accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using ozone background concentrations.

Based on DCP guidance, Tier 1, as the most conservative approach, should initially be applied as a preliminary screening tool to determine whether violations of the NAAQS are likely to occur. If exceedances of the 1-hour NO_2 NAAQS were estimated, the refined Tier 3 approach should be applied.

The annual NO_2 standard is 0.053 parts per million (ppm or 100 $\mu g/m^3$). To conservatively estimate annual NO_2 impacts, a NO_2 to NO_x ratio of 0.75 percent, which is recommended by DEP for an annual NO_2 analysis, was applied.

Screening analysis

In accordance with the *2021 CEQR Technical Manual* guidance, a preliminary screening analysis was conducted as a first step to predict whether the potential impacts of the HVAC emissions from the two RWCDS buildings have the potential to significantly impact each other as well as nearby existing taller buildings, and therefore require a detailed analysis. CEQR screening procedures apply to buildings that are more than 30 feet apart from each other and are of similar or greater height.

As such, the screening analysis does not apply to the project-on-project scenario because the RWCDS buildings on the two development sites would be located less than 30 feet from each other, but is applicable for the project-on-existing scenario as both River Ring Towers are located further than 30 feet from both the Applicant Site and Projected Development Site 2. As such, the following project-on-existing screening analyses were conducted:

1. Applicant building on the South Tower of River Ring
2. Projected Development Site 2's building on the South Tower of River Ring
3. Applicant building on the North Tower of River Ring
4. Projected Development Site 2's Building on the North Tower of River Ring

The total square footage of the Applicant and Projected Development Site 2 buildings were used in Figure 17-2 of the *2021 CEQR AQ Appendix – Residential Development - Natural Gas*. This Figure is applicable for all stack heights. This nomograph depicts the maximum size of development versus the distance to the nearest building below which a potential impact could occur.

If the actual distance between a building with an HVAC stack and an affected building is greater than the threshold distance for building size shown on the nomograph, then that building passes the screening analysis, and no significant impact is predicted. However, if the actual distance is less than the threshold distance for a building, then there is potential for a significant impact, and a detailed analysis would be required. The results of the screening analysis are provided in **Table I-2**, and the screening nomograph is provided in **Appendix 4**.

TABLE I-2
Results of the Project-on-Existing Screening Analysis

Site ID	Floor Area	Stack Height (1)	Impacted Buildings	Distance to Building	Threshold Distance	Nomograph Results
	gsf	feet		feet	feet	(Pass/Fail)
Applicant Building	43,095	108	South Tower	50	52	**Fail**
			North Tower	203		**Pass**
Projected Development Site 2	83,819	148	South Tower	50	75	**Fail**
			North Tower	88		**Pass**

The results of the screening project-on-existing analysis, as presented in **Table I-2**, is that the actual distances between the Applicant Site's building and Projected Development Site 2's building, and the South Tower of the planned River Ring development are less than the threshold distance determined by the screening figure but greater than the threshold distance to the North Tower, indicating that both buildings failed the screening analysis on the South Tower but passed the screening analysis on the North Tower. As such, a detailed analysis of both RWCDS buildings on the South Tower is required.

Dispersion Analysis

The dispersion modeling analysis used the latest version of EPA's AERMOD dispersion model (version 22112). AERMOD is a steady-state plume model that is applicable in rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD can be used to calculate pollutant concentrations from one or more points (e.g., exhaust stacks) based on hourly meteorological data, and has the capability of calculating pollutant concentrations at locations when the plume from the exhaust stack is affected by the aerodynamic wakes and eddies (downwash) produced by nearby structures. Following CEQR guidance, analyses were conducted assuming stack tip downwash, urban dispersion surface roughness length, and elimination of calms, with and without downwash effects. The Building Profile Input Parameters program (BPIP) was employed to estimate building profile input parameters for all combinations of stack and wind directions. BPIP data associated with 36 wind directions were used to compute the plume downwash by the PRIME Plume Rise and Building Downwash Model.

As mentioned above, two criteria pollutants associated with natural gas combustion – nitrogen dioxide (NO_2) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) – were considered for project-on-project and project-on-existing scenarios. Three additional pollutants (PM_{10}, SO_2, and CO) were also considered for the NYPA Plant emissions analysis (discussed in Section III below).

Short-term NO_2 and $PM_{2.5}$ emission rates for the first two scenarios were estimated by accounting for seasonal variation in heat and hot water demand. Based on DCP guidance, a seasonal emission factor for the winter season was set as 1 and at 0.5 for each of the three other seasons of the year.

A total annual average natural gas consumption factor of 44.0 cubic feet per square foot (44 ft^3/ft^2) was obtained from Table C24: "Natural Gas Consumption and Expenditures Intensities, 2012", U.S. Energy Information Administration (EIA), Residential Energy Consumption Survey", which apply for all buildings in the Northeast region. (Note: The 2021 *CEQR Technical Manual* Air Quality Appendix no longer contains energy use factors; therefore, the 2021 CEQR *Technical Manual* recommends using energy data from the U.S. Energy Information Administration (EIA). The 2012 EIA data shows a lower (by approximately 25%) natural gas consumption factor for HVAC systems compared to those provided in the 2020 CEQR Tables.)

The stack diameter and exit velocity were obtained from DEP's "CA Permit" database. The maximum boiler size was estimated based on the assumption that all fuel (natural gas) would be consumed during the 100-days (or 2,400-hour) heating season. The stack exit temperature was assumed to be 300°F (423°K), which is appropriate for building boilers. Estimated $PM_{2.5}$ and NO_2 emission rates are provided in **Table I-3**.

Meteorological Data

All analyses were conducted using five consecutive years of meteorological data (from 2015 through 2019) provided by the NYSDEC. Surface data were obtained from La Guardia International Airport – KLGA New York, NY (Queens County) – and upper air data were obtained from the Brookhaven, New York station. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and

temperature inversion elevations over the 5 years. Five-year meteorological data were converted into a 5-year concatenated file of meteorological conditions which was used for all AERMOD modeling runs.

TABLE I-3
Estimated Short-term and Annual Pollutant Emission Rates

Building ID	Block/Lot	Stack Height (1)	Total Floor Area	$PM_{2.5}$ Emission Rate (2)		NO_2 Emission Rate (3)	
		feet	ft^2	g/sec	g/sec	g/sec	g/sec
				24-hr	Annual	1-hr	Annual
Applicant Building	2362/1	108	43,095	7.57E-04	2.07E-04	9.95E-03	2.73E-03
Projected Development Site 2 Building	2362/3	148	83,819	1.47E-03	4.03E-04	1.94E-02	5.30E-03

1. The stack height is assumed to be 3 feet above the roof.
2. $PM_{2.5}$ emission factor for natural gas combustion of 7.6 lb/10^6 cubic feet included filterable and condensable particulate matter (Filterable $PM_{2.5}$ =1.9 lb/10^6 ft^3 and condensable $PM_{2.5}$ = 5.7 lb/10^6 ft^3 (AP-42, Table 1.4-2).
3. NO_x emission factor is 100 lb per million cubic feet(AP-42, Table 1.4-1)

Background Concentrations

Three-year average background concentrations for all pollutants were obtained from Queens College 2 monitoring station for the 2017-2019 period, as follows:

- The 3-year average of the 98th percentile of the annual distribution of the daily maximum 1-hour NO_2 concentration was 55.1 ppb (104 ug/m^3);
- The highest annual NO_2 concentration over the 3 years was 14.62 ppb (27.6 ug/m^3);
- The 3-year average of the 99th percentile of the annual distribution of the daily maximum 1-hour SO_2 concentration was 5.17 ppb (13.4 ug/m^3);
- The average of the highest 24-hour PM_{10} concentrations over the 3 years was 28 ug/m^3, and
- The highest-2nd highest 1-hr and 8-hr CO background concentrations over 3 years were 1.51 ppm and 1.1 ppm, respectively.

A summary of modeling parameters is provided in **Table I-4**.

TABLE I-4
AERMOD Modeling Parameters

Model	AERMOD (EPA Version 22112)
Source Type	Point
Emission Sources and Receptor Coordinates	UTM NAD 83 Datum and UTM Zone 18
Downwash Program	Building Profile Input Program (BPIPPRM, regulatory version 04274)
Surface Characteristics	Urban Area Option
Urban Surface Roughness Length	1
The population of the area (Brooklyn)	2.6 million with a population density of more than 750 people per sq. km
Meteorological Data	Provided by NYSDEC for 2015-2019 in form of concatenated single multiyear file
Surface Meteorological Data	LaGuardia 2015-2019
Profile Meteorological Data	Brookhaven Station 2015-2019
24-hour $PM_{2.5}$ Analysis	AERMOD calculates the 8th highest concentration at each receptor for each year modeled, averages those concentrations across the number of years of data, and then selects the highest across all receptors of the 5-year averaged 8th highest values
$PM_{2.5}$ and other pollutant's background concentrations	Brooklyn JHS-126 and Queens College 2 monitoring stations data for 2017-2019

Dispersion Analyses Conducted

Project-on-project Analysis

Applicant building's HVAC emissions on the Projected Development Site 2 building.

Project-on-existing Analyses

The following project-on-existing analyses were conducted:

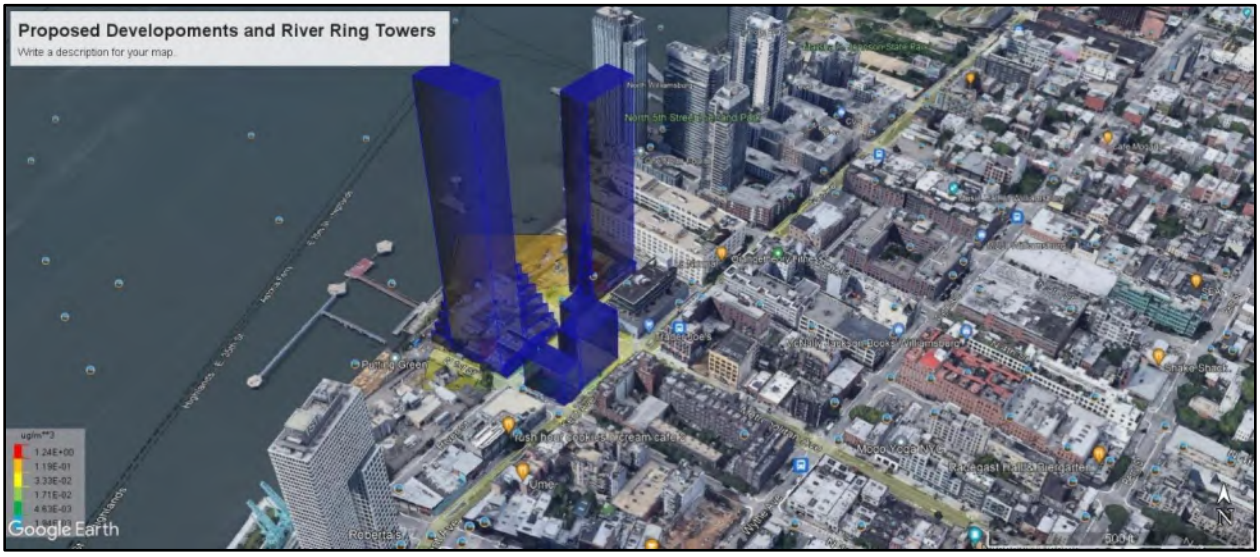
1. Applicant building's HVAC emissions on the South Tower of River Ring;
2. Projected Development Site 2 building's HVAC emissions on the South Tower of River Ring; and
3. Applicant and the Projected Development Site 2 building's HVAC emissions combined on the South Tower of River Ring (cumulative analysis).

An aerial view of the Applicant and Projected Development Site 2 buildings together with the South and North Towers of the River Ring Project is shown in **Figure I-2**. A 3-D view of the two RWCDS buildings along with the South and North Towers generated by the post-processor BREEZE 3-D Analyst that enables the user to analyze and visualize data is provided in **Figure I-3**.

Figure I-2: Aerial View of Applicant Building and Projected Development Site 2 Building with Planned River Ring Towers and Existing Buildings



Figure I-3: Model Generated View of Applicant Building and Projected Development Site 2 Building with Planned River Ring Towers and Existing Buildings



Stack Locations

Project-on-Project

With the stack on the Applicant building placed on a proposed 15-foot-tall bulkhead, which is close to the Projected Development Site 2 building, exceedances of the 1-hour NO_2 NAAQS with a Tier 1 analysis were predicted, and, as such, a Tier 3 analysis was used with the stack placed on the flat roof further away from the Projected Development Site 2 building. Setback distances were gradually increased until no

exceedances were predicted. This final setback distance from Metropolitan Avenue is approximately 168 feet, which would assure full compliance with the CEQR de minimis criteria for $PM_{2.5}$ and NAAQS.

Project-on-Existing

Impact on South Tower of River Ring

The stack on the Applicant building was located at the same location as determined in the Project-on-Project Analysis. The stack on the Projected Development Site 2 building was initially placed at the minimum distance (10 feet) from the South Tower and Tier 1 analysis was conducted. However, due to exceedances of 1-hour NO_2 NAAQS with a Tier 1 analysis, a Tier 3 analysis was employed, and setback distances were gradually increased until no exceedances were predicted.

Cumulative Analysis

The same stack locations used in the previous analyses were used in the cumulative impact assessment.

Receptor Locations

Receptors for the project-on-project analysis were placed around all faces of the Projected Development Site 2 building, in 10-foot increments vertically and horizontally, starting above ground and extending up to the level of the roof of the building (which was assumed to be 5 feet below roof level, which is 140 feet). For the project-on-existing analysis, as the combined emissions of both RWCDS buildings impact the South Tower, receptors were placed around all faces of the South Tower in 10-foot increments vertically and horizontally, on all floor levels, starting above ground and extending up to the level of the roof of the South Tower. The same South Tower configuration as provided in the *River Ring Environmental Impact Statement* was used. More than 4,500 receptors were placed on the South Tower to ensure that maximum impacts are estimated.

Results of HVAC Analysis

Project-on-Project

Maximum estimated $PM_{2.5}$ and NO_2 concentrations from the HVAC emissions of the Applicant building emissions on the Projected Development Site 2 building receptors are provided in **Tables I-5** through **I-8**.

$PM_{2.5}$

With the stack located on the bulkhead, results for 24-hour $PM_{2.5}$ analysis exceed the CEQR de minimis criteria. Therefore, the stack was set back further from the Projected Development Site 2 building. Results comply with both the CEQR de minimis criteria of 8.6 ug/m^3 and the NAAQS of 35 ug/m^3 with a stack setback distance of approximately 50 feet from the front of the Projected Development Site 2 building. This distance translates to a distance of approximately 168 feet to the northern lot line facing Metropolitan Avenue.

At this setback distance, the maximum 5-year average annual concentration is less than the annual $PM_{2.5}$ CEQR *de minimis* criteria of 0.3 ug/m^3 and, with the added background concentration, is less than the NAAQS of 12 ug/m^3, with or without downwash.

Therefore, with this setback requirement, $PM_{2.5}$ emissions from the Applicant building's HVAC system would not significantly impact the Projected Development Site 2 building.

TABLE I-5
Results of the 24-hr/Annual $PM_{2.5}$ Analysis On Projected Development Site 2 Building (with Downwash)

Buildings	Receptor Building	Max Modeled 24-hour Conc. (1)	Max Modeled Annual Conc. (3)	*De Minimis Criteria*	
				24-hour	Annual
Applicant Building	Projected Development Site 2 Building	µg/m³	µg/m³	µg/m³	µg/m³
		0.82	0.02	8.6	0.3
		Max Modeled 24-hour Conc. with Background (2)	Max Modeled Annual Conc. with Background (4)	NAAQS	
				24-hour	Annual
		µg/m³	µg/m³	µg/m³	µg/m³
		18.6	7.6	35	12

TABLE I-6
Results of the 24-hr/Annual $PM_{2.5}$ Analysis On Projected Development Site 2 Building (w/o Downwash)

Buildings	Receptor Building	Max Modeled 24-hour Conc. (1)	Max Modeled Annual Conc. (3)	*De Minimis Criteria*	
				24-hour	Annual
Applicant Building	Projected Development Site 2 Building	µg/m³	µg/m³	µg/m³	µg/m³
		3.4	0.08	8.6	0.3
		Max Modeled 24-hour Conc. with Background (2)	Max Modeled Annual Conc. with Background (4)	NAAQS	
				24-hour	Annual
		µg/m³	µg/m³	µg/m³	µg/m³
		21.2	7.7	35	12

Notes:

1. Modeled $PM_{2.5}$ concentration is presented as the maximum 24-hour average at each year modeled at each receptor (compared to the CEQR *de minimis* criteria of 8.6 ug/m³).
2. Modeled $PM_{2.5}$ concentration is presented as a sum of the maximum first-highest 24-hour concentration averaged over 5 years and 24-hour $PM_{2.5}$ background concentrations of 17.8 ug/m³ (compared to the NAAQS).
3. Modeled $PM_{2.5}$ annual concentration is presented as the maximum annual concentrations averaged over 5 years (compared to the CEQR *de minimis* of 0.3 ug/m³).
4. Modeled $PM_{2.5}$ annual concentration is presented as a sum of maximum annual concentrations averaged over 5 years and $PM_{2.5}$ annual background concentrations of 7.6 ug/m³ (compared to the NAAQS).

NO_2

Because a Tier 1 analysis was not sufficient to demonstrate NO_2 compliance with the stack setback distance determined for $PM_{2.5}$, a Tier 3 analysis with the PVMRM module was employed. Analysis with PVMRM followed NYSDEC DAR-10 guidance for the 1-hour NO_2 analysis, which recommends using the default in-stack ratio (IRS) of NO_2/NO_x emissions, ambient equilibrium ratio, and hourly ozone concentration. As recommended, the background ozone concentration applied was the single highest hourly value of 212 ug/m³, obtained from the 2017-2019 datasets provided by NYSDEC concurrent with the meteorological data. The default ISR and ambient equilibrium ratios were 0.5 and 0.9, respectively. The modeled concentration represented the maximum 8th highest (98th percentile) daily 1-hour results averaged over the five years. The NO_2 background concentration, which was added to the resulting concentration, was a uniform monitored background value of a three-year average of the 98th percentile of the annual distribution of the daily maximum 1-hour concentrations. A sum of the modeled concentration with added monitored concentration was then compared to the 1-hour NO_2 NAAQS to determine compliance with 1-hour NO_2 NAAQS.

The same stack location with the setback, as in the $PM_{2.5}$ analysis was used. With or without downwash, the multi-year 8th highest daily maximum 1-hour NO_2 concentration, with the added background value, is less than the 1-hour NO_2 NAAQS of 188 ug/m^3 and the highest annual average NO_2 concentration is less than the annual NO_2 NAAQS of 100 ug/m^3. Therefore, NO_2 emissions from the Applicant building's HVAC system would not significantly impact the Projected Development Site 2 building.

TABLE I-7
Results of the NO_2 Analysis on Projected Development Site 2 Building (with Downwash)

Building ID	Receptor Building	Modeled 1-hour Conc. (1)	Modeled Annual Conc. (2)	NAAQS 1-hr/Annual
		µg/m^3	µg/m^3	µg/m^3
Applicant Site	**Projected Development Site 2**	143.0	27.8	188/100

TABLE I-8
Results of the NO_2 Analysis on Projected Development Site 2 Building (without Downwash)

Building ID	Receptor Building	Modeled 1-hour Conc. (1)	Modeled Annual Conc. (2)	NAAQS 1-hr/Annual
		µg/m3	µg/m3	µg/m3
Applicant Site	**Projected Development Site 2**	175.3	28.4	188/100

Notes:

1. Modeled 1-hour concentration is presented as the sum of the multi-year average of the 8th highest daily maximum 1-hour concentrations and 1-hr NO_2 background concentration of 104 ug/m^3.
2. Modeled annual concentration is presented as the sum of the highest annual average concentration and annual NO_2 background concentrations of 27.6 ug/m^3.

Project-on-Existing

Analysis of the potential impact on the South Tower of the planned River Ring development from the combined HVAC emissions of the HVAC emissions from both the Applicant building and the Projected Development Site 2 building was conducted in one modeling run to estimate the cumulative impact of the HVAC emissions. The stack location on the Applicant building was the same as used in the project-on-project scenario. However, for the Projected Development Site 2 building, due to exceedance of the 1-hour NO_2 NAAQS on the eastern façade of the South Tower, the stack was set back approximately 18 feet from the western lot line facing the South Tower to assure compliance. Maximum estimated cumulative $PM_{2.5}$ and NO_2 concentrations on the River Ring South Tower with this stack setback are provided in **Tables I-9** through **I-12**.

$PM_{2.5}$

The highest estimated 8th highest 24-hour $PM_{2.5}$ concentration at each receptor is less than the 24-hour $PM_{2.5}$ CEQR de minimis criteria of 8.6 ug/m^3, with or without downwash. The sum of the highest 5-year average of the 8th concentration, with background concentration, is less than the 24-hour NAAQS of 35 ug/m^3, with or without downwash. The maximum 5-year average annual concentration is less than the annual $PM_{2.5}$ CEQR de minimis criteria of 0.3 ug/m^3 and, with the added background concentration, is less than the NAAQS of 12 ug/m^3, with or without downwash.

Therefore, $PM_{2.5}$ emissions from the two Projected Development Sites combined would not significantly impact the South Tower of the River Ring development.

TABLE I-9
Results of Cumulative $PM_{2.5}$ Analysis on River Ring Buildings (with Downwash)

Buildings	Receptor Building	Modeled 24-hour Conc. (1)	Modeled Annual Conc.(3)	*De Minimis Criteria*	
				24-hour	24-hour
		µg/m³	µg/m³	µg/m³	µg/m³
Applicant and Projected Development Site 2 Buildings' HVAC Emissions Combined	South Tower of River Ring	0.73	0.03	8.6	0.3
		Modeled 24-hour Conc. with Background Conc.(2)	Modeled Annual Conc. with Background Conc.(4)	NAAQS	
				24-hour	Annual
		µg/m³	µg/m³	µg/m³	µg/m³
		18.4	7.6	35	12

TABLE I-10
Results of Cumulative PM2.5 Analysis on River Ring Buildings (without Downwash)

Buildings	Receptor Building	Modeled 24-hour Conc. (1)	Modeled Annual Conc.(3)	*De Minimis Criteria*	
				24-hour	Annual
		µg/m³	µg/m³	µg/m³	µg/m³
Applicant and Projected Development Site 2 Buildings' HVAC Emissions Combined	South Tower of River Ring	1.05	0.03	8.6	0.3
		Modeled 24-hour Conc. with Background Conc.(2)	Modeled Annual Conc. with Background Conc.(4)	NAAQS	
				24-hour	Annual
		µg/m³	µg/m³	µg/m³	µg/m³
		18.6	7.6	35	12

Notes:

1. Modeled $PM_{2.5}$ concentration is presented as the maximum 24-hour average at each year modeled at each receptor (compared to the CEQR *de minimis* criteria of 8.6 ug/m^3).
2. Modeled $PM_{2.5}$ concentration is presented as the sum of the maximum first-highest 24-hour concentration averaged over 5 years and 24-hour PM2.5 background concentrations of 17.8 ug/m^3 (compared to the NAAQS).
3. Modeled $PM_{2.5}$ annual concentration is presented as the maximum annual concentrations averaged over 5 years (compared to the CEQR *de minimis* criteria of 0.3 ug/m^3).
4. Modeled $PM_{2.5}$ annual concentration is presented as the sum of maximum annual concentrations averaged over 5 years and $PM_{2.5}$ annual background concentrations of 7.6 ug/m^3 (compared to the NAAQS).

NO_2

With or without downwash, the maximum multi-year 8th highest daily maximum 1-hour NO_2 concentration, with the added background value, is less than the 1-hour NO_2 NAAQS of 188 ug/m^3 and the highest annual average NO_2 concentration is less than the annual NO_2 NAAQS of 100 ug/m^3. Therefore, NO_2 emissions from the two projected developments would not significantly impact existing land uses.

TABLE I-11
Results of the Cumulative NO_2 Analysis on River Ring Buildings (with Downwash)

Building ID	Receptor Building	Modeled 1-hour Conc. (1)	Modeled Annual Conc. (2)	NAAQS 1-hr/Annual
		µg/m³	µg/m³	µg/m³
Applicant and Projected Development Site 2 Buildings Combined	South Tower of River Ring	145.4	27.9	188/100

TABLE I-12
Results of the Cumulative NO_2 Analysis on River Ring Buildings (without Downwash)

Building ID	Receptor Building	Modeled 1-hour Conc. (1)	Modeled Annual Conc. (2)	NAAQS 1-hr/Annual
		µg/m³	µg/m³	µg/m³
Applicant and Projected Development Site 2 Buildings Combined	South Tower of River Ring	153.9	27.9	188/100

Notes:

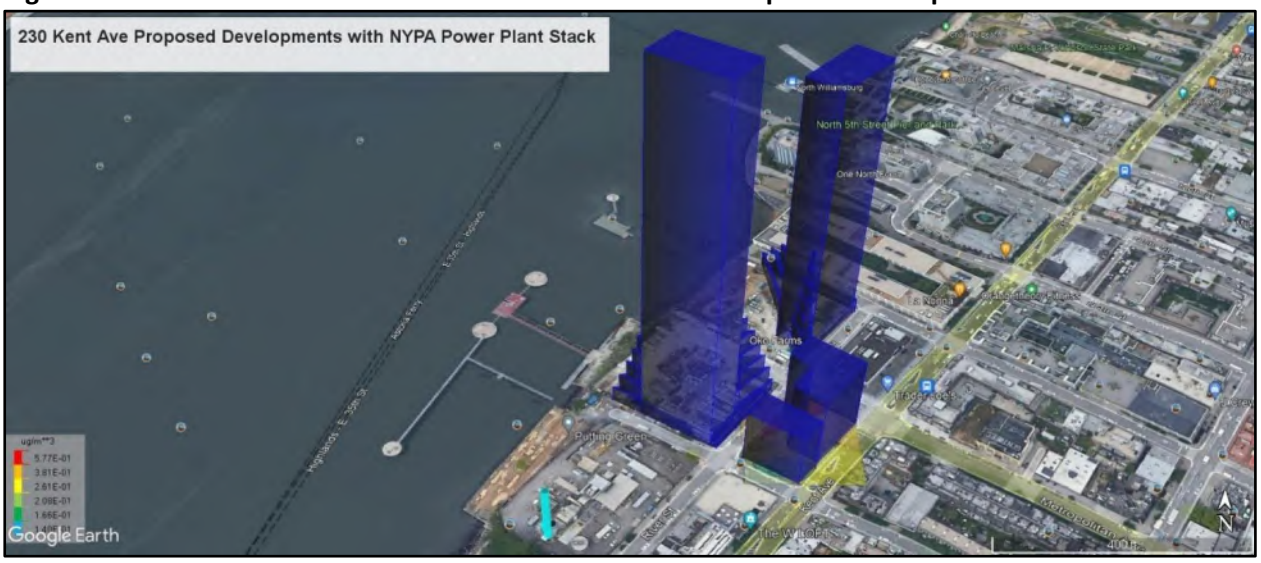
1. Modeled 1-hour concentration is presented as the sum of the multi-year average of the 8th highest daily maximum 1-hour concentrations and 1-hr NO_2 background concentration of 104 ug/m³.
2. Modeled annual concentration is presented as a sum of the highest annual average concentration and annual NO_2 background concentrations of 27.6 ug/m³.

III. TITLE V EMISSION SOURCE (NYPA POWER PLANT) ANALYSIS

The RWCDS developments are located near the NYPA 1st Street Power Plant, with the NYPA stack approximately 350 feet from the Applicant Site (see **Figure I-4**). The NYPA plant, which has a current NYSDEC Title V air pollution control permit (Permit ID 2-6101-01077/00003), consists of one simple-cycle natural gas-fired combustion turbine (GE LM6000), which is rated at 420 million Btus per hour (MMBtu/hour) and can generate a maximum of 47 megawatts of power. The unit is equipped with a selective catalytic reduction to control emissions of oxides of nitrogen (NO_x) and catalytic oxidation to control CO emissions. Other on-site combustion equipment includes one 7.5 MMBtu/hour boiler and one 746 brake horsepower (bhp) diesel backup generator. The boiler is used to heat gas turbine combustion inlet air when ambient temperature and humidity could cause icing at the turbine inlet. Boiler emissions were included in the analysis. Emergency generator emissions were not included because it will operate only temporarily in emergencies and for less than 500 hours a year.

The turbine stack parameters are as follows: height = 106.49 feet (32.46 meters); diameter = 12 feet (3.657 meters); exhaust temperature = 718° F (654° K); and exit velocity = 77 feet/second (23.46 meters/second). The boiler stack height is 15 feet with a diameter of 22 inches. The exit temperature, which is not listed in the permit, is assumed to be 300°F (423°K), which is appropriate for boilers. The exit velocity (7.2 m/sec) was obtained from DEP's "CA Permit" database, which contains data for the various boiler sizes.

Figure I-4: Location of the NYPA Plant Stack Relative to the Proposed Development



An analysis was conducted to determine whether the NYPA stack emissions, together with the boiler emissions, could potentially impact both the Applicant and Non-Applicant buildings because of their proximity to the NYPA facility and because both buildings would be as tall as or taller than the NYPA stack.

Dispersion Analysis

The same AERMOD options and meteorological data used in the HVAC analysis were employed in the NYPA Power Plant analysis. This analysis was conducted using similar methodology to the analysis conducted for the 2021 *River Ring FEIS* – with the only difference being that the new version of the AERMOD model (v.22112) was utilized.

Pollutants

The analysis of the NYPA Plant emissions considers the potential impacts of the five pollutants on the RWCDS Projected Development Sites – the two critical pollutants ($PM_{2.5}$ and NO_2) and the three other criteria pollutants listed in the NYPA permit (PM_{10}, CO, and SO_2).

Methodology for Estimating NYPA Plant $PM_{2.5}$ and NO_2 Emission Rates

24-hour $PM_{2.5}$ Turbine Emissions

The same DEP/DCP-mandated procedure for estimating worst-case $PM_{2.5}$ emission rates that were used in the 2021 *River Ring FEIS* was employed in this analysis. The procedure is based on hour-by-hour operations of the NYPA plant and the assumption that emissions for the worst operational day (24 hours) of each month would occur every day of that month -- for the entire year and over a full 5-year period (2015-2019). To accomplish that goal, a computerized data processing system that used raw historical hourly heat load data and other key operational parameters for the NYPA facility over the 5-year analysis period was developed in-house for this purpose. Raw data were obtained from the NYPA electronic report submitted to the DEC Air Compliance and Emissions Electronic-Reporting System available on EPA's Open Market Program Data website. Raw hourly heat loads including start-up emissions were extracted via a data transfer system and transformed values into hourly emission rates using the $PM_{2.5}$ emission factor (the same emission factor of 0.00355 lb/MMBtu as in the 2021 *River Ring FEIS*). The algorithm instructed

the program to select the worst operational day for each month and apply these worst-case emission rates to each day of that month. The procedure was repeated for each month of the five (5) analysis years (2015-2019).

The estimated $PM_{2.5}$ worst-case hourly emission rates for each analysis year were combined for the full 5-year analysis period and compiled into the format corresponding to the hourly emission input data format of EPA's AERMOD model. Computed boiler emissions were added to the turbine emissions and modeled in one modeling run to estimate the combined NYPA impact. Emissions were coupled with 5-years of concurrent meteorological data for 2015-2019.

Annual $PM_{2.5}$ Turbine Emissions

For the analysis of the NYPA annual $PM_{2.5}$ impact, actual historical daily operating loads were used (as opposed to worst-day emissions) as input for the data transfer system. This is because the assumption that the emissions of the worst day of each month would occur every day of that month, while appropriate for conservatively estimating short-term (24-hour) impacts, is not appropriate for estimating annual impacts. The use of this approach would produce annual emission rates that are substantially above the facility's Title V permit limits. The use of actual loads to calculate annual emission rates reflect actual plant operating conditions that are commensurate with Title V permit limitations.

Actual hourly heat loads for the five-year analysis period multiplied by the same $PM_{2.5}$ emission factor were converted to a 5-year emission data file using the AERMOD hourly emission file editor. Emissions were also coupled with 5-years of concurrent meteorological data for 2015-2019.

One-hour NO_2 Turbine Emissions

For the 1-hr NO_2 analysis, actual hourly NO_2 emission rates (as opposed to worst-case $PM_{2.5}$ emission rates) collected by the monitor at the facility were used. Both $PM_{2.5}$ and NO_2 emissions included start-up and boiler emissions, and the combined turbine and boiler emissions were modeled in one modeling run. The same five-year concurrent NYSDEC meteorological data for 2015-2019 that were used in the 2021 *River Ring FEIS* were utilized for all AERMOD modeling runs.

Analysis for 1-hour NO_2 was conducted using the same NYDEC DAR-10 procedural steps as those described in the 2021 *River Ring FEIS* and used in the previous scenarios. The EPA Tier 3 approach with the Plume Volume Molar Ratio Method (PVMRM) was employed for 1-hour NO_2 analysis of the NYPA operations. Tier 3 input source-specific in-stack ratio of NO_2/NO_x emissions and uniform monitored hourly ozone background data as a single (highest hourly) value of hourly datasets were used.

PM_{10}, SO_2, and CO Turbine Emissions

The Title V NYPA permit includes, in addition to NO_x, three other criteria pollutants – PM_{10} (CAS NY75-00-5), SO_2 (CAS 7446-09-5), and CO (CAS 630-08-0), which were also modeled with the AERMOD model. The difference in calculating PM_{10}, SO_2, and CO for the NYPA facility was that these emissions were estimated using maximum averaged emission rates for turbine and boiler corresponding to their maximum capacity of 420 MMBtu/hr and 7.5 MMBtu/hr, as opposed to worst-day hourly $PM_{2.5}$ emission rates or actual NO_2 hourly emission rates. This approach conservatively assumes that maximum emission rates would occur every hour of the year over 5-years of plant operations. Turbine and boiler emissions were modeled in the same modeling run.

$PM_{2.5}$ Boiler Emissions

The emission rate for the boiler was calculated using an emission factor of 7.6 lb/10^6 standard cubic feet (scf) for a total PM from the EPA AP-42 "Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion" (Table 1.4-2), which include both condensable and filterable particles, and the boiler maximum capacity of 7.5 MMBtu/hour.

NO_2 Boiler Emissions

Boiler emission rates were calculated using an emission factor of 100 lb/10^6 scf from the EPA AP-42 "Emission Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion" (Table 1.4-1) and the boiler maximum capacity of 7.5 MMBtu/hr.

PM_{10} Turbine Emissions

PM_{10} emission rates for turbine were calculated using an emission factor of 6.6E-03 lb/MMBtu for a total PM from the EPA AP-42 "Emission Factors for Criteria Pollutants and Greenhouse Gases from Stationary Gas Turbines" (Table 3.1-2a), which includes both condensable and filterable particles, and turbine maximum capacity of 420 MMBtu/hr. PM_{10} boiler emission rates were calculated using the emission factor of 7.6lb/10^6 scf for a total PM from the EPA AP-42 "Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion" (Table 1.4-2) which includes both condensable and filterable particles and the boiler maximum capacity of 7.5 MMBtu/hr.

SO_2 Turbine Emissions

SO_2 emission rates for turbine were calculated using the emission factor of 0.94S (lb/MMBtu) - where S is sulfur content in fuel from the EPA AP-42 "Emission Factors for Criteria Pollutants and Greenhouse Gases from Stationary Gas Turbines" (Table 3.1-2a) and the turbine maximum capacity of 420 MMBtu/hr. SO_2 emission rates for boiler were calculated using the emission factor of 0.6 lb/10^6 scf from the EPA AP-42 "Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion" (Table 1.4-2) and the boiler maximum capacity of 7.5 MMBtu/hr.

CO Turbine Emissions

CO emission rates for turbine were calculated using the emission factor of 8.2E-02 lb/MMBtu from the EPA AP-42 "Emission Factors for Criteria Pollutants and Greenhouse Gases from Stationary Gas Turbines" (Table 3.1-1) and turbine maximum capacity of 420 MMBtu/hr. CO emission rates for boiler were calculated using the emission factor of 84 lb/10^6 scf from EPA AP-42 "Emission Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO)from Natural Gas Combustion" (Table 1.4-1) and the boiler maximum capacity of 7.5 MMBtu/hr.

Calculated emission rates for all modeled pollutants associated with the NYPA operations are provided in **Table I-13**.

TABLE I-13
Estimated NYPA Power Plant Pollutant Emission Rates

Pollutant	Unit	Emission Factors	Heat Input	Emission Rate Short-Term		Emission Rate Annual	
		lb/MMBtu	MMBtu/hr	lb/hr	g/sec	lb/year	g/sec
$PM_{2.5}$(1)	**Boiler Emissions (2)**	7.60E-03	7.5	0.06	7.18E-03	499	7.18E-03
NO_2(3)	**Boiler Emissions (4)**	1.00E-01	7.5	0.75	9.45E-02	6,570	9.45E-02
PM_{10}	**Combustion Gas-Turbine(5)**	6.60E-03	420	2.77	3.49E-01	24,283	3.49E-01
	Boiler Emissions (6)	7.60E-03	7.5	0.06	7.18E-03	499	7.18E-03
SO_2	**Combustion Gas-Turbine(7)**	1.41E-03	420	0.59	7.46E-02	5,188	7.46E-02
	Boiler Emissions (8)	6.00E-04	7.5	0.005	5.67E-04	39	5.67E-04
CO	**Combustion Gas-Turbine(9)**	8.20E-02	420	34.44	4.34E+00	301,694	4.34E+00
	Boiler Emissions (10)	8.40E-02	7.5	0.06	7.94E-02	5,519	7.94E-02

Notes:

1. $PM_{2.5}$ turbine emissions were modeled using worst-case hourly emissions.
2. $PM_{2.5}$ emission factor for the boiler is 7.6 lb/MMBtu (based on AP-42, Table 1.4-2).
3. NO_2 turbine emissions were modeled using actual hourly emission rates.
4. NO_2 emission factor for the boiler is 100 lb/MMBtu (based on AP-42, Table 1.4-1).
5. PM_{10} Emission factor for the turbine is 6.6E-03 lb/MMBtu (based AP-42, Table 3.1-2a).
6. PM_{10} Emission factor for the boiler is 7.6E-03 lb/MMBtu (based on AP-42, Table 1.4-2).
7. SO_2 Emission factor for the turbine is 0.94S lb/MMBtu (AP-42, Table 3.1-2a) where S is assumed to be 15 ppm (0.0015%).
8. SO_2 Emission factor for the boiler is 6.0 E-04 lb/MMBtu (based on AP-42, Table 1.4-2).
9. CO Emission factor for the turbine is 8.2E-02 lb/MMBtu (AP-42, Table 3.1-1).
10. CO Emission factor for the boiler is 8.4E-02 (AP-42, Table 1.4-1).

Results of the NYPA Analysis

24-hour $PM_{2.5}$ Impacts

The results of the 24-hour $PM_{2.5}$ analysis with or without downwash are that the maximum NYPA plant impact is less than the CEQR de minimis of 8.6 ug/m^3. The maximum 5-year average total concentration of 18.7 ug/m^3 is less than the 24-hour $PM_{2.5}$ NAAQS of 35 ug/m^3.

Annual $PM_{2.5}$ Impacts

The result of the annual analysis is that the maximum annual $PM_{2.5}$ impact with or without downwash is less than the CEQR annual significant impact criteria of 0.3 ug/m^3. The maximum 5-year average total concentration (including background value) is less than the annual $PM_{2.5}$ NAAQS of 12 ug/m^3.

Based on these results, the potential impacts of the NYPA plant's $PM_{2.5}$ emissions are not considered to be significant.

NO_2 Impacts

The results of this analysis are that the maximum estimated 8th highest daily 1-hour NO_2 concentration, with the added uniform background concentration, with or without downwash is less than the 1-hour NO_2 NAAQS of 188 ug/m^3. The annual average total NO_2 concentration with or without downwash is less than the annual NO_2 NAAQS of 100 ug/m^3.

PM_{10} Impacts

The maximum total estimated concentration with or without downwash is less than the 24-hour PM_{10} NAAQS of 150 ug/m^3.

SO_2 Impacts

The maximum total 4th highest daily 1-hour SO_2 concentration with or without downwash is less than the 1-hour SO_2 NAAQS of 196 ug/m^3.

CO Impacts

The maximum total second-highest estimated 1-hour and 8-hour CO concentrations with or without downwash are less than the 1-hour CO NAAQS of 35 ppm or 8-hour CO NAAQS of 9 ppm.

Summary of NYPA Analysis Results

A summary of the results for all pollutants, with and without the downwash effect, is provided in **Tables I-14 to I-15**. As shown, 24-hour/annual NYPA $PM_{2.5}$, 1-hour/annual NO_2, PM_{10}, SO_2, and CO impacts on either the Applicant or the Projected Development Site 2 buildings are less than the CEQR de minimis criteria and all estimated total pollutant concentrations are less than applicable standards.

TABLE I-14
Results of NYPA Emissions Analysis with Downwash

Pollutant	Max Modeled Concentration (1)	Background Conc.	Total Conc. (3)	Evaluation Criteria	
				CEQR de minimis	NAAQS
	ug/m^3	ug/m^3	ug/m^3	ug/m^3	ug/m^3
24-hr $PM_{2.5}$	0.98 (1)			8.6	
	0.9 (2)	17.8	18.7		35
Annual $PM_{2.5}$	0.04			0.3	
		7.6	7.6		12
1-hr NO_2	42.6	104.0	146.6		188
Annual NO_2	0.3	27.6	27.9		100
24-hr PM_{10}	3.1	28	31.1		150
1-hr SO_2	1.4	13.4	14.8		196
CO 1-hr	0.08	1.5	1.6		35 ppm
CO 8-hr	0.05	1.1	1.2		9 ppm

1. Maximum impact.
2. 5-year averaged impact.
3. All concentrations are in ug/m^3, except for CO, which are in ppm.

TABLE I-15
Results of NYPA Emissions Analysis without Downwash

Pollutant	Max Modeled Concentration (1)	Background Conc.	Total Conc. (3)	Evaluation Criteria	
				CEQR de minimis	NAAQS
	ug/m³	ug/m³	ug/m³	ug/m³	ug/m³
24-hr $PM_{2.5}$	1.5 (1)			8.6	
	1.1 (2)	17.8	18.9		35
Annual $PM_{2.5}$	0.08			0.3	
		7.6	7.7		12
1-hr NO_2	32.3	104.0	136.3		188
Annual NO_2	0.8	27.6	28.4		100
24-hr PM_{10}	1.5	28	29.5		150
1-hr SO_2	0.8	13.4	14.2		196
CO 1-hr	0.08	1.5	1.6		35 ppm
CO 8-hr	0.04	1.1	1.1		9 ppm

1. Maximum impact.
2. 5-year averaged impact.
3. All concentrations are in ug/m^3, except for CO, which are in ppm.

The results of the NYPA combined turbine and boiler emissions analysis (including start-up emissions) are that no exceedances of the CEQR 24-hour/annual $PM_{2.5}$ de minimis criteria or the applicable NAAQS (i.e., 24-hour/annual $PM_{2.5}$, 1-hour/annual NO_2, 24-hour PM_{10}, 1-hour SO_2, and 1-hour and 8-hr CO) are predicted. Therefore, emissions from the NYPA power plant would not significantly impact either the Applicant building or the Projected Development Site 2 building.

IV. E-DESIGNATIONS

An (E) designation (E-636) was placed on the applicant-owned Projected Development Site 1 in the River Ring FEIS (CEQR# 21DCP 157K). E-723 will supersede the E-636 on the applicant-owned Projected Development Site 1. Based on the results of the analysis, to ensure that there would be no significant air quality impacts from the RWCDS buildings, the following restrictions should be placed on the Applicant building and the Projected Development Site 2 building:

Applicant-Owned Building **- Block 2362, Lot 1**

Any new development on the above-referenced property on Lot 1 must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and hot water equipment and ensure that the HVAC system and hot water equipment stack on the building is located at the highest tier and at least 108 feet above grade and located at least 43 feet from the northern lot line facing Metropolitan Avenue. Adherence to these conditions would avoid any potential significant adverse air quality impacts.

Projected Development Site 2 Building **- Block 2362, Lot 3**

Any new development on the above-referenced property on Lot 3 must use natural gas as the type of fuel for heating, ventilating, and air conditioning (HVAC) system and hot water equipment and ensure that the HVAC system and hot water equipment stack on the building is located at the highest tier and at least 148 above grade and located at least 18 feet from the western lot line facing

River Street. Adherence to these conditions would avoid any potential significant adverse air quality impacts.

V. CONCLUSION

Based on the results of the HVAC and NYPA plant analyses, neither the Applicant building nor the Projected Development Site 2 building resulting from the Proposed Actions would not cause any significant adverse air quality impacts.

APPENDIX 1

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM

CONSISTENCY ASSESSMENT FORM (CAF)

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: Kent Riverview LLC

Name of Applicant Representative: Yitzchok Schweid

Address: 164 South 8th Street, Brooklyn, NY 11211

Telephone: _____ Email: yitzchok1971@gmail.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

Proposed Actions consist of two discretionary actions: a zoning map amendment and zoning text amendment, affecting an area in the Williamsburg neighborhood of Brooklyn Community District (CD) 1. The actions being requested are: (1) a zoning map amendment to rezone Block 2362 in its entirety, comprised of Lots 1 and 3, ("Project Area") from a M1-4 district to a M1-4/R7X Special Mixed-Use (MX) District (MX8); and (2) a zoning text amendment to Appendix F of the New York City Zoning Resolution (ZR) to establish a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area.

2. Purpose of activity

The Project Area was rezoned from M3-1 to M1-4 as part of the River Ring Rezoning on December 15, 2021 (C 210166 ZMK). This proposal seeks to build on those efforts by allowing residential use at an appropriate scale on the Applicant's property (Lot 1), which is located between the planned predominantly residential towers on the River Ring waterfront sites directly across River Street to the west, and the six- and seven-story apartment buildings located directly across Kent Avenue to the east.

In light of the existing and proposed residential uses in the surrounding area (including the approximately 1,050 dwelling units recently approved at the River Ring development site), extending the existing Special Mixed Use District (MX-8) located east of the Project Area to map the proposed M1-4/R7X district would result in the development of the Project Area in a manner more consistent with existing and planned development surrounding it. The proposed rezoning would also necessitate the establishment of a new Mandatory Inclusionary Housing area and thus the proposed actions would facilitate affordable housing - an acute need within Brooklyn Community District 1.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 2362, Lots 1 and 3

Street Address: 230 Kent Avenue, 218 River Street

Name of water body (if located on the waterfront): n/a

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☐ Other, explain: _____
- ☐ Funding for Construction, specify: _____
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1.	Does the project require a waterfront site?	☐ Yes	☑ No
2.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?	☐ Yes	☑ No
3.	Is the project located on publicly owned land or receiving public assistance?	☐ Yes	☑ No
4.	Is the project located within a FEMA 1% annual chance floodplain? *(6.2)*	☐ Yes	☑ No
5.	Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)*	☑ Yes	☐ No
6.	Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).*	☐ Yes	☑ No

- ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)
- ☐ Special Natural Waterfront Area (SNWA) (*4.1*)
- ☐ Priority Maritime Activity Zone (PMAZ) (*3.5*)
- ☐ Recognized Ecological Complex (REC) (*4.4*)
- ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☐	☐	☑

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☑
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☑	☐	☐
5.1	Manage direct or indirect discharges to waterbodies.	☑	☐	☐
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☑
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☐	☐	☑
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☑	☐	☐
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☑
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☑
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☑
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☑
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☑
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Abir Sabet, AICP

Address: 432 Park Avenue South, 6th Fl. New York, NY 10016

Telephone: 212 929 5656 Email: asabet@phaeng.com

Applicant/Agent's Signature: 

Date: 08/17/2023

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☑ Copy of original signed NYC Consistency Assessment Form
- ☑ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☑ Environmental Review documents
- ☑ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☑ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

APPENDIX 2

LPC ENVIRONMENTAL REVIEW LETTER

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: 230 KENT AVENUE
Date Received: 7/25/2022

Properties with no Architectural or Archaeological significance:
1) 230 KENT AVENUE, BBL: 3023620001
2) 218 RIVER STREET, BBL: 3023620003

S/NR LISTED AUSTIN NICHOLS & CO. WAREHOUSE, 184 KENT AVENUE AND S/NR ELIGIBLE FORMER NORTHSIDE SAVINGS BANK, 35 GRAND STREET; GRAND STREET HISTORIC DISTRICT; AND 67-73 METROPOLITAN AVENUE WITHIN RADIUS. S/NR ELIGIBLE I. ROKEACH & SONS WAREHOUSE, 63-81 NORTH 3 STREET ADJACENT TO RADIUS.

Gina Santucci

7/28/2022

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 36521_FSO_DNP_07282022.docx

APPENDIX 3

NYSDEC BROWNFIELD CLEANUP PROGRAM

CERTIFICATE OF COMPLETION

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Office of the Director
625 Broadway, 12th Floor, Albany, New York 12233-7011
P: (518) 402-9706 | F: (518) 402-9020
www.dec.ny.gov

May 20, 2021

Kent Riverview LLC
c/o Charles S. Warren, Esq.
Kramer Levin Naftalis & Frankel LLP
1177 Avenue of Americas
New York, NY 10036

Re: Certificate of Completion
Fyn Paint and Lacquer Co., Inc.
Kings County
Site No. C224154

Dear Mr. Warren:

Congratulations on having satisfactorily completed the remedial program at the Fyn Paint and Lacquer Co., Inc. site. Enclosed please find an original, signed Certificate of Completion (COC). The New York State Department of Environmental Conservation (Department) is pleased to inform you that the Final Engineering Report is hereby approved, allowing the COC to be issued for the above-referenced site.

Please note that you are required to perform the following tasks:

- If you are the site owner, you must record the Notice of Certificate of Completion in the recording office for the county (or counties) where any portion of the site is located within 30 days of issuance of the COC; or if you are a prospective purchaser of the site, you must record the Notice within 30 days of the date that you acquire the site. If you are a non-owner, you must work with the owner to assure the Notice is recorded within the time frame specified. A standard Notice of Certificate of Completion form is attached to this letter.

- Provide electronic copies of the recorded Notice and proof of recording to the Department's project manager. Please return the hard copy of the proof of recording to:

  Bryan Wong
  New York State Department of Environmental Conservation

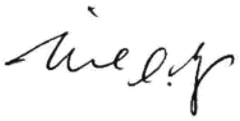
Division of Environmental Remediation
47-40 21st Street
Long Island City, NY 11101

- Provide the Notice of Certificate of Completion to the Document Repositories within 10 days of issuance of the COC. The Department will develop a fact sheet announcing the issuance of the COC and describing the institutional and engineering controls (IC/ECs), if any, that are required at the site and distribute it to the County Listserv within 10 days;

- Implement the Department-approved Site Management Plan (SMP) which details the activities necessary to assure the performance, effectiveness, and protectiveness of the remedial program; and you must report the results of these activities to the Department in a Periodic Review Report (PRR) which also includes any required IC/EC Certifications. The site IC/ECs are identified on the attached Site Management Form. The first PRR including the certification of the IC/ECs is due to the Department in September 2022.

If you have any questions regarding any of these items, please contact Bryan Wong at 718-482-4905.

Sincerely,



Michael J. Ryan, P.E.
Director
Division of Environmental Remediation

ec w/ enclosure:
S. Groszkowski, sean.groszkowski@wsp.com
K. Heaphy, kheaphy@currierandco.com
M. Schweid, mischweid@gmail.com
C. Vooris – NYSDOH, Christine.Vooris@health.ny.gov
S. McLaughlin – NYSDOH, Scarlett.mclaughlin@health.ny.gov
R. Ockerby – NYSDOH, Renata.ockerby@health.ny.gov
Matt Gokey, matthew.gokey@tax.ny.gov
Paul Takac, paul.takac@tax.ny.gov

ec w/o enc.:
B. Wong, J. O'Connell, G. Burke, R. Rusinko, J. Andaloro, K. Lewandowski

NYSDEC BROWNFIELD CLEANUP PROGRAM (BCP)

CERTIFICATE OF COMPLETION

CERTIFICATE HOLDER(S):

Name	**Address**
Kent Riverview LLC	1177 Avenue of the Americas, New York, NY 10036 c/o Kramer Levin Naftalis & Frankel LLP

BROWNFIELD CLEANUP AGREEMENT:

Application Approval: 2/25/15 **Agreement Execution:** 3/5/15
Agreement Index No.:C224154-02-15
Application Approval Amendment: 9/9/20 **Agreement Execution Amendment:** 9/9/20
Agreement Execution Amendment: 5/28/20

SITE INFORMATION:

Site No.: C224154 **Site Name:** Fyn Paint and Lacquer Co., Inc.
Site Owner: Kent Riverview LLC
Street Address: 230 Kent Avenue
Municipality: Brooklyn **County:** Kings **DEC Region:** 2
Site Size: 0.125 Acres
Tax Map Identification Number(s): 2362-1
Percentage of site located in an EnZone: 0 - 49 %

A description of the property subject to this Certificate is attached as Exhibit A and a site survey is attached as Exhibit B.

CERTIFICATE ISSUANCE

This Certificate of Completion, hereinafter referred to as the "Certificate," is issued pursuant to Article 27, Title 14 of the New York State Environmental Conservation Law ("ECL").

This Certificate has been issued upon satisfaction of the Commissioner, following review by the Department of the Final Engineering Report and data submitted pursuant to the Brownfield Site Cleanup Agreement, as well as any other relevant information regarding the site, that the applicable remediation requirements set forth in the ECL have been or will be achieved in accordance with the time frames, if any, established in the remedial work plan.

The remedial program for the site has achieved a cleanup level that would be consistent with the following categories of uses (actual site use is subject to local zoning requirements):

Allowable Uses under the BCP: Restricted-Residential, Commercial, and Industrial
Cleanup Track: Track 4: Restricted use with site-specific soil cleanup objectives

Tax Credit Provisions:

Site Preparation and On-Site Groundwater Remediation Credit Component Rate is 28 %.
Eligibility for Tangible Property Credit is available through: Upside-Down
Tangible Property Credit Component Rate is 10%. Comprised of 10% Base.

Dependent upon the project being developed in a manner consistent with the approved Brownfield Cleanup Program application, additional rate increases may be available if the site is developed as affordable housing (5%), if the Certificate Holder receives a separate Determination of Conformance with the BOA from the Secretary of State (5%), or if the site is used primarily for manufacturing activities (5%) not to exceed a maximum 24 %."

The Remedial Program includes use restrictions or reliance on the long term employment of institutional or engineering controls which are contained in the approved Site Management Plan and an Environmental Easement granted pursuant to ECL Article 71, Title 36 which has been duly recorded in the Recording Office for Kings County as 2019000376468.

LIABILITY LIMITATION

Upon issuance of this Certificate of Completion, and subject to the terms and conditions set forth herein, the Certificate holder(s) shall be entitled to the liability limitation provided in ECL Section 27-1421. The liability limitation shall run with the land, extending to the Certificate holder's successors or assigns through acquisition of title to the site and to a person who develops or otherwise occupies the site, subject to certain limitations as set forth in ECL Section 27-1421. The liability limitation shall be subject to all rights reserved to the State by ECL Section 27-1421.2 and any other applicable provision of law.

CERTIFICATE TRANSFERABILITY

This Certificate may be transferred to the Certificate holder's successors or assigns upon transfer or sale of the site as provided by ECL Section 27-1419.5 and 6NYCRR Part 375-1.9.

CERTIFICATE MODIFICATION/REVOCATION

This Certificate of Completion may be modified or revoked by the Commissioner following notice and an opportunity for a hearing in accordance with ECL Section 27-1419 and 6NYCRR Part 375-1.9(e) upon a finding that:

(1) either the Applicant or the Applicant's successors or assigns have failed to comply with the terms and conditions of the Brownfield Site Cleanup Agreement;

(2) the Applicant made a misrepresentation of a material fact tending to demonstrate that it was qualified as a Volunteer;

(3) either the Applicant or the Applicant's successors or assigns made a misrepresentation of a material fact tending to demonstrate that the cleanup levels identified in the Brownfield Site Cleanup Agreement were reached;

(4) there is good cause for such modification or revocation;

(5) either the Applicant or the Applicant's successors or assigns failed to manage the controls or monitoring in full compliance with the terms of the remedial program;

(6) the terms and conditions of the environmental easement have been intentionally violated or found to be not protective or enforceable.

The Certificate holder(s) (including its successors or assigns) shall have thirty (30) days within which to cure any deficiency or to seek a hearing. If the deficiency is not cured or a request for a hearing is not received within such 30-day period, the Certificate shall be deemed modified or vacated on the 31st day after the Department's notice.

Basil Seggos
Commissioner
New York State Department of Environmental Conservation

By: _____ Date: May 20, 2021

Michael J. Ryan, P.E., Director
Division of Environmental Remediation

NOTICE OF CERTIFICATE OF COMPLETION
Brownfield Cleanup Program
6 NYCRR Part 375-1.9(d)

Fyn Paint and Lacquer Co., Inc., Site ID No. C224154
230 Kent Avenue, Brooklyn, NY 11249
Brooklyn, Kings County, Tax Map Identification Number: Block 2362 Lot 1

PLEASE TAKE NOTICE, the New York State Department of Environmental Conservation (Department) has issued a Certificate of Completion (Certificate) pursuant to Article 27, Title 14 of the New York State Environmental Conservation Law (ECL) to Kent Riverview LLC for a parcel approximately 0.125 acres located at 230 Kent Avenue in Brooklyn, NY 11249.

PLEASE TAKE NOTICE, the Certificate was issued upon satisfaction of the Commissioner, following review by the Department of the final engineering report and data submitted pursuant to the Brownfield Site Cleanup Agreement, as well as any other relevant information regarding the site, that the remediation requirements set forth in ECL Article 27, Title 14 have been or will be achieved in accordance with the time frames, if any, established in the remedial work plan.

PLEASE TAKE NOTICE, the remedial program for the site has achieved a cleanup level that would be consistent with the following categories of uses (actual site use is subject to local zoning requirements):

- ☐ Unrestricted Use, as set forth in 6 NYCRR 375-1.8(g)(1)i
- ☐ Residential Use, as set forth in 6 NYCRR 375-1.8(g)(2)i.
- ☒ Restricted Residential Use, as set forth in 6 NYCRR 375-1.8(g)(2)ii.
- ☒ Commercial Use, as set forth in 6 NYCRR 375-1.8(g)(2)iii.
- ☒ Industrial Use, as set forth in 6 NYCRR 375-1.8(g)(2)iv.

Further, the use of groundwater is restricted and may not be used, unless treated in accordance with the requirements provided by the New York State Department of Health, or a local County Health Department with jurisdiction in such matters and such is approved by the Department as not inconsistent with the remedy.

PLEASE TAKE NOTICE, since the remedial program relies upon use restrictions or the long term employment of institutional or engineering controls; such institutional or engineering controls are contained in an Environmental Easement granted pursuant to ECL Article 71, Title 36 which has been duly recorded in the Recording Office for Kings County as 2019000376468.

PLEASE TAKE NOTICE, the Environmental Easement requires that the approved Site Management Plan (SMP) for this property be adhered to. The SMP, which may be amended from time to time, may include sampling, monitoring, and/or operating a treatment system on the property, providing certified reports to the NYSDEC, and generally provides for the management of any and all plans and limitations on the property. A copy of the SMP is available upon request by writing to the Department's Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, New York 12233.

PLEASE TAKE NOTICE, provided that the Environmental Easement, SMP and Certificate are complied with, the Certificate holder(s) shall be entitled to the liability limitation provided in ECL Section 27-1421. The liability limitation shall run with the land, extending to the Certificate holder's successors or assigns through acquisition of title to the site and to a person who develops or otherwise occupies the site, subject to certain limitations as set forth in ECL Section 27-1421. The liability limitation shall be subject to all rights reserved to the State by ECL Section 27-1421.2 and any other applicable provision of law.

Fyn Paint and Lacquer Co., Inc., C224154
230 Kent Avenue, Brooklyn, NY 11249

PLEASE TAKE NOTICE, any change of use of the site, as defined in 6 NYCRR 375, must be preceded by notice to the Department in accordance with 6 NYCRR 375-1.11(d). A transfer of any or all of the property constitutes a change of use.

PLEASE TAKE NOTICE, the Certificate may be revoked if the Environmental Easement as implemented, if applicable, is not protective or enforceable.

PLEASE TAKE NOTICE, the Certificate may entitle the Certificate holder(s) to tax credits in accordance with Tax Law Sections 21, 22 and 23.

PLEASE TAKE NOTICE, the Certificate may only be transferred to the Certificate holder's successors or assigns upon transfer or sale of the site as provided by ECL Section 27-1419.5 and 6 NYCRR Part 375-1.9. Failure to comply with the regulatory requirements for transfer **WILL** bar the successors and assigns from the benefits of the Certificate.

PLEASE TAKE NOTICE, the Certificate may be modified or revoked by the Commissioner as set forth in the applicable regulations.

PLEASE TAKE NOTICE, a copy of the Certificate can be reviewed at the NYSDEC's Region 2 Office located at 47-40 21st Street, Long Island City, NY 11101, by contacting the Regional Environmental Remediation Engineer, or at https://www.dec.ny.gov/data/DecDocs/C224154.

WHEREFORE, the undersigned has signed this Notice of Certificate

Kent Riverview LLC

By: _____

Title: _____

Date: _____

STATE OF NEW YORK) SS:
COUNTY OF)

On the _____ day of _____, in the year 20__, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Signature and Office of individual
taking acknowledgment

Please record and return to:
Kent Riverview LLC
c/o Kramer Levin Naftalis & Frankel LLP
Attn. Charles S. Warren, Esq
1177 Avenue of Americas
New York, NY 10036

Exhibit A

Site Description

SCHEDULE "A" PROPERTY DESCRIPTION

ALL THAT CERTAIN plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

BEGINNING at the corner formed by the intersection of the westerly side of Kent Avenue (formerly 1st Street) with the northerly side of North 1st Street;

RUNNING THENCE westerly along the northerly side of North 1st Street, 100 feet 9 inches to the easterly side of River Street (formerly Water Street);

THENCE northerly along the easterly side of River Street, 57 feet 4 inches;

THENCE easterly 102 feet 3 inches to the westerly side of Kent Avenue; and

THENCE southerly along the westerly side of Kent Avenue, 50 feet 9 inches to the point or place of BEGINNING.

Containing an area of approximately 5,472 square feet or 0.12 acres more or less.

Exhibit B

Site Survey

FIELDWORK COMPLETED: December 03, 2019
& December 10, 2019

LEGAL DESCRIPTION
Block 2362, Lot 1
Deed Document ID. 2017102601029001

All that certain plot, piece or parcel of land with the buildings and improvements thereon erected, situate, lying and being in the Borough of Brooklyn, County of Kings, City and State of New York, bounded and described as follows:

Beginning at the corner formed by the intersection of the westerly side of Kent Avenue (formerly 1st Street) with the northerly side of North 1st Street;

running thence westerly along the northerly side of North 1st Street, 100 feet 9 inches to the easterly side of River Street (formerly Water Street);

thence northerly along the easterly side of River Street, 57 feet 4 inches;

thence easterly, 102 feet 3 inches to the westerly side of Kent Avenue; and

thence southerly along the westerly side of Kent Avenue, 50 feet 9 inches to the point or place of Beginning.

Containing 0.125 Acres.

[redacted]

date Title Report.

Property corner monuments were not placed as part of this survey.

This map may not be used in connection with a "Survey Affidavit" or similar document, statement or mechanism to obtain title insurance for any subsequent or future grantees.

Unauthorized alteration or addition to this survey is a violation of Section 7209, subdivision 2 of the New York State Education Law.

The alteration of survey maps by anyone other than the original preparer is misleading, confusing and not in the general welfare and benefit of the public. Licensed Land Surveyors shall not alter survey maps, survey plans, or survey plats prepared by others.

Underground structures, if any exist, are not shown hereon, except as noted. The location of underground improvements or encroachments are not always known and often must be estimated. If underground improvements, easements, or encroachments exist and are neither visible during normal field survey operations nor described in instruments provided to this surveyor, they may not be shown on this map and are not certified.

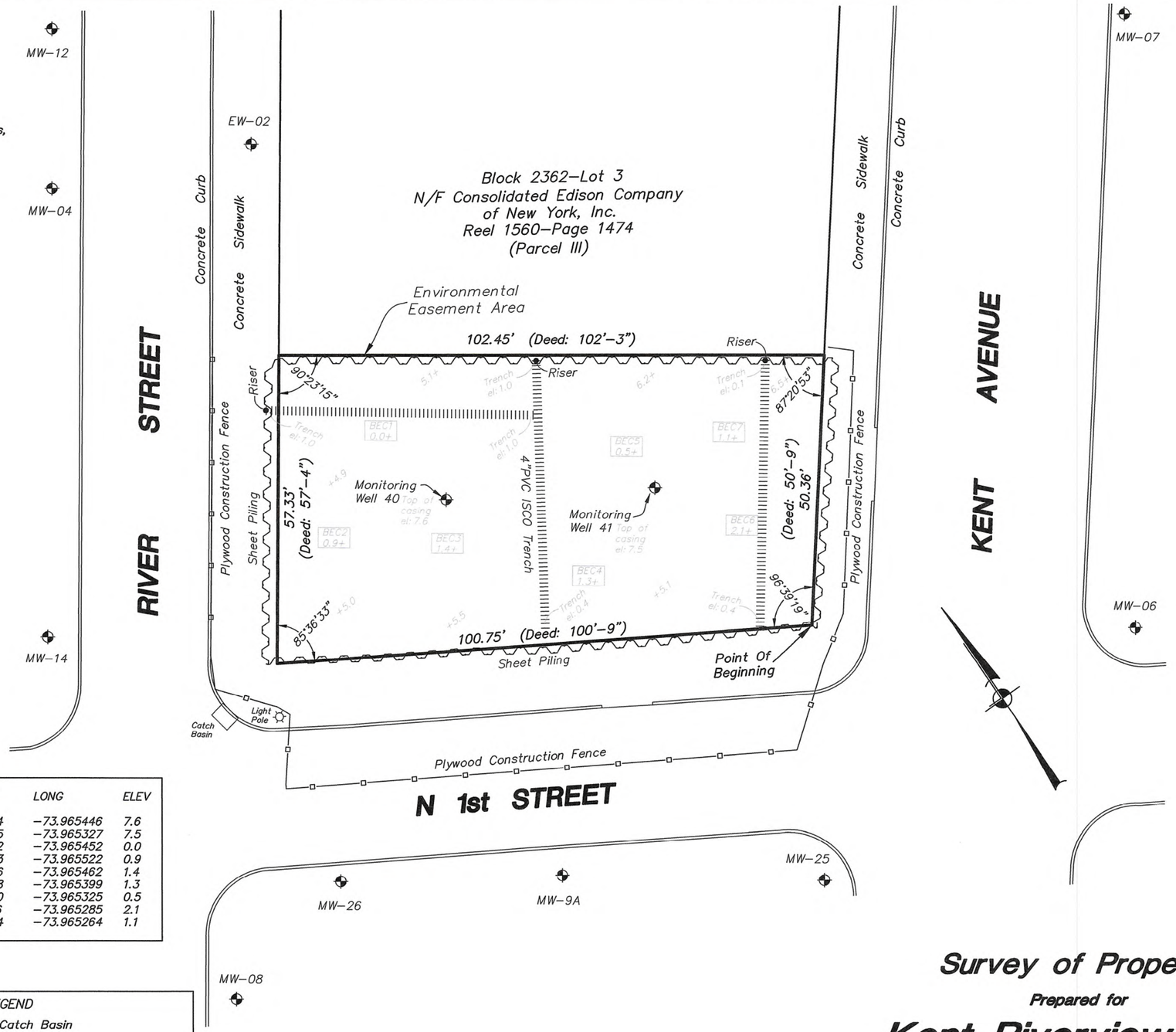
Certifications indicated hereon signify that this survey was prepared in accordance with the existing Code of Practice for Land Surveys adopted by the New York State Association of Professional Land Surveyors, Inc. Said certifications shall run only to the person or entity for whom this survey was prepared and on their behalf to the title company, governmental agency and/or lending institution listed hereon, and to the assignees thereof.

Certifications are not transferable to additional lending institutions or subsequent owners.

This property may be affected by instruments which have not been provided to this surveyor. Users of this map should verify title with their attorney or a qualified title examiner.

Only copies from the original of this survey marked with the surveyor's embossed seal are genuine, true and correct copies of the surveyor's original work and opinion. A copy of this document without a proper application of the surveyor's embossed seal should be assumed to be an unauthorized copy.

JEFFREY B. DeROSA, LS
New York State License No. 050749



	LAT	LONG	ELEV
MW–40	40.717284	–73.965446	7.6
MW–41	40.717225	–73.965327	7.5
BEC1	40.717332	–73.965452	0.0
BEC2	40.717303	–73.965522	0.9
BEC3	40.717266	–73.965462	1.4
BEC4	40.717208	–73.965399	1.3
BEC5	40.717250	–73.965325	0.5
BEC6	40.717176	–73.965285	2.1
BEC7	40.717224	–73.965264	1.1

LEGEND

- Catch Basin
- Light Pole
- Monitoring Well
- Wood Fence
- Steel Sheet Piling
- ISCO Trench & Pipe
- 6.2+ Spot Elevation (12/10/19)
- BEC 6.2+ Bottom Endpoint Confirmation Elevation (12/03/19)

Block 2362–Lot 1
Deed Document ID: 2017102601029001
Area = 0.125 Acres (5,457 S.F.)

ENVIRONMENTAL EASEMENT NOTE:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the New York Environmental Conservation Law. The engineering and institutional controls for this Easement are set forth in the Site Management Plan (SMP). A copy of the SMP must be obtained by any party with an interest in the property. The SMP can be obtained from NYS Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233 or at "derweb@dec.ny. gov."

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Survey of Property

Prepared for

Kent Riverview LLC

230 Kent Avenue
Borough of Brooklyn
Kings County, New York

Date: December 13, 2019 Scale 1" = 16'

GRAPHIC SCALE

16 0 8 16 32 64

(IN FEET)
1 inch = 16 feet
1 inch = 4.88 Meters

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Form
3/15/2021

SITE DESCRIPTION

SITE NO. C224154

SITE NAME Fyn Paint and Lacquer Co., Inc.

SITE ADDRESS: 230 Kent Avenue ZIP CODE: 11249

CITY/TOWN: Brooklyn

COUNTY: Kings

ALLOWABLE USE: Restricted-Residential, Commercial, and Industrial

SITE MANAGEMENT DESCRIPTION

SITE MANAGEMENT PLAN INCLUDES:	YES	NO
IC/EC Certification Plan	■	□
Monitoring Plan	■	□
Operation and Maintenance (O&M) Plan	■	□

Periodic Review Frequency: once a year

Periodic Review Report Submitted Date: 09/31/2022

Description of Institutional Control

Kent Riverview LLC
Attn.: Charles S. Warren Esq., 1177 Avenue of the Americas
230 Kent Ave
Environmental Easement
Block: 2362
Lot: 1
Sublot:
Section:
Subsection:
S_B_L Image: 2362-1
Ground Water Use Restriction
IC/EC Plan
Landuse Restriction
Monitoring Plan
O&M Plan
Site Management Plan
Soil Management Plan

Description of Engineering Control

Kent Riverview LLC

Attn.: Charles S. Warren Esq., 1177 Avenue of the Americas

230 Kent Ave

Environmental Easement

Block: 2362

Lot: 1

Sublot:

Section:

Subsection:

S_B_L Image: 2362-1

Cover System

Groundwater Treatment System

Monitoring Wells

Subsurface Barriers