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21-31 46th Avenue Rezoning

Environmental Assessment Statement

Address: 21-31 46th Avenue, Long Island City, New York 11101

Block 76, Lot 11

CEQR Number: 25DCP023Q

ULURP Number: TBD

Lead Agency:
New York City Department of City Planning

Prepared For:
21-31 46th Street Holdings, LLC

Prepared By:
GZA GeoEnvironmental, Inc.



Date Submitted:
August 23, 2024

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Table of Contents

EAS SHORT FORM i
1 Project Description 1
1.1 Introduction 1
1.2 Background and Site History 1
1.3 Description of the Surrounding Area 2
1.4 Description of the Affected Area/Project Site 3
1.5 Description of the Proposed Project 3
1.6 Action(s) Necessary to Facilitate the Project 3
1.7 Purpose and Need 3
1.8 Analysis Framework 4
2 Environmental Review 7
2.1 Land Use, Zoning, and Public Policy 8
2.1.1 Land Use 8
2.1.2 Zoning 10
2.1.3 Public Policy 15
2.2 Open Space 35
2.3 Shadows 37
2.3.1 Tier 1 Shadow Screening Assessment 38
2.3.2 Tier 2 Shadow Screening Assessment 40
2.3.3 Tier 3 Shadow Screening Assessment 40
2.3.4 Detailed Shadow Analysis 46
2.3.5 Determination of Impacts 47
2.3.6 Conclusion 49
2.4 Historic and Cultural Resources 50
2.4.1 Architectural Resources 51
2.4.2 Archaeological Resources 57
2.4.3 Conclusion 58
2.5 Urban Design and Visual Resources 59
2.5.1 Existing Conditions 59
2.5.2 Future No-Action Condition 60

2.5.3 Future With-Action Condition 61
2.5.4 Conclusion 61
2.6 Hazardous Materials 66
2.6.1 Conclusion 69
2.7 Air Quality 70
2.7.1 Mobile Sources 70
2.7.2 Stationary Sources 71
2.7.3 Industrial Emissions 79
2.7.4 Industrial Emissions Conclusion 81
2.8 Noise 82
2.8.1 Initial Impact Screening 86
2.8.2 Noise Monitoring Results 88
2.8.3 Conclusion 93
2.9 Neighborhood Character 95
2.9.1 Preliminary Analysis 95
2.9.2 Conclusion 97
2.10 Construction 98

Appendices:

Appendix A: Illustrative Architectural Plans

Appendix B: Agency Correspondence

Appendix C: Waterfront Revitalization Policy Consistency Assessment Form and Flood Evaluation Worksheet

EAS SHORT FORM

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* 21-31 46th Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
25DCP023Q	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY New York City Department of City Planning (NYCDCP)			NAME OF APPLICANT 21-31 46th Street Holdings, LLC		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, Director, NYCDCP Environmental Assessment Review Devision			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Christina Szczepanski, GZA GeoEnvironmental, Inc.		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 55 Lane Road		
CITY New York	STATE NY	ZIP 10271	CITY Fairfield	STATE NJ	ZIP 07004
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE	EMAIL christina.szczepanski@gza.com	

5. *Project Description*

The "Applicant," 21-31 46th Street Holdings, LLC, seeks a zoning map and text amendment affecting a portion of Block 76 in the Long Island City neighborhood of Queens Community District 2. The "Affected Area" consists of Block 76, Lot 11, a 13,500 square feet (SF) site located on a block bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. The proposed zoning map amendment would rezone the entirety of the Affected Area from an M1-4/R6B zoning district to an R7X/C2-5 zoning district. The Applicant is also proposing a zoning text amendment to Appendix F of the New York City Zoning Resolution to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. The zoning map amendment and zoning text amendment constitute the "Proposed Actions."

The "Proposed Project" consists of redevelopment of the Applicant's site (Block 76, Lot 11) with a 99,030-gross-square-foot (GSF) or 80,846 zoning square foot (ZSF), 112-foot-tall, eleven-story plus cellar mixed-use commercial and residential building with an overall floor area ratio (FAR) of 5.98. The ground floor would feature a 8,567 GSF (8,000 ZSF) commercial retail space (0.59 commercial FAR). The second through eleventh floors would contain 70 dwelling units. Overall, there would be a total of 76,963 GSF or 72,846 ZSF of residential floor area (5.39 residential FAR) and 70 dwelling units within the building, of which 25-30% (18-21 units) would be set aside as permanently affordable units, depending on the selected MIH Option. The Proposed Project would contain a total of 22 enclosed vehicular parking spaces located in the cellar level and accessed via a ramp along 46th Avenue.

Project Location

BOROUGH Queens	COMMUNITY DISTRICT(S) 2	STREET ADDRESS 21-31 46th Avenue
TAX BLOCK(S) AND LOT(S) Queens Block 76, Lot 11		ZIP CODE 11101
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west.		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-4/R6B		ZONING SECTIONAL MAP NUMBER 9b

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 Zoning Text Amendment to Appendix F to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area

***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.): 13,500 Waterbody area (sq. ft) and type: 0

Roads, buildings, and other paved surfaces (sq. ft.): 13,500 Other, describe (sq. ft.): 0

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): 99,030

NUMBER OF BUILDINGS: 1 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 99,030

HEIGHT OF EACH BUILDING (ft.): 112' (127' w/ bulkhead) NUMBER OF STORIES OF EACH BUILDING: 11

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: 13,500

The total square feet not owned or controlled by the applicant: 0

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: sq. ft. (width x length) VOLUME OF DISTURBANCE: 135,000 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 13,500 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.)	76,963	8,567		
Type (*e.g.,* retail, office, school)	70 units	Ground floor commercial 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: 159 NUMBER OF ADDITIONAL WORKERS: 29

Provide a brief explanation of how these numbers were determined: 3 employee per 1,000 sf of commercial retail space, and 1 employee per 25 dwelling units and an average of 2.27 persons per household (based on 2020 Decennial Census Data for Queen CD 2)

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:

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2027

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: Eighteen (18) months for technical review/environmental review, seven (7) months for the ULURP process, and an 18-month construction schedule are assumed.

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

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

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

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.		
(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. See Attached		
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?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		

	YES	NO
(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.		
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?	☒	☐
(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?	☐	☒
(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: See attached	☐	☐
(j) Based on the Phase I Assessment, is a Phase II Investigation needed?	☐	☐
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?	☐	☒
(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?	☐	☒

	YES	NO
(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): 4,924		
○ 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): 11,604,254.2		
(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?	☐	☒
(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?	☐	☒
(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?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(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?	☐	☒
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		

	YES	NO
preliminary analysis, if necessary. No significant unmitigated adverse impact would occur under the CEQR analysis areas of air quality, hazardous materials, or noise, and therefore a public health analysis is not warranted.		
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. No significant unmitigated adverse impact would occur in any CEQR analysis areas related to neighborhood character. Additionally, the Proposed Project would not result in impact to any of the constituent elements of neighborhood character when considered together.		
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. All construction activities would comply with relevant New York City Department of Transportation (DOT) and New York City Department of Buildings (DOB) regulations governing construction activities		

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
Christina Szczepanski	8/23/2024

SIGNATURE 

PLEASE NOTE THAT APPLICANTS MAY BE 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
NAME	DATE
SIGNATURE	

NEGATIVE DECLARATION (Use of this form is optional)

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, assumed the role of lead agency for the environmental review of the proposed project. Based on a review of information about the project contained in this environmental assessment statement and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed project 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 that the proposed project:

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).

TITLE	LEAD AGENCY
NAME	DATE
SIGNATURE	

Figure 1.1-1: Site Location Map

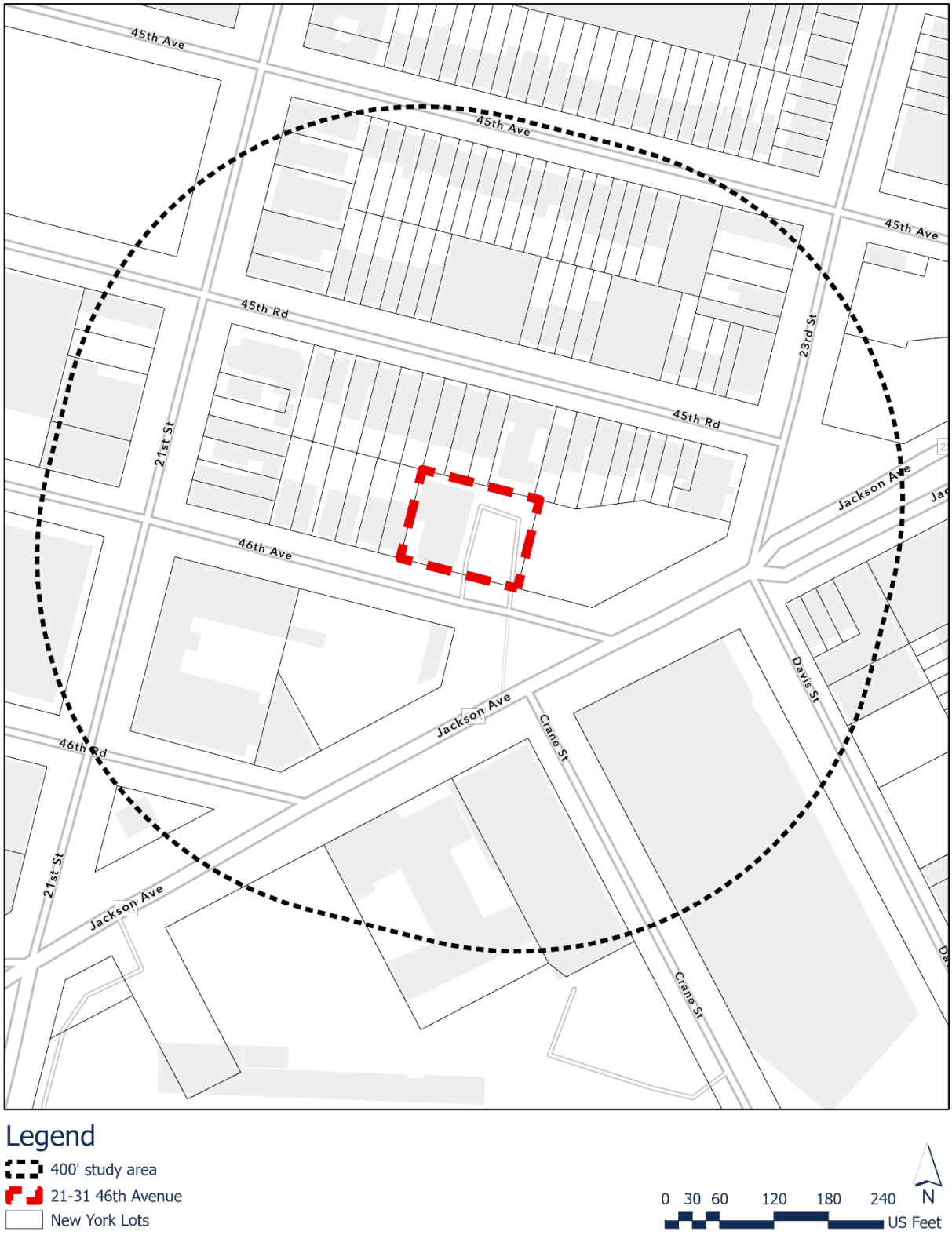


Figure 1.1-2: Existing Land Use Map

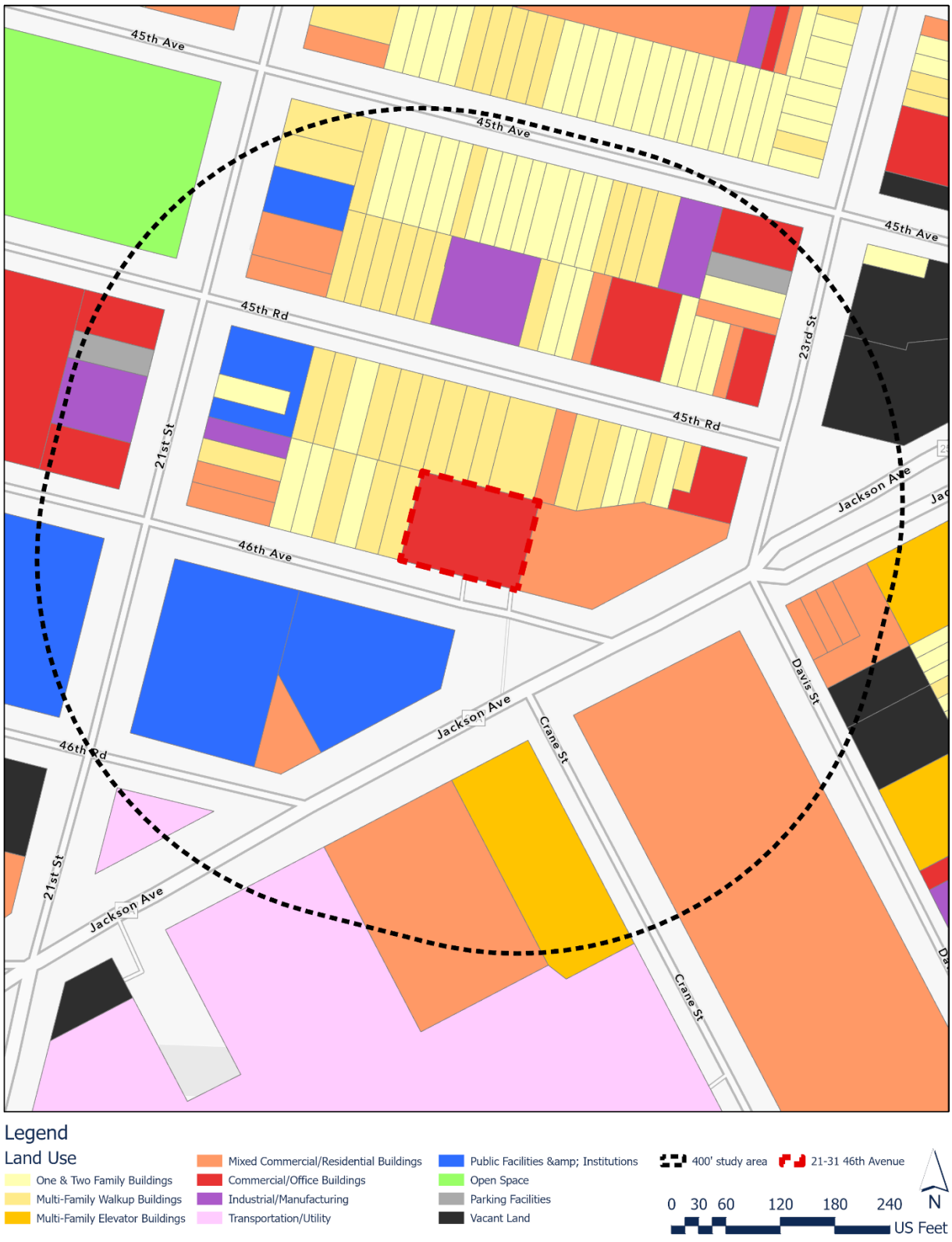


Figure 1.1-3: Zoning Sectional Map

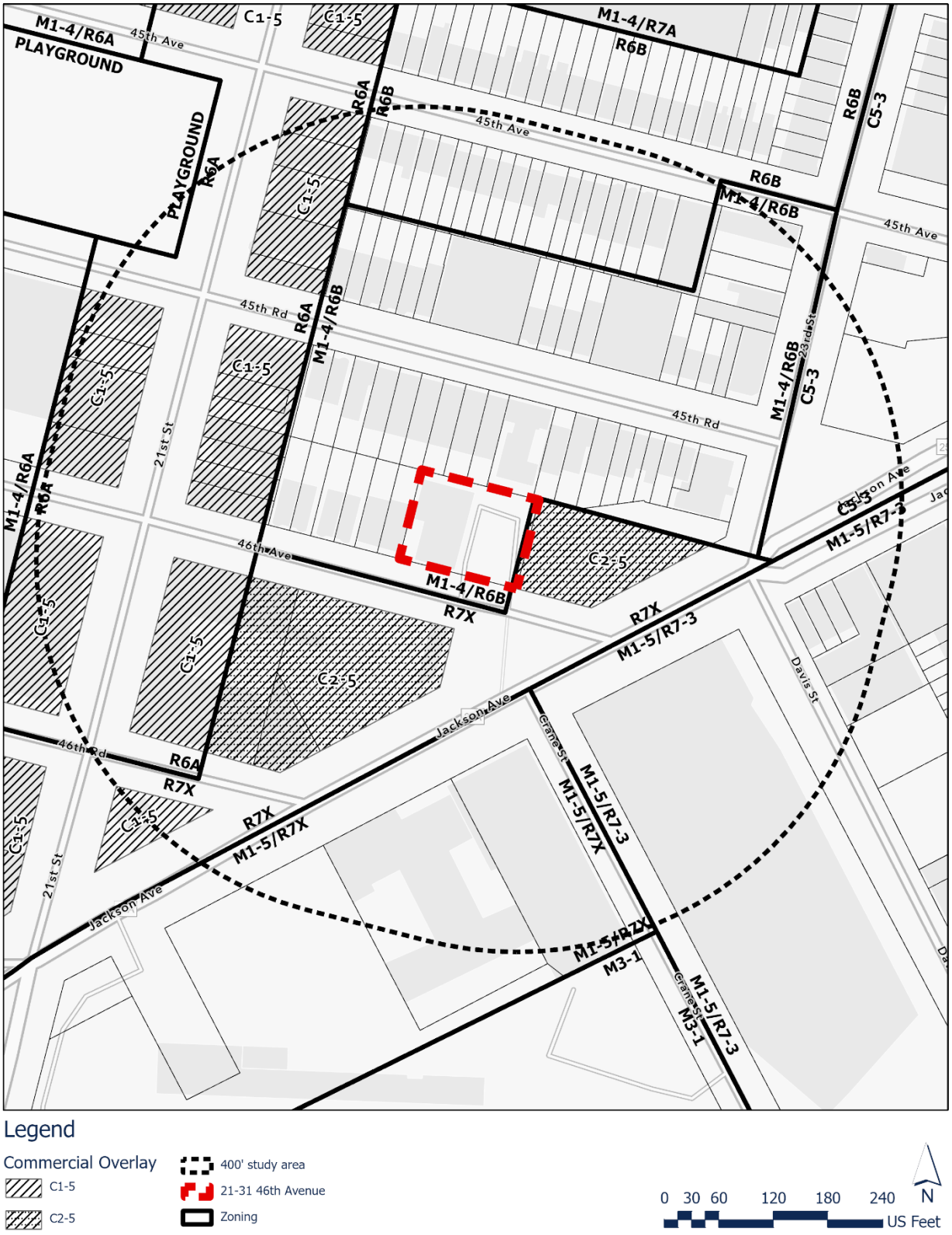


Figure 1.1-4: Zoning Change Map

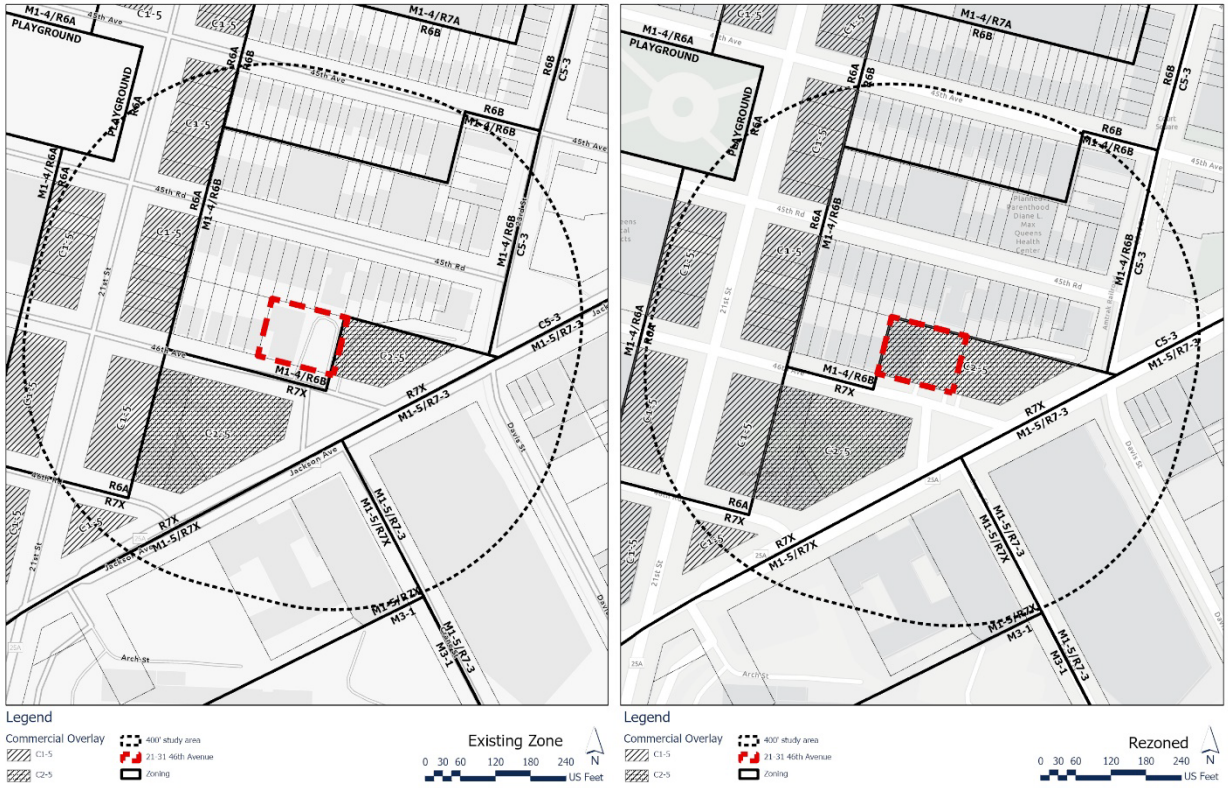


Figure 1.1-5: Tax Map

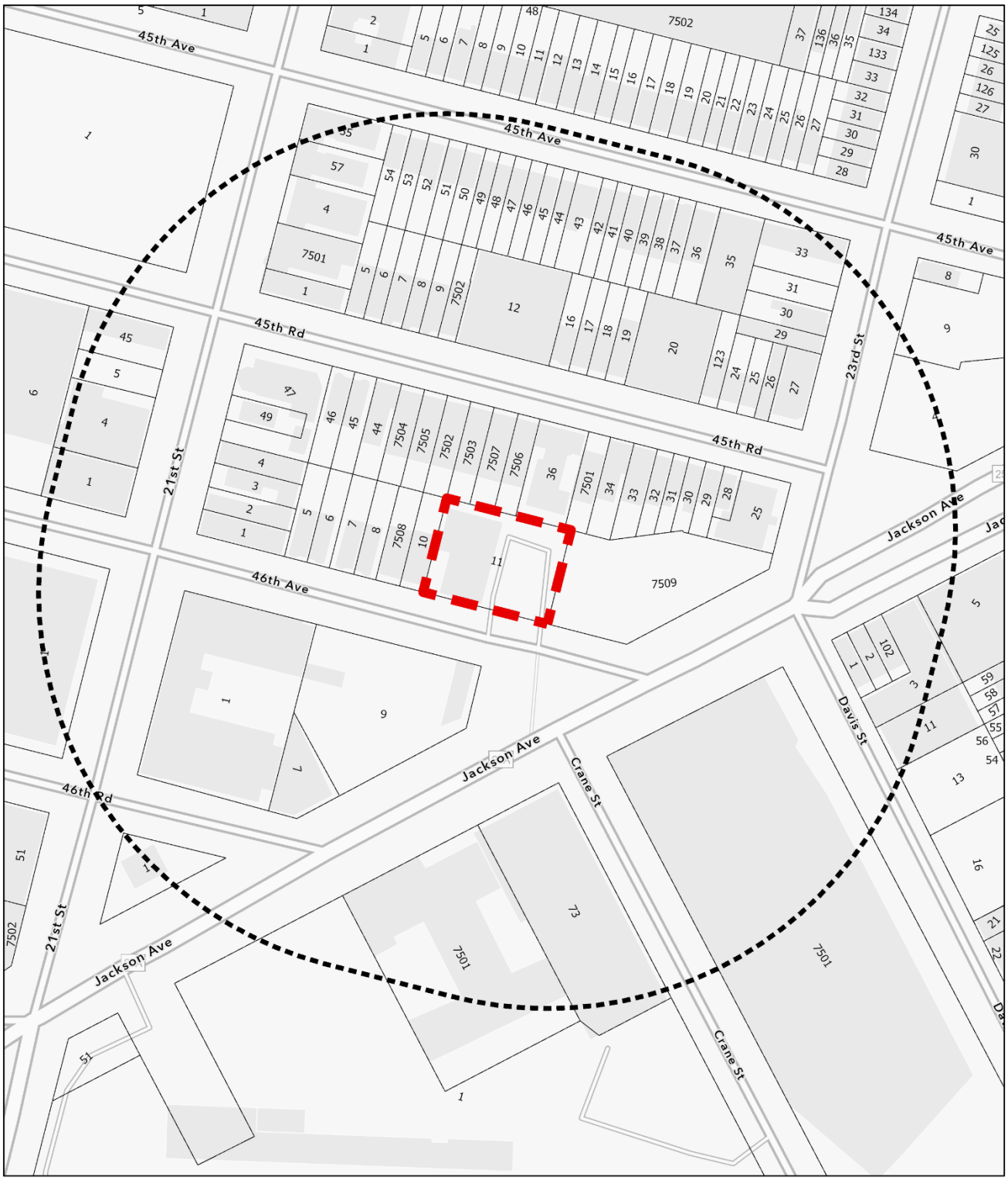
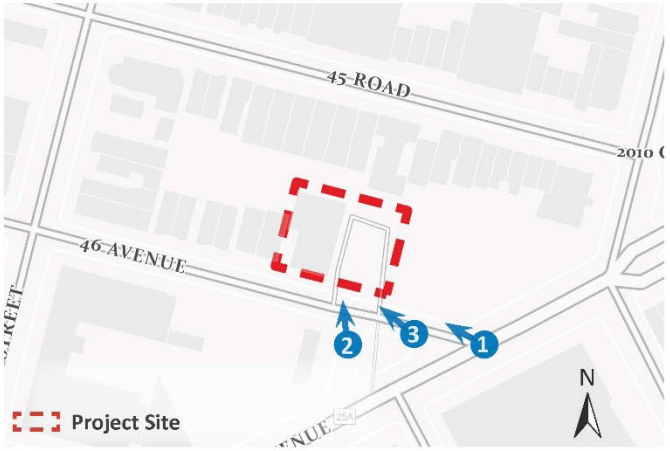


Figure 1.1-6: Site Photos



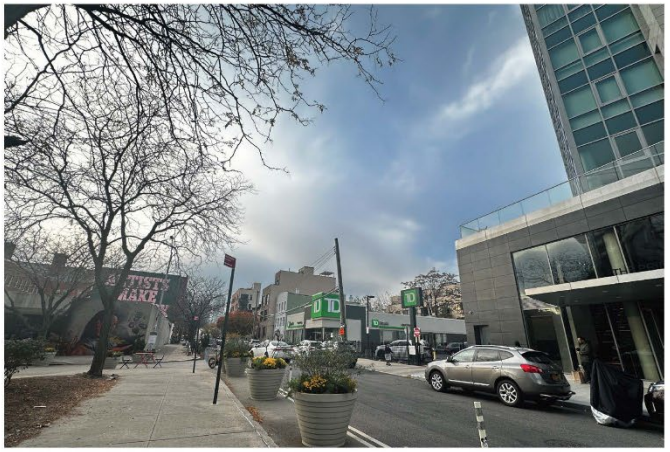
1 View of Project Site from the intersection of Jackson Avenue and 46th Avenue facing west



Project Site Photo Key



2 View of Project Site from the south side of 46th Avenue facing north



3 View of Project Site from the 46th Avenue facing west

1 Project Description

1.1 Introduction

The "Applicant," 21-31 46th Street Holdings, LLC, seeks a zoning map and text amendment affecting Block 76, Lot 11 in the Long Island City neighborhood of Queens Community District 2. The "Affected Area," or "Project Site," consists of Block 76, Lot 11, a 13,500 square feet (SF) lot located on a block bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. The proposed zoning map amendment would rezone the entirety of the Affected Area from an M1-4/R6B zoning district to an R7X/C2-5 zoning district. The Applicant is also proposing a zoning text amendment to Appendix F of the New York City Zoning Resolution to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. The zoning map amendment and zoning text amendment constitute the "Proposed Actions."

The "Proposed Project" consists of redevelopment of the Applicant's site (Block 76, Lot 11) with a 99,030-gross square foot (GSF) or 80,846 zoning square foot (ZSF), 112-foot-tall, eleven-story plus cellar mixed-use commercial and residential building with an overall floor area ratio (FAR) of 5.98. The ground floor would feature an 8,567 GSF (8,000 ZSF) commercial retail space (0.59 commercial FAR). The second through eleventh floors would contain 70 dwelling units. Overall, there would be a total of 76,963 GSF or 72,846 ZSF of residential floor area (5.39 residential FAR) and 70 dwelling units within the building, of which 25-30% (18-21 units) would be set aside as permanently affordable units for households with income averaging 60%-80% AMI depending on the selected MIH Option is selected. The Proposed Project would contain a total of 22 enclosed vehicular parking spaces located in the cellar level and accessed via a ramp on the western portion of the site from a curb cut along 46th Avenue.

The Proposed Actions are discretionary actions subject to environmental review. The New York City Department of City Planning (DCP) is the lead agency on behalf of the New York City Planning Commission (CPC) for environmental review under the City Environmental Quality Review Act (CEQR).

1.2 Background and Site History

The Affected Area was initially mapped with a M1-4 zoning district in 1961, but was rezoned to the current M1-4/R6B district as part of the Hunters Point Subdistrict Rezoning (N040272ZRQ, C040273ZMQ effective August 12, 2004). The Hunters Point Subdistrict Rezoning, initiated by DCP, rezoned all or portions of 43 blocks. It was intended to promote a vibrant mix of housing, light industry, commercial enterprises, and cultural activities in Hunters Point and to foster new residential and mixed-use development.

A 1955 Certificate of Occupancy (CO) exists for the Project Site for an office and shop and a 1992 CO for the site permits office use and bank uses.

1.3 Description of the Surrounding Area

The Affected Area is located within the Long Island City neighborhood of Queens Community District 2. The area is bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. 45th Road is a 60-foot-wide west-to-east one-way street with a single moving lane of traffic and curbside parking. Jackson Avenue is a 100-foot-wide two-way street classified as a Principal Arterial Road by the New York State Department of Transportation (NYS DOT) with two moving lanes of traffic in each direction and curbside parking. 46th Avenue is a 60-foot-wide east-to-west one-way street with one moving lane of traffic and curbside parking. 21st Street is an 80-foot-wide two-way street classified as a Principal Arterial Road with two moving lanes of traffic in each direction and curbside parking.

Existing land uses within a 400-foot buffer around the Affected Area primarily consist of multi-family residences, mixed commercial and residential buildings, transportation and utility uses, public facilities and institutions, and industrial/warehouse uses. Industrial/warehouse buildings in the area range from 1 to 2 stories in height. The residential buildings in the surrounding area consist of multiple-family apartments ranging from 2 to 48 stories in height and one- and two-family buildings. Jackson Avenue is a major thoroughfare in the area and contains a mix of high-density multi-family, commercial, and mixed residential and commercial uses. 21st Street is predominantly developed with light-industrial uses near the Affected Area before becoming primarily residential, commercial, and public facilities to the north and south. Similarly, 46th Avenue is developed with public facilities near the Affected Area and becomes a mixed residential and commercial area to the east and west.

The Affected Area is within an M1-4/R6B zoning district that generally extends to the north. The area to the south and east of the Affected Area is mapped R7X/C2-5, M1-5/R7-3, and M1-5/R7X. The area to the west of the Affected Area is mapped with R6A/C1-5 along 21st Street. Major commercial corridors in the area include Jackson Avenue to the east and east and 21st Street to the west.

The area is well-served by transit. The Court Square subway station with service from the G train is located approximately 400 feet northeast of the Affected Area near the corner of Jackson Avenue and 45th Road. The Court Square subway station for the 7 train is located approximately 500 feet northeast of the Affected Area at 45th Avenue and 23rd Street. The Court Square subway station for the E and M trains is located approximately 700 feet north of the Affected Area at 21st Street and 44th Drive. In addition, the Hunterspoint Avenue station for the Long Island Rail Road is located approximately 1,800 feet southeast of the Affected Area.

There are two bus lines (B62 and Q67) that are accessible to users in the area. The B62 bus, which connects Downtown Brooklyn/Dumbo and Long Island City via the Brooklyn Navy Yard/Manhattan Avenue/Jackson Avenue, has a stop at Jackson Avenue/23rd Street. Serving as a link between Downtown Brooklyn and Long Island City, the Q67 runs along 21st Street in the vicinity of the Affected Area, with a stop at 21st Street/46th Avenue.

1.4 Description of the Affected Area/Project Site

The Project Site consists of one lot (Queens Block 76, Lot 11) within the Long Island City neighborhood of Queens, Community District 2. In total, the Project Site has an area of approximately 13,500 SF and is located on a block bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. The Project Site is currently improved with a one-story 4,800 GSF building tenanted by TD Bank as well as a surface parking lot for the bank.

1.5 Description of the Proposed Project

The Proposed Project consists of redevelopment of the Applicant's site (Block 76, Lot 11) with a 99,030 GSF or 80,846 ZSF, 112-foot-tall, eleven-story plus cellar mixed-use commercial and residential building with an overall FAR of 5.98. The ground floor would feature an 8,567 GSF (8,000 ZSF) commercial retail space (0.59 commercial FAR). The second through eleventh floors would contain 70 dwelling units. Overall, there would be a total of 76,963 GSF or 72,846 ZSF of residential floor area (5.39 residential FAR) and 70 dwelling units within the building, of which 25-30% (18-21 units) would be set aside as permanently affordable units for households, depending on the selected MIH Option. The Proposed Project would contain a total of 22 enclosed vehicular parking spaces located in the cellar level and accessed via a ramp along 46th Avenue.

1.6 Action(s) Necessary to Facilitate the Project

The actions necessary to facilitate the construction of the Proposed Project consist of:

(1) a zoning map amendment to map a R7X/C2-5 zoning district in the Affected Area currently zoned as M1-4/R6B;

(2) zoning text amendment to ZR Appendix F to add a Mandatory Inclusionary Housing (MIH) area coterminous with the rezoning area.

1.7 Purpose and Need

The Proposed Actions are intended to provide opportunities for new residential and commercial development. The Applicant intends for the Proposed Actions to create opportunities for new housing development, including affordable housing, on underutilized land where a strong demand for housing exists. The proposed zoning map amendment to rezone the Affected Area from M1-4/R6B to R7X/C2-5, combined with the proposed text amendment to make the rezoning area a mandatory inclusionary housing area, would increase the permitted residential FAR. The proposed R7X/C2-5 zoning district, combined with a MIH designation, would allow a maximum 6.0 FAR for residential uses, 5.0 FAR for community facility uses, and 2.0 FAR for commercial uses.

The proposed zoning text amendment, which would designate the proposed rezoning area as a MIH Area, would require the Applicant to construct affordable dwelling units on the Project Site

in order to take advantage of the additional FAR provided through the MIH Program. As such, the proposed zoning map and text amendment would create additional zoning capacity in a transit accessible area to support new housing creation and also increase the number of affordable housing units available in New York City. The creation of new housing supply at various income levels is also expected to help alleviate the upward pressure on housing prices, and contribute to housing affordability in the surrounding neighborhood and larger City. The MIH program would promote and retain neighborhood economic diversity in the area and create new housing units, including affordable units, in close proximity to public transit and local bus routes.

1.8 Analysis Framework

The analysis framework compares the incremental difference between the proposed and potential development under the Proposed Actions (Future With-Action Condition) and the development which could occur under the existing zoning (Future No-Action Condition) by the build year specified below. This EAS studies the potential for individual and cumulative environmental impacts related to the Proposed Actions occurring in a study area of approximately 400 feet around the Affected Area. The analysis framework is described below:

Reasonable Worst-Case Development Scenario

Discretionary actions sometimes permit a range of project characteristics, or development scenarios, to occur even though the action may be sought in order to facilitate a specific development. From the range of possible scenarios that are considered reasonable and likely, the scenario with the worst environmental consequences is chosen for analysis. This is considered to be the Reasonable Worst-Case Development Scenario (RWCDS), the use of which ensures that, regardless of which scenario actually occurs, its impacts would be no worse than those considered in the environmental review. The environmental assessment examines the incremental differences between the RWCDS of the future without the project in place (No-Action Condition) and the future with the Proposed Actions (With-Action Condition).

The *2021 CEQR Technical Manua*l categorizes soft sites as either “projected” or “potential” development sites. Projected development sites are defined as those sites that are more likely to be developed as a result of the proposed project. Potential sites are defined as sites that could be developed but have been determined to have less development potential than the projected development sites, based on observed historic and current market conditions, location, site configuration, proximity to transit, infrastructure and other facilities, and other factors that affect the likelihood that they would be developed under the Proposed Actions. Projected development sites are analyzed for both site-specific and density-related effects, whereas potential development sites are only analyzed for site-specific effects.

Pursuant to *2021 CEQR Technical Manual* methodology, sites may be considered ‘soft’ if they are built to substantially less than the maximum permitted floor area ratio and are of a

sufficient size or could be assembled into a parcel of sufficient size, to support a feasible development. Sites that have recently been developed or redeveloped are considered less likely to be soft, due to the significant recent investment in the current use.

City of Yes for Housing Opportunity

The NYC Department of City Planning is proposing a citywide zoning text amendment, the City of Yes for Housing Opportunity "CHO" (CEQR No. 24DCP033Y) to expand opportunities for housing within all zoning districts, and across all 59 of the City's Community Districts. These changes to the City's Zoning Resolution would enable more housing and a wider variety of housing types in every neighborhood, from the lowest-density districts to the highest, to address the housing shortage and high cost of housing in New York City. It is anticipated that this proposed zoning text amendment would be referred into public review in Spring 2024. The proposed zoning district, R7X/C2-4, would not benefit from any additional FAR or height under CHO. Therefore, it has been determined that the RWCDS for the Proposed Actions will not be affected by the CHO citywide text amendment.

Build Year

The build year for the analysis is anticipated to be 2027 in consideration of an 18-month environmental approval process, approximately 7 months for the ULURP process and an 18-month construction schedule for the Proposed Project.

Future Without the Proposed Actions (No-Action Condition)

The No-Action Condition for the Affected Area would be the same as existing conditions.

Future With the Proposed Actions (With-Action Condition)

Project Site (Block 76, Lot 11)

The Project Site would be developed with a mixed-use residential and commercial building totaling 99,030 GSF (80,846 ZSF, 5.98 FAR). The proposed building would be 11 stories (112-feet tall). Given that 46th Avenue is a narrow street, the proposed building would have a height of 112 feet after a 15-foot setback on above the base height of 82 feet. There would be a total of 8,567 GSF (8,000 ZSF, 0.59 FAR) commercial space (local retail) on ground floor and a total of 76,963 GSF (72,846 ZSF, 5.39 FAR) of residential uses on the 2nd to 11th floor. There would be a total 70 dwelling units, 25-30% (18-21 units) of which would be affordable pursuant to MIH, depending on the Option selected. The Proposed Project would include a 13,500 GSF parking garage at the cellar level with 22 residential accessory parking spaces.

As presented in **Table 1.1-1**, compared to the No-Action Condition, the Proposed Actions would result in an increase of 70 DUs and a net increase of 3,767 GSF of commercial retail uses. In terms of population, the Proposed Actions are expected to result in an incremental increase of 159 residents and 12 employees, as compared to the 2027 No-Action Condition.

Table 1.8-1: RWCDS Incremental Analysis Table

Use	No-Action Condition	With-Action Condition	Increment
Commercial GSF	4,800	8,567	+3,767
Residential GSF	0	76,963	+76,963
Residential DUs	0	70	+70
Residents[1]	0	159	+159
Employees[2]	14	26	+12

1: Assumes 3 employees per 1,000 sf of retail.

2: Assumes 2.27 residents per household average - 2020 Census data, Queens CD 2

2 Environmental Review

The following technical sections are provided as supplemental assessments to the Environmental Assessment Statement ("EAS") Short Form. Part II: Technical Analyses of the EAS forms a series of technical thresholds for each analysis area in the respective chapter of the *2021 CEQR Technical Manual*. If the proposed project was demonstrated not to meet or exceed the threshold, the 'NO' box in that section was checked; thus, additional analyses were not needed. If the proposed project was expected to meet or exceed the threshold, or if this was not able to be determined, the 'YES' box was checked on the EAS Short Form, resulting in a preliminary analysis to determine whether further analyses were needed. For those technical sections, the relevant chapter of the *2021 CEQR Technical Manual* was consulted for guidance on providing additional analyses (and supporting information, if needed) to determine whether detailed analysis was needed.

A 'YES' answer was provided in the following technical analyses areas on the EAS Short Form:

- Land Use, Zoning, and Public Policy
- Open Space
- Shadows
- Historic and Cultural Resources
- Urban Design and Visual Resources
- Hazardous Materials
- Air Quality
- Noise
- Neighborhood Character
- Construction

2.1 Land Use, Zoning, and Public Policy

The *2021 CEQR Technical Manual* recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the surrounding area. Land use, zoning, and public policy are described in detail below. This section considers existing conditions, development trends, and zoning and other public policies in relation to the Affected Area and the surrounding area as well as the larger area in which the Proposed Actions may have an effect. Because the Proposed Actions would permit the development of multiple-family residential and commercial uses with a larger bulk, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

Methodology

Existing land uses were determined by reference to the New York City Zoning and Land Use (Zola) database and PLUTO 20v4 shapefiles. These uses were then confirmed through site visits. The evaluation of lots within a 400-foot Study Area was performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No-Action and Future With-Action Conditions. Public policy research was performed through an evaluation of NYCDCP and other city agencies programs and documentation.

2.1.1 Land Use

The *2021 CEQR Technical Manual* suggests that a land use, zoning, and public policy study area should generally extend 400 feet from the Affected Area. Existing land uses within approximately 400 feet of the Affected Area are presented in

Existing Conditions

Land Use Study Area

As shown in **Figure 1.1-2** and stated in **Section 1.3**, existing land uses within the study area primarily consist of multi-family residences, mixed commercial and residential buildings, transportation and utility uses, public facilities and institutions, and industrial/warehouse uses. Industrial/warehouse buildings in the area range from 1- to 2-stories in height. The residential buildings in the study area consist of multiple-family apartments ranging from 2 to 48 stories in height and one- and two-family buildings. Jackson Avenue is a major thoroughfare in the area and contains a mix of high-density multi-family, commercial, and mixed residential and commercial uses. 21st Street is predominantly developed with light-industrial uses near the Affected Area before becoming primarily residential, commercial, and public facilities to the north and south. Similarly, 46th Avenue is developed with public facilities near the Affected Area and becomes a mixed residential and commercial area to the east and west.

Affected Area/Project Site

The Project Site consists of one lot (Queens Block 76, Lot 11) within the Long Island City neighborhood of Queens Community District 2. In total, the Affected Area has an area of approximately 13,500 SF and is located on a block bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. The Project Site is currently improved with a one-story 4,800 GSF building tenanted by TD Bank as well as a surface parking lot for the bank.

Future No-Action Condition

Land Use Study Area

In the 2027 future without the Proposed Actions, the study area is expected to experience an ongoing trend toward the development of new residential space. There are several active construction permits within the study area. One for a new 123,325 GSF, 17-story building that would include 128 DUs at 45-19 Davis Street and the other for a new 130,136 GSF, 7-story building that would include 115 DUs at 11-36 45th Road. There are no other known major land use changes anticipated in the foreseeable future within the 400-foot study area.

Future With-Action Condition

Affected Area/Project Site

The Project Site would be developed with a mixed-use residential and commercial building totaling 99,030 GSF (80,846 ZSF, 5.98 FAR). The proposed building would be 11 stories (112-feet tall). There would be a total of 8,567 GSF (8,000 ZSF, 0.59 FAR) commercial space (local retail) on ground floor and a total of 76,963 GSF (72,846 ZSF, 5.39 FAR) of residential uses on the 2nd to 11th floor. There would be a total 70 dwelling units, 25-30% (18-21 units) of which would be affordable pursuant to MIH, depending on the Option selected. The Proposed Project would include a 13,500 GSF parking garage at the cellar level with 22 residential accessory parking spaces.

Land Use Study Area

The Proposed Actions are not expected to generate significant adverse land use impacts in the study area. The new development generated by the Proposed Actions would be at a density and building scale compatible with other developments in the area. New development in the study area is expected by 2027 and is expected to continue after 2027 with or without the Proposed Actions.

Conclusion

Overall, the Proposed Actions would not adversely affect existing land use patterns and trends. Many of the changes associated with the Proposed Actions would be considered beneficial, including redeveloping underutilized land and providing affordable housing in an area

experiencing substantial new residential growth. The Proposed Actions would be consistent with nearby high-density mixed-use buildings, mostly along Jackson Avenue and 21st Street. The Proposed Project would not be incompatible with surrounding uses, which are predominantly residential and commercial. Therefore, there would be no adverse impacts on land use as a result of the Proposed Actions, and further analysis is not required.

2.1.2 Zoning

The *2021 CEQR Technical Manual* suggests that a zoning study area should extend 400 feet from the Affected Area. The proposed zoning map amendment would rezone Block 76, Lot 11 from M1-4/R6B to R7X/C2-5. Existing zoning districts within approximately 400 feet of the Affected Area are presented in **Figure 2.1-1**.

Existing Conditions

Zoning Study Area

The zoning districts within 400 feet of the Affected Area are M1-4/R6B, M1-5/R7X, M1-5/R7-3, M1-4/R6A, C5-3, and C1-5 and C2-5 commercial overlays, as illustrated in **Table 2.1-1**.

Existing zoning districts in the study area include:

M1-4/R6B

M1-4 districts permit a maximum of 2.0 FAR for commercial or manufacturing use, and 6.50 for community facility uses. Parking is not required for industrial or commercial uses in the M1-4/R6B districts.

R6B districts are often traditional row house districts, which preserve the scale and harmonious streetscape of neighborhoods of four-story attached buildings developed during the 19th century. Many of these houses are set back from the street with stoops and small front yards that are typical of Queens “brownstone” neighborhoods.

The FAR of 2.0 and the mandatory Quality Housing regulations also accommodate apartment buildings at a similar four- to five-story scale. The base height of a new building before setback must be between 30 and 40 feet and the maximum height is 50 feet. For buildings providing a qualifying ground floor, the maximum base height and overall height increase by 5 feet. Higher maximum FAR are available for buildings participating in the Inclusionary Housing program or that provide certain senior facilities.

Off-street parking spaces are required for 50% of the dwelling units. However, requirements are lower for income-restricted housing units (IRHU) and are further modified within the Transit Zone. Parking can be waived if five or fewer spaces are required.

M1-5/R7X

M1-5 districts are often developed with multistory lofts, one- or two-story warehouses characterized by loading bays, serving as a buffer between M2 or M3 districts of intensive industrial uses and adjacent residential or commercial districts. M1 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. M1-5 districts are mainly found in areas with one-story industrial buildings, such as the Long Island City neighborhood of Queens. The FAR for manufacturing and commercial uses are both 5.0 in M1-5 districts, while the FAR for community facilities is higher, reaching 6.50. Parking is not required for commercial or manufacturing uses in M1-5 districts.

R7X districts permit medium-density residential development at a maximum FAR of 6.00 for developments with a permanent affordable housing set aside pursuant to the MIH program. The maximum building height is 145 feet after a setback from the base height of up to 60 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 14 floors. Off-street parking is required for 15 percent of the residential dwelling units but is not required for income-restricted housing units within the Transit Zone.

Table 2.1-1: Zoning Districts in the Study Area[3]

Zoning District	Use Group	Floor Area Ratio (FAR)
M1-5/R7X	1-14, 16-17	6.0 Residential 5.0 Manufacturing, Commercial 6.5 Community Facility
M1-4/R6B	1-14, 16-17	2.2 Residential 2.0 Manufacturing, Commercial 6.5 Community Facility
M1-4/R6A	1-14, 16-17	3.6 Residential 2.0 Commercial, Manufacturing 6.5 Community Facility
M1-5/R7-3	1-14, 16-17	6.0 Residential 5.0 Manufacturing, Commercial 6.5 Community Facility
C5-3	1-6, 9-11	12.0 Residential 15.0 Commercial, Community Facility
C1 & C2 Overlays	C1: 1-6 C2: 1-9	2.0 Commercial

[3] Zoning Handbook, New York City Department of City Planning, 2019

M1-5/R7-3

M1-5 districts are often developed with multistory lofts, one- or two-story warehouses characterized by loading bays, serving as a buffer between M2 or M3 districts of intensive industrial uses and adjacent residential or commercial districts. M1 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. M1-5 districts are mainly found in areas with one-story industrial buildings, such as the Long Island City neighborhood of Queens. The FAR for manufacturing and commercial uses are both 5.0 in M1-5 districts, while the FAR for community facilities is higher, reaching 6.50. Parking is not required for commercial or manufacturing uses in M1-5 districts.

R7 districts are medium-density apartment house districts mapped in much of the Bronx as well as the Upper West Side in Manhattan and Brighton Beach in Brooklyn. The height factor regulations for R7 districts encourage lower apartment buildings on smaller zoning lots and, on larger lots, taller buildings with less lot coverage.

Height factor buildings are often set back from the street and surrounded by open space and on-site parking. R7-3 districts permit medium-density residential development at a maximum FAR of 6.00 for developments with a permanent affordable housing and a maximum of 5.0 for community facility uses. As in other non-contextual districts, a taller building may be obtained by providing more open space. The maximum FAR is achievable only where the zoning lot is large enough to accommodate a practical building footprint as well as the required amount of open space. The building must be set within a sky exposure plane which, in R7 districts, begins at a height of 60 feet above the street line and then slopes inward over the zoning lot.

Off-street parking is generally required for 50 percent in an R7-3 district, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core. Off-street parking requirements can be waived if 15 or fewer parking spaces are required or if the zoning lot is 10,000 square feet or less in R7-2 districts.

M1-4/R6A

M1-4 districts permit a maximum of 2.0 FAR for commercial or manufacturing use, and 6.50 for community facility uses. Parking is not required for industrial or commercial uses in the M1-4/R6A districts.

R6A districts are medium-density contextual districts that promote new developments along transit corridors where Quality Housing bulk regulations are mandatory. The permitted uses within R6A districts are residential and community facilities.

In R6A districts, the community facility FAR is 3.00 and the residential FAR is 3.60 with the provision of inclusionary housing. Above a base height of 40-65 feet, the building must set back

by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 85 feet, if providing a qualifying ground floor.

Off-street parking is generally required for 50 percent of a building's dwelling units, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core, or for lots 10,000 square feet or less. Off-street parking requirements can be waived if 15 or fewer parking spaces are required.

C5-3

C5 is a central commercial district with continuous retail frontage intended for offices and retail establishments that serve the entire metropolitan region. Famous shopping streets, such as Fifth Avenue, Madison Avenue and East 57th Street are C5 districts. Parts of Lower Manhattan, Downtown Brooklyn and Long Island City are also within C5 districts.

Department stores, large office buildings, and mixed buildings with residential space above office or commercial floors, are typical C5 uses. Use Groups 5 (hotels), 6, 9 and 10 (retail shops and business services) and 11 (custom manufacturing) are permitted in C5 districts. Home maintenance services, auto rental establishments and other uses not in character with the district, including illuminated signs, are not permitted.

In C5-3 districts, the maximum FAR permitted for commercial uses in 15.0 and up to 12.0 FAR for residential uses, with the provision of inclusionary housing. Floor area may be increased by a bonus for a public plaza or Inclusionary Housing. In non-contextual C5-2 through C5-5 districts, a building occupied by commercial, residential and/or community facility uses may be configured as a tower. A residential tower is also allowed in C5-1 districts. All commercial uses in C5 districts are exempt from off-street parking requirements because public transportation is easily accessible. For residential uses, off-street parking is generally required for 40 percent of a building's dwelling units, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core, or for lots less than 15,000 square feet. Off-street parking requirements can be waived if 15 or fewer parking spaces are required or if the zoning lot is 10,000 square feet or less.

C1-5 and C2-5 Commercial Overlays

C1 and C2 districts are commercial overlays mapped within residential districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use. C2 districts permit a slightly wider range of uses, such as funeral homes and repair services. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use.

When commercial overlays are mapped in R1 through R5 districts, the maximum commercial floor area ratio (FAR) is 1.0; when mapped in R6 through R10 districts, the maximum commercial FAR is 2.0. Commercial buildings are subject to commercial bulk rules.

Overlay districts differ from other commercial districts in that residential bulk is governed by the residence district within which the overlay is mapped. All other commercial districts that permit residential use are assigned a specific residential district equivalent. Unless otherwise indicated on the zoning maps, the depth of overlay districts ranges from 100 to 200 feet.

Affected Area/Project Site

The Affected Area is zoned M1-4/R6B and is in the Special Long Island City Mixed Use District (LIC), which permits low-density light manufacturing developments along with commercial, community facility, residential uses.

Future No-Action Condition

Zoning Study Area and Affected Area

There are no other rezonings proposed within the study area by the 2027 Build Year. No changes to zoning would occur in the future without the Proposed Actions in the Affected Area. Existing zoning patterns would remain, and the Affected Area would continue to be subject to M1-4/R6B zoning regulations.

Future With-Action Condition

Zoning Study Area

Changes to zoning would only occur in the Affected Area in the future with the Proposed Actions.

Affected Area/Project Site

Block 76, Lot 11 would be rezoned from an existing M1-4/R6B zoning district to a R7X/C2-5 zoning district.

Under the With-Action Condition, the proposed R7X/C2-5 district would permit a maximum of 6.00 FAR for residential uses, 2.00 FAR for commercial uses, and 5.00 for community facility uses. The maximum building height within the R7X/C2-5 zoning district is 145 feet after a setback from the base height of up to 95 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street. Off-street parking is generally required for 50 percent of a building's dwelling units, but requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core, or for lots 10,000 square feet or less. Off-street parking requirements can be waived if 15 or fewer parking spaces are required.

In comparison with the existing M1-4/R6B zoning district mapped in the Affected Area currently, the proposed R7X/C2-5 zoning district would not permit manufacturing uses and would allow for larger bulk and a higher building height within the Affected Area, which would enhance the zoning conformity in the surrounding area which is predominantly zoned as residential and commercial districts.

Conclusion

The proposed R7X/C2-5 zoning district is consistent with City policy to position higher density developments near transit along wide streets that can support such development. The proposed zoning district is appropriate because it is located immediately adjacent to an existing R7X/C2-5 zoning district. Further, the proposed zoning district is appropriate because it is located in close proximity to several subway lines and two wide streets, Jackson Avenue and 21st Street. In addition to subway service available on the G, 7, E, and M lines at the Court Square Station, bus service is available on the B62 and Q67 lines along 21st Street and Jackson Avenue, respectively. The Proposed Actions would induce development consistent with nearby high-density mixed-use buildings, mostly along Jackson Avenue to the east and 21st street to the west.

2.1.3 Public Policy

According to the *2021 CEQR Technical Manual*, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports, which pertain to the study area. If the proposed actions could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary.

The Affected Area is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Industrial Business Zone (IBZ), FRESH programming or the New York City Landmarks Law.

The Affected Area is located within a designated coastal zone boundary and the Long Island City Business Improvement Districts (BID).

The Proposed Actions include a Zoning Text Amendment to ZR Appendix F: Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas for Community District 2, Queens, to establish the Affected Area as an MIH Area under Program Option 1 or Option 2. As a result, analysis of the Proposed Project's alignment with Mayor Adams' era plans, such as Where We Live NYC, Get Stuff Built, and Housing Our Neighbors is warranted. In addition, the Proposed Actions' consistency with "Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery" is provided below.

Though the Proposed Project is not a large publicly sponsored project, consistency with the City's OneNYC for sustainability is provided below.

Existing Conditions

Coastal Zone Boundary

The New York City Waterfront Revitalization Program (WRP) establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation and public use of the waterfront, while minimizing any potential conflicts among these objectives. The WRP is authorized by New York State's Waterfront Revitalization of Coastal Areas and Inland Waterways Act, which was enacted in response to the Federal Coastal Zone Management Act and allows municipalities to participate in the State's Coastal Management Program by creating their own local Waterfront Revitalization Program.

Long Island City Business Improvement Districts (BID)

Created in 2005, the original Long Island City BID encompassed the commercial corridors along Queens Plaza and Jackson Avenue to Court Square. It has since been expanded to include the commercial corridors continuing along Jackson Avenue, Vernon Boulevard, and 44th Drive. Managed by the Long Island City Partnership, the BID provides supplementary sanitation and visitor services within the district and carries out community development and marketing initiatives that benefit the greater neighborhood.

Housing New York 2.0

Carried out by Housing Preservation and Development (HPD), Housing New York is the Mayor's plan to build or preserve 300,000 affordable homes by 2026. The plan outlines a comprehensive set of policies and programs to address the city's affordable housing crisis and retain the diversity and vitality of its neighborhoods.

OneNYC

OneNYC is New York City's long-term strategy and Green New Deal to confront climate crisis, achieve equity, and strengthen democracy so that people can build a strong and fair city. It covers eight strategies: a vibrant democracy, an inclusive economy, thriving neighborhoods, healthy lives, equity and excellence in education, a livable climate, efficient mobility, and modern infrastructure.

Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery

Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery aims to accelerate job creation and make communities more resilient to future environmental and public health

emergencies, financially stronger, and more connected. It contains five main strategies, including

1. Restarting the city's economic engines and reactivating the public realm, supporting small businesses, entrepreneurship, and a more equitable economy
2. Driving inclusive sector growth
3. Building a future-focused economy
4. Connecting New Yorkers to quality jobs and in-demand skills
5. Planning and building for inclusive growth now and in the future

Get Stuff Built

Get Stuff Built is a strategy to address affordable housing crisis with the goal of 500,000 new homes. Carried out by the Building and Land Use Approval Streamlining Task Force (BLAST), "Get Stuff Built" includes 111 concrete actions the city will take to create more housing more quickly by streamlining processes and removing bureaucratic obstacles that are slowing housing production and economic recovery. These actions will increase the speed and lower the cost of development by accelerating project timelines by 50 percent, ensure environmental protection and meaningful public participation, and stimulate the creation of affordable housing across New York City.

Housing Our Neighbors: A Blueprint for Housing and Homelessness

Housing Our Neighbors: A Blueprint for Housing and Homelessness is a plan to get New Yorkers into Safe, High-Quality, Affordable Homes. Crafted with insight from New Yorkers who experienced homelessness, blueprint focuses not just on creating homes but also on getting New Yorkers into them more quickly. The blueprint contains five main strategies, including:

1. Transforming NYCHA,
2. Addressing Homelessness and Housing Instability,
3. Creating and Preserving Affordable Housing,
4. Improving the Health and Safety of New Yorkers, and
5. Reducing Administrative Burden.

Future No-Action Condition

No changes to *Housing New York 2.0,* One NYC, Business Improvement Districts (BID), *Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery, Get Stuff Built, or Housing Our Neighbors: A Blueprint for Housing and Homelessness,* Coastal Zone Boundary are anticipated under Future No-Action Condition.

Future With-Action Condition

Housing New York 2.0

The Proposed Actions are consistent with the goals of Housing New York as an MIH area would be established over the Affected Area to introduce more affordable residential units to the area. The development of the Proposed Project would result in approximately 18-21 affordable dwelling units. The affordable units that would be provided pursuant to the Proposed Actions would foster diverse and livable neighborhoods, preserve the affordability and quality of the housing stock, and build new affordable housing for all New Yorkers.

OneNYC

The Proposed Actions support the OneNYC strategies in terms of an inclusive economy and thriving neighborhoods by creating new job opportunities within the proposed spaces.

The Proposed Actions would support OneNYC initiatives by constructing new multi-family housing. The Proposed Actions are consistent with the goals of OneNYC 2050, as it would create additional affordable housing and contribute to the community and economic development of the Long Island City neighborhood and New York City as a whole. Therefore, the Proposed Actions would not conflict with this public policy.

Rebuild, Renew, Reinvent: A Blueprint for New York City's Economic Recovery

The Proposed Project would provide new-built spaces for small businesses, increase the community's economic diversity, and create quality jobs for New Yorkers. Thus, the Proposed Actions are supportive of this policy.

Get Stuff Built

The Proposed Actions would facilitate the construction of 70 dwelling units within the Affected Area including 18-20 permanently affordable dwelling units. The units that would be provided pursuant to the Proposed Actions would help address affordable housing crisis and contribute to the goal of 500,000 new homes expressed in the "Get Stuff Built" strategy.

Housing Our Neighbors: A Blueprint for Housing and Homelessness

The Proposed Actions would facilitate the construction of 70 dwelling units within the Affected Area including 18-21 permanently affordable dwelling units. By creating affordable housing, the Proposed Actions would contribute to the goal of getting New Yorkers into safe, high-quality, affordable homes expressed in "Housing Our Neighbors: A Blueprint for Housing and Homelessness".

New York City Waterfront Revitalization Program

The Project Site is located within the New York City Coastal Zone Boundary (NYCCZB) and therefore, the Proposed Actions must be reviewed and assessed for consistency with the

policies set forth in the Waterfront Revitalization Program (WRP). The WRP establishes the City's policies for waterfront planning, preservation, and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront while minimizing any potential conflicts among these objectives.

The Proposed Actions would place a new mixed-use multi-family residential building with ground floor commercial retail space in a FEMA-designated "Zone X" within the 0.2 percent annual chance floodplain (500-year flood zone). Refer to **Figure 2.1-2** for a visualization of the Affected Area's location within the flood zone.

Shaded X Zone delineates areas that have a 0.2 percent probability of flooding every year (also known as the "500-year floodplain"), outside the regulatory 1 percent annual chance flood (also known as the "100-year floodplain") but within the limits of the 0.2 percent annual chance flood level. Shaded X Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile. Properties in Shaded X Zone are considered to be at moderate risk of flooding under the National Flood Insurance Program (NFIP). There are no current NYC Building Code or FEMA flood insurance purchase requirements for buildings in the Shaded X Zone.

The WRP Consistency Assessment Form (CAF) was completed (see **Appendix C**) to determine the consistency of the Proposed Actions with the WRP's ten policies. Based on the information provided in the CAF, a detailed methodology and policy response is provided below, which incorporates the findings of the Proposed Actions' consistency with the applicable WRP Policies (Policy 1 and 6) and Sub-Policies (Policy 1.1, 1.3, 1.5, 6.1, 6.2).

Based on the information provided in the WRP CAF, the Proposed Actions require assessment relative to the following policies:

Policy 1: Support and Facilitate Commercial and Residential Development in Areas Well-Suited to Such Development

<u>Sub-Policy 1.1: Encourage commercial and residential development in appropriate coastal zone areas.</u>

Criteria that should be considered to determine areas appropriate for reuse through public and private actions include: compatibility with the continued functioning of the designated Special Natural Waterfront Areas, the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or Significant Maritime and Industrial Areas, where applicable; the absence of unique or significant natural features or, if present, the potential for compatible development; the presence of substantial vacant or underused land; proximity to existing residential or commercial uses; the potential for strengthening upland residential or commercial areas and for opening up the waterfront to the public; transportation access; the maritime and industrial jobs potentially

displaced or created; and the new opportunities created by redevelopment. Public actions—such as property disposition, urban renewal plans, and infrastructure provision—should facilitate redevelopment of underused property to promote housing and economic development and enhance the city's tax base, subject to consideration of Policy 2, where applicable.

The Proposed Actions would result in a mixed-use residential and commercial building totaling 99,030 GSF (80,846 ZSF, 5.98 FAR). There would be a total of 8,567 GSF (8,000 ZSF, 0.59 FAR) commercial space (local retail) on ground floor and a total of 76,963 GSF (72,846 ZSF, 5.39 FAR) of residential uses on the 2nd to 11th floor. There would be a total 70 dwelling units, 25-30% (18-21 units) of which would be affordable pursuant to MIH, depending on the Option selected. The Proposed Project would include a 13,500 GSF parking garage at the cellar level with 22 residential accessory parking spaces.

The Proposed Actions are consistent with this policy. It would allow redevelopment of underutilized land in proximity to established and newly emerging residential, commercial, and community facility development that is well served by transit.

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

Encourage development at a density compatible with the capacity of surrounding roadways, mass transit, and essential community services such as public schools. Lack of adequate local infrastructure need not preclude development, but it may suggest the need to upgrade or expand inadequate or deteriorated local infrastructure.

The Proposed Actions would redevelop underutilized land for multi-family residential and commercial retail uses with higher density in close proximity to high-capacity roadways, mass transit infrastructure, and would integrate the site into the surrounding residential and commercial area. The Court Square subway station with service from the G train is located approximately 400 feet northeast of the Project Site near the corner of Jackson Avenue and 45th Road. The Court Square subway station for the 7 train is located approximately 500 feet northeast of the Project Site at 45th Avenue and 23rd Street. The Court Square subway station for the E and M trains is located approximately 700 feet north of the Affected Area at 21st Street and 44th Drive. In addition, the Hunterspoint Avenue station for the Long Island Rail Road is located approximately 1,800 feet southeast of the Project Site.

There are two bus lines (B62 and Q67) that are accessible to users in the area. The B62 bus, which connects Downtown Brooklyn/Dumbo and Long Island City via the Brooklyn Navy Yard/Manhattan Avenue/Jackson Avenue, has a stop at Jackson Avenue/23rd Street. Serving as a link between Downtown Brooklyn and Long Island City, the Q67 runs along 21st Street in the vicinity of the Affected Area, with a stop at 21st Street/46th Avenue. In addition, Jackson Avenue is a major thoroughfare in the area and contains a mix of high-density multi-family, commercial, and mixed residential and commercial uses.

The Proposed Actions would encourage new development in an area served by existing public facilities and infrastructure. As described throughout this EAS, the density of the Proposed Project is compatible with the capacity of surrounding roadways, mass transit, infrastructure, and essential community services. It is anticipated that the mix of commercial and residential uses and the scale of the Proposed Project would not overburden the surrounding area and the Project Site would continue to be adequately served by the existing local infrastructure. Overall, the Proposed Actions would encourage redevelopment in an area adequately served by existing public facilities and infrastructure and would promote Policy 1.3 of the WRP.

Sub-Policy 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.

As described further below under Policy 6.2, the Proposed Project would incorporate measures to provide resiliency from climate change and sea level rise. Therefore, the Proposed Project would promote Policy 1.5.

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.

Sub-Policy 6.1 Minimize losses from flooding and erosion by employing non-structural and structural design measures appropriate to the site, the use of the property to be protected, and the surrounding area.

As indicated below in **Figure 2.1-1**, the Project Site is located within the 2015 PFIRMS 0.2 percent annual chance floodplain (500-year flood zone). However, as shown below in **Figure 2.1-2** through **Figure 2.1-5**, which reference the New York City Panel on Climate Change (NPCC) future floodplain projections through the 2100s, the entirety of the Project Site is anticipated to fall within the future 1.0 percent annual chance floodplain by the 2080s.

Under Policy 6, the primary goal for projects within flood hazard areas is to reduce the risks posed by current and future flood events, mainly major storms that are likely to increase due to climate change and sea level rise.

As discussed under Policy 6.2 below, based on the future flood projections. the design of the Proposed Project would take the future climate change into consideration. Therefore, the Proposed Project would meet the requirements of building-scale resiliency measures to reduce the risks of damage from current and future coastal hazards and would be consistent with Policy 6.1.

Figure 2.1-1: 2007 FIRM vs. 2015 PFIRM

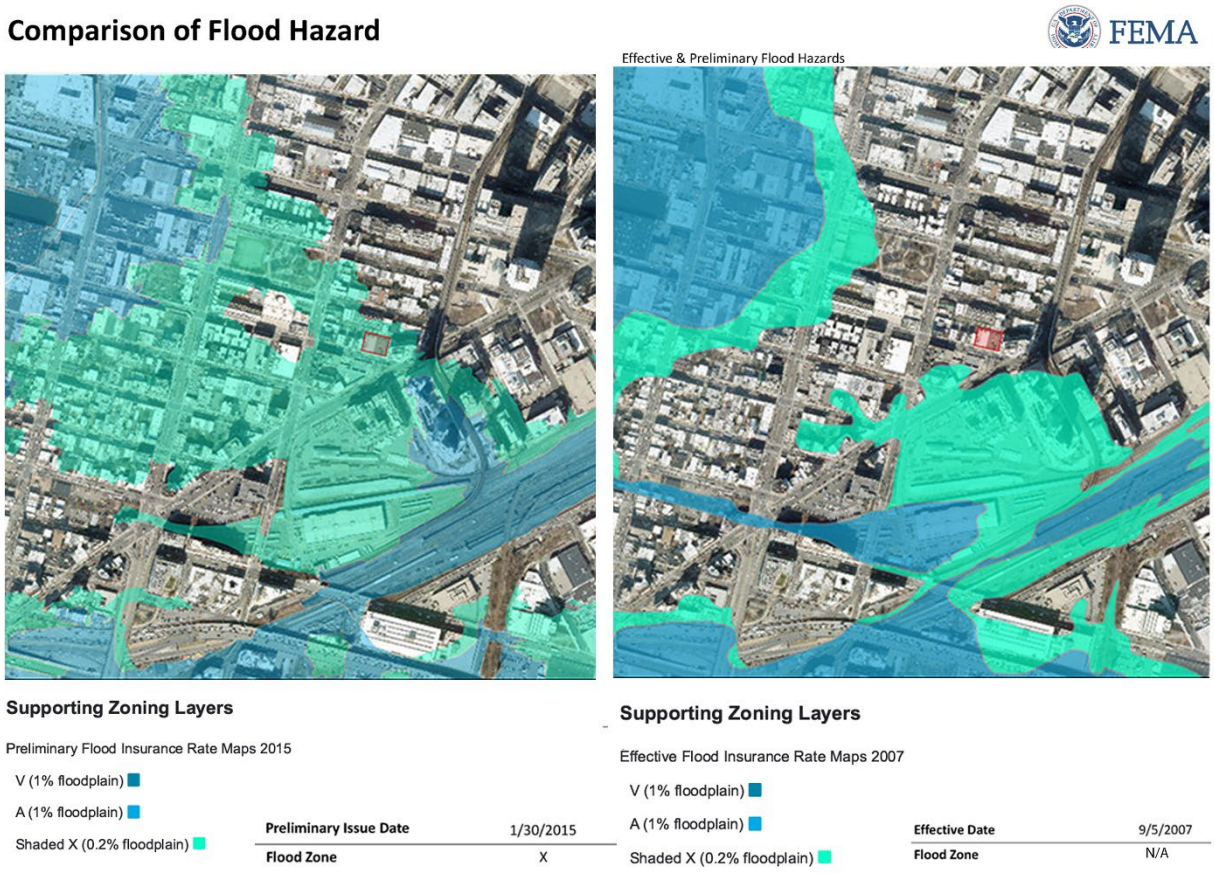


Figure 2.1-2: 2020s High Tide and 1% Flood Projections

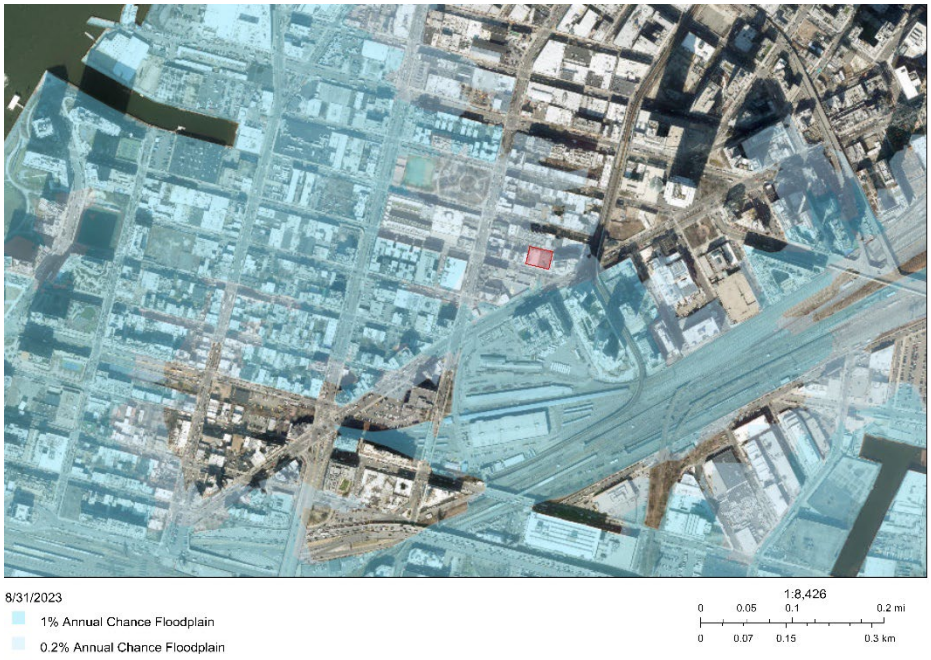




Figure 2.1-3: 2050s High Tide and 1% Flood Projections



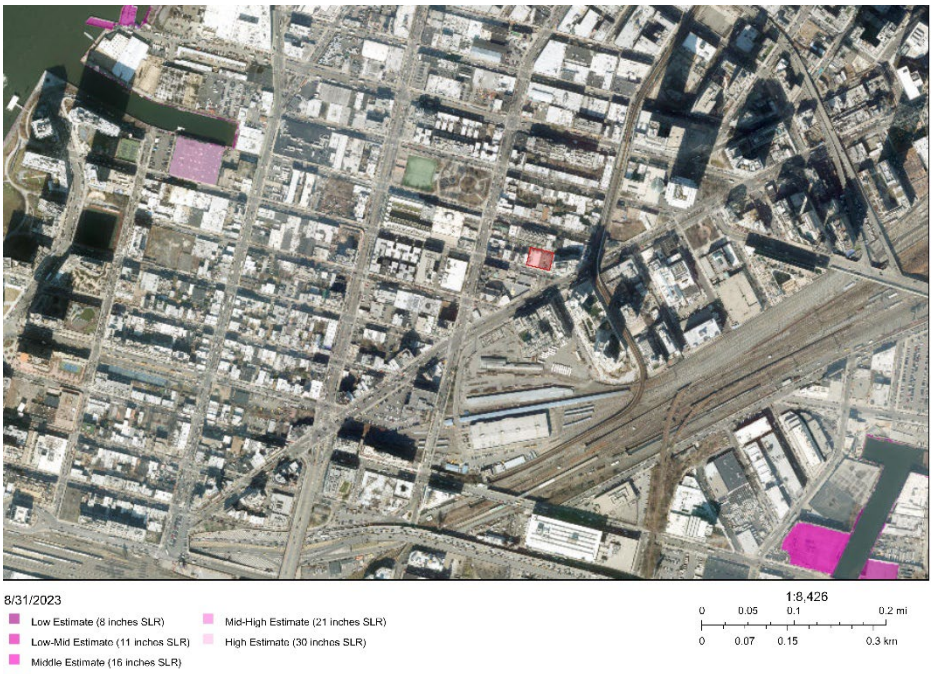


Figure 2.1-4: 2080s High Tide and 1% Flood Projections



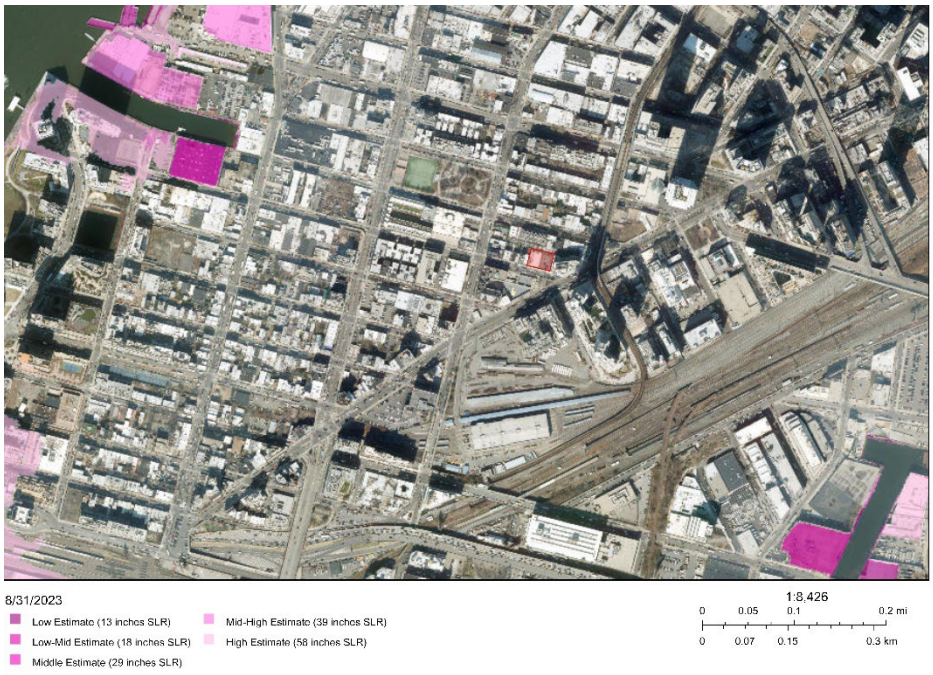
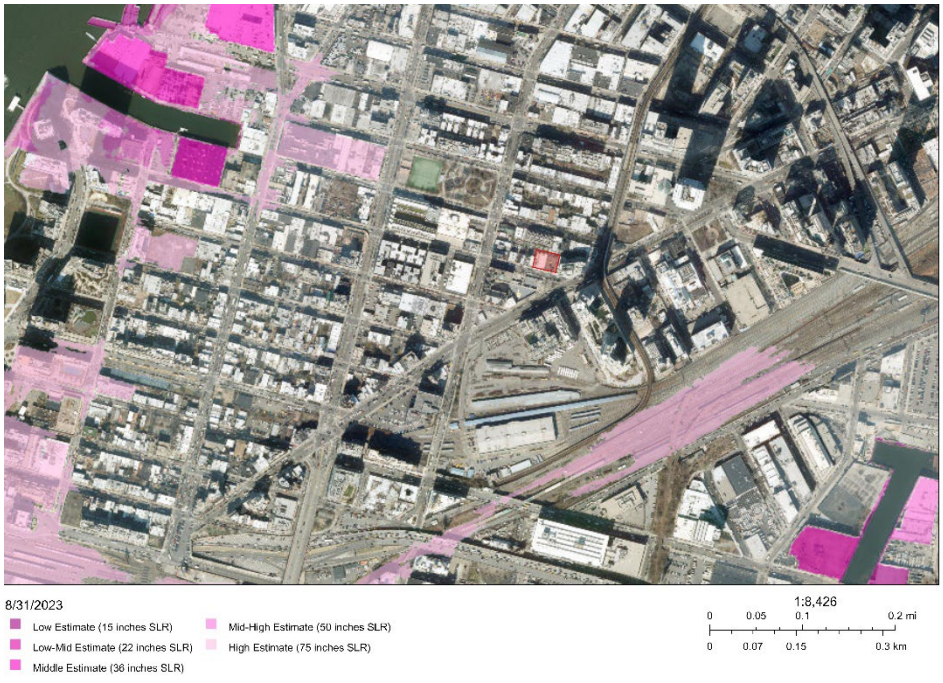


Figure 2.1-5: 2100s High Tide and 1% Flood Projections





Sub-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.

The following assessment was prepared in accordance with *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance Document for Policy 6.2*. [4] The three basic steps to assessing an action's consistency with Policy 6.2 of the WRP include identifying vulnerabilities and consequences, identifying adaptive strategies, and assessing policy consistency.

Sub-Policy 6.2 Detailed Methodology

1. **Identify Vulnerabilities and Consequences**

a) Assess the Project Area's Exposure to current and future flood risk (Flood-Evaluation Worksheet)

The information in the following subsections is based on the results of the completed flood evaluation worksheet, which is provided in **Appendix C**.

The Proposed Project's first-floor level is located approximately 12.0 feet in elevation above grade (NAVD88 Datum). The cellar level is located at approximately 2.0 feet in elevation (NAVD88 Datum). The Proposed Project's vulnerable or critical features, which are most likely to be impacted by future flood would be located on the roof.

Regulatory floodplains are defined by the elevation of the base flood (BFE) in relation to the elevation of the ground. According to datum (NAVD88) obtained from the National Oceanic and Atmospheric Administration (NOAA)[5] website for the nearest NOAA station, Queensboro Station (Station ID 8518687), the mean higher high-water height (MHHW) is 2.6 feet (adjusted). Pursuant to the 2015 PFIRMs, the nearest 1.0 percent flood height to the Project Site is 10 feet, and the design flood elevation (DFE) is 12.0 feet.

Based on the results of the calculations completed in the flood evaluation worksheet using site-specific data, Error! Reference source not found. shows the results of the 1.0 percent Flood Elevation and Sea Level Rise (SLR) projections, and Error! Reference source not found. shows the results of the MHHW and SLR projections.

For this assessment, building features are defined in one of four categories: (1) vulnerable: project features that have the potential to incur significant damage if flooded; (2) critical:

[4] https://www1.nyc.gov/assets/planning/download/pdf/planning-level/waterfront/wrp/revisions-2017/policy-62-guidance-document-nov2018.pdf

[5] https://tidesandcurrents.noaa.gov/datums.html?id=8518699

project features that if damaged would have severe impacts on the project and its ability to function as designed; (3) potentially hazardous: project features that if damaged or made unsecure by flooding could potentially adversely affect the health and safety of the public and the environment; and (4) other: project features that are entirely open and unenclosed spaces, except the open storage of potentially hazardous materials, which may be damaged by flooding, but are not likely to present significant consequences and are more easily repaired.

The flood elevation worksheet was prepared for the Proposed Project in accordance with DCP guidance. This is a tool which identifies current and future flood elevations in relation to the elevations of the site and project features, presenting a range of future flood elevations as affected by sea level rise (SLR), from high (90th percentile) to low (10th percentile). In other words, “high” refers not to the predicted likelihood, which is estimated at approximately one in ten, but to being a high-end projected increase in flood elevation and as such physically higher than the “low” projections. Conversely, the “low” projection is more likely to occur, estimated at an approximately nine in ten probability.

Figure 2.1-6: Mean Higher High Water + SLR Projections

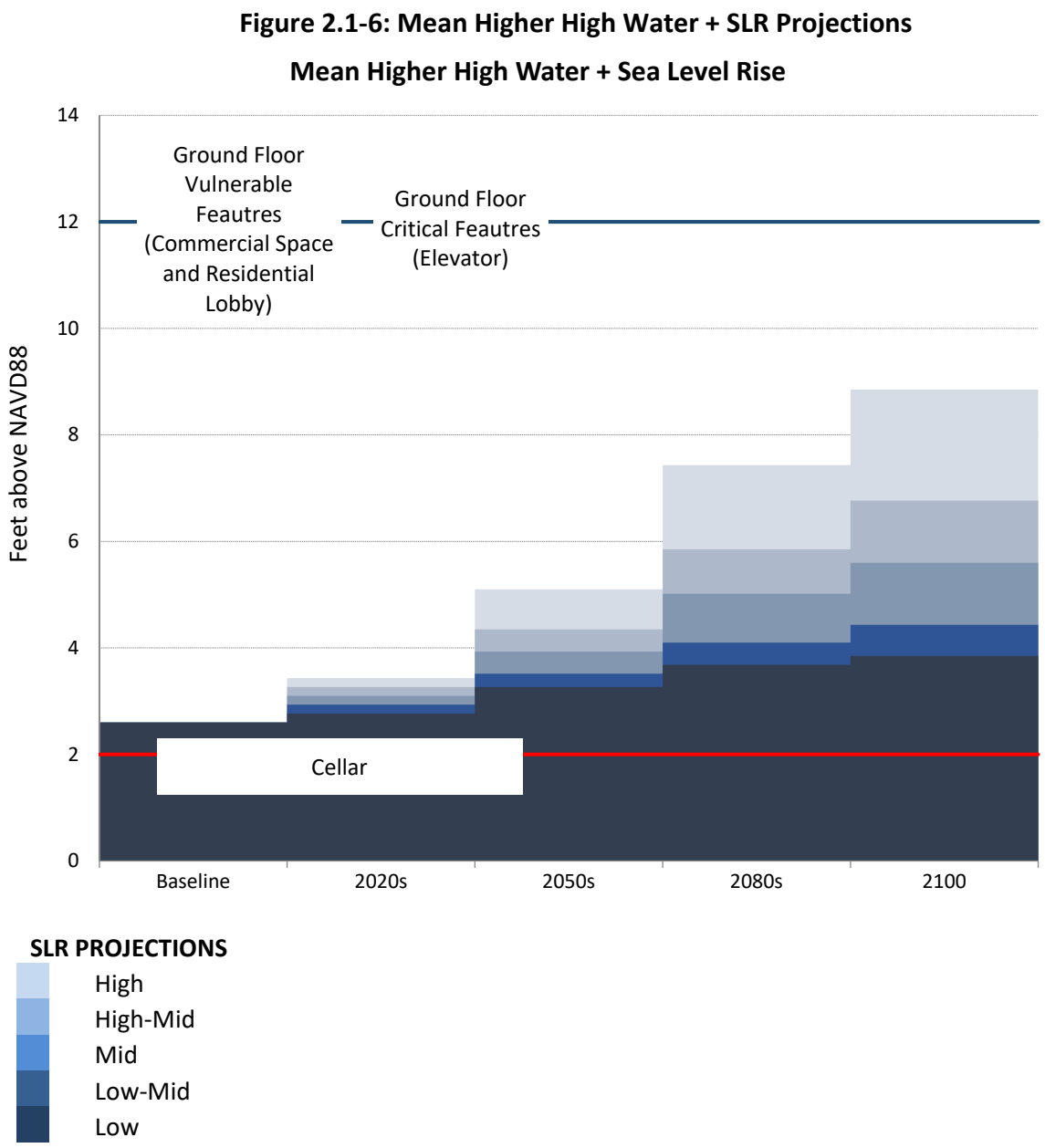
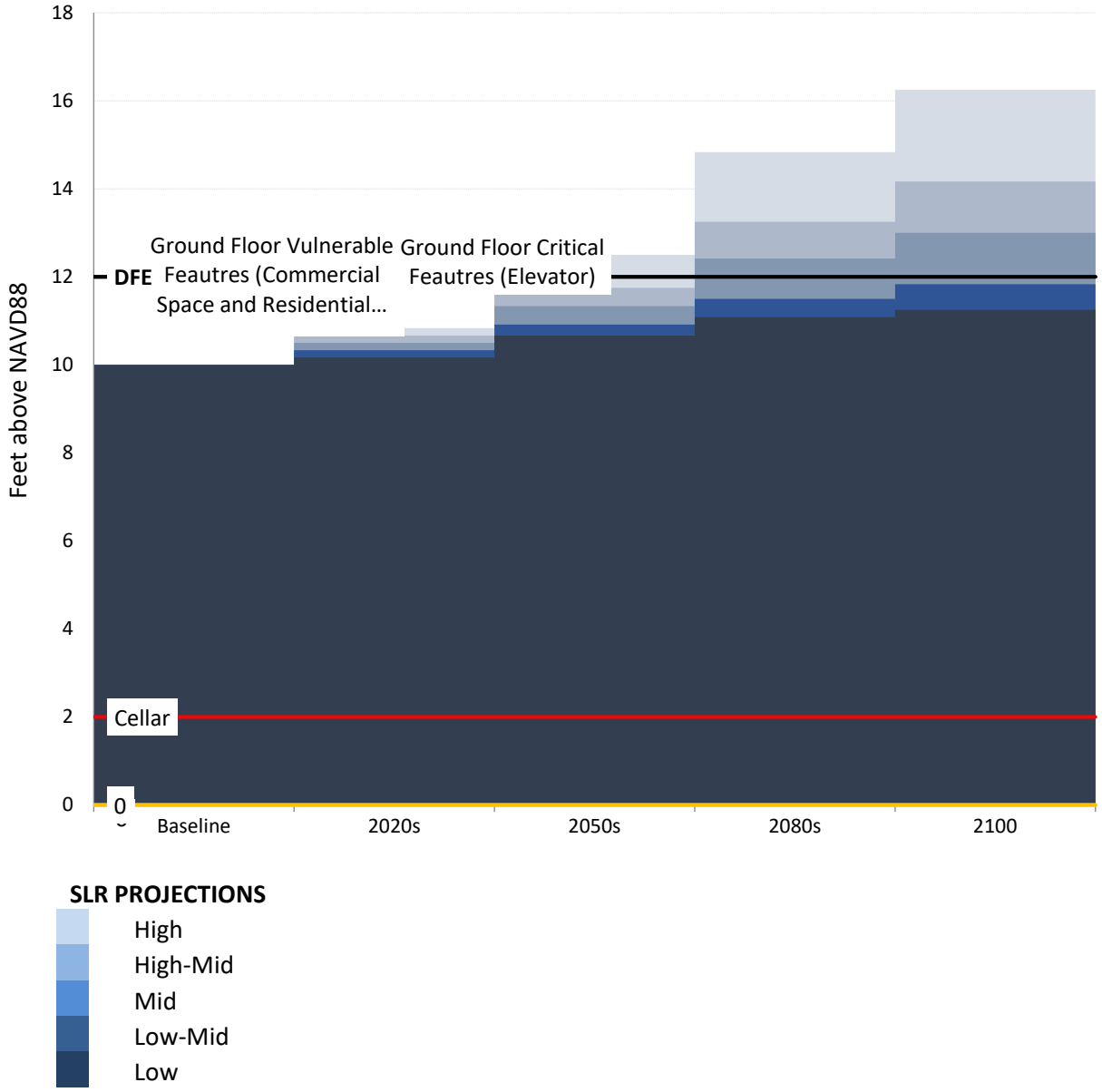


Figure 2.1-7: 1.0 Percent Flood Elevation + SLR Projections



As shown in **Figures 2.1-2** through **2.1-5.** based on the New York City Panel on Climate Change (NPCC) future floodplain projections, the Project Site would not fall within the future high tides through the 2100s. Thus, the cellar and first floor are not projected to be below the MHHW under any SLR projections through the 2100s.

b) Identify any Project Features that may be located below the elevation of the 1% floodplain over the lifespan of the project under any SLR scenario:

In the future, the Proposed Project's cellar and first-floor level fall within the 1.0 percent annual chance floodplain under low SLR projections. The cellar would include parking, bicycle storage, and two elevator vestibules. The first floor would include commercial space, two elevators, and a residential lobby.

The first floor have a ground floor elevation of +12 NAVD88. The cellar level would have an elevation of +2.0' NAVD88. The Proposed Development's vulnerable or critical features, which are most likely to be impacted by future flood would be located on the roof.

As shown in **Figure 2.1-7**, the non-critical mechanical infrastructure on the first floor is forecast to be in the 1 percent annual chance floodplain by the 2050s. The critical mechanical infrastructure on the roof would remain above the 1 percent annual chance flood elevation through the 2100s at all forecast levels. The +12 NAVD88 ground/first floor would remain above the elevation of the Mean Higher High Water (MHHW) through the 2100s (refer to **Figure 2.1-6**). Potential consequences of the ground floor retail space being located within the 1 percent annual chance floodplain include flood damage to property, building structure, loss of inventory, or potentially increased flood insurance costs.

c) Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.

As discussed above, based on the NPCC future floodplain projections, the Proposed Project's cellar and first-floor levels would not be impacted by the MHHW under any SLR projections.

d) Identify if the project or action would facilitate the development of any vulnerable, critical, or potentially hazardous features, as defined under "Key Terms" below, within areas exposed to flooding from Mean Higher High Water or 1% Annual Chance Flood by the 2050s under the 90th percentile of sea level rise projections:

Vulnerable, Critical or Potentially Hazardous Features pursuant to Policy 6.2 guidance:

- *Vulnerable Features, if damaged, have the potential to incur significant damage if flooded.*

  These include any form of enclosed space within a building, including residential, commercial, industrial, or community facility land uses; enclosed parking structures;

storage areas; enclosed recreational facilities; and bulkheads, revetments, piers, platforms, and other in-water infrastructure elements.

- *Critical Features, if damaged, would have severe impacts on the project and its ability to function*

  The project features that, if damaged, would have severe impacts on the project and its ability to function as designed. Examples include electrical utilities, building heating and cooling systems, telephone and data connection and distribution rooms, and other supporting and related building technology and utility spaces.

- *Potentially Hazardous Features, if damaged or made insecure by flooding, could potentially adversely affect the health and safety of the public and the environment.*

  Examples include hazardous materials, including highly volatile, flammable, explosive, toxic, or water-reactive materials; and materials that have the potential to become waterborne in the event of a flood and would be dangerous to the health and safety of the public and the environment, such as the storage of construction materials, demolition debris, and aggregate materials.

As discussed above, in the future, the first floor and cellar levels fall within the 1.0 percent annual floodplain under high SLR projections.

Proposed Development Building Features:

- ***Cellar Level*: T**he cellar level would contain enclosed parking spaces, bicycle parking, and an elevator vestibule. The vulnerable building features within the cellar level would include the walls and flooring. The elevator vestibule would be considered potentially critical building features, which if damaged, would have severe impact on the building and its ability to function as designed. The building's mechanical and electrical systems would be located on the roof which would be located well above the current and future 0.2 percent annual chance floodplain under high-projections**.** The cellar level would not introduce any hazardous features, materials, or substances that if made insecure, would result in a threat to public health or the environment.

- ***First Floor Level*: *T***he ground floor level would contain commercial retail space, a residential lobby, and two elevators. The vulnerable building features within the ground floor level would include the walls, flooring, and electrical. The elevator would be considered a potentially critical building feature, which if damaged, would have impact on the project and its ability to function as designed. The first floor level would not introduce any hazardous features, materials, or substances that if made insecure, would result in a threat to public health or the environment.

2. Identify Adaptive Strategies

The goal of Step 2 under WRP Policy 6.2 is to assess how the vulnerabilities and consequences identified in Step 1 are addressed through the project's design and planning. Assess how applicable codes and regulations, planned flood damage reduction elements and adaptive measures, or likely future infrastructure investments (beyond the scope of the proposed project), would or would not reduce potential flood damage for any proposed vulnerable, critical, or potentially hazardous features.

Because the Project Site is susceptible to the impacts of future flood events, it is recommended that building scale resiliency measures and flood mitigation strategies be considered. Pursuant to Policy 6.2: Climate Change Adaptation Guidance, consideration of climate change projections for coastal flooding and sea level rise should be incorporated into the design and planning of projects. The Proposed Project should identify potential vulnerabilities to and consequences of sea level rise and coastal flooding over its lifespan and identify and incorporate design techniques to address these risks.

a) Flood Damage Reduction Elements/Controls

The Project Site is located within the current 0.2 percent annual chance floodplain. The uses on the ground floor of the Proposed Project would be within the 1.0 percent annual chance floodplain by the 2050s under the high scenario of sea level rise projections. As a proactive flood protection measure, the building would be constructed at a DFE of 12.0 feet, which is 2.0 feet above the BFE. Should the increase in flood elevation exceed the DFE within the project's lifespan, the building would be able to incorporate floodproofing measures, such as installing deployable flood gates, installing flood vents located at exterior and interior walls, and replacing all windows, door, and finishes with flood damage-resistant materials.

These building scale resiliency measures would help prevent damage to vulnerable and critical building features and reduce the susceptibility of water damage from a future flood event or inundation. With the provision of the above, the building features would not be considered vulnerable or critical.

b) Flood Protection of Adjacent Sites:

The Proposed Project would not significantly increase stormwater runoff. Therefore, the Proposed Actions would not affect the flood protection of adjacent sites.

3. Assess Policy Consistency

A project or action would advance the policy when:

- No new vulnerable, critical, or potentially hazardous features would be located within area flooded by current or future high tide, or current or future 1% annual chance flood, over the project's lifespan; or

- All new vulnerable, critical or potentially hazardous features would be protected through flood damage reduction elements or future adaptive measures within the timeframe that they would be needed.

A project or action would hinder the policy when:

- Vulnerable, critical, or potentially hazardous features would be introduced in areas that will be flooded by high tide during the project's lifespan and adaptive measures are not feasible.
- Industrial development would not be protected from 2050s high tides or the current 1% annual chance flood.
- Critical infrastructure would not be protected to the elevation of the 1% annual chance storm over its lifespan.
- Shoreline structures would not function as intended with increases in sea levels projected over their lifespan.

The Project Site is located within the current 0.2-percent annual chance floodplain. The ground floor of the building would be constructed at a DFE of 12.0 feet, 2.00 feet above the current closest BFE of 10 feet, as indicated by the 2015 Preliminary FIRM. The ground floor of the Proposed Project would remain above MHHW but would be within the 1.0 percent annual chance floodplain by the 2050s under the high scenario sea level rise projections. Residential units would remain above the 1-percent annual chance floodplain and MHHW elevation throughout the life of the project. Should the increase in flood elevation exceed the DFE within the project's lifespan, the building would be able to incorporate floodproofing measures, such as installing deployable flood gates, installing flood vents located at exterior and interior walls, and replacing all windows, door, and finishes with flood damage-resistant materials. Therefore, the Proposed Project would promote Policy 6.2.

Conclusion

The development effectuated as a result of the Proposed Actions would not create a land use conflict, nor would it conflict with public policies and plans for the site or surrounding area. The Proposed Actions would also not result in significant material changes to existing regulations or policy. There would be no significant adverse impacts on public policies, and no further analysis is warranted.

2.2 Open Space

The *2021 CEQR Technical Manual* defines the need for an open space assessment if the proposed action(s) would have a direct or indirect effect on open space resources. Direct effects would occur if the proposed action(s) would result in the physical loss of a public open space; change of use of an open space so that it no longer serves the same user population; limit public access to an open space; or cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether temporary or permanent. Indirect effects would occur if the proposed action would result in an increase in population sufficiently large enough to noticeably diminish the ability of an area's open space to serve the future population.

Open space is defined as publicly or privately-owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment.

Pursuant to Chapter 7, Section 100 of the *2021 CEQR Technical Manual*, open space resources are defined as active and/or passive, and may include, but is not limited to, the following:

- Parks operated or managed by the City, State, or Federal governments and include neighborhood and regional parks, beaches, pools, golf courses, boardwalks, playgrounds, ballfields, and recreation centers that are available to the public at no cost or through a nominal fee, as in the case of recreation centers and golf courses;
- Open space designated through regulatory approvals (such as zoning), including large-scale permits that prescribe publicly accessible open space, such as public plazas;
- Outdoor schoolyards if available to the public during non-school hours;
- Publicly-accessible institutional campuses;
- Esplanades;
- Designated greenways, as shown on the City's Bike Map, and defined as multi-use pathways for non-motorized recreation and transportation along natural and manmade linear spaces such as rail and highway rights-of-way, river corridors, and waterfront spaces;
- Landscaped medians with seating;
- Housing complex grounds, if publicly accessible;
- Nature preserves, if publicly accessible;
- Gardens, if publicly accessible on a constant and regular basis;

- Church yards (with seating) or cemeteries, if publicly accessible on a constant and regular basis for passive recreation such as strolling; or
- Waterfront piers used for recreation.

Direct Effects

According to the *2021 CEQR Technical Manual*, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As (1) there are no publicly-accessible open space resources within the Affected Area, and (2) the Proposed Actions would not result in significant adverse shadow, air quality, noise, or construction impacts on area open space resources, the Proposed Actions would not have any direct effects on open space resources and no further analysis is warranted. As discussed in detail in **Section 2.3, "Shadows,"** the Proposed Actions would result in incremental shadows on Murray Playground. The incremental shadows would be cast on the December 21st analysis day for a total duration of 54 minutes. The limited incremental shadow coverage would affect the open space's passive uses, including seating areas, walking paths, and the dog run. However, bench seating is located throughout the park which would receive direct sunlight throughout the early morning time periods when the bench seating in the southeastern portion of the open space would be cast in shadow. Furthermore, the vegetation located in the area of the open space that would experience incremental shadow coverage would not be affected, as the incremental shadow coverage would occur during winter, outside of the growing season (March to September as defined by the *2021 CEQR Technical Manual*). Therefore, incremental shadow coverage would not have a significant effect on the utilization or enjoyment of Murray Playground.

Indirect Effects

The threshold for assessment of the potential for indirect open space impacts is 200 new residents or 500 additional employees. As indicated above**,** the Proposed Actions is projected to generate a net increase of 159 residents and 12 employees. As the Proposed Actions would not result in a net increase of residents or employees exceeding the threshold, the analysis of indirect open space impacts is not warranted.

2.3 Shadows

The *2021 CEQR Technical Manual* defines a shadow as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space or feature. An incremental shadow is 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. The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. Shadows can have impacts on publicly accessible open spaces or natural features by adversely affecting their use and important landscaping and vegetation. In general, increases in shadow coverage make parks feel darker and colder, affecting the experience of park patrons. Shadows can also have impacts on historic resources whose features are sunlight-sensitive, such as stained-glass windows, by obscuring the features or details, which make the resources significant.

The duration and dimensions of shadows are determined by the geographic location of the area from which the shadow is cast and the time of day and season. Shadows cast during the morning and evening, when the sun is low in the sky, are longer, while midday shadows are shorter in length. Shadows in winter, when the sun arcs low across the southern sky, are also longer throughout the day than at corresponding times in spring and fall seasons. In summer, the high arc of the sun casts shorter shadows than at any other time of year, and early and late shadows during the summer are cast farther towards the south than shadows cast in early and late winter months.

The *2021 CEQR Technical Manual* states that a shadow assessment considers projects that result in new shadows long enough to reach a sunlight-sensitive resource. Therefore, a shadow assessment is warranted only if the project would either result in: (a) new structures (or additions to existing structures, including the addition of rooftop mechanical equipment) of 50 feet or more; or, (b) be located adjacent to, or across the street from, a sunlight-sensitive resource. However, a project located adjacent to or across the street from a sunlight-sensitive open space resource (which is not a designated New York City Landmark or listed on the State/National Registers of Historic Places, or eligible for these programs) may not require a detailed shadow assessment if the project's height increase is ten feet or less.

The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources and natural resources. In general, shadows on city streets and sidewalks or on other buildings are not considered significant. Some open spaces also contain facilities that are not sensitive to sunlight. These are usually paved, such as handball or basketball courts, places containing no seating areas and no vegetation, no unusual or historic plantings, or containing only unusual or historic plantings that are shade tolerant.

These types of facilities do not need to be analyzed for shadow impacts. Additionally, it is generally not necessary to assess resources located to the south of projected development sites, as shadows cast by the action-generated development would not be cast in the direction of these resources. Furthermore, shadows occurring within one and one-half hour of sunrise or sunset generally are not considered significant in accordance with *2021 CEQR Technical Manual* guidance.

Methodology

This preliminary analysis of shadows follows the guidelines set forth in the *2021 CEQR Technical Manual* for a preliminary assessment (Section 310). According to the *2021 CEQR Technical Manual*, a preliminary shadow assessment includes the development of a base map showing the site location in relationship to any sunlight-sensitive resources as per guidelines provided in the *2021 CEQR Technical Manual*. Following these guidelines, the longest shadow study area is determined, and a Tier 1 screening assessment is conducted to determine if any sunlight-sensitive resources fall within the study area. If no resources are identified, no further analysis would be required. If sunlight-sensitive resources lay within the longest shadow study area, the next tier of screening assessment should be conducted. This preliminary assessment includes a basic description of the proposed project that would be facilitated by the proposed action in order to determine whether a more detailed assessment would be appropriate.

Analysis Framework

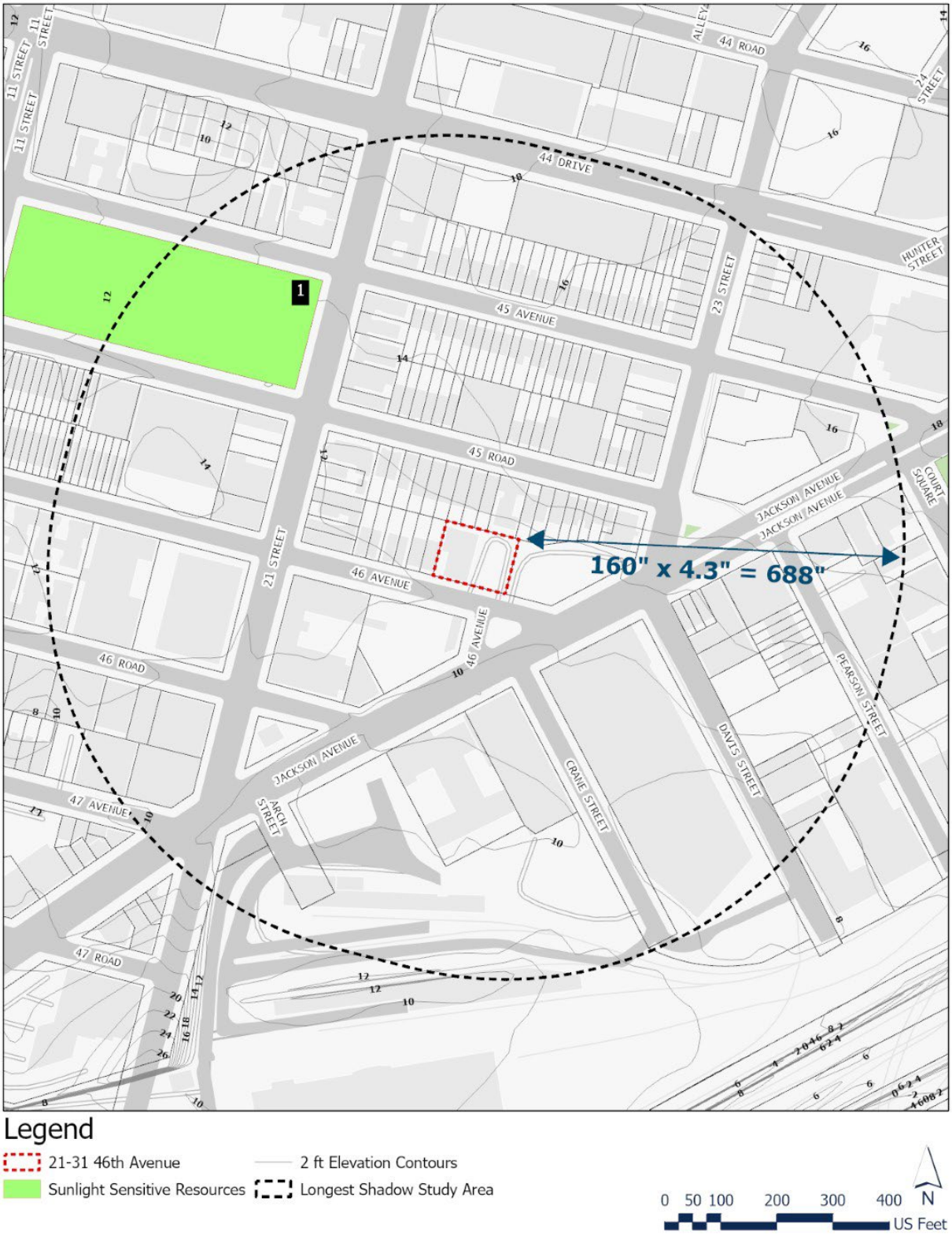
The Project Site is located on Block 76, Lot 11 in the Long Island City neighborhood of Queens, Community District 2. The Proposed Project would consist of an 11-story building that would reach a height of 112 feet (127 feet to the bulkhead). While the Proposed Project would reach a height of 127 feet to the bulkhead, the proposed zoning district would permit a maximum height of 145 feet. Therefore, for conservative assessment purposes, the shadows analysis considers a building with a maximum height of 160 feet (to the bulkhead). As the Proposed Actions would result in an incremental change in height greater than 50 feet on the Project Site, a preliminary assessment of shadows is warranted.

2.3.1 Tier 1 Shadow Screening Assessment

As the Proposed Actions would result in a new building with a maximum height of 160 feet and the longest action-induced shadow would be approximately 688 feet (4.3 x 160 feet) in length. The first step in a shadow analysis is to determine if there are any sunlight sensitive resources located within the length of the 688-foot radius.

As **Figure 2.3-1** shows below, there are one sunlight sensitive resources within the longest shadow radius - Murray Playground (Resource 1). Accordingly, a Tier 2 screening assessment is required.

Figure 2.3-1: Tier 1 Shadow Screening Assessment



2.3.2 Tier 2 Shadow Screening Assessment

The *2021 CEQR Technical Manual* states that if any portion of a sunlight-sensitive resource lies within the longest shadow radius, a Tier 2 screening assessment should be performed. Because of the path the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. For a Tier 2 screening assessment, sunlight-sensitive resources within the triangular area cannot be shaded by new development sites, and are screened out. The complementing portion to the north within the longest shadow radius is the area that can be shaded by a proposed project.

As shown in **Figure 2.3-2**, the Tier 2 screening assessment shows that Murray Playground (Resource 1) is not within of the -108/+180-degree area. Accordingly, a Tier 3 shadow screening assessment is required.

2.3.3 Tier 3 Shadow Screening Assessment

The *2021 CEQR Technical Manual* states that if any portion of a sunlight-sensitive resource is within the area that could be shaded by the proposed project, a Tier 3 screening assessment should be performed. Because the sun rises in the east and travels across the southern part of the sky to set in the west, a project's earliest shadows would be cast almost directly westward. Throughout the day, they would shift clockwise (moving northwest, then north, then northeast) until sunset, when they would fall east. Therefore, a project's earliest shadow on a sunlight-sensitive resource would occur in a similar pattern, depending on the location of the resource in relation to the project site. For a Tier 3 screening assessment, if the assessment determines that no shadows from the development would reach any of the sunlight-sensitive resources on any of the representative analysis days, then no further assessment for those days is needed. If, however, in the absence of intervening buildings, shadows from the proposed buildings would reach sunlight-sensitive resources on any of the representative analysis days, then a detailed shadow analysis would be warranted for those days.

As shown in **Figure 2.3-3** to **Figure 2.3-6** below, shadows from the Proposed Project would reach the sunlight-sensitive resource, Murray Playground, during December 21st Winter Solstice months. Therefore, a detailed shadow analysis is required to determine the impacts on Murray Playground.

Figure 2.3-2: Tier 2 Shadow Screening Assessment

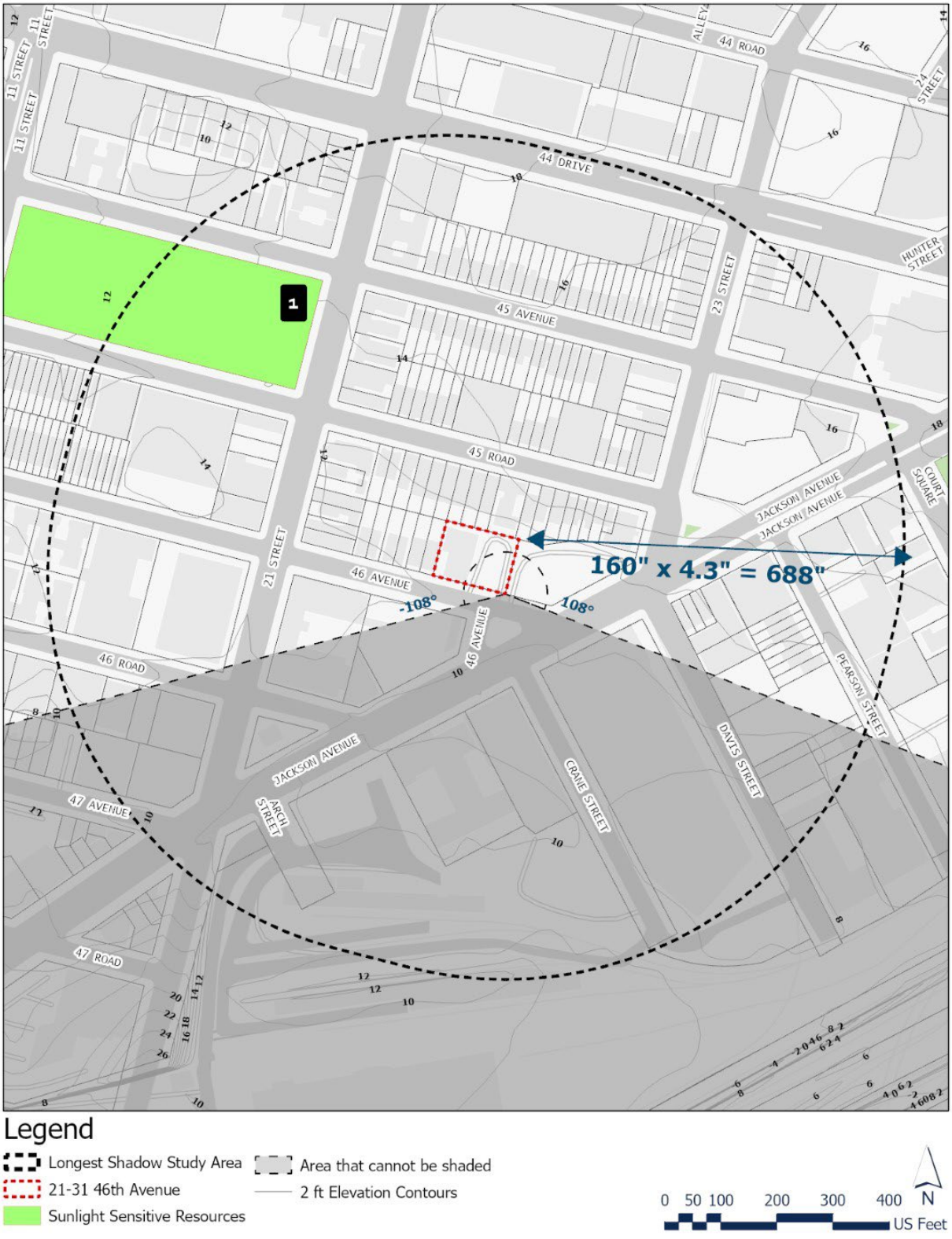


Figure 2.3-3: Tier 3 Shadow Screening December 21st (Winter Solstice)

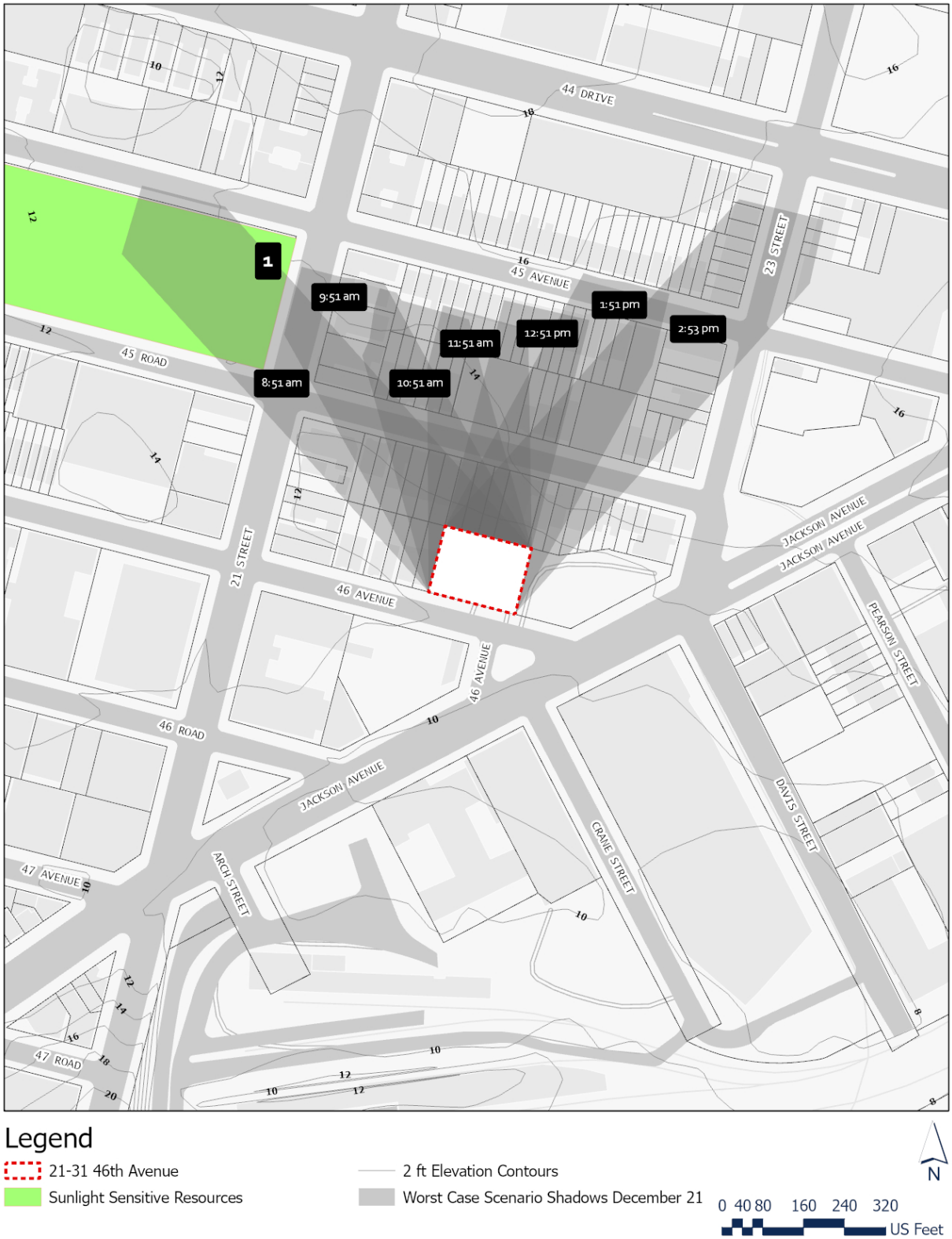


Figure 2.3-4: Tier 3 Shadow Screening March 21st/September 21st (Vernal and Autumnal Equinox)

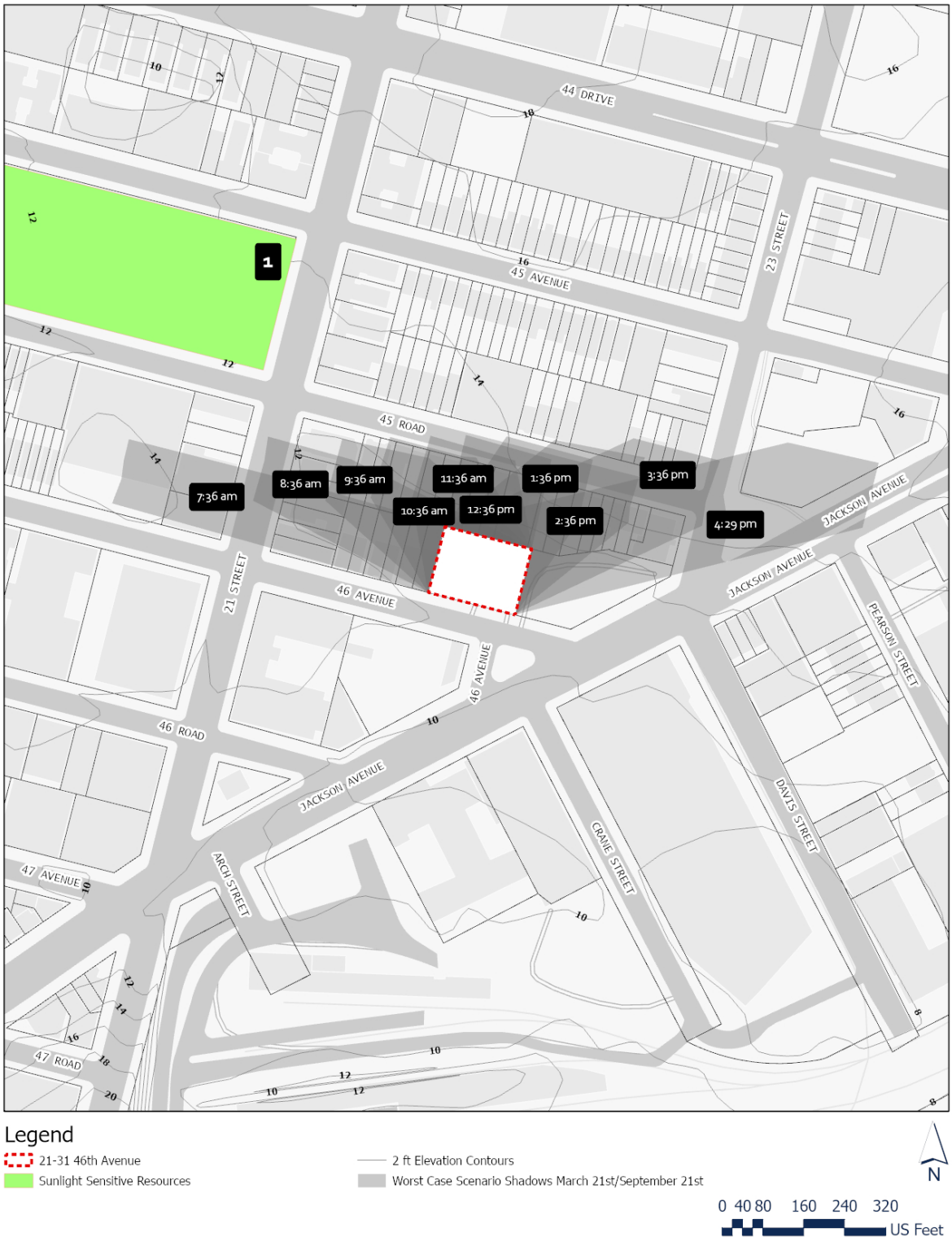


Figure 2.3-5: Tier 3 Shadow Screening May 6th/August 6th

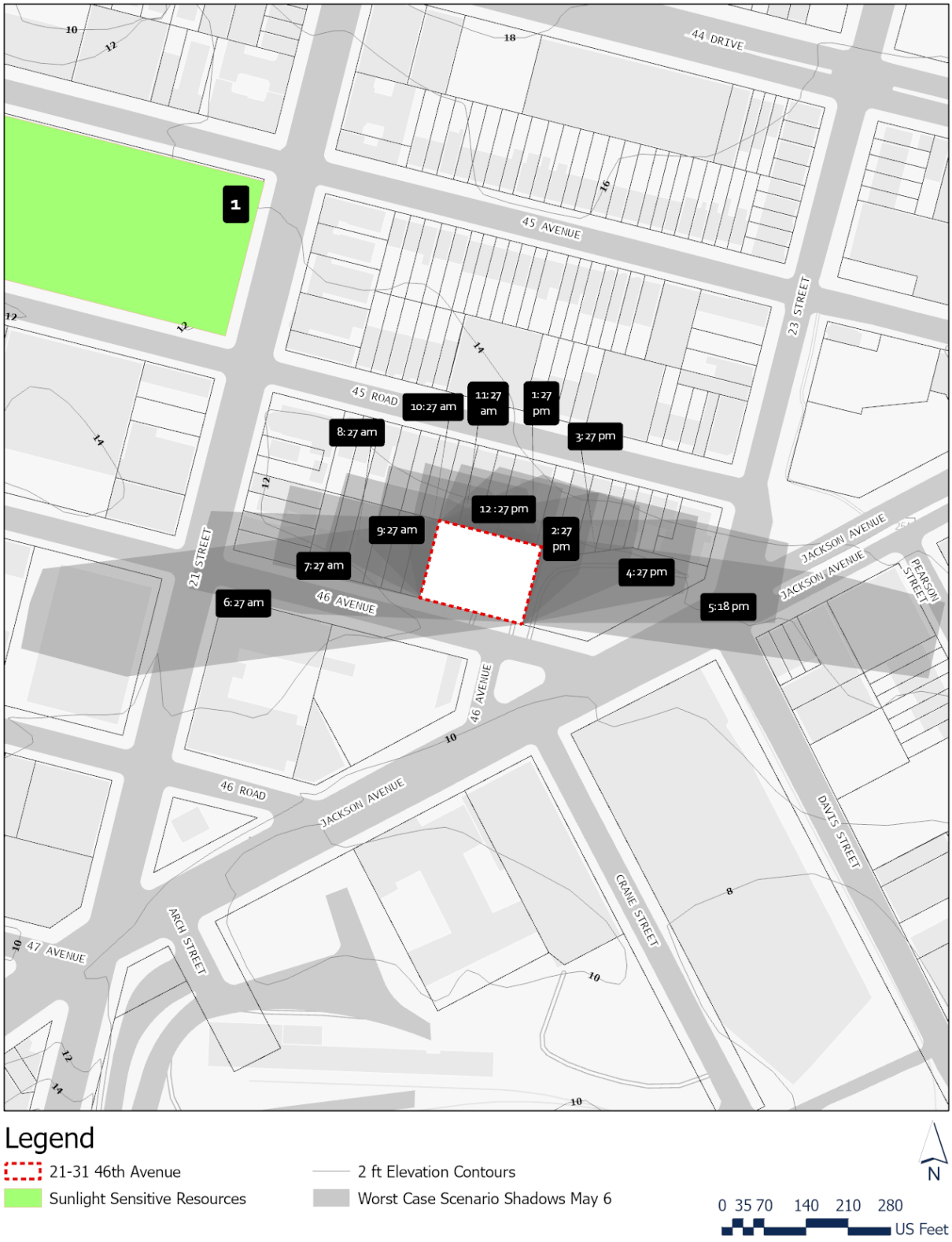
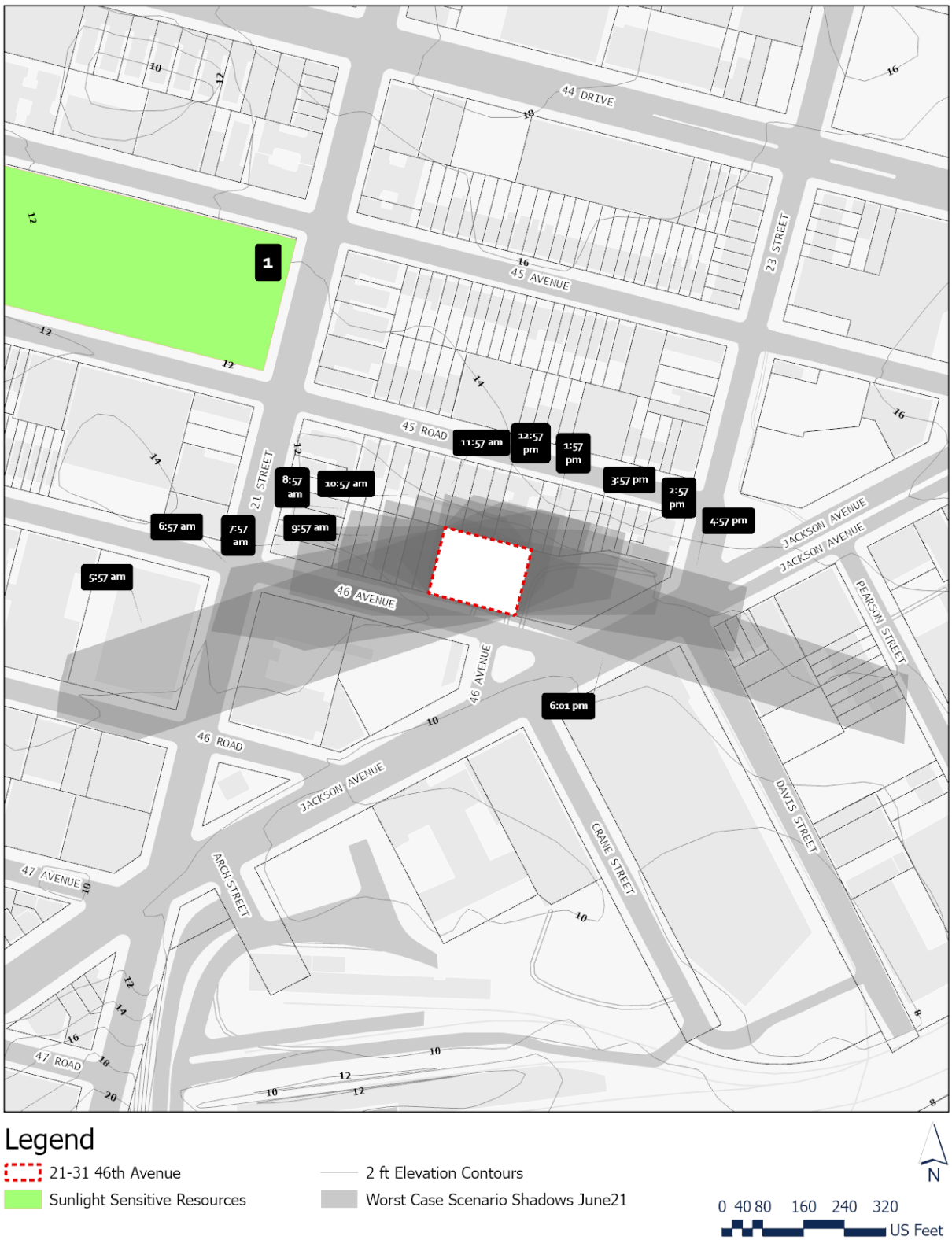


Figure 2.3-6: Tier 3 Shadow Screening June 21st (Summer Solstice)



2.3.4 Detailed Shadow Analysis

The *2021 CEQR Technical Manual* states that a detailed shadow analysis is warranted when the screening analyses do not rule out the possibility that project-generated shadows, in absence of shadows cast by intervening buildings, would reach any sunlight-sensitive resources. The detailed analysis aims to determine the extent and duration of shadows that fall on a sunlight-sensitive resource due to the proposed project. To evaluate the extent and duration of new shadows that would be cast on a sunlight-sensitive resource as a result of the proposed project, shadows that would exist in the future without the proposed project are also defined.

The results of the detailed shadow analyses on the identified resources of concern are summarized in **Table 2.3-1**. Based on the detailed shadow analysis findings, the Proposed Actions would cast shadows on Murray Playground for a total of 54 minutes on the December 21st analysis day.

Owned and managed by New York City Department of Parks and Recreation (DPR), Murray Playground is a publicly accessible open space. Murray Playground is a 2.52-acre playground featured with a public bathroom, benches, playground equipment, a dog run, an athletic field, handball courts, and spray showers**.**

Table 2.3-1: Detailed Shadow Analysis Results

Analysis Day	**21-Dec**	**March 21 / September 21**	**May 6 / August 6**	**21-Jun**
Timeframe Window	8:51 a.m. - 2:53 p.m.	7:36 a.m. - 4:29 p.m.	6:27 a.m. - 5:18 p.m.	5:57 a.m. - 6:01 p.m.
Sunlight Sensitive Resource 1	Murray Playground			
Shadow enter - exit times	8:51 a.m. - 9:45 a.m.	N/A	N/A	N/A
Incremental Shadow Duration	54 minutes	N/A	N/A	N/A
Note: Daylight savings time not used				

2.3.5 Determination of Impacts

The *2021 CEQR Technical Manual* states that the determination of significance of shadow on a sunlight-sensitive resource is based on: (1) the information resulting from the detailed shadow analysis describing the extent and duration of incremental shadows; and (2) an analysis of the resource's sensitivity to reduced sunlight.

Where the incremental shadows induced by a proposed action fall on sunlight-sensitive features or uses, the analysis assesses the loss of sunlight relative to sunlight that would be available without the project. The determination of impact under CEQR considers the extent and duration of the incremental shadows, the specific context in which the impact occurs, and the types of sunlight-sensitive features within the identified sunlight-sensitive resource(s) being analyzed, as described below.

- Open Space and Natural Resources

  For open space and natural resources, the uses and features of a resource is an indicator of its sensitivity to shadows. This sensitivity is assessed for warm-weather-dependent features such as vegetation that could be affected by a loss of sunlight during the growing season and warm-weather-dependent open space features such as pools, and sandboxes. Shadows occurring during the cold-weather months generally do not affect the growing season of outdoor vegetation. However, if an area potentially affected by shadows has evergreen trees present, it may be warranted to assess the potential for shadow impacts during all seasons as evergreen trees photosynthesize when the environment allows, including during the winter months. In addition, the detailed shadows analysis should consider the potential impact on open space features such as benches, that could be affected by a loss of winter sunlight.

  Pursuant to the *2021 CEQR Technical Manual*, plantings and vegetation such as grass lawns, planted annuals, or areas used for a relatively substantial amount of food production need six to eight hours of direct sunlight. However, some plantings and vegetation, such as established tree canopies, shrubs and perennials, can tolerate partial sun, with a reduced minimum requirement of four to six hours of direct sunlight. Direct sunlight does not need to be continuous. For example, a portion of the direct sun could be in the morning and the balance in the afternoon. However, the periods of sunlight need to be full and unobscured.

- Historic Resources

  The sensitivity to shadows for sunlight-sensitive features of a historic structure depends on its design and setting, and whether or not any of the characteristics or elements that make the resource historically significant depend on sunlight. The assessment focuses only on sunlight-sensitive features or portions of the historic resource that can be enjoyed by the public.

As stated in the *2021 CEQR Technical Manual*, to determine impact significance, an incremental shadow is generally not considered significant when its duration is no longer than 10 minutes 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 10 minutes or longer falls on a sunlight-sensitive resource and results in one or more of the following:

- Vegetation
    - A substantial reduction in sunlight available to a sunlight-sensitive feature of the resource to less than the minimum time necessary for its minimum sunlight needs (as defined above)
    - A reduction in direct sunlight exposure where the sunlight-sensitive feature of the resource is already subject to substandard sunlight.
- Open Space Utilization
    - A substantial reduction in the usability of open space as a result of increased shadows.
- Historic and Cultural Resources
    - A substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of a historic or cultural resource.
- For Any Sunlight-Sensitive Feature of a Resource
    - A 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.

The determination of significant shadow impacts for the identified sunlight-sensitive resources evaluated as part of the detailed shadow analysis are presented below.

Sunlight Sensitive Resource (Murray Playground)

Murray Playground is a 2.52-acre playground that features a public bathroom, benches, playground equipment, a dog run, an athletic field, handball courts, and spray showers.

Shadows would be cast on Murray Playground from the Proposed Project on the December 21st analysis day for a total of 54 minutes. The incremental shadows cast by the Proposed Project would enter the playground at 8:51 AM and exit the playground at 9:45 AM in the early morning, moving across the southeastern corner of the park which includes walking paths, vegetation, seating areas, and a dog run. The majority of the open space would continue to receive direct sunlight.

2.3.6 Conclusion

The limited incremental shadow coverage would affect the open space's passive uses, including seating areas, walking paths, and the dog run. However, bench seating is located throughout the park which would receive direct sunlight throughout the early morning time periods when the bench seating in the southeastern portion of the open space would be cast in shadow. Furthermore, the vegetation located in the area of the open space that would experience incremental shadow coverage would not be affected, as the incremental shadow coverage would occur during winter, outside of the growing season (March to September as defined by the *2021 CEQR Technical Manual*). Therefore, incremental shadow coverage would not have a significant effect on the utilization or enjoyment of Murray Playground. 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 features found within the open space resource; and (2) would not significantly alter the public's use of the open space resource or threaten the viability of vegetation or other sunlight-sensitive features, incremental shadows from the Proposed Project would not be considered a significant adverse impact, in accordance with *2021 CEQR Technical Manual* guidance.

2.4 Historic and Cultural Resources

An assessment of historic and cultural resources is usually necessary for projects that are located in close proximity to historic or landmark structures or districts, or for projects that require in-ground disturbance, unless such disturbance occurs in an area that has been formerly excavated, according to the *2021 CEQR Technical Manual*.

The term "historic resources" defines districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, architectural and archaeological importance. In assessing both historic and cultural resources, the findings of the appropriate city, state, and federal agencies are consulted. Historic resources include the New York City Landmarks Preservation Commission (LPC) designated landmarks, interior landmarks, scenic landmarks, and historic districts; locations being considered for landmark status by the LPC; properties/districts listed on, or formally determined eligible for, inclusion on the State and/or National Register (S/NR) of Historic Places; locations recommended by the New York State Board for Listings on the State and/or National Register of Historic Places and National Historic Landmarks.

Methodology

Archaeological and architectural resources usually need to be assessed for projects that would result in any in-ground disturbance. In-ground disturbance is any disturbance to an area not previously excavated, including new excavation that is deeper and/or wider than previous excavation on the same site.

For projects that may affect historic or cultural resources, the first step in evaluating a project's potential effects on historic resources is to consider what area the project might affect and then identify historic resources—whether officially recognized or eligible for such recognition—within that area. The area of subsurface work for the proposed project is considered the impact area for archaeological resources, while the study area for architectural resources is the area in which any resources may be affected by the project, which is defined by the radius of 400 feet from the borders of the project site for most proposals.

After the study areas have been established, all known archaeological and architectural resources within the study areas are identified, and the potential for unknown resources is investigated. It is recommended that lead agencies and applicants contact LPC for archaeological and architectural resources review. Based on the report from LPC, if any listed historic or cultural resources are located in the study areas, then further analysis of the project's impact on these resources must be performed. The proposed project's effects on any designated or potential archaeological and architectural resources are then analyzed under Existing, No-Action, and With-Action conditions. The assessment specifically considers whether the project may result in the disturbance or destruction of those archaeological and architectural resources as a result of the proposed actions.

2.4.1 Architectural Resources

Per *2021 CEQR Technical Manual* guidelines, impacts on historic resources are considered on those sites affected by the proposed action(s) and in the area surrounding identified development sites. The historic resources study area is defined as the project site plus an approximately 400-foot radius around the Affected Area.

According to the *2021 CEQR Technical Manual*, significant adverse impacts to historic and cultural resources could potentially result if a proposed action affects those characteristics that make a resource eligible for LPC designation or S/NR listing. This section assesses the potential for the proposed action to result in significant adverse impacts on identified historic and cultural resources. **Table 2.4-1** below provides information about possible direct, indirect and construction-related impacts on historic and cultural resources. Generally, architectural resources should be surveyed and assessed if the proposed project would result in any of the following, whether or not any known historic resources are located near the site of the project:

Table 2.4-1: Possible Impacts to Historic and Cultural Resources

Construction resulting in ground disturbance, including construction of temporary roads and access facilities, grading, and landscaping.
Below-ground construction, such as excavation or installation of utilities.
Physical destruction, demolition, damage, alteration or neglect of all or part of an historic property.
Changes to the architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features.
Isolation of the property from, or alteration of, its setting or visual relationship 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.
Introduction of incompatible visual, audible, or atmospheric elements to a resource's setting.
Replication of aspects of the resource so as to create a false historical appearance.
Elimination or screening of publicly accessible views of the resource.
Construction-related impacts such as falling objects, vibration, dewatering, flooding, subsidence, or collapse.
Introduction of significant new shadows, or significant lengthening of the duration of existing shadows, over an historic landscape or an historic structure to the extent that the architectural details that distinguish that resource as significant are obscured.

To determine whether the Proposed Actions have the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources. The LPC was contacted for their initial review of the Proposed Project's potential to impact

nearby historic and cultural resources, and by letter dated August 7, 2023, indicated that the study area does not contain any sites of buildings of known architectural or archeological significance (see **Appendix A**).

Direct Impacts

Historic resources could 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 could result in significant adverse impacts, depending on the design. Direct impacts 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.

NR-listed and eligible resources are given a measure of protection from the effects and impacts of projects sponsored, assisted, or approved by federal agencies under Section 106 of the National 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. S/NR-listed and eligible resources are similarly protected against impacts resulting from projects sponsored, assisted, or approved by State agencies under the State Historic Preservation Act. However, private owners of S/NR-listed and eligible resources using private funds can alter or demolish their properties without such a review process. Privately owned properties that are NYCLs, in LPC-designated historic districts, or pending designation as Landmarks by LPC are protected under the New York City Landmarks Law. The law requires LPC review and approval before any alteration or demolition occurs, regardless of whether the project is publicly or privately funded. Publicly owned resources are also subject to review and advisement by LPC before project implementation.

Construction Impacts

The assessment of construction impacts on historic and cultural resources considers the possibility of physical damage to any architectural or archaeological resources identified in the project's historic and cultural resources assessment.

Pursuant to Chapter 22, Section 300 of the *2021 CEQR Technical Manual*, if a project's construction activities are located within 400 feet of a historic or cultural resource, potential hazards should be assessed, such as whether certain character-defining elements of a structure, including but not limited to rooftops or stained-glass windows, could be impacted by falling objects from an adjacent construction site.

The City has two procedures for avoidance of damage to historic structures from adjacent construction.

1. All buildings are provided some protection from accidental damage through New York City Department of Buildings (DOB) controls that govern the protection of any adjacent properties from construction activities, under Building Code Section 27-166 (C26-112.4).

For all construction work, Building Code section 27-166 (C26-112.4) serves to protect buildings by requiring that all lots, buildings, and service facilities adjacent to foundation and earthwork areas be protected and supported in accordance with the code requirements.

2. The second protective measure applies only to designated NYCL and S/NR listed historic buildings that are located within 90 linear feet of a proposed construction site. For these structures, the DOB's Technical Policy and Procedure Notice (TPPN) #10/88 is applicable. The DOB's TPPN 10/88 supplements the standard building protections afforded by the Building Code C26-112.4 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.

If the project is not located within 90 feet of a historic or cultural resource that is NYC-landmark eligible, eligible for the State and National Register of Historic Places, or within an eligible New York City Historic District, then no special protections apply. Therefore, the potential for physical disturbance and adverse impacts on those historic and cultural resources should be disclosed.

Indirect Impacts

As per the *2021 CEQR Technical Manual*, visual and contextual impacts on historic resources can include: the isolation of a property from or alteration of its setting or visual relationship with the streetscape; introduction of incompatible visual, audible, or atmospheric elements to a resource's setting; elimination or screening of publicly accessible views of a resource; or introduction of significant new shadows, over a historic landscape or on a historic structure (if the features that make the resource significant depend on sunlight) to the extent that the architectural details that distinguish that resource as significant are obscured.

Architectural Resources within the Study Area

To determine whether the projected development has the potential to affect nearby off-site historic or architectural resources, the study area was screened for historic and architectural resources.

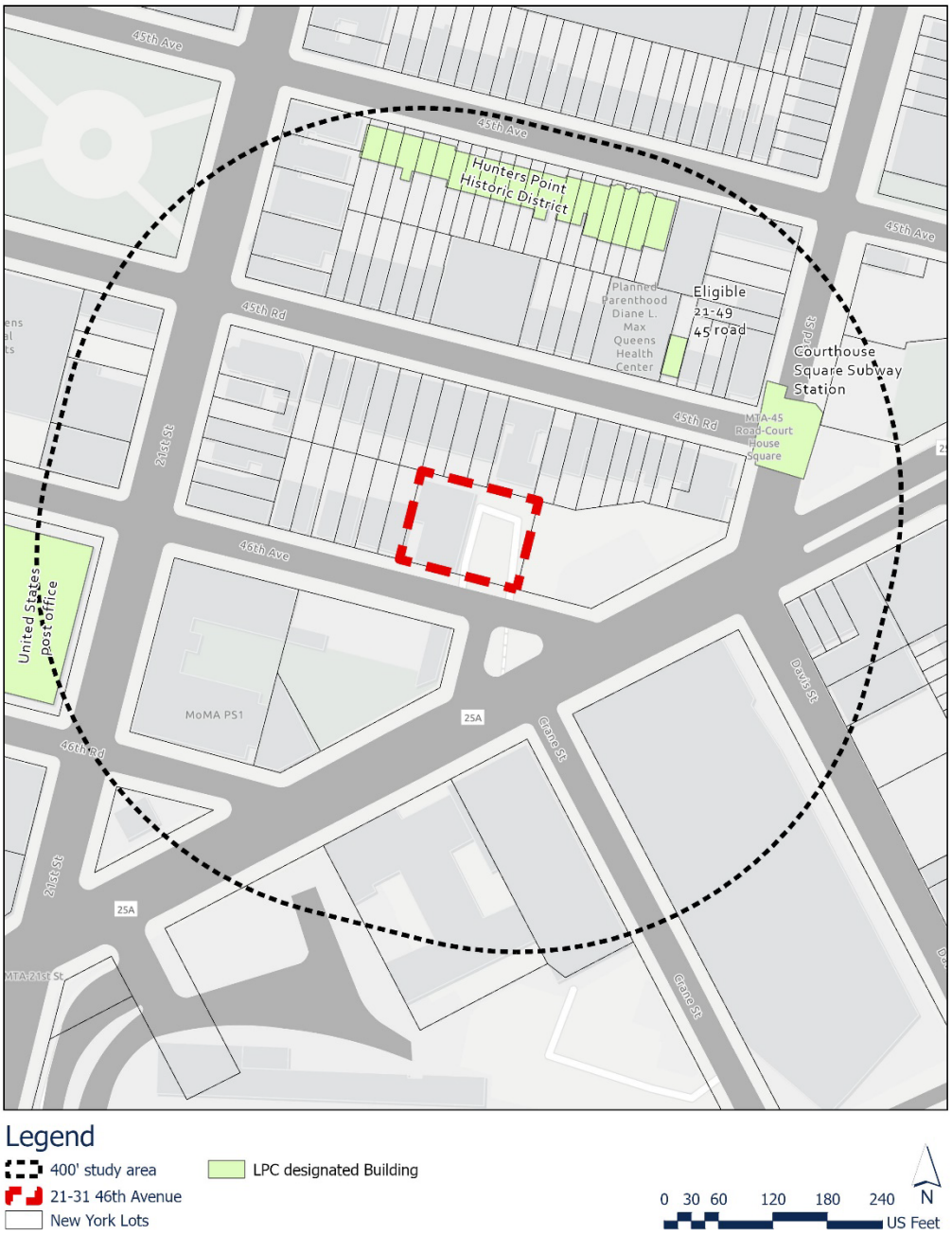
The LPC was contacted for their initial review of the project's potential to impact nearby historic or architectural resources, and by letter dated August 7, 2023 indicated that the LPC designated and S/NR listed Hunters Point Historic District is located within the 400-foot study area (see **Appendix A**). In addition, the LPC identified the following architectural resources within the study area:

- S/NR listed United States Post Office, Long Island City, 46-02 21st Street;
- S/NR listed 45th Road-Court House Square Subway Station, 23rd Street; and

- S/NR eligible 21-49 45th Road.

Therefore, an analysis on the potential impacts of the Proposed Actions on the identified architectural resources is warranted. **Figure 2.4-1** shows the locations of properties with architectural significance.

Figure 2.4-1: Architectural Resources Within 400-Foot Study Area



Existing Condition

The LPC identified the following architectural resources within the study area:

- United States Post Office, Long Island City, 46-02 21st Street (S/NR Listed): The building was built in 1928 and is one of a number of post offices in New York designed by the Office of the Supervising Architect under director James A. Wetmore. The building is a two-story, symmetrically massed brick building with limestone trim in the Colonial Revival style. It features a frontispiece with four semi-engaged limestone Ionic order columns that support a pedimented entablature. It was listed on the National Register of Historic Places in 1989.

- 45th Road-Court House Square Subway Station, 23rd Street (S/NR Listed): 45th Road - Court House Square Station opened in 1916 and is located in Queens, serving the Flushing Line of the IRT. The elevated station is located at the intersection of 23rd Street and 45th Road. With a relatively high degree of integrity, character-defining features include the plain, unadorned utilitarian mezzanine and standing seam metal covered stairs, webbed trusses attached to four steel piers at each station corner, painted metal-clad exterior, and various wood windows. Platforms were extended during the 1950s, some windows within the control house were replaced during the 1990s, and corrugated windscreens added to the platform walls. A corrugated metal station department building and a small wood frame structure are located on the southern end of the eastern platform.

- 21-49 45th Road (S/NR Eligible): The Romanesque Revival-style building at 21-49 45th Road was constructed in the 1890s. The three-and-a-half story, two-bay-wide rowhouse has a quarry-faced brownstone ashlar-clad basement and first floor with Roman brick above. The western bay contains a double-door entryway with a chamfered transom with stained glass. The paired window located in the eastern bay also has a chamfered transom with stained glass. A rounded box bay window is located centrally on the second floor; it contains four window units, each containing one-over-one-light sash. Each unit is separated by an attenuated column with stylized capitals. The top of the box bay window forms a third-floor balcony with terra-cotta relief, onto which a centered round-arched window opens. The window has a lintel of quarry-faced stone emblematic of the Romanesque style. The building is capped with a front-gable parapet wall with textural terra-cotta decorating the tympanum. The gable feature has terra-cotta coping, with a finial at the apex and foliate stops at the lower termini.

The LPC and S/NR listed Hunters Point Historic District roughly spans the block of 45th Avenue between 21st and 23rd Streets. This small district contains examples of the Italianate, French Second Empire, Neo-Grec and other architectural styles common in the second half of the 19th century. Originally part of the Van Alst farm, the street was subdivided for residential development in the 1870s and its elegant stone houses came to be known as "White Collar

Row." One of its most notable residents was "Battle Axe" Gleason, the mayor of Long Island City who famously chopped down a fence erected by the Long Island Rail Road that prevented pedestrians from crossing 2nd Street without a railroad ticket. The street changed as nearby commercial and industrial activity increased, as well as with the arrival of the elevated railway along 23rd Street in 1916. As families fled the noise from the trains, the houses were subdivided and began to attract theatrical performers who were drawn to the area for its easy subway access to the Broadway theaters in Manhattan.

Future No-Action Condition

Without the Proposed Actions, the existing conditions would remain within the Affected Area and within the properties identified as S/NR eligible. In the No-Action Condition, the S/NR eligible properties within the study area would remain unchanged.

Future With-Action Condition

The potential for significant adverse impacts on historic resources under Future With-Action Condition was assessed following **Table 2.4-1** above to determine (a) whether there would be a physical change to any designated resource or its setting, and (b) if so, is the change likely to diminish the qualities of the resource that make it important (including non-physical changes such as context or visual prominence).

Direct impacts

In the future, with the Proposed Actions, it is expected that the existing architectural resources within the Study Area would be the same as the existing conditions. There are no existing architectural resources within the Affected Area (See **Appendix A** for LPC letter dated August 7, 2023). As such, no direct impacts on architectural resources are anticipated.

Construction impacts

The Project Site is located over 90 feet from the architectural resources discussed above. Accordingly, the Proposed Project would not introduce adverse construction-related impacts to architectural resources within the study area from ground-borne construction period vibrations, falling debris, and/or collapse. Therefore, the Proposed Actions would not result in significant adverse impacts to these resources and further analysis is not warranted.

Indirect impacts

The Proposed Actions would not result in any visual and contextual impacts to the known historic resources within the study area, as the new building that would be developed under the Proposed Actions would be consistent with urban design features of the surrounding area. The Proposed Actions would not introduce any incompatible visual, audible, or atmospheric elements to the settings of the identified historic resources.

Publicly accessible views of the identified historic architectural resources would not be blocked, because the new development would occur on existing blocks and lots. In addition, none of the identified historic resources feature sunlight-sensitive physical characteristics based on the *2021 CEQR Technical Manual*:

- The buildings do not contain design elements that are part of a recognized architectural style that depends on the contrast between light and dark design elements.
- The buildings are not distinguished by elaborate, highly carved ornamentation.
- The buildings do not have stained glass windows.
- The buildings do not contain exterior materials and color that depend on direct sunlight for visual character.
- The buildings do not include a historic landscape, such as scenic landmarks including vegetation recognized as a historic feature of the landscape.
- The buildings do not include features where the effect of direct sunlight is described as playing a significant role in the structure's significance as an historic landmark.

As such, no sunlight sensitive historic resources would be affected by incremental shadows as a result of the Proposed Actions.

The Proposed Project would also not pose any changes to the setting or context of historic resources. Since the architectural resources are located less than 400 feet from the Affected Area, the construction activity happening at the Project Site may induce some temporary changes to the environment surrounding the architectural resources. However, the construction activity is expected to last for approximately 18 months, of which the major exterior construction that may have an impact on the architectural resources would last no more than 12 months. As such, no significant indirect impacts on architectural resources would occur as a result of the Proposed Actions.

2.4.2 Archaeological Resources

Unlike the architectural evaluation of a study area that extends beyond the footprint of a project's block and lot lines, the analysis of potential and/or projected impacts on archaeological resources is controlled by the actual footprint of the limits of soil disturbance. Archaeological resources are physical remains, usually subsurface, of the prehistoric and historic periods such as burials, foundations, artifacts, wells and privies. The *2021 CEQR Technical Manual* requires a detailed evaluation of a project's potential effect on the archeological resources if it would potentially result in an in-ground disturbance to an area not previously excavated.

The Proposed Actions would result in new in-ground construction on the Project Site. As noted, the LPC was contacted for their initial review of the project's potential to impact nearby cultural or archaeological resources, and a response was received on August 7, 2023 (see **Appendix A**).

The LPC has indicated that no cultural resource of archaeological significance is associated with the Project Site. Therefore, significant adverse impacts on archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

2.4.3 Conclusion

According to the *2021 CEQR Technical Manual*, significant adverse impacts to historic and cultural resources could potentially result if a proposed action affects those characteristics that make a resource eligible for LPC designation or S/NR listing. Based on the above analysis, the Proposed Actions would not result significant adverse impacts to architectural resources. In addition, no archaeological significance is associated with the Project Site. Accordingly, no further analysis is warranted.

2.5 Urban Design and Visual Resources

According to the *2021 CEQR Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements that play an important role in the pedestrian's experience include streets, buildings, visual resources, open space, and natural features, as well as wind as it relates to channelization and downwash pressure from tall buildings. Pursuant to the *2021 CEQR Technical Manual*, an assessment of urban design may be warranted when a proposed action may affect one or more of the elements that contribute to the pedestrian experience of an area, specifically the arrangement, appearance, and functionality of the built environment.

The proposed rezoning of the Affected Area from M1-4/R6B to R7X/C2-5 would alter the permitted use, bulk, and height. Therefore, further analysis is warranted. The differences between existing and proposed zoning, with regards to those aspects of zoning affecting urban design, are presented in the following **Table 2.5-1**.

Table 2.5-1: No-Action and With-Action Zoning

	No-Action	**With-Action**
Zoning	**M1-4/R6B**	**R7X/C2-5**
Permitted Uses	Manu., Com., CF, Res.	Com., Res., CF
Maximum FAR	Manu.: 2.0 Com: 2.0 Res: 2.20 CF: 6.5	Com: 2.00 Res.: 6.00 CF: 5.00
Maximum Height	Base Height: 30 - 45 feet (w/QGF)	Base Height: 60 - 105 feet (w/QGF)
	Building Height: 55 feet (w/QGF)	Building Height: 145 feet (w/QGF)

Com. = Commercial; CF = Community Facility; Manu. = Manufacturing; Res. = Residential; QGF = Qualifying Ground Floor

2.5.1 Existing Conditions

The Affected Area is in the Long Island City neighborhood of Queens, Community District 2, and includes Block 76, Lot 11. The Affected Area contains approximately 13,500 SF of lot area and is located on a block bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. 45th Road is a 60-foot-wide west-to-east one-way street with a single moving lane of traffic and curbside parking. Jackson Avenue is a 100-foot-wide two-way street with two moving lanes of traffic in each direction and curbside parking. 46th Avenue is a 60-foot-wide narrow east-to-west one-way street with one moving lane of traffic and curbside parking. 21st Street is an 80-foot-wide two-way street with two moving lanes of traffic in each direction and curbside parking.

Existing land uses within a 400-foot radius around the Affected Area primarily include multi-family residences, mixed commercial and residential buildings, transportation and utility uses, and public facilities and institutions. The area has a mix of low-rise residential and commercial

buildings, as well as multi-family residential buildings ranging from 2 to 48 stories in height. Jackson Avenue is a major thoroughfare with various high-density multi-family, commercial, and mixed residential and commercial uses. The surrounding streets, such as 21st Street and 46th Avenue, also have a combination of light-industrial, residential, commercial, and institutional uses. The area has many transit options, with nearby subway stations including the 7 and G train Court Square station, the E and F train Court Square Station, and a Long Island Railroad station within 450 feet of the Affected Area at Hunterspoint Avenue. Two bus lines (B62 and Q67) serve the area, connecting it to Downtown Brooklyn, Dumbo, Long Island City, and the Brooklyn Navy Yard.

The Project Site consists of Block 76, Lot 11 and is 13,500 SF with 135 feet of frontage along 46th Avenue. The Project Site is currently improved with a one-story, 4,800 GSF building tenanted by TD Bank and an accessory parking lot. The parking lot is served by a curb cut along 46th Avenue and is gated during non-business hours.

The surrounding area features predominantly rectangular street grid, with Jackson Avenue cutting through the area at a diagonal alignment. The north-south streets are generally major thoroughfares with wide sidewalks and in some cases, center medians in the roadways. Most retail and other ground-floor businesses are located along these thoroughfares. The east-west streets are generally narrow, and in most cases have one-way traffic flow. The sidewalks in the area are in good condition with paved surfaces, limited street trees, and regular streetlights. The intersections of the larger streets are controlled by traffic lights, feature clear crosswalk markings, and ADA-compliant ramps. Most of the intersections of the smaller streets in the surrounding residential areas are controlled by all-way stop signs and feature clear crosswalk markings.

2.5.2 Future No-Action Condition

Affected Area/Project Site

Existing conditions on the Project Site are expected to remain in the future without the Proposed Actions.

Urban Design Study Area

Existing land use patterns are generally expected to continue in the surrounding area in the future without the Proposed Actions. There are several active construction permits within the study area. One for a new 123,325 GSF, 17-story building that would include 128 DUs at 45-19 Davis Street and the other for a new 130,136 GSF, 7-story building that would include 115 DUs at 11-36 45th Road. There are no other known major land use changes anticipated in the foreseeable future within the 400-foot study area. Any new development within the study area would be governed by the underlying zoning regulations.

Pedestrian activity within the study area under the No-Action Condition would not experience significant changes compared to existing conditions. The sidewalks would be expected to

remain in their existing good condition with limited street trees and regular streetlights. Built form in the study area would remain. No significant changes to the area's urban character are anticipated.

2.5.3 Future With-Action Condition

Affected Area/Project Site

Under the With-Action Condition, the Project Site would be developed with a single 99,030 GSF (80,846 ZSF, 5.98 FAR) mixed-use commercial, and residential building. The Proposed Project would include a 13,500 GSF parking garage at the cellar level with 22 residential accessory parking spaces. The below grade parking garage would be accessed by a curb cut along 46th Avenue at the western portion of the Project Site. There would be a total of 8,567 GSF (8,000 ZSF, 0.59 FAR) commercial retail space on the ground floor. A total of 76,963 GSF (72,846 ZSF, 5.39 FAR) residential area would be developed. The building would rise to 11 stories at 112 feet tall. Along 46th Avenue, there would be a 15-foot setback at the 9th floor and a 33-foot setback at the 11th floor. There would be a 25-foot setback at the 7th floor, along the western frontage of the Project Site, facing 21st Street. While the Proposed Project would reach a height of 112 feet, the proposed zoning district would permit a maximum height of 145 feet. Therefore, for conservative assessment purposes, the urban design and visual resource analysis considers a building with a maximum height of 145feet.

Urban Design Study Area

The Proposed Actions would only affect the Affected Area. Therefore, existing patterns are generally expected to continue in the future with the Proposed Actions.

The proposed R7X/C2-5 zoning district would extend the existing R7X/C2-5 district located directly to the east of the Affected Area. The increased bulk as a result of the Proposed Actions would be appropriate for the Affected Area and would be surrounded by numerous buildings of similar scale. The proposed development would be designed to be visually compatible and consistent with existing developments. The Proposed Project would not introduce any incompatible visual elements to the existing urban design settings or obstruct publicly accessible views as there are no view corridors that could be obstructed by the Proposed Actions.

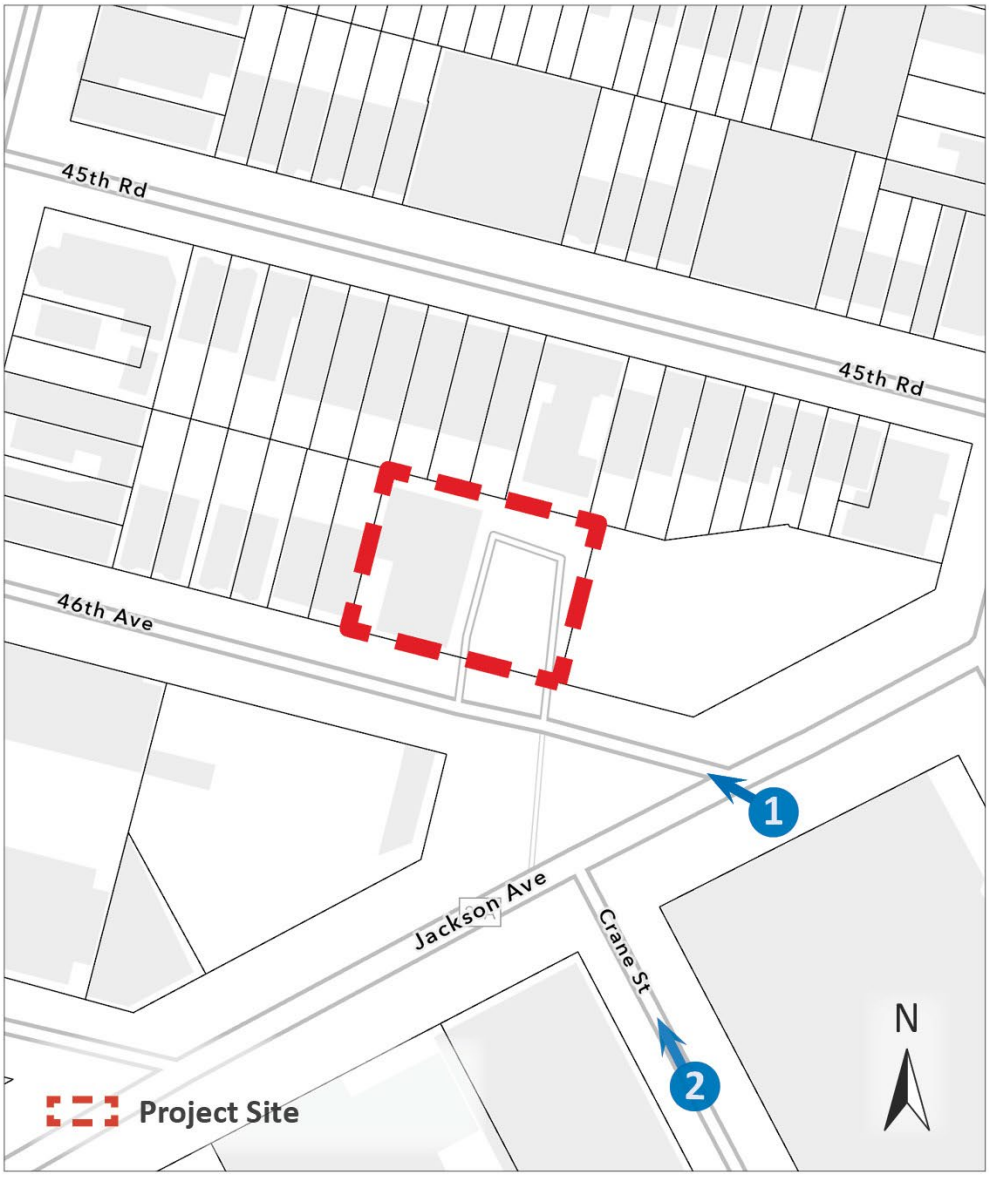
The urban design massing views under the With-Action Condition in comparison to No-Action/Existing conditions are shown in **Figure 2.5-2** to **Figure 2.5-3** below.

2.5.4 Conclusion

The development facilitated by the Proposed Actions would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood. It would not significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or the visual character of the area. The mixed-use residential, commercial, and

community facility development with ground-floor local retail uses would improve the pedestrian experience and increase the vitality of the area. The increased density of the proposed uses is appropriate for the area with immediate access to public transit. There are no view corridors within the study area. The Proposed Project would be located within an existing block. No publicly accessible views of the historic architectural resources would be blocked. Therefore, a detailed analysis is not warranted.

Figure 2.5-1: Locations of Urban Design Massing Views



Project Site Photo Key

Figure 2.5-2:Illustrative Comparison of the No-Action and With-Action Conditions

Existing/No-Action Condition



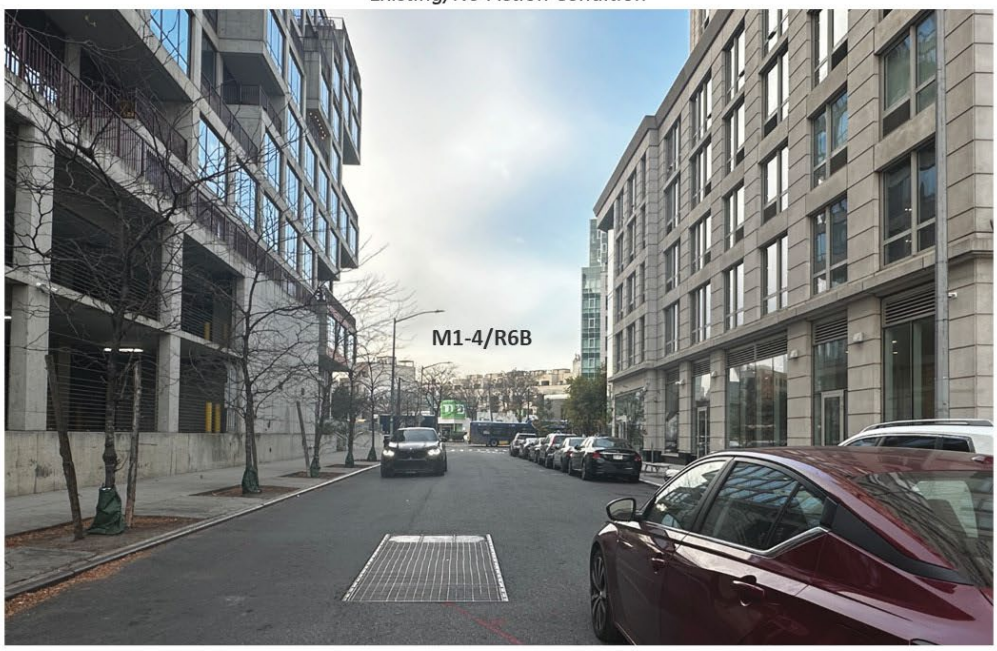
With-Action Condition



1 Looking northwest from the intersection of Jackson Avenue and 46th Avenue

Figure 2.5-3: Illustrative Comparison of the No-Action and With-Action Conditions

Existing/No-Action Condition



With-Action Condition



2 Looking north along Crane Street toward the Rezoning Area

2.6 Hazardous Materials

According to the *2021 CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when: (a) hazardous material exists 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.

Methodology

The hazardous materials assessment begins with a Phase I Environmental Site Assessment (ESA), which is a qualitative evaluation of the environmental conditions present at a site, based on a review of available information, site observations, and interviews. Pursuant to the *2021 CEQR Technical Manual*, the Phase I ESA is conducted in accordance with the standards established by the current ASTM Phase I ESA Standard and includes research and field observations to determine whether the site may contain contamination from either past or present activities on the site or as a result of activities on adjacent or nearby properties. If a potential Recognized Environmental Condition (REC) is identified during this assessment, then building any subsurface investigations are usually conducted as part of a Phase II ESA to confirm the presence and extent of the contamination.

Analysis

The Project Site, consisting of Block 76, Lot 11, is approximately 13,500 square feet and is owned by the Applicant. Bock 76, Lot 11 has 130 feet of frontage along 46th Avenue and is improved with a 4,800 GSF, one-story building tenanted by TD Bank and constructed circa 1931.

The Proposed Actions include a proposed zoning map amendment that would rezone Block 76, Lot 11 from an M1-4/R6B zoning district to an R7X/C2-5 zoning district and a zoning text amendment to establish a Mandatory Inclusionary Housing (MIH) area at 21-31 46th Avenue (Queens Block 76, Lot 11) within the Long Island City neighborhood of Queens, NY, Community District 2.

The Proposed Project would consist of the demolition of the existing building and the construction of an 11-story-plus-cellar, 112-foot-tall, 99,030 GSF (80,846 ZSF, 5.98 FAR) mixed-use building containing approximately 8,567 GSF (8,000 ZSF, 0.59 FAR) of commercial or community facility floor area on the ground floor and 76,963 GSF (72,846 ZSF, 5.39 FAR) of residential floor area on floors 2 to 11. Up to twenty-two (22) residential accessory parking spaces and thirty-five (35) bicycle parking spaces would be provided at the cellar of 13,500 GSF. There would be 70 dwelling units provided in the new mixed-use building, with 18-21units (25-30%) set aside as affordable units.

Block 76, Lot 11 was considered a potential development site in the 2004 *Hunters Point Subdistrict Rezoning Environmental Assessment Statement* (CEQR No. 04DCP011Q). As discussed in the *Hunters Point Subdistrict Rezoning Environmental Assessment Statement,* due

to prior historical uses on the site, hazardous materials contamination may exist. Therefore, an (E) Designation (E-129) for hazardous materials was placed on Block 76, Lot 11.

The (E) Designation requires that pre-development activities at the Project Site include a testing protocol, and, if necessary, a remediation determination and protocol to the satisfaction of New York City Department of Environmental Protection (NYCDEP) before the issuance of a building permit.

The language of the (E) Designation reads:

> *The following tasks must be undertaken by the fee owner(s) of the lot which is restricted by this (E) Designation. They must be completed prior to any demolition or excavation activities on the lot for the proposed development. These tasks must be completed in order to determine if contamination exists on the aforementioned designated sites, as well as to ensure the completion of any appropriate remediation prior to occupancy.*
>
> ***Task 1 – Sampling Protocol***
>
> *A. Petroleum*
>
> *A soil, soil gas, and groundwater testing protocol (including a description of methods), and a site map with all sampling locations represented clearly and precisely, must be submitted to the NYCDEP by the fee owner(s) of the lot which is restricted by this (E) Designation for review and approval.*
>
> *A site map with the sampling locations clearly identified and a testing protocol with a description of methods for soil, soil gas, and groundwater must be submitted by the fee owner(s) of the lot which is restricted by the (E) Designation to the NYCDEP for review and approval.*
>
> *B. Non-Petroleum*
>
> *The fee owner(s) of the lot restricted by this (E) Designation will be required to prepare a scope of work for any sampling and testing needed to determine if contamination exists and to what extent remediation may be required. The scope of work will include all relevant supporting documentation, including site plans and sampling locations. This scope of work will be submitted to NYCDEP for review and approval prior to implementation. It will be reviewed to ensure that an adequate number of samples will be collected and that appropriate parameters are selected for laboratory analysis. For all non-petroleum (E) Designated sites the three generic NYCDEP soil and groundwater sampling protocols should be followed.*
>
> *A scope of work for any sampling and testing to be completed, which will determine the extent of on-site contamination and the required remediation, must be prepared by the fee owner(s) of the lot restricted by this (E) Designation. The scope of work will include*

the following: site plans, sampling locations, and all other relevant supporting documentation. The scope of work must be submitted to the NYCDEP for review and confirmation that an adequate testing protocol (i.e., number of samples collected, appropriate parameters for laboratory analysis) has been prepared. The NYCDEP must approve the scope of work before it can be implemented.

For non-petroleum (E) Designated sites, one of the three generic soil and groundwater sampling protocols prepared by the NYCDEP should be followed.

The protocols are based on three types of releases to soil and groundwater, including: the release of a solid hazardous material to ground surface; the release of a liquid hazardous material to the ground surface; and the release of a hazardous material to the subsurface (i.e., storage tank or piping). The type of release defines the areas of soil to be sampled from surface, near-surface, to subsurface. Additionally, it determines the need for groundwater sampling.

A written approval of the sampling protocol must be received from the NYCDEP before commencement of sampling activities. Sample site quantity and location should be determined so as to adequately characterize the site, the source of contamination, and the condition of the remainder of the site. After review of the sampling data, the characterization should have been complete enough to adequately determine what remediation strategy (if any) is necessary. Upon request, NYCDEP will provide guidelines and criteria for choosing sampling sites and performing sampling.

Finally, a Health and Safety Plan must be devised and approved by the NYCDEP before the commencement on any on-site activities.

Task 2 – Remediation Determination and Protocol

After sample collection and laboratory analysis have been completed on the soil and/or groundwater samples collected in Task 1, a summary of the data and findings in the form of a written report must be presented to the NYCDEP for review and approval. The NYCDEP will provide a determination as to whether remediation is necessary.

If it is determined that no remediation activities are necessary, a written notice will be released to that effect. However, if it is the NYCDEP's determination that remediation is Necessary, the fee owner(s) of the lot restricted by the (E) Designation must submit a proposed remediation plan to the NYCDEP for review and approval. Once approval has been obtained and the work completed, the fee owner(s) of the lot restricted by the (E) Designation must provide proof to the NYCDEP that the work has been completed satisfactorily.

2.6.1 Conclusion

The (E) Designation requirements described above would serve to avoid the potential for significant adverse impacts relating to hazardous materials. The Applicant would complete the requirements specified in the (E) Designation and submit to the NYCDEP for review and approval prior to beginning construction. In addition, demolition of the existing building on Project Site would follow applicable regulatory requirements to address management of any potential hazardous substances in a manner to avoid impacts to workers, the community, and the environment. Therefore, no further analysis of hazardous materials is required.

2.7 Air Quality

When assessing the potential for air quality significant impacts, the *2021 CEQR Technical Manual* seeks to determine a Proposed Action's effect on ambient air quality, or the quality of the surrounding air. Ambient air can be affected by motor vehicles, referred to as "mobile sources," or by fixed facilities, referred to as "stationary sources." This can occur during the operation and/or construction of a project being proposed. The pollutants of most concern are carbon monoxide, lead, nitrogen dioxide, ozone, relatively coarse inhalable particulates (PM_{10}), fine particulate matter ($PM_{2.5}$), and sulfur dioxide. The *2021 CEQR Technical Manual* generally recommends an assessment of the potential impact of mobile sources on air quality when an action increases traffic or causes a redistribution of traffic flows, creates any other mobile sources of pollutants (such as diesel train usage), or adds new uses near mobile sources (e.g., roadways, parking lots, garages). The *2021 CEQR Technical Manual* generally recommends assessments when new stationary sources of pollutants are created, when a new use might be affected by existing stationary sources, or when stationary sources are added near existing sources and the combined dispersion of emissions would impact surrounding areas.

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered. The analysis framework, as mandated by the State Environmental Review Act, follows the *2021 CEQR Technical Manual*.

2.7.1 Mobile Sources

According to the *2021 CEQR Technical Manual*, projects, whether site-specific or generic, may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic; create any other mobile sources of pollutants (such as diesel trains, helicopters etc.); or add new uses near mobile sources (roadways, garages, parking lots, etc.). Projects requiring further assessment include:

- Projects that would result in placement of operable windows, balconies, air intakes or intake vents generally within 200 feet of an atypical source of vehicular pollutants.
- Projects that would result in the creation of a fully or partially covered roadway, would exacerbate traffic conditions on such a roadway, or would add new uses near such a roadway.
- Projects that would generate peak hour auto traffic or divert existing peak hour traffic of 160 or more auto trips in this area of the City.
- Projects that would generate peak hour heavy- duty diesel vehicle traffic or its equivalent in vehicular emissions resulting from 12 or more heavy-duty diesel vehicles

(HDDVs) for paved roads with average daily traffic of fewer than 5,000 vehicles, 19 or more HDDVs for collector roads, 23 or more HDDVs for principal and minor arterials, or 23 or more HDDVs for expressways and limited-access roads.

- Projects that would result in new sensitive uses (e.g., schools or hospitals) adjacent to large existing parking facilities or parking garage exhaust vents.
- Projects that would result in parking facilities or applications requesting the grant of a special permit or authorization for parking facilities; or projects that would result in a sizable number of other mobile sources of pollution (e.g., a heliport or a new railroad terminal).
- Projects that would substantially increase the vehicle miles traveled in a large area.

The Proposed Actions would not result in operable windows or air intakes within 200 feet of an atypical roadway. It would not result in creation of a covered roadway or affect any covered roadway. Peak hour trip generation would be below the 160-car threshold, as per the transportation section, as potentially warranting further assessment fo CO (see EAS Short Form screen). The Proposed Actions would not result in an incremental generation of HDDVs that would exceed the CEQR thresholds for $PM_{2.5}$. The Proposed Project would not create a new sensitive receptor adjacent to large parking facilities. The Proposed Project would result in creation of a new parking facility with less than 85 spaces. Therefore, a detailed mobile source analysis would not be warranted.

2.7.2 Stationary Sources

According to the *2021 CEQR Technical Manual*, projects may result in stationary source air quality impacts when one or more of the following occurs:

- New stationary sources of pollutants are created (e.g., emission stacks for industrial plants, hospitals, and other large institutional uses).
- Certain new uses near existing (or planned future) emissions stacks are introduced that may affect the use.
- Structures near such stacks are introduced so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected.
- Fossil fuels (fuel oil or natural gas) for heating/hot water, ventilation, and air conditioning systems are used.
- Large emission sources are created (e.g., solid waste or medical-waste incinerators, cogeneration facilities, asphalt/concrete plants, or power-generating plants, etc.).
- New sensitive uses are located near a large emission source.

- Medical, chemical, or research labs are created or result in new uses being located near them.
- Operation of manufacturing or processing facilities is created.
- New sensitive uses created within 400 feet of manufacturing or processing facilities.
- New uses created within 400 feet of a stack associated with commercial, institutional, or residential developments (and the height of the new structures would be similar to or greater than the height of the emission stack).
- Potentially significant odors are created.
- New uses near an odor-producing facility are created.
- "Non-point" sources that could result in fugitive dust are created.
- New uses near nonpoint sources are created.
- A generic or programmatic action is introduced that would change or create a stationary source or that would expose new populations to such a station

Analysis Framework

The Proposed Project consists of redevelopment of the Applicant's site (Block 76, Lot 11) with a 99,030 GSF or 80,846 ZSF, 112-foot-tall, eleven-story plus cellar mixed-use commercial and residential building with an overall floor area ratio (FAR) of 5.98. The ground floor would feature a 8,567 GSF (8,000 ZSF) commercial retail space (0.59 commercial FAR). The second through eleventh floors would contain 70 dwelling units. The parking garage at the cellar level would include 22 accessory parking spaces.

Fossil fuel could potentially be used in the Proposed Development's heating/hot water, ventilation, and air conditioning (HVAC) systems. As such, the stationary source analysis evaluated the potential of the HVAC system(s) of the Proposed Project to significantly impact nearby sensitive land uses.

Air Pollutants and Applicable Standards/Guidelines

<u>Criteria Pollutants</u>

The U.S. Environmental Protection Agency (EPA) has identified six pollutants, known as criteria pollutants which are of concern nationwide and established threshold concentrations based upon adverse effects on human health. The six pollutants and their characteristics are:

- Carbon Monoxide (CO) is mainly produced by motor vehicles from the incomplete combustion of gasoline. The impact of CO on the ambient air is analyzed next to roadways, intersections, parking lots, and parking garages vents as these locations are the most affected.

- Nitrogen Dioxide (NO_2) is a main concern related to the burning of natural gas. Emitted NOx from the burning of fossil fuel gradually convert to NO2 in a chemical reaction that is affected by ozone concentration and the presence of sunlight. In a micro scale analysis, buildings HVAC systems are analyzed for NO2 impact.
- Ozone (O_3) is formed by chemical reaction between hydrocarbons and nitrogen oxides and its impact is analyzed on a regional scale by monitoring stations.
- Lead (Pb) in the ambient air is monitored on a regional level. In a project scale analysis, impact due to Lead concentration levels are analyzed if a new source, such as lead smelters, is introduced into the environment or if a project is located next to a lead emitter.
- Particulate Matter emissions are associated with both stationary sources and mobile sources. Two sizes of particulate matters are analyzed: Inhalable Particles (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$), where the subscript number refers to the diameter of the particulate matter in micrometers.
- Sulfur Dioxide (SO_2) emission is principally associated with stationary sources that burn oil or coal. These fuels contain sulfur that bond to oxygen atoms in the burning process.

As the Clean Air Act (CAA) requires, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by the EPA. New York State has adopted the NAAQS as the State ambient air quality standard. The NO_2 and $PM_{2.5}$ standards, the pollutants for which detailed analysis was conducted, together with their health-related averaging periods, are presented in

Table 2.7-1.

Table 2.7-1: National and New York State Ambient Air Quality

Pollutant	Averaging Period	National and State Standards
NO_2	Maximum 1-Hour Concentration	0.10 ppm (188 μg/m^3)
	Annual Arithmetic Average	0.053 ppm (100 μg/m^3)
$PM_{2.5}$	24-Hour Concentration	35 μg/m^3
	Average of 3 Consecutive Annual Means	12 μg/m^3
Note: μg/m3 – microgram per meter cube; ppm – parts per million.		

<u>New York State Standards</u>

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the NYSDEC has established guidelines for the maximum allowable concentration of “noncriteria pollutants,” which are potentially toxic or carcinogenic pollutants. These include 188 hazardous

air pollutants (HAPs), which the EPA also regulates. The maximum allowable guidelines set maximum 1-hour and annual averaging time concentrations (February 12, 2021 publication) in the DAR-1 Annual and Short-term Guideline Concentration (AGC/SGC Table). In addition, DAR-1 also includes standards for pollutants' cumulative risk assessment (acceptable residual risk).

NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic, or duration.

NYC Interim Guidelines

In addition to the NAAQS, the *2021 CEQR Technical Manual* requires that projects subject to CEQR apply a $PM_{2.5}$ significant impact criteria(*de minimis*), which is based on concentration increments. The *CEQR Technical Manual de minimis* criteria for stationary source set allowable incremental increases in $PM_{2.5}$ concentrations that would result as a consequence of a proposed project. These *de minimis* are more stringent than the NAAQS and the state standards as the criteria set a maximum increase of pollutant concentration that is below the national standard. As outlined in the *2021 CEQR Technical Manual*, $PM_{2.5}$ *de minimis* for stationary source is evaluated as follow:

- Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

Background Concentrations

Determination of significant impact related to criteria pollutants accounts for pollutants in the ambient air (background concentrations). Background concentrations of NO_2 and PM2.5—the criteria pollutants of concern for an analysis of HVAC system(s) fueled by natural gas—were obtained from the NYSDEC's annual report for the nearest monitoring stations. **Table 2.7-2** shows the background concentrations.

Table 2.7-2: Background Concentrations (NYSDEC 2019 Report)

Pollutant	Averaging Period	National and State Standards	Background Concentration [1,2]	Monitoring Station
NO_2	98th Percentile of Daily Maximum 1-hour averaged over last 3 years	188 µg/m3	55.1 ppb (103.6 µg/m3)	IS 52 (Site No. 36-005-0110)
	Annual Arithmetic Mean	100 µg/m3	14.18 ppb (26.8 µg/m3)	
$PM_{2.5}$	24-Hour average of 98th percentile for last 3 years	35 µg/m3	18.7 $\mu g/m^3$	JHS 126 (Site No. 36-047-0122)
	Average of last 3 years annual means	12 µg/m3	7.6 $\mu g/m^3$	

Note:
1. NO_2 background concentration: NYSDEC. 2019. "New York State Ambient Air Quality Report for 2019." File version: 11/12/2020. extapps.dec.ny.gov/docs/air_pdf/2019airqualreport.pdf.
2. $PM_{2.5}$ background concentration: NYSDEC. 2020. "New York State Ambient Air Quality Report for 2020." File version: 4/13/2020. extapps.dec.ny.gov/docs/air_pdf/2020airqualreport.pdf.

µg/m3 – microgram per meter cube; ppb – parts per billion.

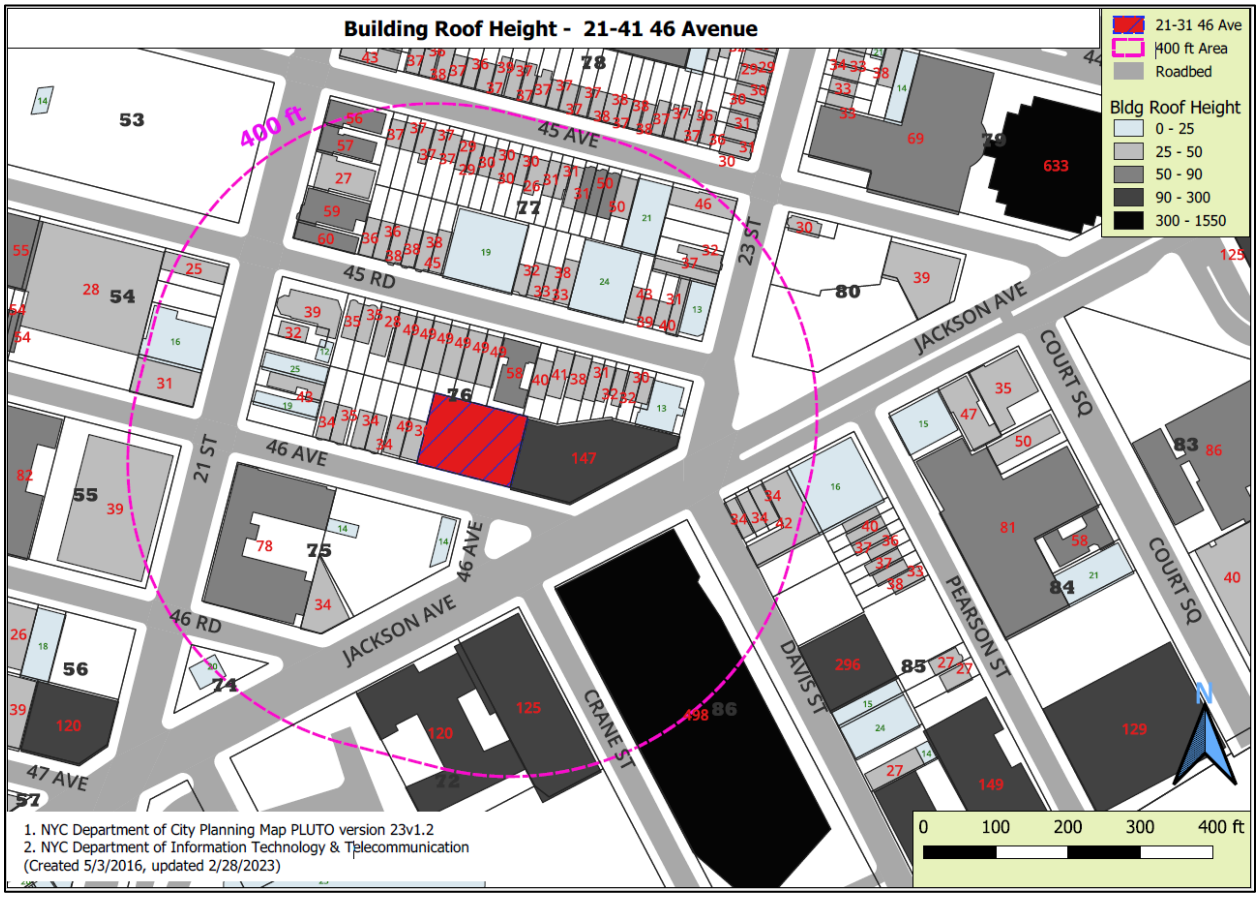
Based on the background concentration and the NYC Interim Guidelines for stationary sources, the 24-hour $PM_{2.5}$ *de minimis* is a concentration increment of 8.15 µg/m^3, and the annual $PM_{2.5}$ *de minimis* is a concentration increment of 0.3 µg/m^3.

Heating and Hot Water Systems

Per the *2021 CEQR Technical Manual*, the HVAC analysis considers the potential for emissions from the HVAC system of the proposed project to significantly impact existing land uses (project-on-existing), and the proposed project's potential to significantly impact each other (project-on-project). Based on CEQR guidelines, a preliminary screening analysis is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system(s) boiler emissions can be significant. The screening analysis determines the threshold of development size below which the action would not have a significant impact. This CEQR screening procedure applies to buildings that are not less than 30 feet from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

There is an eleven-story building located directly east of the Affected Area at 22-43 Jackson Avenue (Block 76, Lot 7509). As this existing building is located less than 30 feet from the Affected Area, a detailed HVAC system analysis is warranted. **Figure 2.7-1** shows existing building footprints and roof heights within 400 feet of the Development Site.

Figure 2.7-1: Existing building roof heights[7] within 400 feet of the Development Site



Air Dispersion Analysis

A detailed analysis was conducted to evaluate the Proposed project's HVAC system(s) potential for significant adverse impact on existing land uses. AERMOD, processor version 23132, was used in the analysis. AERMOD application incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources and simple and complex terrain. The model was run with the regulatory default option, where applicable, and for both with and without downwash effects options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses used five consecutive years of meteorological data (2017-2021) obtained from NYSDEC. Surface data used in the analysis is from LaGuardia Airport, and upper air data is from Brookhaven station, New York. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the five years.

[7] City of New York, Office of Technology and Innovation (2016). "Building-Footprints." opendata.cityofnewyork.us, Feb. 28, 2023.

Population in New York City, obtained from the New York City Department of City Planning (DCP) 2020 annual report, was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

Natural gas was assumed to be the type of fossil fuel, if any, used in the Proposed Development HVAC system(s), and the system was assumed to be equipped with low-NOx (15 ppm) burners. The pollutants of concern for natural gas-fueled boilers are nitrogen dioxide (NO_2) and $PM_{2.5}$. The HVAC system's total energy capacity was calculated based on the Proposed Project gsf and an energy consumption rate of 60.3 thousand Btu per gsf,[8] and all fuel was assumed to be consumed during the 100-day heating season (2,400 hours) based on the *CEQR Technical Manual.* $PM_{2.5}$ emission factor was obtained from the EPA AP-42 manual for external combustion sources. NOx emission of the low-NOx (15 ppm) HVAC system was based on factors used to calculate the emission of low-NOx 30 ppm boiler, obtained from the New York City Department of City Planning (DCP). Based on the above, NOx emission was calculated using EPA *Method 19—Determination of sulfur dioxide removal efficiency and particulate, sulfur dioxide and nitrogen oxides emission rates, Equation 19-1*, where a conversion factor of 1.194E-07 (Table 19–1—Conversion Factors for Concentration) was used to convert concentration in ppm to pounds per square feet.[9] **Table 2.7-5** shows the HVAC system emission rates.

Table 2.7-5: HVAC Systems Short-term and Annual Emission Rates

Floor Area (gsf)	HVAC System	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
99,030 gsf residential	Natural Gas, low-NOx (15 ppm)	NO_2	5.71E-03	1.56E-03
		$PM_{2.5}$	2.34E-03	6.40E-04

The boiler stack diameter was estimated based on values obtained from the New York City Department of Environmental Protection (NYCDEP) "CA Permit" database.[10] The boiler stack exit temperature was estimated based on a low-NOx boiler specification.[11] The boiler stack was placed 3 feet above the roofline and as close as possible to the receiving building. If a significant adverse impact was predicted, the stack(s) was set back from the receiving building.

The Proposed Project was modeled as buildings that cover its entire property (wall façade placed on the outer lot lines). Buildings in the surrounding area were accounted for in the downwash effect on plum dispersions (BPIP). Receptors on the receiving building (building at

[8] Energy Information Administration (2022). "Table US1. Total Energy Consumption, Expenditures, and Intensities, 2005 Part 1: Housing Unit Characteristics and Energy Usage Indicators." *2005 Residential Energy Consumption Survey: Energy Consumption and Expenditures Tables.*
[9] Appendix A–7 to Part 60, Title 40.
[10] NYCDEP "CA Permit" database obtained from the New York City Department of City Planning, February 2020.
[11] Aerco. "Benchmark 1500 and 2000." aerco.com/products/hvac-hot-water-solutions/boilers/benchmark/benchmark-1500-and-2000#jl_439b2059-2f3c-46ca-a4d6-2e2f0d0af485

22-43 Jackson Avenue) were placed around the property line (Block 76, Lot 7509) from the ground floor to rooftop height in spaced intervals. Placing the receptors at the property line ensured that maximum pollutant concentrations are predicted at the building's tower portion. The U.S. Geological Service (USGS) National Elevation Dataset (NED) 1/3 arc-second resolution (GeoTIFF dataset) was used to process buildings' base elevations. The base elevations of the receptors and stacks were set to their buildings' base elevations.

One-hour NO_2 concentration was predicted using a Tier 1 approach, which is the most conservative. The model was run twice, with the building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The NO_2 modeled concentrations were added to the background concentrations, and the result was evaluated with the NAAQS. $PM_{2.5}$ modeled concentrations were evaluated with the *de minimis* for stationary source. The HVAC dispersion analysis results are shown in **Table 2.7-6**.

Table 2.7-6: HVAC Dispersion Analysis Results

Pollutant	Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$) (1,2)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
1-hour NO_2	53.14	103.6	156.74	188	NAAQS
Annual NO_2	0.71	26.8	27.51	100	NAAQS
24-hour $PM_{2.5}$	5.43	18.7	5.4	8.15	*de minimis*
Annual $PM_{2.5}$	0.29	7.6	0.29	0.3	*de minimis*

Note:
1. NO_2 background concentration: NYSDEC. 2019. "New York State Ambient Air Quality Report for 2019." File version: 11/12/2020. extapps.dec.ny.gov/docs/air_pdf/2019airqualreport.pdf.
2. $PM_{2.5}$ background concentration: NYSDEC. 2020. "New York State Ambient Air Quality Report for 2020." File version: 4/13/2020. extapps.dec.ny.gov/docs/air_pdf/2020airqualreport.pdf.
3. $\mu g/m^3$ – microgram per meter cube.

Table 2.7-6 shows that the NO_2 predicted concentrations are within the NAAQS, and $PM_{2.5}$ concentrations do not exceed the *de minimis*. These results were predicted with specific requirements to ensure no impact(s) would occur. The air quality environmental requirement(s) (E-Designation) are presented in the next section (see - "Heating and Hot Water Systems Conclusion").

Heating and Hot Water Systems Conclusion

Based on the analysis, conditions associated with the Proposed Action HVAC system(s) would not result in any violations of the ambient air quality standards, with the following environmental requirement(s) adhered to:

(E) Designation

Block 76, Lot 11: Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating and air

conditioning (HVAC) system and hot water equipment and must be fitted with low NOx (15 ppm) burners, ensure that the HVAC system and hot water equipment stack is located at the building's highest level and at a minimum of 115 feet above grade, and that the stack is located at least 80 feet from the eastern lot line of Block 76, Lot 11 to avoid any potential significant adverse air quality impacts.

2.7.3 Industrial Emissions

The Proposed Actions would introduce a sensitive land use into the area. Accordingly, a preliminary screening was conducted to determine if there are any potential sources of industrial process emissions that could affect project occupants. Industrial sources were identified through a site visit within a 400-foot Study Area and the New York City Department of Environmental Protection (DEP) Clean Air Tracking System (CATS) search.

400-Foot Study Area

The Affected Area is located within a M1-4/R6B zoning district, and the surrounding area is a mixture of residential, commercial, and institutional properties. The 400-foot radius was screened for potential sources of industrial emissions and is shown in **Figure 2.7-2**. Based on field observations and reviews of DCP land use maps, 4 sites were identified as industrial/manufacturing land uses. Based on the review of the DEP CATS database, there was no record of any permits for any site listed in **Table 2.7-7.**

Figure 2.7-2: Industrial Emissions Screening

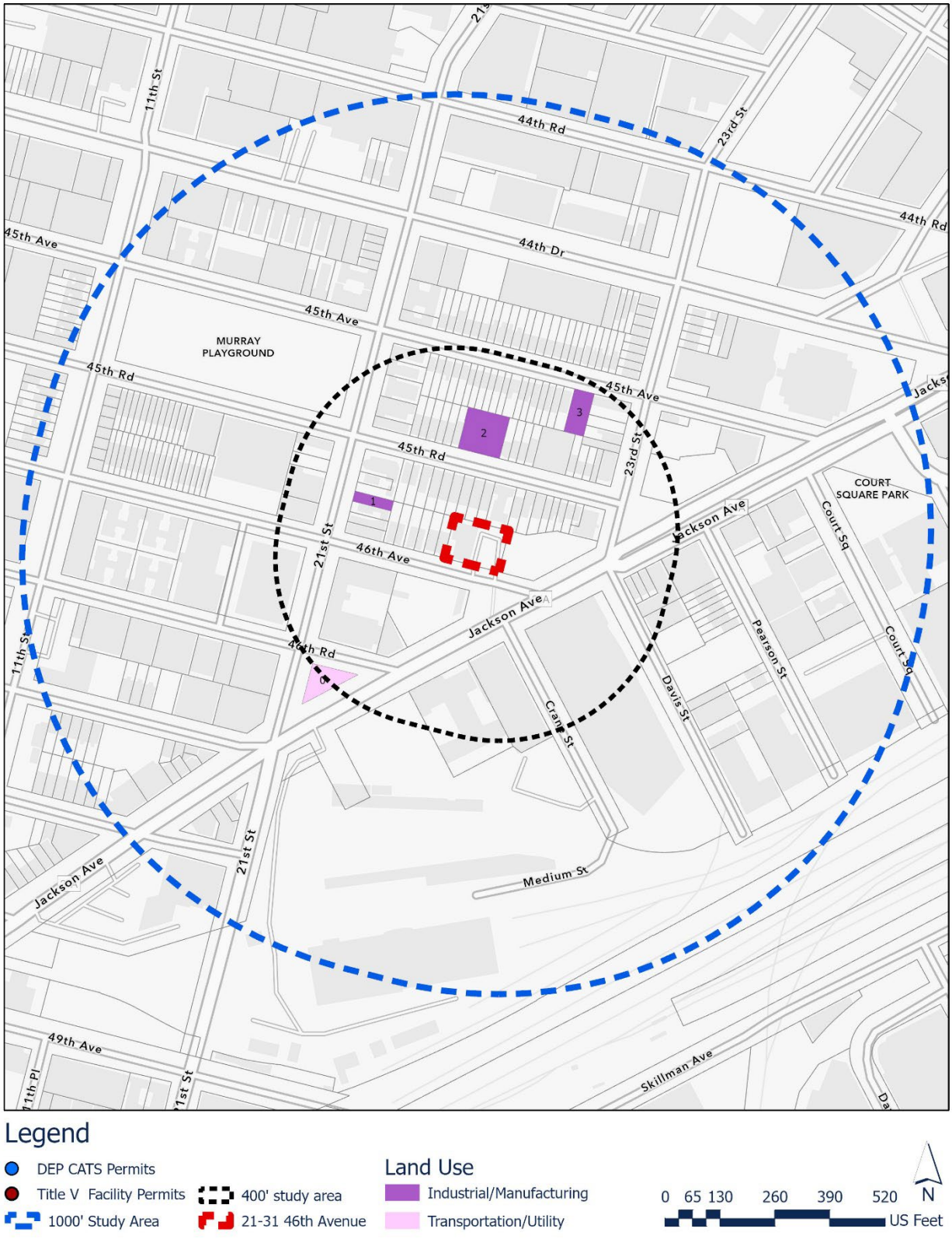


Table 2.7-7: Industrial/Manufacturing within 400 feet of the Affected Area

Site ID	Block	Lot	Address	Current Use	Industrial Permit Search Results
1	76	4	45-37 21st Street	Warehouse – Contractors Warehouse	No Record
2	77	12	21-29 45th Street	Photo Studio	No Record
3	77	35	21-50 45th Avenue	Clothing store	No Record
4	74	1	21-10 46th Road	Gas Station	No Record

1,000-Foot Study Area

A search of the EPA Envirofacts ICIS-AIR database and the Toxics Release Inventory (TRI) was conducted for all parcels within the 400 and 1000-foot Study Area. The Envirofacts ICIS Air Database contains compliance and permit data for stationary sources of air pollution (such as electric power plants, steel mills, factories, and universities) regulated by EPA, state and local air pollution agencies. The Toxics Release Inventory (TRI) is a publicly available database containing information on toxic chemical releases and other waste management activities in the United States.

The search did not identify any large or major sources of industrial emissions or odor-producing facilities within 1,000 feet of the Affected Area. As such, no further analysis of large emissions sources is warranted.

2.7.4 Industrial Emissions Conclusion

As indicated in **Table 2.7-7**, there are no active industrial emissions permits within 400-feet of the Affected Area. No large or major industrial emission sources were identified within a 1,000-foot radius of the Affected Area. Additionally, there is no evidence present to conclude that there are illegal unpermitted air emissions present in the study area. Therefore, significant adverse impacts related industrial air toxic emissions would not occur.

2.8 Noise

Introduction

The following noise analysis was conducted to assess the potential for adverse noise impacts related to the requested zoning map and text amendment affecting Block 76, Lot 11 in the Long Island City neighborhood of Queens Community District 2. The Affected Area consists of Block 76, Lot 11, a 13,500 square feet (SF) rectangular area located on a block bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. The proposed zoning map amendment would rezone the entirety of the Affected Area from an M1-4/R6B zoning district to an R7X/C2-5 zoning district. The Applicant is also proposing a zoning text amendment to Appendix F of the New York City Zoning Resolution to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area.

The Proposed Project consists of redevelopment of the Applicant's site (Block 76, Lot 11) with a 99,030 GSF or 80,846 ZSF, 112-foot-tall, eleven-story plus cellar mixed-use commercial and residential building with an overall FAR of 5.98. The ground floor would feature an 8,567 GSF (8,000 ZSF) commercial retail space (0.59 commercial FAR). The second through eleventh floors would contain 70 dwelling units. Overall, there would be a total of 76,963 GSF or 72,846 ZSF of residential floor area (5.39 residential FAR) and 70 dwelling units within the building, of which 25-30% (18-21 units) would be set aside as permanently affordable units for households with income averaging 60%-80% AMI depending on the selected MIH Option is selected. The Proposed Project would contain a total of 22 enclosed vehicular parking spaces located in the cellar level and accessed via a ramp on the western portion of the site from a curb cut along 46th Avenue.

Framework of Noise Analysis

Noise is defined as any unwanted sound, and sound is defined as any pressure variation that the human ear can detect. Humans can detect a large range of sound pressures, from 20 to 20 million micropascals, but only those air pressure variations occurring within a particular set of frequencies are experienced as sound. Air pressure changes that occur between 20 and 20,000 times a second, stated as units of Hertz (Hz), are registered as sound.

Because the human ear can detect such a wide range of sound pressures, sound pressure is converted to sound pressure level (SPL), which is measured in units called decibels (dB). The decibel is a relative measure of the sound pressure with respect to a standardized reference quantity. Because the dB scale is logarithmic, a relative increase of 10 dB represents acoustic energy that is 10 times higher. However, humans do not perceive a 10-dB increase as 10 times louder. Instead, they perceive it as twice as loud.

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz)

and are most sensitive to frequencies in the 1,000- to 5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common frequency weightings used are the A- and C-weightings. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighting is the most commonly used for environmental measurements, and sound levels measured using this weighting are denoted as dBA. The letter "A" indicates that the sound has been filtered to reduce the strength of very low and very high-frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high-frequency bands are significantly affected by C-weighting. **Table 2.8-1** notes the decibel levels of common noise sources.

Table 2.8-1: Noise Levels of Common Sources[12]

Sound Source	SPL (dB(A))
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Notes: A change in 3dB(A) is a just noticeable change in SPL. A change in 10 dB(A)Is perceived as a doubling or halving in SPL.	

The following are typical human perceptions of dB(A) relative to changes in noise level:

- 3 dB(A) change is the threshold of change detectable by the human ear;
- 5 dB(A) change is readily noticeable; and
- 10 dB(A) increase is perceived as a doubling of the noise level.

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law. In a large open area with no obstructive or reflective surfaces, it

[12] Source: *2021 CEQR Technical Manual*

is a general rule that at distances greater than 50 feet, the SPL from a point source of noise drops off at a rate of 6 dB with each doubling of distance away from the source. For "line" sources, such as vehicles on a street, the SPL drops off at a rate of 3 dBA with each doubling of the distance from the source. Sound energy is absorbed in the air as a function of temperature, humidity, and the frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. The drop-off rate also will vary with both terrain conditions and the presence of obstructions in the sound propagation path.

The SPL that humans experience typically varies from moment to moment. Therefore, various descriptors are used to evaluate noise levels over time. Some typical descriptors are defined below.

- L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity level. High noise levels during a measurement period will have a greater effect on the L_{eq} than low noise levels. L_{eq} has an advantage over other descriptors because L_{eq} values from various noise sources can be added and subtracted to determine cumulative noise levels.
- $L_{eq(24)}$ is the continuous equivalent sound level over a 24-hour time period.
- Lmax is the highest SPL measured during a given period of time. It is useful in evaluating Leqs for time periods that have an especially wide range of noise levels.
- L_{dn} is the day-night equivalent sound level, defined as a 24-hour continuous Leq with a 10 dB adjustment added to all hourly noise levels recorded between the hours of 10 PM and 7 AM. This 10 dB addition accounts for the extra sensitivity people have to noise during typical sleeping hours.
- DNL is the annual average day-night average sound level. Aircraft noise around airports is usually mapped out in terms of DNL, which are normally depicted as noise contours on a map.

The sound level exceeded during a given percentage of a measurement period is the percentile-exceeded sound level (L_X). Examples include L_{10}, L_{50}, and L_{90}. L_{10} is the A-weighted sound level that is exceeded 10% of the measurement period.

Noise Standards and Guidelines

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the CEQR noise exposure guidelines for exterior noise levels. As shown in **Table 2.8-2** below, noise standards classify noise exposure into four categories based on noise level limits and land use, for vehicular traffic, rail, and aircraft noise sources: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable, Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels.

Recommended noise attenuation values for buildings are designed to maintain interior L_{10} noise levels of 45 dB(A) or below or interior Ldn noise levels of 40 dB(A) or below depending on the noise source, as shown below in **Table 2.8-3**.

Table 2.8-2: Noise Exposure Guidelines for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
1. Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA	----------DNL ≤ 60 dBA----------		----------60 < DNL ≤ 65 dBA----------		(I) 65 < DNL ≤ 75 dBA		---------- 75 dBA < DNL ----------
2. Hospital, nursing home		$L_{10} \leq 55$ dBA		55 < L_{10} ≤ 65 dBA		65 < L_{10} ≤ 80 dBA		L_{10} > 80 dBA	
3. Residence, residential hotel, or motel	(7 AM to 10 PM)	$L_{10} \leq 65$ dBA		65 < L_{10} ≤ 70 dBA		70 < L_{10} ≤ 80 dBA		L_{10} > 80 dBA	
	(10 PM to 7 AM)	$L_{10} \leq 55$ dBA		55 < L_{10} ≤ 70 dBA		70 < L_{10} ≤ 80 dBA		L_{10} > 80 dBA	
4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas only[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

Notes:

(i) In addition, any new activity shall comply with Impact Thresholds detailed in Section 410.

[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.

[2] Tracts of land where serenity and quiet are extraordinarily important and serve as important public need, and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes.

[3] One may use the FAA-approved DNL contours supplied by the Port Authority of New York and New Jersey (PANYNJ), or the noise contours may be computed from the federally approved Aviation Environmental Design Tool (AEDT) Computer Model using flight data supplied by the PANYNJ.

[4] External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are listed by octave bands).

Sources: New York City Department of Environmental Protection (adopted policy 1983).

Table 2.8-3: Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Vehicular Traffic	70 < L10 ≤ 73	73 < L10 ≤ 76	76 < L10 ≤ 78	78 < L10 ≤ 80	80 < L10
Aircraft[A]	65 < DNL ≤ 68	68 < DNL ≤ 71	71 < DNL ≤ 73	73 < DNL ≤ 75	75 < DNL
Train	65 < Ldn ≤ 68	68 < Ldn ≤ 71	71 < Ldn ≤ 73	73 < Ldn ≤ 75	75 < Ldn
Attenuation[B]	(i) 28 dB(A)	(ii) 31 dB(A)	(iii) 33 dB(A)	(iv) 35 dB(A)	See Note c

Note:

A. DNL descriptor based on average values of Ldn over a year period.

B. The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All of the above categories require a closed window situation and hence an alternate means of ventilation.

C. The required attenuation value is the difference between Lbuild and Linterior, using the appropriate noise descriptor Where:

Lbuild is the projected noise level under the build condition rounded up to the whole number

Linterior is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise)

2.8.1 Initial Impact Screening

Future No-Action Condition

In the future without the Proposed Actions, existing conditions on the Project Site would remain.

Future With-Action Condition

The Proposed Project consists of redevelopment of the Applicant's site (Block 76, Lot 11) with a 99,030 GSF or 80,846 ZSF, 112-foot-tall, eleven-story plus cellar mixed-use commercial and residential building with an overall FAR of 5.98. The ground floor would feature an 8,567 GSF (8,000 ZSF) commercial retail space (0.59 commercial FAR). The second through eleventh floors would contain 70 dwelling units. Overall, there would be a total of 76,963 GSF or 72,846 ZSF of residential floor area (5.39 residential FAR) and 70 dwelling units within the building, of which 25-30% (18-21 units) would be set aside as permanently affordable units for households with

income averaging 60%-80% AMI depending on the selected MIH Option is selected. The Proposed Project would contain a total of 22 enclosed vehicular parking spaces located in the cellar level and accessed via a ramp on the western portion of the site from a curb cut along 46th Avenue.

Stationary Sources

The *2021 CEQR Technical Manual* states that based upon previous studies, unless existing ambient noise levels are very low and/or stationary source levels are very high (and there are no structures that provide shielding), it is unusual for stationary sources to have significant impacts at distances beyond 1,500 feet. A detailed analysis may be appropriate if the Proposed Project would: cause a substantial stationary source (i.e., unenclosed mechanical equipment for manufacturing or building ventilation purposes, playground, etc.) to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses. Machinery, mechanical equipment, heating, ventilating and air-conditioning units, loudspeakers, new loading docks, and other noise associated with building structures may also be considered in a stationary source noise analysis. Impacts may occur when a stationary noise source is near a sensitive receptor and is unenclosed.

No unenclosed stationary noise sources of concern were observed during field inspections. As the Project Site is not subject to high ambient noise levels from any nearby stationary source, no stationary source noise impacts from surrounding uses are anticipated. Additionally, it is assumed that the building mechanical systems (i.e., HVAC systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code, the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Actions would not result in any significant adverse noise impacts related to building mechanical equipment.

Mobile Sources

Pursuant to Section 111 of the *2021 CEQR Technical Manual*, mobile sources are those noise sources that move in relation to a noise-sensitive receptor—principally automobiles, buses, trucks, aircraft, and trains. Each has its own distinctive noise character, and, consequently, an associated set of noise assessment descriptors.

For mobile sources, an initial noise assessment may be appropriate if a proposed action would generate additional project-generated vehicular traffic in an area where roadways currently carry no or very low traffic volumes, or where a nearby receptor would potentially be impacted by high ambient noise levels.

Vehicular traffic and rail traffic are the predominant sources of noise in the area. Therefore, the noise analysis presented in this chapter focuses on the operational noise effects of the proposed action to determine the level of building attenuation necessary to ensure that interior noise levels satisfy CEQR requirements. The Proposed Actions are not expected to increase existing noise passenger car equivalents (PCEs) by greater than 100%, and would therefore not result in significant adverse noise impacts associated with project-generated vehicles.

2.8.2 Noise Monitoring Results

Measurement Location and Equipment

Because the predominant noise sources in the area of the Project Site consist of vehicular traffic, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day. Location One (1) was collected for a 24-hour period on an elevated lift at the approximate height of the nearby elevated rail line. Location Two (2) was collected for 1-hour periods along 46th Avenue. The noise monitoring locations are shown in **Figure 2.8-1** to Error! Reference source not found. below.

Noise monitoring was conducted using a Type 1 Casella CEL-633 sound level meters with wind screens. The monitors were placed on a tripod at a height of approximately four feet above the ground, away from any other noise-reflective surfaces. The monitors were calibrated prior to and following each monitoring session. Periods of peak vehicular around the Project Stite constitute a worst-case condition for noise.

Figure 2.8-1: Noise Monitoring Locations



Figure 2.8-2: Location 1 – Noise Monitor Location Photos (Elevated)



Figure 2.8-3: Location 2 – Noise Monitor Location Photos (46th Avenue)



Existing Conditions

Monitoring was conducted during typical midweek conditions, on Wednesday, November 15 and Thursday, November 16, 2023. The weather was dry and wind speeds were moderate during all monitoring periods. **Table 2.8-4** to **Table 2.8-5** below contains the results for the measurements taken at Location 1 and Location 2.

Table 2.8-4: Noise Levels in dBA at Location 1

Start Date & Time	LAeq	LASmin	LAs 10%	LAS 50%	LAS 90%	LASmax
11/15/2023 7:59	64.9 dB	56.0 dB	69.0 dB	61.5 dB	58.0 dB	76.7 dB
11/15/2023 8:59	64.1 dB	56.4 dB	68.0 dB	61.0 dB	58.0 dB	72.9 dB
11/15/2023 9:59	62.0 dB	54.4 dB	65.0 dB	60.0 dB	57.0 dB	79.7 dB
11/15/2023 10:59	63.3 dB	55.3 dB	65.0 dB	61.0 dB	58.0 dB	85.3 dB
11/15/2023 11:59	63.2 dB	56.3 dB	67.0 dB	60.5 dB	58.5 dB	81.5 dB
11/15/2023 12:59	63.6 dB	55.6 dB	67.5 dB	60.0 dB	58.0 dB	81.8 dB
11/15/2023 13:59	63.8 dB	55.8 dB	68.0 dB	60.5 dB	58.0 dB	77.4 dB
11/15/2023 14:59	63.8 dB	55.6 dB	68.0 dB	60.5 dB	58.0 dB	79.5 dB
11/15/2023 15:59	64.1 dB	55.6 dB	68.5 dB	61.0 dB	58.5 dB	73.2 dB
11/15/2023 16:59	64.9 dB	55.2 dB	69.0 dB	61.0 dB	57.5 dB	81.6 dB
11/15/2023 17:59	64.3 dB	54.8 dB	69.0 dB	59.5 dB	57.0 dB	78.2 dB
11/15/2023 18:59	63.5 dB	55.6 dB	68.0 dB	59.5 dB	57.5 dB	79.3 dB
11/15/2023 19:59	62.9 dB	54.1 dB	67.5 dB	59.0 dB	57.5 dB	72.6 dB
11/15/2023 20:59	62.5 dB	54.9 dB	67.5 dB	58.5 dB	56.5 dB	73.0 dB
11/15/2023 21:59	61.6 dB	53.5 dB	67.0 dB	57.5 dB	55.5 dB	71.8 dB
11/15/2023 22:59	60.9 dB	53.0 dB	66.5 dB	56.5 dB	54.5 dB	72.7 dB
11/15/2023 23:59	59.6 dB	51.7 dB	62.5 dB	56.0 dB	54.0 dB	74.2 dB
11/16/2023 0:59	57.6 dB	51.5 dB	59.0 dB	54.5 dB	53.0 dB	73.3 dB
11/16/2023 1:59	57.7 dB	51.1 dB	58.0 dB	54.0 dB	52.5 dB	74.1 dB
11/16/2023 2:59	58.2 dB	51.6 dB	60.0 dB	54.5 dB	53.0 dB	75.4 dB
11/16/2023 3:59	58.7 dB	52.3 dB	60.5 dB	55.0 dB	53.5 dB	73.6 dB
11/16/2023 4:59	60.5 dB	53.3 dB	64.0 dB	57.0 dB	54.5 dB	74.2 dB
11/16/2023 5:59	63.1 dB	54.5 dB	68.0 dB	59.0 dB	56.0 dB	72.1 dB
11/16/2023 6:59	64.6 dB	55.8 dB	69.0 dB	61.0 dB	58.5 dB	73.8 dB
LDN	67.3					

Table 2.8-5: Noise Levels in dBA at Location 2

Wednesday, November 15, 2023			
Time	**7:59 am – 8:59 am**	**12:01 pm – 1:01 pm**	**4:31 pm – 5:31 pm**
L_{max}	85.9	87.3	87.7
L_{10}	68.0	68.0	69.0
L_{eq}	64.8	65.1	65.8
L_{50}	62.0	61.5	62.0
L_{90}	57.5	58.0	57.0
L_{min}	53.4	53.4	52.6

The traffic volumes (vehicle counts) and vehicle classifications collected during peak vehicular travel periods [morning (AM), noon (MD), and evening (PM)] concurrent with noise monitoring at Location 2 are shown below in **Table 2.8-6**.

Table 2.8-6: Traffic Volumes and Vehicle Classifications Noise Location 2

	7:59 am – 8:59 am	**12:01 pm – 1:01 pm**	**4:31 pm – 5:31 pm**
Car/ Taxi	20	14	27
Van/Light Truck/SUV	65	53	68
Medium Truck	5	0	6
Heavy Truck	1	0	0
Bus	1	0	0
Train	30	19	33

2.8.3 Conclusion

The *2021 CEQR Technical Manual* sets external noise exposure standards, which are classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. Table 19-3 of the *2021 CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise exposure levels. Recommended noise attenuation values for buildings are designed to maintain interior noise levels of 40 dB(A) or lower where train traffic is the noise source. For a residential use such as what would occur under the proposed action, an LDN of between 65 and 68 dB(A) is identified as marginally acceptable general external exposure. An LDN of between 68 and 75 dB(A) is identified as marginally unacceptable general external exposure.

The LDN at Location 1 was 67.3 dB(A). The highest recorded L_{10} at Location 2 was 69.0 dB(A) during the evening period.

To ensure that no significant adverse impacts related to noise occur as a result of the Proposed Actions, the following E-Designation would be placed on the Project Site:

The text for E-Designation would be as follows:

E-XXX

Block 76, Lot 11: In order to ensure an acceptable interior noise environment, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on all facades in order to maintain an interior L10 noise level not greater than 40 dBA for residential uses or not greater than 45 dBA for commercial office uses. In order 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, central air conditioning or air conditioning sleeves containing air conditioners.

2.9 Neighborhood Character

According to the *2021 CEQR Technical Manual*, a neighborhood character assessment considers how elements of the environment combine to create the context and feeling of a neighborhood and how a project may affect that context and feeling. Thus, to determine a project's effects on the neighborhood character, the elements that contribute to a neighborhood's context and feeling are considered together. These elements may include land use, zoning, public policy, socioeconomic conditions, open space, historic and cultural resources, urban design, visual resources, shadows, transportation, and noise. The study area for a preliminary analysis of neighborhood character is typically consistent with the study areas of the relevant technical areas under CEQR that contribute to the defining elements of the neighborhood. The study area should generally extend to a 400-foot radius around the Affected Area.

2.9.1 Preliminary Analysis

Existing Conditions

Existing land uses within the study area primarily consist of multi-family residences, mixed commercial and residential buildings, transportation and utility uses, public facilities and institutions, and industrial/warehouse uses. Industrial/warehouse buildings in the area range from 1- to 2-stories in height. The residential buildings in the study area consist of multiple-family apartments ranging from 2 to 48 stories in height and one- and two-family buildings. Jackson Avenue is a major thoroughfare in the area and contains a mix of high-density multi-family, commercial, and mixed residential and commercial uses. 21st Street is predominantly developed with light-industrial uses near the Affected Area before becoming primarily residential, commercial, and public facilities to the north and south. Similarly, 46th Avenue is developed with public facilities near the Affected Area and becomes a mixed residential and commercial area to the east and west.

The Project Site consists of one lot (Queens Block 76, Lot 11) within the Long Island City neighborhood of Queens, Community District 2. In total, the Affected Area has an area of approximately 13,500 square feet and is bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. The Project Site is currently improved with a one-story 4,800 GSF building tenanted by TD Bank as well as surface parking for the bank.

Future No-Action Condition

Under the future condition with No-Action, existing conditions on the Project Site would remain, and no changes are anticipated. Therefore, for the purposes of this analysis, it is assumed that the constituent elements of neighborhood character in the No-Action Condition would be consistent with the existing conditions.

Future With-Action Condition

In order to determine the Proposed Actions' potential effects on neighborhood character, the elements that contribute to a neighborhood's context and feeling are considered both separately and cumulatively. The examination focuses on whether a defining feature of the neighborhood's character may be significantly affected, as further described below:

- **Land Use, Zoning, and Public Policy:** The Proposed Actions would not adversely impact the neighborhood in terms of land use, zoning, or public policy. Though the proposed rezoning would effectuate development of residential and uses at a higher density than that is currently allowed within the Affected Area, the permitted uses would be in character with the existing mixed residential, commercial, light industrial, and institutional uses and the density would be consistent with the existing directly adjacent R7X/C2-5 zoning district. Accordingly, the Proposed Actions would not alter the overall land use patterns in the area or jeopardize the intent of the zoning resolution.

- **Shadows:** Defining features of the neighborhood would not be adversely affected due to potential shadow effects of the Proposed Project, either singularly or in combination with potential impacts in other relevant technical areas discussed in this section. As discussed above under, **"Shadows,"** the incremental shadows from the Proposed Project would result in incremental shadow coverage on area one open space resource, Murray Playground. This open space resource would continue to receive a minimum of four to six hours of direct sunlight throughout the growing season.

- **Historic and Cultural Resources:** Though the LPC review identified several architectural resources within a 400-foot radius of the Affected Area, no potential impacts associated with the Proposed Project on the identified historic resources would occur. The Proposed Actions would not result in any types of visual and contextual impacts to the known historic resources within the 400-foot radius or introduce any incompatible visual, audible, or atmospheric elements to the settings of historic resources. The Project Site does not contain historic architectural resources and is not adjacent to or within 90 feet of any identified historic architectural resources. As a result, no direct impacts or indirect construction-related effects via ground-borne construction activities are anticipated. Only temporary changes related to the construction activity to the existing environment surrounding the architectural resources is expected for a limited construction period of 18 months. After the completion of the construction, the environment of the architectural resources would be the same as the existing condition. Therefore, significant adverse impacts to architectural resources are not expected because of the Proposed Actions, and further analysis is not warranted.

- **Urban Design and Visual Resources:** The development facilitated by the Proposed Actions would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood as it would not significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or the visual

character of the area. The development with ground floor commercial uses would improve walkability and the visual character of the area.

- **Noise:** Though the Proposed Actions would result in a mixed-use development composed of residential and commercial retail uses that may be impacted by the ambient noise, future residential/commercial uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on all facades in order to maintain an interior L10 noise level not greater than 40 dBA for residential uses or not greater than 45 dBA for commercial office uses. With this level of attenuation, there would be no potential for adverse impacts related to ambient noise.

Combination of Moderate Effects:

Based on the above findings, there would be no combination of moderate effects to several elements that cumulatively may affect neighborhood character.

2.9.2 Conclusion

As discussed above, the Proposed Actions would not, in whole or from a specific technical study standpoint, result in a significant impact on the neighborhood character, nor would have cumulative effects of two or more of the above technical areas have any significant impacts on the 400-foot study area.

2.10 Construction

Construction, although temporary, can result in disruptive and noticeable effects on an area. A determination of the significance of construction and the need for mitigation is based on the duration and magnitude of these effects. Construction is typically of greatest importance when it could affect traffic conditions, archaeological resources, and the integrity of historic resources, community noise patterns and air quality conditions. All analyses were undertaken in accordance with the guidelines contained in the *2021 CEQR Technical Manual*.

The Proposed Actions involve a rezoning in the Long Island City section of Queens. On the Project Site, construction is expected to last up to approximately 18 months.

While construction would take place over a 18-month period, there would not be any significant adverse impacts as a result of the Proposed Actions. The following is a brief discussion of the effects associated with the construction-related activities on traffic, air quality, noise, historical resources, and hazardous materials resulting from the construction of the Proposed Project.

Effect of Construction on Traffic

The Proposed Actions would result in new development on the Project Site, which would replace existing uses on the site. During construction, vehicle trips from workers traveling to and from the construction site would be generated, and from the movement of materials and equipment.

The infrastructure of New York City is comprised of physical systems that support the population, including water supply, wastewater, sanitation, energy, roadways, bridges, tunnels, and public transportation. This section covers only the effect of the Proposed Actions on traffic operations. Given typical construction hours of 7:00 AM to 4:00 PM, worker trips would be concentrated in off-peak hours typically before both the AM and PM peak commuter periods. Truck movements typically would be spread throughout the day on weekdays and would generally occur between the hours of 7:00 AM and 4:30 PM. Traffic generated by construction workers traveling to and from their work sites and construction truck traffic would not represent a substantial increment during the area's peak travel periods.

Construction activities may result in short-term disruption of both traffic and pedestrian movements at the development sites. This would occur primarily due to the temporary loss of curbside lanes from the staging of equipment and the movement of materials to and from the site. Additionally, construction would at times result in the temporary closing of sidewalks adjacent to the site. These conditions would not lead to significant adverse effects on traffic and transportation conditions.

Effect of Construction on Air Quality

Possible impacts on local air quality during construction induced by the Proposed Actions include fugitive dust (particulate) emission from land clearing operation and demolition as well as mobile source emissions (hydrocarbons, nitrogen oxide, and carbon monoxide) generated by construction equipment and vehicles.

Fugitive dust emissions from land clearing operations can occur from excavation, hauling, dumping, spreading, grading, compaction, wind erosion, and traffic over unpaved areas. Actual quantities of emissions depend on the extent and nature of the clearing operations, the type of equipment employed, the physical characteristics of the underlying soil, the speed at which construction vehicles are operated, and the type of fugitive dust control methods employed. Much of the fugitive dust generated by construction activities should be of a short-term duration and relatively contained within a proposed site, not significantly impacting nearby buildings or residents. All appropriate fugitive dust control measures – including watering of exposed areas and dust covers for trucks – would be employed during construction of the development sites. Therefore, the fugitive source emissions generated by the Proposed Actions would not be significant.

Mobile source emissions may result from the operation of construction equipment, trucks delivering materials and removing debris, workers' private vehicles, or occasional disruptions in traffic near the construction site. As the number of construction-related vehicle trips generated by the Proposed Actions would be relatively small and the emissions from such vehicles as well as construction equipment would occur over a four-year period and be dispersed throughout the Rezoning Area, the mobile source emissions generated by the Proposed Actions would not be significant. Overall, the Proposed Actions would not result in significant adverse air quality impacts.

Effect of Construction on Noise

Noise and vibration from construction equipment operation and noise from construction workers' vehicles and delivery vehicles traveling to and from the construction sites can affect community noise levels. The level of impact of these noise sources depends on the noise characteristics of the equipment and activities involved the construction schedule, and the location of potentially sensitive noise receptors.

Noise and vibration levels at a given location are dependent on the kind and number of pieces of construction equipment being operated, as well as the distance of the location from the construction site and the types of structures, if any, between the location and the noise source. Noise levels caused by construction activities can vary widely, depending on the phase of construction (e.g., demolition, land clearing and excavation, foundation, erection of structure, construction of exterior walls) and the specific task being undertaken.

Construction noise associated with the Proposed Actions are expected to be similar to noise generated by other residential construction projects in the city. Increased noise level caused by

construction activities can be expected to be more significant during early excavation phases of construction and would be of relatively short duration. Increases in noise levels caused by delivery trucks and other construction vehicles would not be significant.

Construction noise is regulated by the New York City Noise Control Code and by Environmental Protection Agency noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards; that, except under exceptional circumstances, construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction material be handled and transported in such a manner as not to create unnecessary noise. In addition, whenever possible, appropriate low noise emission level equipment and operational procedures can be utilized to minimize noise and its effect on adjacent uses.

Thus, while there may be short periods of time when noise is greater than the Noise Control Code, these regulations would be followed in such a matter that no significant adverse noise impacts would occur as a result of the Proposed Actions.

Effect of Construction on Historic Resources

If a project's construction activities are located within 400 feet of a historic or cultural resource, potential hazards should be assessed, such as whether certain character-defining elements of a structure, including but not limited to rooftops or stained-glass windows, could be impacted by falling objects from an adjacent construction site. If the project is located within 90 feet of a New York City Landmark, a National Register-listed property, or within a New York City Historic District, the potential for physical disturbance should be disclosed and the project is required to comply with the New York City Department of Buildings (DOB) Technical Policy and Procedure Notice (TPPN) #10/88. TPPN #10/88 supplements the standard building protections afforded by Building Code C26-112.4 by requiring a monitoring program to reduce the likelihood of construction damage to adjacent New York City Landmarks and National Register-listed properties (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures may be changed. If the project is not located within 90 feet of a historic or cultural resource that is NYC-landmark eligible, eligible for the State and National Register of Historic Places, or within an eligible New York City Historic District, then no special protections apply. Therefore, the potential for physical disturbance and adverse impacts to those historic and cultural resources should be disclosed. The LPC designated and S/NR listed Hunters Point Historic District, the S/NR listed United States Post Office, Long Island City, 46-02 21st Street, the S/NR listed 45th Road-Court House Square Subway Station, 23rd Street, and the S/NR eligible 21-49 45th Road are greater than 90 feet away from Project Site and the construction timeline would be short-term lasting under two years.

Accordingly, the Proposed Actions would not introduce adverse construction-related impacts to architectural resources within the study area from ground-borne construction period vibrations, falling debris, and/or collapse. Therefore, significant adverse impacts to these

resources would not occur as a result of the Proposed Actions, and further analysis is not warranted.

Effect of Construction on Hazardous Materials

The Proposed Actions would result in new development in the area. As discussed above, Block 76, Lot 11 was considered a potential development site in the 2004 *Hunters Point Subdistrict Rezoning Environmental Assessment Statement* (CEQR No. 04DCP011Q). As discussed in the *Hunters Point Subdistrict Rezoning Environmental Assessment Statement,* due to prior historical uses on the site, hazardous materials contamination may exist. Therefore, an (E) Designation (E-129) for hazardous materials was placed on Block 76, Lot 11. The (E) Designation requires that pre-development activities at the Project Site include a testing protocol, and, if necessary, a remediation determination and protocol to the satisfaction of New York City Department of Environmental Protection (NYCDEP) before the issuance of a building permit.

The (E) Designation requirements described above would serve to avoid the potential for significant adverse impacts relating to hazardous materials. The Applicant would complete the requirements specified in the (E) Designation and submit to the NYCDEP for review and approval prior to beginning construction. In addition, demolition of the existing building on Project Site would follow applicable regulatory requirements to address management of any potential hazardous substances in a manner to avoid impacts to workers, the community, and the environment.

Conclusion

Based on the above qualitative construction analysis, and detailed analysis in the preceding technical sections, construction-related activities would not have any significant adverse impacts on traffic, air quality, noise, historic resources, or hazardous materials conditions because of the Proposed Actions.

APPENDIX A

ILLUSTRIATIVE ARCHITECTURAL PLANS

ZONING ANALYSIS R7X W/ C2-5

BSA Calendar No.:

Location: 21-31 46th AVE. Borough: QUEENS Block: 76

Applicant: Lots: 11

Zoning District: R7X W/ C2-5 Special District: HP - HUNTERS POINT / M.I.H. (MANDATORY INCLUSIONARY HOUSING)

Lot Area: 13,500.0 S.F. Equivalent R District: N/A

Street width: 60'-0" (NARROW)

	ZR SECTION	Code Prescription	Existing Building	Maximum Allowed	Proposed Condition	Compliance
Floor Area Ratio (Residential)	23-154(d)	6.00	N/A	13,500 X 6 (LESS 8,000 S.F RETAIL) = 73,000 S.F	72,846 S.F.	COMPLIES
Floor Area Ratio (Commercial)	33-121	2.00	0.36 (commercial)	13,500 X 2= 27,000 S.F	8,000 S.F.	COMPLIES
Floor Area Qualifying Household See zoning analysis for Income Restricted Housing Units						
Lot Coverage (Residential)	23-153	.70 (70%)	.36 (36%)	13,500 X .7= 9,450 S.F	9,433 S.F. (69.87%)	COMPLIES
Lot Coverage (Commercial)						
Side Yard	23-462c	0 OR 8'-0"	EXISTING NON-COMPLIANT	0	8'-0"	COMPLIES
Rear Yard Equivalent	26-52	30'-0"	N/A	N/A	30'-0"	COMPLIES
Min./Max. Base Height	23-664	Min. BASE = 60'-0" Max. BASE = 105'-0"	N/A	BASE = 85'-0"	BASE = 82'-0"	COMPLIES
Max. Building Height	23-664	140'-0" - 145'-0"	N/A	120'-0"	112'-0"	COMPLIES
Setback	23-662(C)(1)	15'-0" NARROW STREET	N/A	N/A	15'-0" NARROW STREET	COMPLIES
Dwelling Unit Count	23-22 D.U. FTR=680	73,000 (ALLOW FAR) / 680 = 107 UNITS	N/A	107 DWELLING UNITS	70 DWELLING UNITS	COMPLIES
Housing Units	23-96	NOT MORE THAN 1/3 OF THE DWELLING UNITS ON ANY FLOOR SHALL BE AFFORDABLE				
2nd thru 6th floors (see A-4)	23-96	1/3 OF UNITS PER FLOOR	N/A	2 AFFORDABLE (x5 FLRS)	10 UNITS	COMPLIES
7th thru 8th floors (see A-5)	23-96	1/3 OF UNITS PER FLOOR	N/A	2 AFFORDABLE (x2 FLRS)	4 UNITS	COMPLIES
9th thru 10th floors (see A-6)	23-96	1/3 OF UNITS PER FLOOR	N/A	1 AFFORDABLE (x2 FLRS)	2 UNITS	COMPLIES
11th floor (see A-7)	23-96	1/3 OF UNITS PER FLOOR	N/A	2 AFFORDABLE (x1 FLR)	2 UNITS	COMPLIES
		TOTAL AFFORDABLE UNITS			*18 TOTAL UNITS	
Street Trees Planting	23-03/26-41	1 tree per 25' frontage 46th AVE 135.00' / 25' = 5.4 = 5 TREES EXACT LOCATION OF TREES TO BE DETERMINED BY NYC PARKS AND RECREATION OR PAYMENT TO TREE FUND				COMPLIES
Windows	28-22	All Double Glazed			PROVIDED	COMPLIES
Refuse-Enclosed Storage	28-23	2.9 Cubic Feet per D.U.			PROVIDED	COMPLIES
Refuse-Disposal Room	28-23	12 S.F. PER STORY			PROVIDED	COMPLIES
Laundry Facilities	28-24	If Provided(a,b,c,d)			PROVIDED	COMPLIES
Corridor Daylight	28-25	If Provided(a,b)	N/A	N/A	N/A	
Rec. Space: R7 Equiv.	28-21	3.3% of Residential F.A.	N/A	72,846 SF X 3.3% = 2,404 SF	REC AREA 'A' & 'B' & 'C' = 4,801 SF	COMPLIES
Recreation Standards	28-22	All rec. space accessible				COMPLIES
	28-22	Min. dimensions-various			15 FEET.	COMPLIES
	28-22	Outdoor sky req.		10% COVERED 4,001 X .10 = 401 SF	400 SF	COMPLIES
	28-22	Indoor window req.		9.5% WINDOW	9.5% WINDOW	COMPLIES
Planting	28-23	Req St. line to st. wall				COMPLIES
Density per Corridor	28-31	See table in ZR 28-41		11 UNITS PER CORRIDOR	8 UNITS PER CORRIDOR	COMPLIES
Group Parking Screening	25-66	Parking Lot Screening	6'-0" HIGH, NOT MORE THAN 50% OPEN			COMPLIES
Parking - Curb Cut	25-631 (e)	Location and Width Curb Cuts	12'-0" maximum width where accesses a group parking facility of less than 50 Cars			COMPLIES
Parking Requirements	16-10	Parking is not required pursuant to ZR Section 16-10, but parking will be provided up to 22 spaces.				
		TOTAL PARKING SPACES			22 TOTAL SPACES	COMPLIES

*25% of residential units in MIH Development (Option 1). See sheets A-4 through A-7 for MIH unit designations.

FLOOR
11th
10th
9th
8th
7th
6th
5th
4th
3rd
2nd
1st
SUB TO
CELLAR
TOTAL



04-01-22

21-31 46th AVE
NORTH SIDE
240'-0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

Z 1 DWG. NO

FLOOR AREA BREAKDOWN (SQ. FT.)									
FLOOR	GROSS FLOOR AREA	COMMERCIAL COMM. FACILITY	CORRIDOR DEDUCTION	MECHANICAL DEDUCTION	INDOOR RECREATION DEDUCTION	RESIDENTIAL FLOOR AREA	RESIDENTIAL (FAR)	COMMERCIAL (FAR)	TOTAL (FAR)
11th	4,020		326 / 2= 163	104		3,753			
10th	5,200		326 / 2= 163	104	400	4,533			
9th	5,200		326 / 2= 163	104	400	4,533			
8th	7,689		403 / 2=201.5	153.8		7,333.7			
7th	7,689		403 / 2=201.5	153.8		7,333.7			
6th	9,433		345 / 2= 172.5	188.6		9,071.9			
5th	9,433		345 / 2= 172.5	188.6		9,071.9			
4th	9,433		345 / 2= 172.5	188.6		9,071.9			
3rd	9,433		345 / 2= 172.5	188.6		9,071.9			
2nd	9,433		345 / 2= 172.5	188.6		9,071.9			
1st	8,567	8,000.0	567.0	171.3					
SUB TOTAL	85,530	8,000.0	1,754.5	1,562.5	800	72,846	5.39	0.59	5.98
CELLAR	13,500.0								
TOTAL									

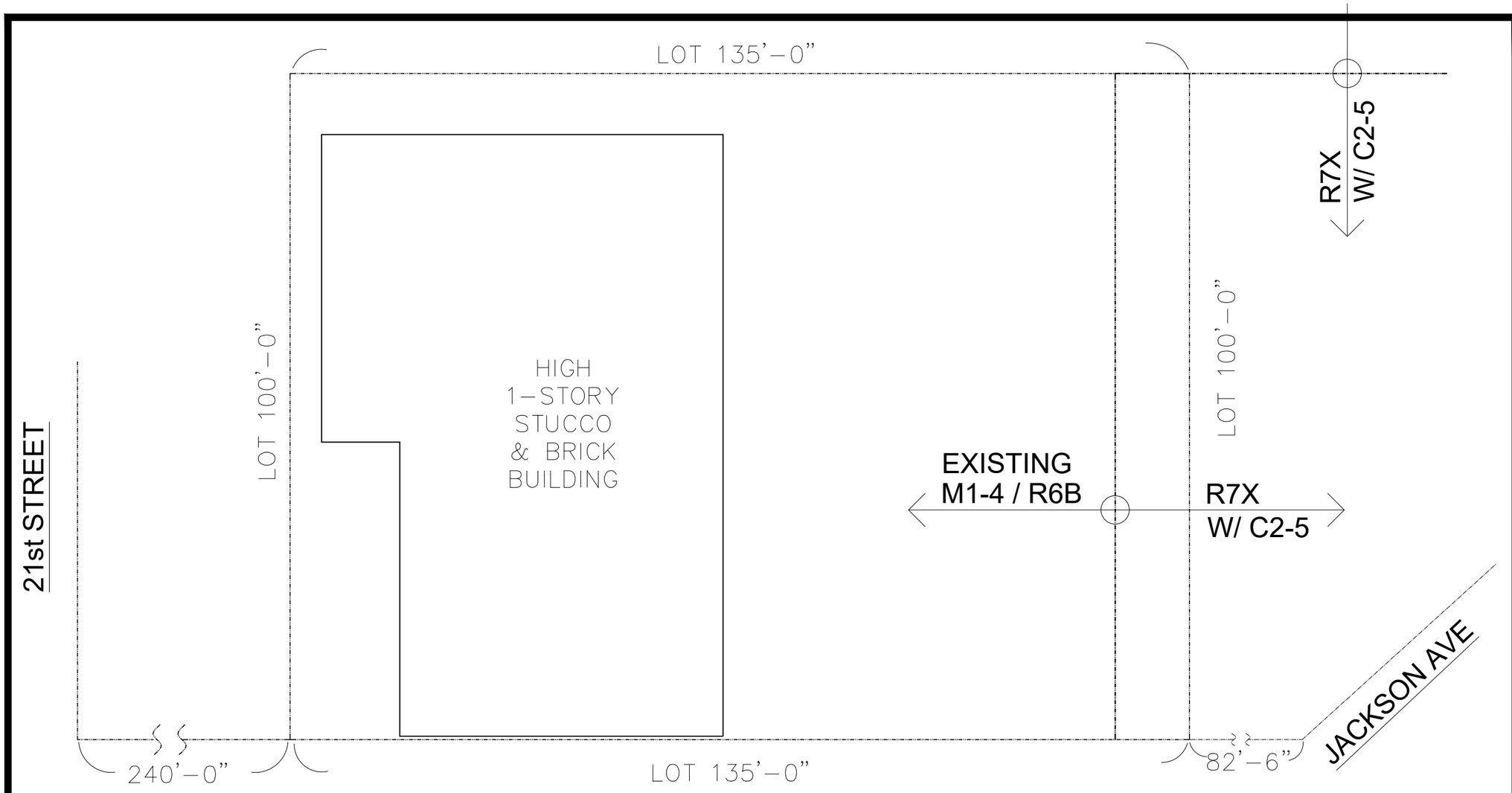


04-01-22

21-31 46th AVE
NORTH SIDE
240'-0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

Z 2 DWG. NO



46th AVENUE

60'–0" WIDE
NARROW STREET

LOT AREA: 13,500 SF
BLOCK: 76
LOT: 11
ZONE: M1–4/R6B

EXISTING PLOT PLAN

0 8' 16' 32'

SCALE: 1/16" = 1'–0"

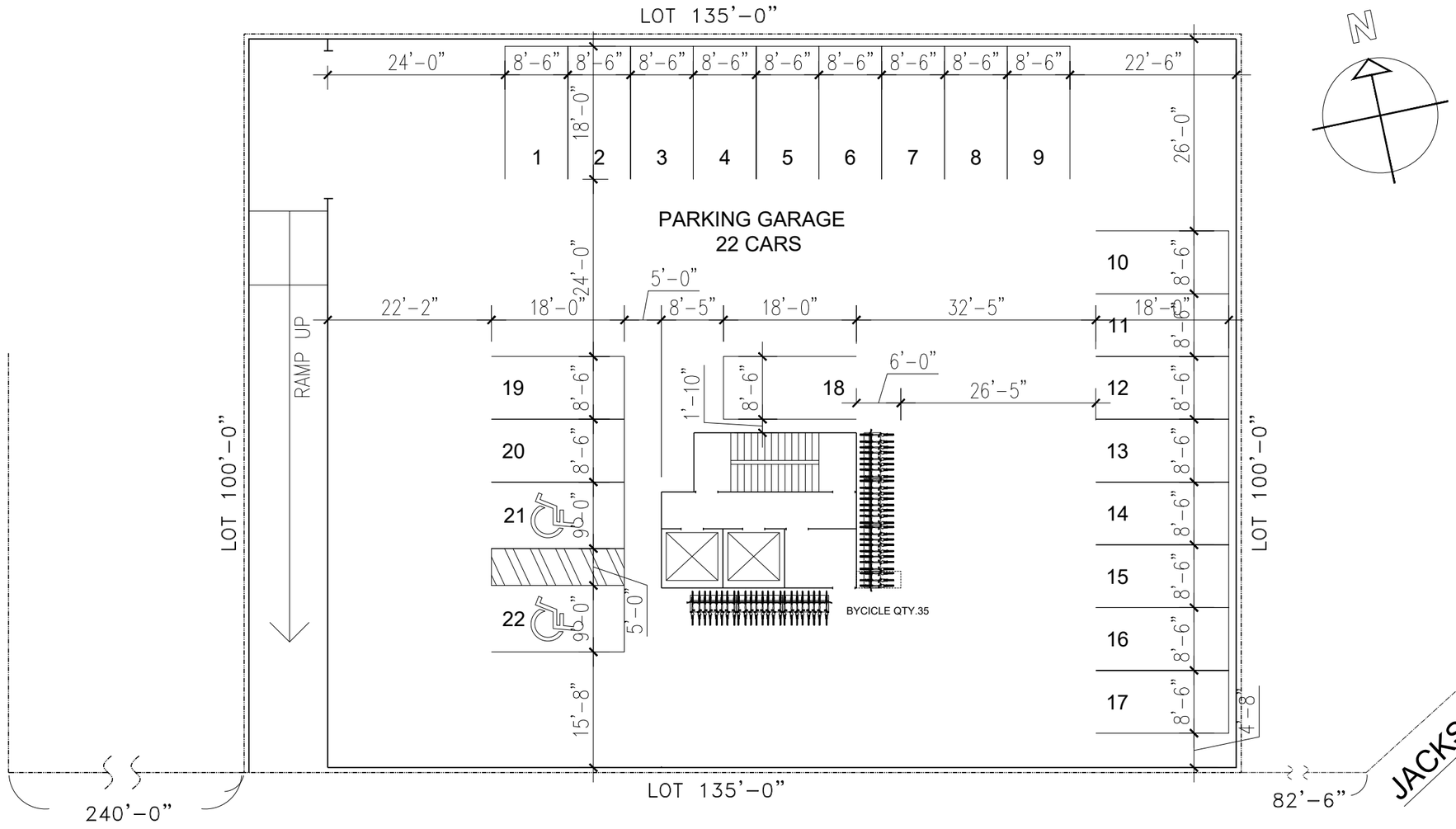
N

04-01-22

21–31 46th AVE
NORTH SIDE
240'–0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

E
1
DWG. NO



46th AVENUE

60'–0" WIDE
NARROW STREET

LOT AREA: 13,500 SF
BLOCK: 76
LOT: 11
ZONE: R7X/C2–5
MAP: 9b

PROPOSED
PLAN OF CELLAR

0 8' 16' 32'

SCALE: 1/16" = 1'–0"

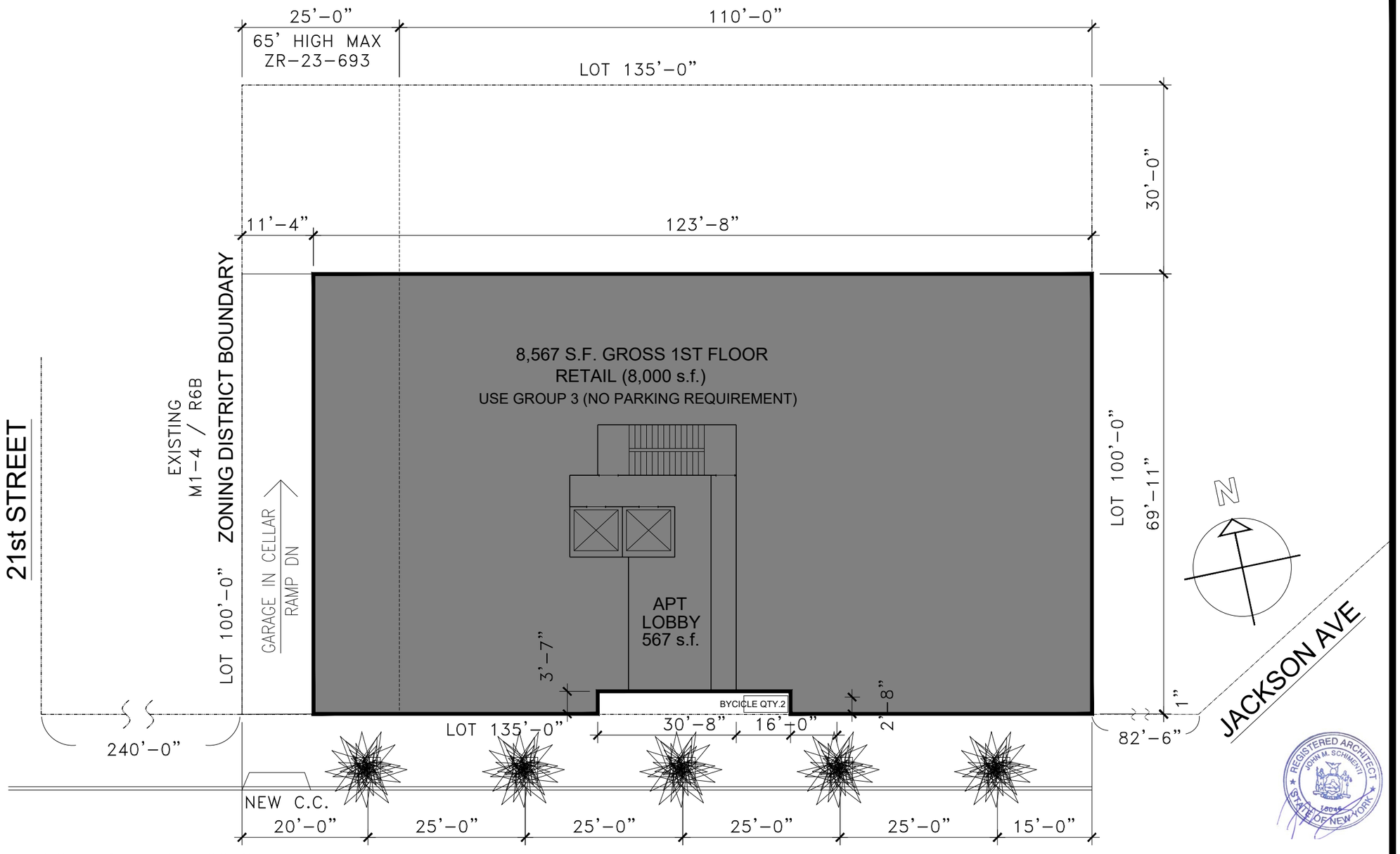
REGISTERED ARCHITECT
JOHN M. SCHIMENTI
STATE OF NEW YORK
18048

04-01-22

21–31 46th AVE
NORTH SIDE
240'–0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

A
1
DWG. NO



LOT AREA: 13,500 SF
BLOCK: 76
LOT: 11
ZONE: R7X/C2–5
MAP: 9b

46th AVENUE
60'–0" WIDE
NARROW STREET

PROPOSED
PLAN OF 1st FLOOR

0 8' 16' 32'
SCALE: 1/16" = 1'–0"

04-01-22

21–31 46th AVE
NORTH SIDE
240'–0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

REGISTERED ARCHITECT
JOHN M. SCHIMENTI
STATE OF NEW YORK
16048

A
2
DWG. NO

DWELLING UNITS/FLOOR:
2 BEDROOM UNITS = 4
1 BEDROOM UNITS = 4
TOTAL UNITS = 8
(2 UNITS M.I.H.)

= INDICATES M.I.H. UNIT

21st STREET

EXISTING M1-4 / R6B ZONING DISTRICT BOUNDARY

25'-0"
65' HIGH MAX ZR-23-693
110'-0"
LOT 135'-0"
30'-0"
134'-11"

2BR | 1BR | 1BR | 2BR

PUBLIC CORRIDOR - 345 s.f.

2BR | 1BR | 1BR | 2BR

LOT 100'-0"
69'-11"
1"
86'-10"

N

240'-0"

LOT 135'-0"
TERRACES TO BE WITHIN NICHES

46th AVENUE
60'-0" WIDE
NARROW STREET

LOT AREA: 13,500 SF
BLOCK: 76
LOT: 11
ZONE: R7X/C2-5
MAP: 9b

9,433 gross s.f.
PROPOSED
TYP PLAN OF 2nd thru 6th FLS

0 8' 16' 32'

SCALE: 1/16" = 1'-0"

REGISTERED ARCHITECT JOHN M. SCHIMENTI 16048 STATE OF NEW YORK

04-01-22

21-31 46th AVE
NORTH SIDE
240'-0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

A 3 DWG. NO

DWELLING UNITS/FLOOR:
2 BEDROOM UNITS = 2
1 BEDROOM UNITS = 4
0 BEDROOM UNITS = 2
TOTAL UNITS = 8
(2 UNITS M.I.H.)

= INDICATES M.I.H. UNIT

21st STREET

EXISTING M1-4 / R6B
ZONING DISTRICT BOUNDARY

LOT 100'-0"

ROOF TERRACE OVER 6TH FLOOR
1,750 S.F. - RECREATION AREA 'A'

25'-0"
65' HIGH MAX
ZR-23-693

110'-0"

LOT 135'-0"

107'-11"

109'-11"

1"

30'-0"

0BR | 1BR | 1BR | 2BR

PUBLIC CORRIDOR - 403 s.f.

0BR | 1BR | 1BR | 2BR

LOT 100'-0"

69'-11"

1"

LOT 135'-0"

240'-0"

N

LOT AREA: 13,500 SF
BLOCK: 76
LOT: 11
ZONE: R7X/C2-5
MAP: 9b

46th AVENUE
60'-0" WIDE
NARROW STREET

7,689 gross s.f.
PROPOSED

TYP PLAN OF 7th thru 8th FLS

0 8' 16' 32'

SCALE: 1/16" = 1'-0"

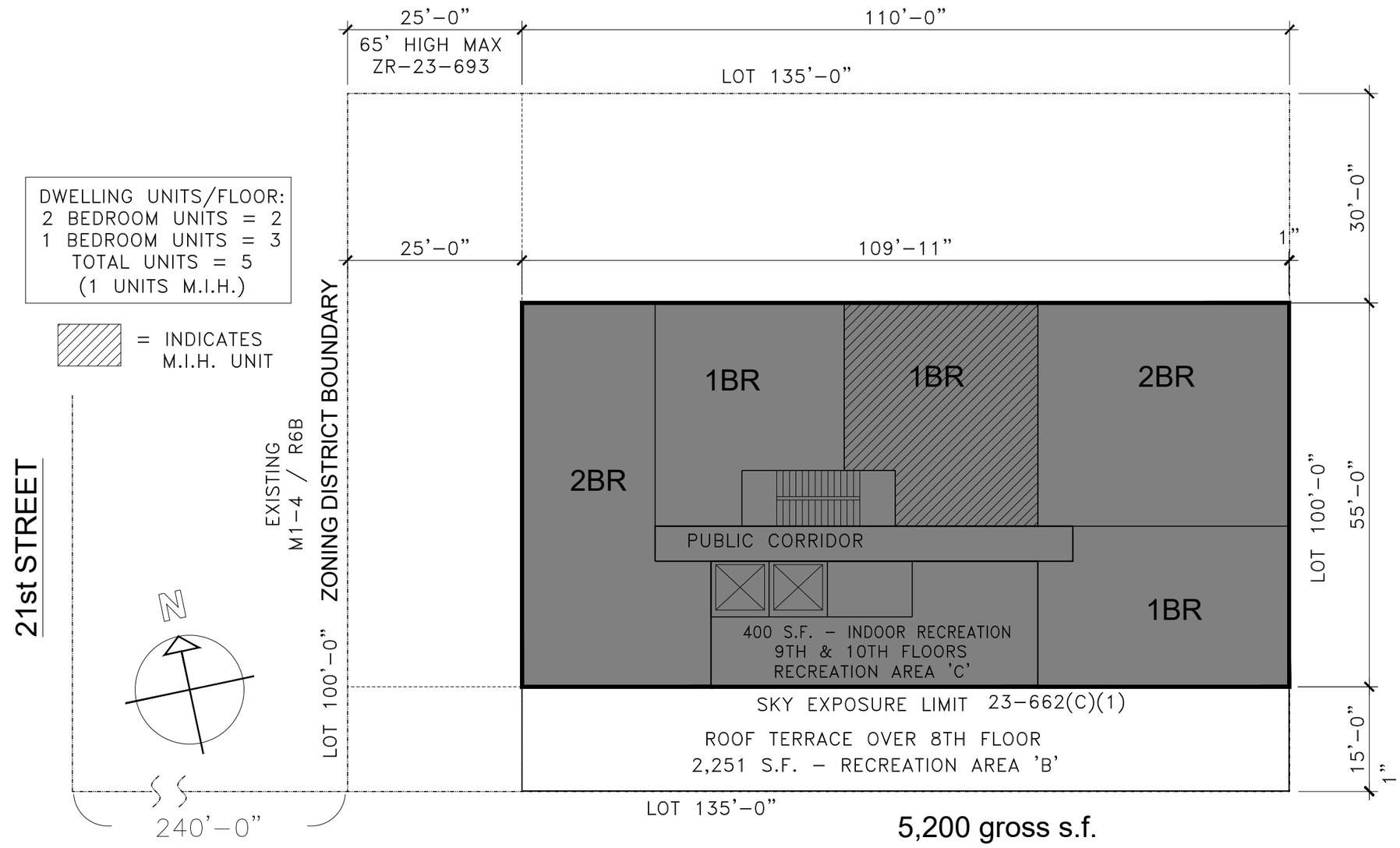
REGISTERED ARCHITECT
JOHN M. SCHIMENTI
STATE OF NEW YORK

04-01-22

21-31 46th AVE
NORTH SIDE
240'-0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

A
4
DWG. NO



LOT AREA: 13,500 SF
BLOCK: 76
LOT: 11
ZONE: R7X/C2–5
MAP: 9b

46th AVENUE
60'–0" WIDE
NARROW STREET

5,200 gross s.f.
PROPOSED
TYP PLAN OF 9th THRU 10TH FLS

0 8' 16' 32'
SCALE: 1/16" = 1'–0"

04-01-22

21–31 46th AVE
NORTH SIDE
240'–0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516–825–3883 fax 516–825–3887

A
5
DWG. NO

DWELLING UNITS/FLOOR:
2 BEDROOM UNITS = 2
1 BEDROOM UNITS = 2
TOTAL UNITS = 4
(2 UNITS M.I.H.)

= INDICATES M.I.H. UNIT

21st STREET

EXISTING
M1-4 / R6B

ZONING DISTRICT BOUNDARY

LOT 100'-0"

25'-0"
65' HIGH MAX
ZR-23-693

110'-0"

LOT 135'-0"

25'-0"

109'-11"

1"

30'-0"

1BR | 1BR | 2BR | 2BR

PUBLIC CORRIDOR

LOT 100'-0"

37'-0"

ROOF TERRACE

ROOF TERRACE

18'-0"

15'-0"

SKY EXPOSURE LIMIT 23-662(C)(1)

LOT 135'-0"

240'-0"

N

LOT AREA: 13,500 SF
BLOCK: 76
LOT: 11
ZONE: R7X/C2-5
MAP: 9b

46th AVENUE
60'-0" WIDE
NARROW STREET

4,020 gross s.f.
PROPOSED
PLAN OF 11TH FL

0 8' 16' 32'

SCALE: 1/16" = 1'-0"

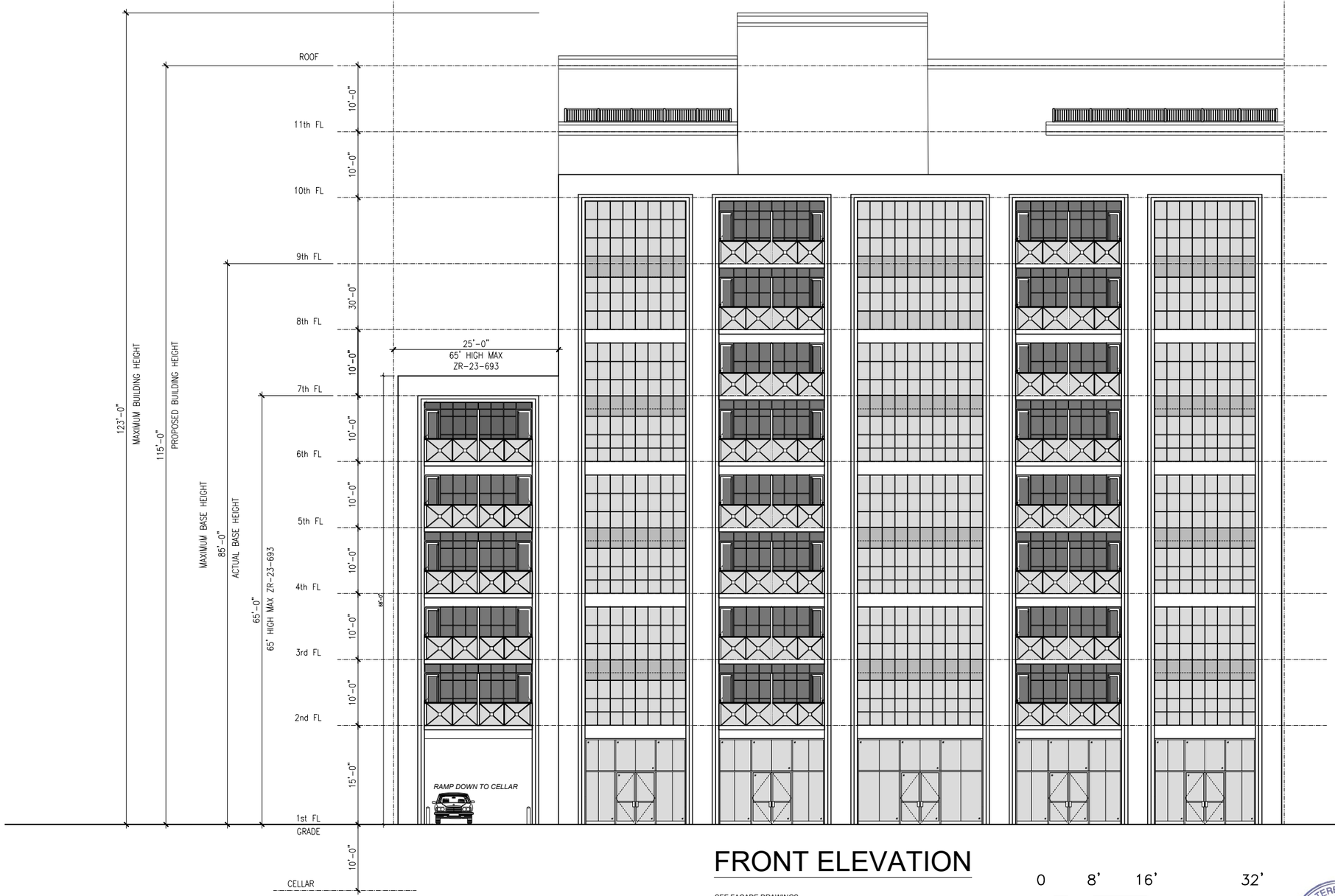
REGISTERED ARCHITECT JOHN M. SCHIMENTI 026048 STATE OF NEW YORK

04-01-22

21-31 46th AVE
NORTH SIDE
240'-0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

A
6
DWG. NO



FRONT ELEVATION

SEE FACADE DRAWINGS

0 8' 16' 32'

SCALE: 1/16" = 1'-0"

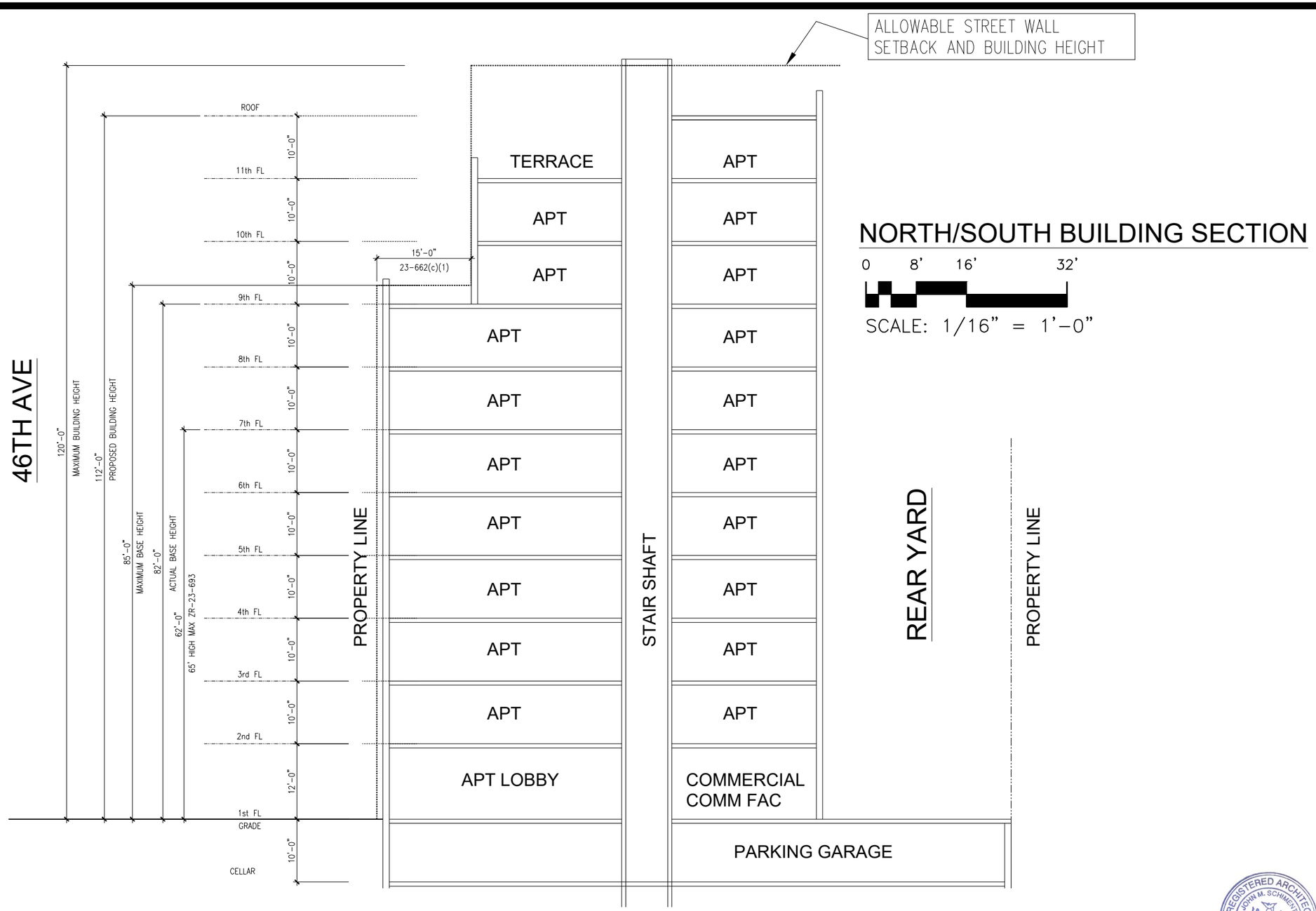
04-01-22

REGISTERED ARCHITECT JOHN M. SCHIMENTI 19045 STATE OF NEW YORK

21-31 46th AVE
NORTH SIDE
240'-0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

A 7 DWG. NO



NORTH/SOUTH BUILDING SECTION

0 8' 16' 32'

SCALE: 1/16" = 1'-0"

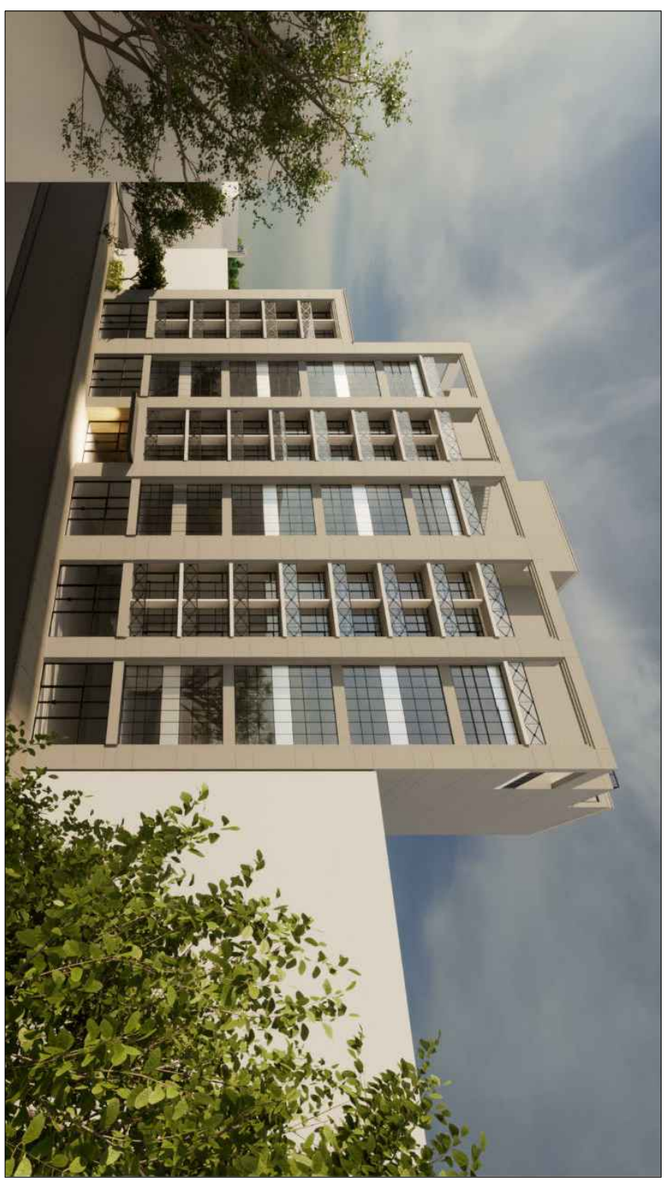
04-01-22

21-31 46th AVE
NORTH SIDE
240'-0" EAST OF 21st STREET
QUEENS, NEW YORK
BUILDING LOCATION

JOHN SCHIMENTI, P.C.
ARCHITECT, AIA
126 ATLANTIC AVE. SUITE 3
LYNBROOK, NEW YORK, 11563
516-825-3883 fax 516-825-3887

A 8 DWG. NO





04-01-22

9 A DWG. NO	JOHN SCHIMENTI, P.C. ARCHITECT, AIA 126 ATLANTIC AVE. SUITE 3 LYNBROOK, NEW YORK, 11563 516-825-3883 fax 516-825-3887	21-31 46th AVE NORTH SIDE 240'-0" EAST OF 21st STREET QUEENS, NEW YORK BUILDING LOCATION

APPENDIX B

AGENCY COORESPONDENCE

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: LA-CEQR-Q (DEPARTMENT OF CITY PLANNING)
Project: 46 AVENUE REZONING.
Address: 21-31 46 AVENUE BBL: 4000760011
Date Received: 8/8/2023

[X**] No architectural significance**

[X**] No archaeological significance**

[ ] Designated New York City Landmark or Within Designated Historic District

[ ] Listed on National Register of Historic Places

[ ] Appears to be eligible for National Register Listing and/or New York City Landmark Designation

[ ] May be archaeologically significant; requesting additional materials

LPC DESIGNATED AND S/NR LISTED HUNTERS POINT HISTORIC DISTRICT; S/NR LISTED UNITED STATES POST OFFICE, LONG ISLAND CITY, 46-02 21 STREET; 45TH ROAD-COURT HOUSE SQUARE SUBWAY STATION, 23RD STREET; AND S/NR ELIGIBLE 21-49 45 ROAD WITHIN RADIUS.

Gina Santucci 8/16/2023

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 37135_FSO_DNP_08162023.docx

APPENDIX C

WATERFRONT REVITALIZATION PROGRAM

CONSISTENCY ASSESSMENT FORM

FLOOD EVALUATION WORKSHEET

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: 21-31 46th Street Holdings, LLC

Name of Applicant Representative: Christina Szczepanski, GZA GeoEnvironmental, Inc.

Address: 55 Lane Road, Fairfield, NJ 07004

Telephone: _____ Email: christina.szczepanski@gza.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

The "Applicant," 21-31 46th Street Holdings, LLC, seeks a zoning map and text amendment affecting Block 76, Lot 11 in the Long Island City neighborhood of Queens Community District 2. The "Affected Area," or "Project Site," consists of Block 76, Lot 11, a 13,500 square feet (SF) lot located on a block bounded by 45th Road to the north, Jackson Avenue to the east, 46th Avenue to the south, and 21st Street to the west. The proposed zoning map amendment would rezone the entirety of the Affected Area from an M1-4/R6B zoning district to an R7X/C2-5 zoning district. The Applicant is also proposing a zoning text amendment to Appendix F of the New York City Zoning Resolution to add a Mandatory Inclusionary Housing (MIH) area coterminous with the Affected Area. The zoning map amendment and zoning text amendment constitute the "Proposed Actions."

The "Proposed Project" consists of redevelopment of the Applicant's site (Block 76, Lot 11) with a 99,030-gross square foot (GSF) or 80,846 zoning square foot (ZSF), 112-foot-tall, eleven-story plus cellar mixed-use commercial and residential building with an overall floor area ratio (FAR) of 5.98. The ground floor would feature an 8,567 GSF (8,000 ZSF) commercial retail space (0.59 commercial FAR). The second through eleventh floors would contain 70 dwelling units. Overall, there would be a total of 76,963 GSF or 72,846 ZSF of residential floor area (5.39 residential FAR) and 70 dwelling units within the building, of which 25-30% (18-21 units) would be set aside as permanently affordable units for households with income averaging 60%-80% AMI depending on the selected MIH Option is selected. The Proposed Project would contain a total of 22 enclosed vehicular parking spaces located in the cellar level and accessed via a ramp on the western portion of the site from a curb cut along 46th Avenue.

2. Purpose of activity

The Proposed Actions are intended to provide opportunities for new residential and commercial development. The Applicant intends for the Proposed Actions to create opportunities for new housing development, including affordable housing, on underutilized land where a strong demand for housing exists. The proposed zoning map amendment to rezone the Affected Area from M1-4/R6B to R7X/C2-5, combined with the proposed text amendment to make the rezoning area a mandatory inclusionary housing area, would increase the permitted residential FAR. The proposed R7X/C2-5 zoning district, combined with a MIH designation, would allow a maximum 6.0 FAR for residential uses, 5.0 FAR for community facility uses, and 2.0 FAR for commercial uses.

The proposed zoning text amendment, which would designate the proposed rezoning area as a MIH Area, would require the Applicant to construct affordable dwelling units on the Project Site in order to take advantage of the additional FAR provided through the MIH Program. As such, the proposed zoning map and text amendment would create additional zoning capacity in a transit accessible area to support new housing creation and also increase the number of affordable housing units available in New York City. The creation of new housing supply at various income levels is also expected to help alleviate the upward pressure on housing prices, and contribute to housing affordability in the surrounding neighborhood and larger City. The MIH program would promote and retain neighborhood economic diversity in the area and create new housing units, including affordable units, in close proximity to public transit and local bus routes.

C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): Block 76, Lot 11

Street Address: 21-31 46th Avenue

Name of water body (if located on the waterfront): _____

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: Christina Szczepanski, GZA GeoEnvironmental, Inc.

Address: 55 Lane Road, Fairfield, NJ 07004

Telephone: _____ Email: christina.szczepanski@gza.com

Applicant/Agent's Signature: 

Date: 1/31/2024

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

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp

Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.

Background Information	
Project Name	21-31 46th Avenue Rezoning
Location	21-31 46th Avenue, Queens
Type(s)	■ Residential, Commercial, ▫ Parkland, Open Space, and ▫ Tidal Wetland Restoration ▫ Critical Infrastructure or ▫ Industrial Uses ▫ Over-water Structures ▫ Shoreline Structures ▫ Transportation ▫ Wastewater ■ Coastal Protection
Description	The Proposed Project consists of redevelopment of the Applicant's site (Block 76, Lot 11) with a 99,030-gross-square-foot (gsf) or 80,846 zoning square foot (zsf), 112-foot-tall, eleven-story plus cellar mixed-use commercial and residential building with an overall floor area ratio (FAR) of 5.98. The ground floor would feature a 8,567 gsf (8,000 zsf) commercial retail space (0.59 commercial FAR). The second through eleventh floors would contain 70 dwelling units. Overall, there would be a total of 76,963 gsf or 72,846 zsf of residential floor area (5.39 residential FAR) and 70 dwelling units within the building, of which 25-30% (18-21 units) would be set aside as permanently affordable units for households with income averaging 60% AMI
Planned Completion Date	2027
Expected Project Lifespan	100 Years +

The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.

For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."

Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	2.60	**2.60**	**NAVD88**	*Queensboro Bridge*
1% flood height	10.00	**10.00**	**NAVD88**	*2015 PFIRMs nearest 1% flood height*
Design flood elevation	12.00	**12.00**	**NAVD88**	*Nearest 1% BFE + 2 feet*
As relevant:				
0.2% flood height	10.00	10.00	**NAVD88**	*Nearest 1% BFE*

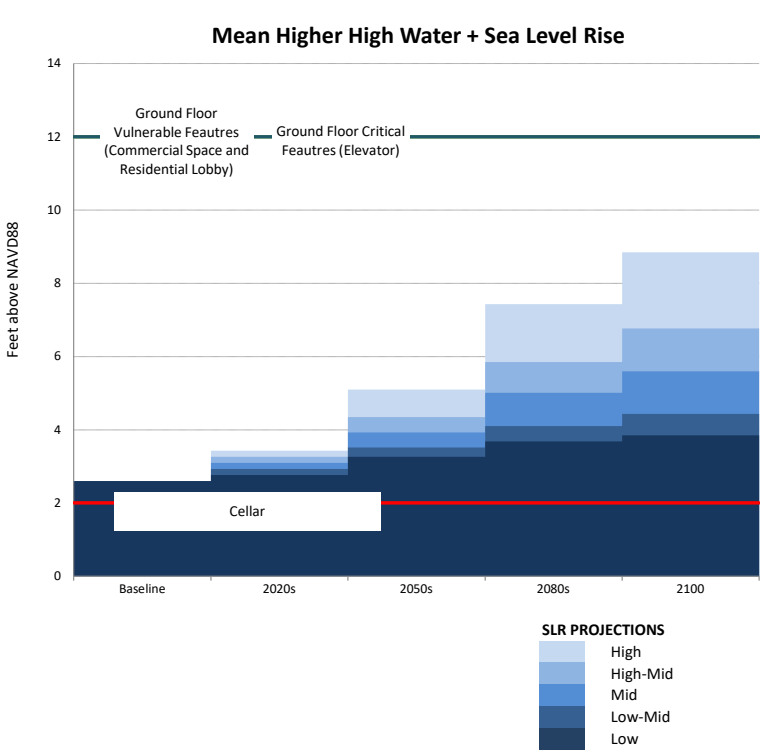
Data will be converted based on the following datums:

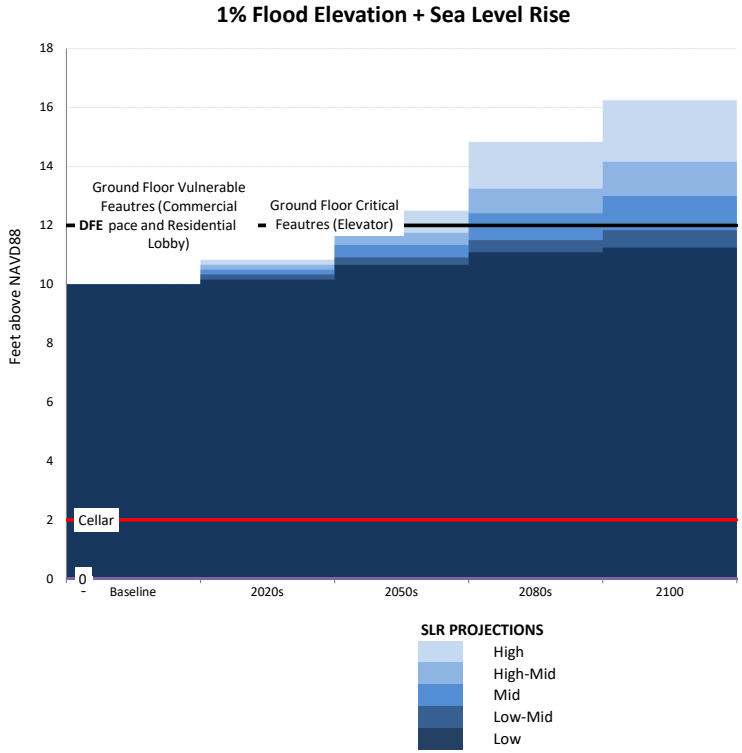
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

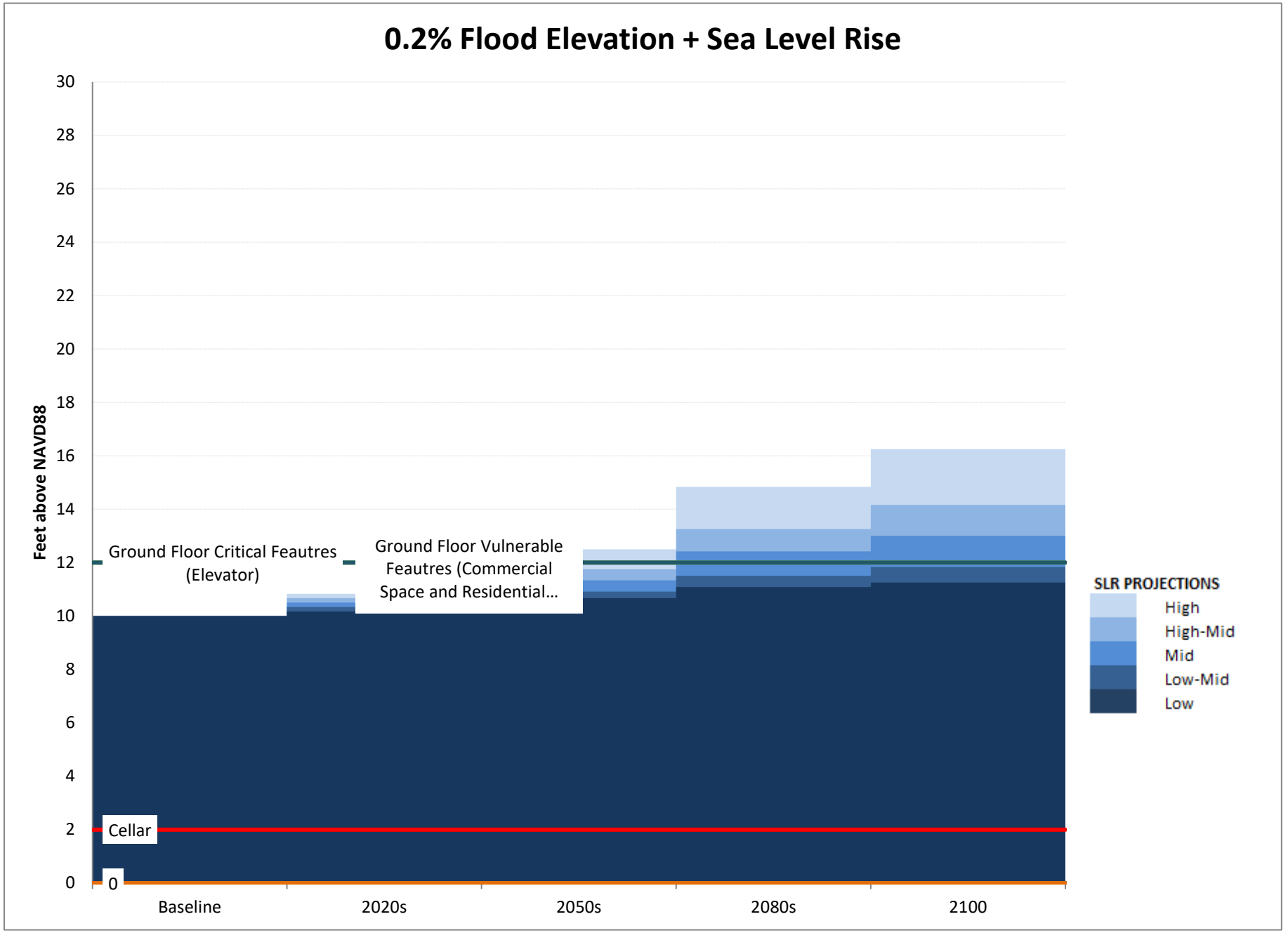
Describe key physical features of the project.

Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Cellar	▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other	100	2.0		NAVD88	*0.2*	*0.2*	*-2.4*	*-9.8*
Parking, BIcycle									
	▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other	100			NAVD88				
Ground Floor Vulnerable Feautres (Elevator)	▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▪ Other	100	12.0		NAVD88	*1.0*	*1.0*	*-1.6*	*-9.0*
Ground floor commercial, residential lobby									
Ground Floor Critical Feautres (Elevator)	▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▫ Other	100	12.0		NAVD88	*1.0*	*1.0*	*-1.6*	*-9.0*
Elevator									
	▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▫ Other	100			NAVD88				
	▪ Vulnerable ▫ Critical ▫ Potentially Hazardous ▫ Other				NAVD88				
Description of Planned Uses and Materials									
	▫ Vulnerable ▪ Critical ▫ Potentially Hazardous ▫ Other				NAVD88				
Description of Planned Uses and Materials									
	▫ Vulnerable ▪ Critical ▫ Potentially Hazardous ▫ Other				NAVD88				
Description of Planned Uses and Materials									

Assess project vulnerability over a range of sea level rise projections.






0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
Ground Floor Critical Feautres (Elevator)
Ground Floor Vulnerable Feautres (Commercial Space and Residential...
Cellar
0
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

	SLR (ft)					
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**	
Baseline	0.00	0.00	0.00	0.00	0.00	**2014**
2020s	0.17	0.33	0.50	0.67	0.83	**2020s**
2050s	0.67	0.92	1.33	1.75	2.50	**2050s**
2080s	1.08	1.50	2.42	3.25	4.83	**2080s**
2100	1.25	1.83	3.00	4.17	6.25	**2100**

	MHHW+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	2.60	2.60	2.60	2.60	2.60
2020s	2.77	2.93	3.10	3.27	3.43
2050s	3.27	3.52	3.93	4.35	5.10
2080s	3.68	4.10	5.02	5.85	7.43
2100	3.85	4.43	5.60	6.77	8.85

	1%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	10.00	10.00	10.00	10.00	10.00
2020s	10.17	10.33	10.50	10.67	10.83
2050s	10.67	10.92	11.33	11.75	12.50
2080s	11.08	11.50	12.42	13.25	14.83
2100	11.25	11.83	13.00	14.17	16.25

	0.2%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	10.00	10.00	10.00	10.00	10.00
2020s	10.17	10.33	10.50	10.67	10.83
2050s	10.67	10.92	11.33	11.75	12.50
2080s	11.08	11.50	12.42	13.25	14.83
2100	11.25	11.83	13.00	14.17	16.25

	0	1
Cellar	2	2
0	0	0
Ground Floor Vulnerable Feau	12	12
Ground Floor Critical Feautres	12	12
0	0	0
0	0	0
0	0	0
0	0	0
DFE	12.00	12.00

SLR (in)				
Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
0	0	0	0	0
2	4	6	8	10
8	11	16	21	30
13	18	29	39	58
15	22	36	50	75

NOAA Tide Station Data

(to be used only when a site survey is unavailable)

Station ID	*Station Name*	*Source MHHW (Feet, NAVD88)**	*Adjusted MHHW (Feet, NAVD88)**
8518687	Queensboro Bridge	2.27	2.60
8530095	Alpine	2.11	2.44
8516614	Glen Cove	3.72	4.05
8516990	Willets Point	3.72	4.05
8518639	Port Morris	3.33	3.66
8518699	Williamsburg Bridge	2.14	2.47
8518750	The Battery	2.28	2.61
8531680	Sandy Hook	2.41	2.74
8518490	New Rochelle	3.71	4.04
8531545	Keyport	2.66	2.99
8516891	Norton Point	2.08	2.41
8517201	North Channel	2.72	3.05
8517137	Beach Channel	2.10	2.43
8517756	Kingsborough	2.13	2.46
8519436	Great Kills	2.22	2.55
8531142	Port Reading	2.82	3.15
8519483	Bergen Point	2.56	2.89
8519050	USCG	2.28	2.61
8518902	Dyckman St	2.01	2.34
8517251	Worlds Fair Marina	3.59	3.92
8518668	Horns Hook	2.54	2.87
8518643	Randalls Island	2.60	2.93
8518526	Throggs Neck	3.68	4.01

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-20

Source
NOAA Tides and Currents
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NOAA Tides and Currents
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NOAA VDATUM
NOAA Tides and Currents
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NOAA Tides and Currents

01 tidal epoch.




Alpine
8530095
New
Rochelle
8518490
Dyckman St
8518902
Glen Cove
8516614
Randalls
Island
8518643
Port
Morris
8518639
Throggs
Neck
8518526
Willets
Point
8516990
Worlds Fair
Marina
8517251
Queensboro
Bridge
8518687
Horns Hook
8518668
Williamsburg
Bridge
8518699
The Battery
8518750
North
Channel
8507201
Norton
Point
8516891
CG
9050
Beach
Channel
8517137
Kingsborough
8517756
Sandy Hook
8531680