98 Third Avenue Rezoning
Environmental Assessment Statement



CEQR #: 21DCP096K

Prepared for:
98 Third Avenue Realty LLC

Prepared by:
Environmental Studies Corporation

December 10, 2021

Table of Contents:

- EAS Form

Analysis Chapters

- Project Description – Chapter A
- Land Use, Zoning and Public Policy – Chapter B
- Shadows – Chapter C
- Historic and Cultural Resources – Chapter D
- Urban Design and Visual Resources – Chapter E
- Hazardous Materials – Chapter F
- Transportation – Chapter G
- Air Quality – Chapter H
- Noise – Chapter I
- Public Health – Chapter J
- Neighborhood Character – Chapter K
- Construction – Chapter L

Appendices:

LPC Correspondence (Appendix A)
DEP Correspondence (Appendix B)
Noise Back-up (Appendix B)

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* 98 Third Avenue Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
21DCP096K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
200335ZMK, N200336ZRK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY NYC Department of City Planning Environmental Assessment and Review Division			NAME OF APPLICANT 98 Third Avenue Realty LLC		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, Deputy Director			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Hiram Rothkrug, ESC, Inc.		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 55 Water Mill Road		
CITY New York	STATE NY	ZIP 10271	CITY Great Neck	STATE NY	ZIP 11021
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 718-343-0026	EMAIL hrothkrug@environmentalstudiescorp.com	

5. *Project Description*

98 Third Avenue Realty LLC ("the Applicant") seeks a zoning map amendment and zoning text amendment (the "Proposed Actions") that would affect 10 tax lots on a single block (Block 388, Lots 31, 34, 35, 36, 37, 38, 41, 42 and p/o Lots 19 and 43; hereafter the "Rezoning Area") in the Boerum Hill area of Brooklyn Community District #2.

The Proposed Actions include a zoning map amendment of portions of an M1-2 district to R7D/C2-4 and R6B. In addition, the Proposed Actions include a zoning text amendment to make the Rezoning Area applicable as a Mandatory Inclusionary Housing (MIH) area mapped as Option 1 and Option 2. At this time, the Proposed Actions would seek compliance with MIH through Option 2 of the program.

The Proposed Actions would facilitate the development of a 35,274 gross square foot (gsf) 8-story mixed use building at Block 388, Lot 31 (the "Development Site") to contain 31,751 square feet of residential space and 3,523 square feet of ground-floor commercial retail (5.6 FAR). This would include 24 dwelling units, 8 of which would be affordable pursuant to MIH (the "Proposed Development"). The building would rise to a maximum height of approximately 85 feet.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 2	STREET ADDRESS 98 Third Avenue
TAX BLOCK(S) AND LOT(S) Block 388, Lot 31		ZIP CODE 11217
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Third Avenue at Bergen Street		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-2		ZONING SECTIONAL MAP NUMBER 16c

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 Appendix F

***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 If "yes," specify:

Other City Approvals Subject to CEQR (check all that apply)
☐ LEGISLATION
☐ RULEMAKING
☐ CONSTRUCTION OF PUBLIC FACILITIES
☐ 384(b)(4) APPROVAL
☐ OTHER, explain:
☐ FUNDING OF CONSTRUCTION, specify:
☐ POLICY OR PLAN, specify:
☐ FUNDING OF PROGRAMS, specify:
☐ PERMITS, specify:

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.): 22,00
Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.):
Other, describe (sq. ft.):

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): 35,274
NUMBER OF BUILDINGS: 8
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 35,274
HEIGHT OF EACH BUILDING (ft.): 85
NUMBER OF STORIES OF EACH BUILDING: 8-Stories

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: 4,984
The total square feet not owned or controlled by the applicant: 17,016

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: n/a sq. ft. (width x length)
VOLUME OF DISTURBANCE: 59,808 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 4,984 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.)	35,274	3,523		
Type (*e.g.,* retail, office, school)	24 units	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: 63
NUMBER OF ADDITIONAL WORKERS:
Provide a brief explanation of how these numbers were determined: Residents are calculated based on the Proposed Development, a total of 24 dwelling units with an average household size of 2.6 persons (based on the Boerum Hill NTA via the 2013-2017 U.S. Census ACS). Commercial retail assumptions consist of 1 Worker/333 sf.

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): 2025

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 16

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: It is assumed that the Proposed Actions would be approved in 2021 with a single construction period lasting approximately 16 months for the Proposed Development. The applicant does not control the remaining properties and any new development in the Project Area would need time to prepare, develop, and file plans upon approval of the Proposed Actions. As such, construction of non-applicant parcels would likely occur following the construction of the Proposed Development and overlap of substantial construction activities between applicant-owned and non-applicant-owned development sites is unlikely. Therefore, active construction across multiple development sites would not be expected to be continuous or extend two consecutive years or more. Therefore, all projected new development is anticipated to occur by 2025 in the future with the Proposed Actions.

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

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

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. See Chapter B		
(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.		
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		
○ **Child Care Centers:** 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)	☐	☒
○ **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)	☐	☒
○ **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)	☐	☒
○ **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 proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒
5. *SHADOWS*: CEQR Technical Manual Chapter 8		

	YES	NO
(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		
(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. See Chapter D		
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 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) 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?	☐	☒
(c) 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 Appendix 1 (including nonconforming uses)?	☒	☐
(d) 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?	☒	☐
(e) 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)?	☒	☐
(f) 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?	☐	☒
(g) 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?	☒	☐
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: 1) Gasoline tanks on-site;(2) History of gas tank compliance unknown; (3) Potential for previous hazardous waste activity on-site; and (4) Potential off-site contamination sources.	☐	☐
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?	☐	☒

	YES	NO
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 2,915		
○ 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): 6,607,531		
(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 or bus 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) or 200 subway trips per station or line?	☐	☐
○ 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?	☐	☐
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) See Chapter H	☐	☒
(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 124 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?	☐	☒

	YES	NO
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. See Chapter J		
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. See Chapter K		
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. See Chapter L		

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
Justin Jarboe, ESC	December 10, 2021

SIGNATURE

Justin Jarboe

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

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

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

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

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

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

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

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

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	Department of City Planning, acting on behalf of the City Planning Commission
NAME	**DATE**
Stephanie Shellooe	December 10, 2021

SIGNATURE



NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The proposed actions are a Zoning Map Amendment to rezone the project area (all or parts of Brooklyn Block 388, Lots 31, 34-38, 41, 42, and 43) from an M1-2 district to R7D/C2-4 and R6B, and a Zoning Text Amendment to establish a Mandatory Inclusionary Housing area coterminous with the rezoning area in the Boerum Hill neighborhood of Brooklyn Community District 2. The surrounding area contains 3- to 4-story row houses as well as higher density apartment buildings from 6- to 21-stories, including the NYCHA Wyckoff Gardens complex made up of three 21-story buildings, as well as mixed commercial and residential buildings along Third Avenue. The proposed actions would facilitate the development of an 8-story mixed use building on Projected Development Site 1, Brooklyn Block 388, Lot 31, containing 38 residential units and ground floor commercial retail space. Although not part of the proposed project, the proposed actions are conservatively projected to facilitate development on Projected Development Site 2, Lot 38, and Projected Development Site 3, Lot 42, totaling 27 dwelling units and 2,000 gsf of ground floor retail. The remainder of the lots within the rezoning area are not expected to be developed as a result of the proposed actions. The proposed actions are anticipated to result in a change in land use within the project area, however, given the existing residential and commercial mixed use character of the surrounding area, the change in land use and zoning would not constitute a significant adverse impact. Additionally, the proposed actions would not result in a significant adverse impact to public policy.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-647) related to hazardous materials, air quality, and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials, air quality, and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials, air quality, or noise.

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

TITLE Deputy Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe	DATE December 10, 2021
SIGNATURE	
TITLE Chair, City Planning Commission	
NAME Anita Laremont	DATE December 13, 2021
SIGNATURE	

Project Name: 98 Third Avenue Rezoning
CEQR # 21DCP096K
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	BK	Block 388, Lot 31
Projected Development Site 2	BK	Block 388, Lot 38
Projected Development Site 3	BK	Block 388, Lot 42

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-647**) would be established as part of approval of the proposed actions on **Projected Development Sites 1, 2, and 3** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1	X	X	X
Projected Development Site 2	X	X	X
Projected Development Site 3	X	X	X

Hazardous Materials

The (E) designation requirements applicable to **Projected Development Sites 1, 2, and 3** for hazardous materials would apply as follows:

Task 1-Sampling Protocol
The applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2-Remediation Determination and Protocol
A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

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

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

Air Quality

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

Projected Development Site 1: *Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s), ensure that the stack is located at the building's highest level at a minimum of 88 feet above the grade, and that the stack is located at least 25 feet from the eastern lot line facing 3rd Avenue to avoid any potential significant adverse air quality impacts.*

Projected Development Site 2: *Any new residential or commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest level at a minimum of 67 feet above the grade to avoid any potential significant adverse air quality impacts.*

Projected Development Site 3: *Any new residential development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and ensure that the stack is located at the building's highest level at a minimum of 47 feet above the grade to avoid any potential significant adverse air quality impacts.*

Noise

The (E) designation requirements for noise would apply as follows:

Projected Development Site 1: *To ensure an acceptable interior noise environment, future residential and community facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation along the façade facing Third Avenue and 33 dBA window/wall attenuation along the façade facing Wyckoff Street.*

Projected Development Site 2: *To ensure an acceptable interior noise environment, future residential and community facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation along the façade facing Third Avenue and 33 dBA window/wall attenuation along the façade facing Wyckoff Street.*

Projected Development Site 3: *To ensure an acceptable interior noise environment, future residential and community facility uses must provide a closed-window condition with a minimum of 33dBA window/wall attenuation along the façade Wyckoff Street.*

PROJECT DESCRIPTION

Introduction

98 Third Avenue Realty LLC ("the Applicant") seeks a zoning map amendment and zoning text amendment (the "Proposed Actions") that would affect 10 tax lots on a single block (Block 388, Lots 31, 34, 35, 36, 37, 38, 41, 42 and p/o Lots 19 and 43; hereafter the "Project Area") in the Boerum Hill area of Brooklyn Community District #2.

The Proposed Actions would facilitate the development of a 35,274 gross square foot (gsf) 8-story mixed use building at Block 388, Lot 31 (the "Development Site") to contain 31,751 square feet of residential space and 3,523 square feet of ground-floor commercial retail (5.6 FAR). This would include 24 dwelling units, 8 of which would be affordable pursuant to MIH (the "Proposed Development"). The building would rise to a maximum height of approximately 85 feet.

The Proposed Actions include a zoning amendment of portions of an M1-2 district to R7D/C2-4 and R6B. In addition, the Proposed Actions include a zoning text amendment to make the Project Area applicable as a Mandatory Inclusionary Housing (MIH) area mapped as Option 1 and Option 2. At this time, the Proposed Actions would seek compliance with MIH through Option 2 of the program, which would require 30% of the proposed residential floor area as affordable to incomes averaging 80% AMI.

Block 388, Lots 34, 35, 36, 37, 38, 41, 42 and p/o Lots 19 and 43 would be directly affected by the Proposed Actions but are not under the Applicant's control.

Description of the Affected Area

The Proposed Project Area affects ten (10) tax lots on a single block (Block 388, Lots 31, 34, 35, 36, 37, 38, 41, 42 and p/o Lots 19 and 43) in the Boerum Hill neighborhood of Brooklyn, Community District 2. The Project Area consists of parcels centered around the northwest intersection of Wyckoff and Third Avenue with frontage along both, as well as Bergen Street. As noted above, Third Avenue is classified as a 'narrow' street in the Zoning Resolution with 70 feet in mapped width. Bergen and Wyckoff Streets are also classified as 'narrow' streets with 60 feet in mapped width.

Block 388, Lot 19 (268 Bergen Street) is improved with a two-story industrial use rising to 32 feet (the Ulano Corporation) in approximately 49,293 square feet on a 46,692 square foot lot (1.05 FAR). Only a portion of the lot would be rezoned to R7D/C2-4 (50'x100') or less than 11 percent of the lot area. It should be noted the Ulano Corporation is moving their operations to Texas, and plan on a phased cessation of operations prior to the Analysis Year.

Block 388, Lot 31 (98 Third Avenue) consists of the Development Site. The Development Site is an approximately 4,984 square foot lot, improved with an automotive service use (a Shell Gas

Station) constructed in 1986. The building contains 156 square feet of floor area (0.03 FAR) and has three pumps associated with the fueling area, with the 156 square foot structure serving as a payment area with some accessory retail/convenience space housed within. The parcel has approximately 50 feet of frontage along Bergen Street and 100 feet of frontage along Third Avenue. The Third Avenue frontage contains two open curb cuts, each approximately 18 feet in width, while Bergen Street contains one open curb cut with approximately 20 feet in width.

Block 388, Lots 34, 35, 36, 37 and 41 are under the control of NYC Housing Preservation Development (HPD). Lots 34, 35, 36 and 37 (110-114 Third Avenue) are utilized as accessory surface parking, while Lot 41 (289 Wyckoff Street) is improved with a single-story 1,340 square foot commercial office building on a 2,000 square foot lot (0.67 FAR) that rises to approximately 16 feet. The surface parking is utilized by the Ulano Corporation, per a lease agreement with HPD, while Lot 41 is also utilized by the Ulano Corporation as office space.

Lot 38 (118 Third Avenue) is improved with a two-story commercial building containing 4,620 square feet (approximately 1.77 FAR) that rises to 25 feet.

Lot 42 (287 Wyckoff Street) is improved with a single-story commercial building containing 2,000 square feet (1.0 FAR) that rises to approximately 16 feet. This building is also utilized as part of the Ulano Corporation.

Lot 43 (285 Wyckoff Street) is improved with three-story walk-up apartment building containing 2,400 square feet (1.2 FAR) that rises to approximately 36 feet. The building contains 4 dwelling units and was constructed around 1931. Only a small portion of this property (two feet along the eastern lot line) would be affected.

As noted above, the Project Area is zoned M1-2. The M1-2 district allows for a variety of light manufacturing, and commercial uses at 2.0 FAR along with limited community facility uses at 4.8 FAR.

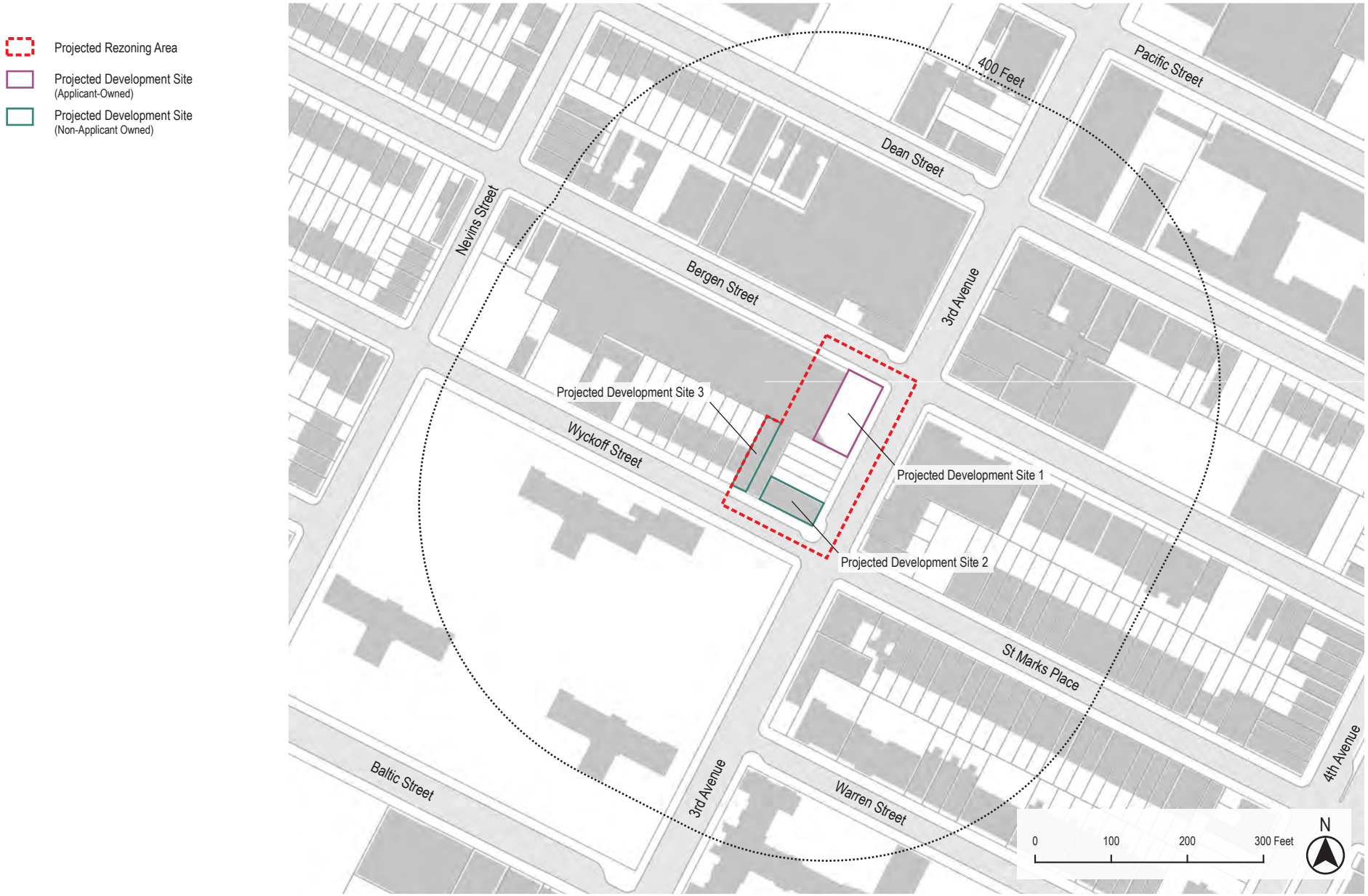
(**See Figure 1 – Site Location; Figure 2 – Tax Map; Figure 3 – Land Use Map; Figure 4 – Zoning Map; Figure 5 – Aerial Map)**

Description of the Surrounding Area

The Project Area is located along the Third Avenue corridor in Boerum Hill. Third Avenue is a two-way mixed-use corridor that travels from Downtown Brooklyn to Bay Ridge. Along this segment of Third Avenue the street is 70 feet wide in mapped width, classifying the street as 'narrow' under the Zoning Resolution. Third Avenue along this segment is predominantly mixed-use with residential uses, commercial buildings, institutional uses and some older warehouse, industrial and light manufacturing uses. An increasing amount of mixed-use buildings are being developed along the corridor with ground-floor retail and residences above, pursuant to the underlying

98 3rd Avenue, Brooklyn

Figure 1: Site Location



Data Source: MapPLUTO 2018v2.1

Urban Cartographics

98 3rd Avenue, Brooklyn

Figure 2: Tax Map



Data Source: MapPLUTO 2018v2.1, NYC DOF Digital Tax Map 2/22/19

Urban Cartographics

R7A/C2-4 district created as a result of the 2011 Boerum Hill Rezoning, which mapped the district at a depth of 100 feet from Third Avenue.

In terms of building types in the surrounding area, residential uses vary between three and four-story rowhouses located along mid-block portions of streets, and higher-density apartment buildings rising between 6- and 21-stories. The block to the south of the Project Area contains the NYCHA Wyckoff Gardens complex, which includes three, 21-story apartment buildings. More recent construction includes an 8-story apartment building directly to the east of the Development Site at 101 Third Avenue (Block 389, Lot 5).

Some older warehouse buildings are present in the surrounding area that range in height between 1- and 4-stories. Examples include the Ulano Corporation at 110 Third Avenue, a printing and graphic arts facility, a portion of which is within the proposed Project Area and is described in greater detail below. Block 198 to the northeast of the Project Area also contains several 3- and 4-story warehouse buildings.

Institutional uses in this area range between 1 and 4-stories. A cluster of such uses exists along Dean and Pacific Streets at Third Avenue. These include P.S. 38 and 47, the Temple of Resolution, Acorn High School for Social Justice, and Brooklyn High School for the Arts. A Kingdom Hall of Jehovah's Witnesses is located to the south of the Project Area on Third Avenue at St. Mark's Place. A commercial warehouse building that houses various City services is located on the block to the north of the Project Area at 88 Third Avenue. In terms of parkland, the only space located in the 1000-foot radius is a schoolyard to playground area adjacent P.S. 38 and 47, referenced above.

As noted above, the Boerum Hill Historic District (as extended) is located west of the Project Area, bounded by Warren Street to the south, Nevins Street to the east, Bond Street to the West, and the centerline of Block 196 to the north.

Zoning districts in the surrounding area include the underlying M1-2 district, as well as R7A/C2-4 districts and R6, R6B, R6A, R7B and R8A/C2-4 districts. The underlying M1-2 district is present on a majority of the subject tax block except for a mid-block segment that is zoned R6B. The M1-2 district allows for a variety of light manufacturing uses such as repair shops, wholesale service and storage facilities, as well as heavier industrial uses subject to stringent performance standards. The bulk parameters of the district allow for buildings up to 2.0 FAR, built to the front and side lot lines, with a 20-foot rear yard. Building heights for M1-2 districts are governed by a sky exposure plane that begins at 60 feet or four-stories, whichever is less. The sky exposure plane is 2.7 to 1 on narrow streets. Off-street parking and loading facilities vary in M1-2 districts according to the type and size of the use on the property. Setbacks of 20 feet are required on narrow streets and 15 feet on wide streets.

The area along Third Avenue, from Warren Street in the south to Pacific Street in the north, is mapped with an R7A/C2-4 district at a depth of 100 feet. The R7A district is a contextual zoning district that permits residential, commercial and community facility uses. R7A districts allow for

98 3rd Avenue, Brooklyn

Figure 3: Land Use Map

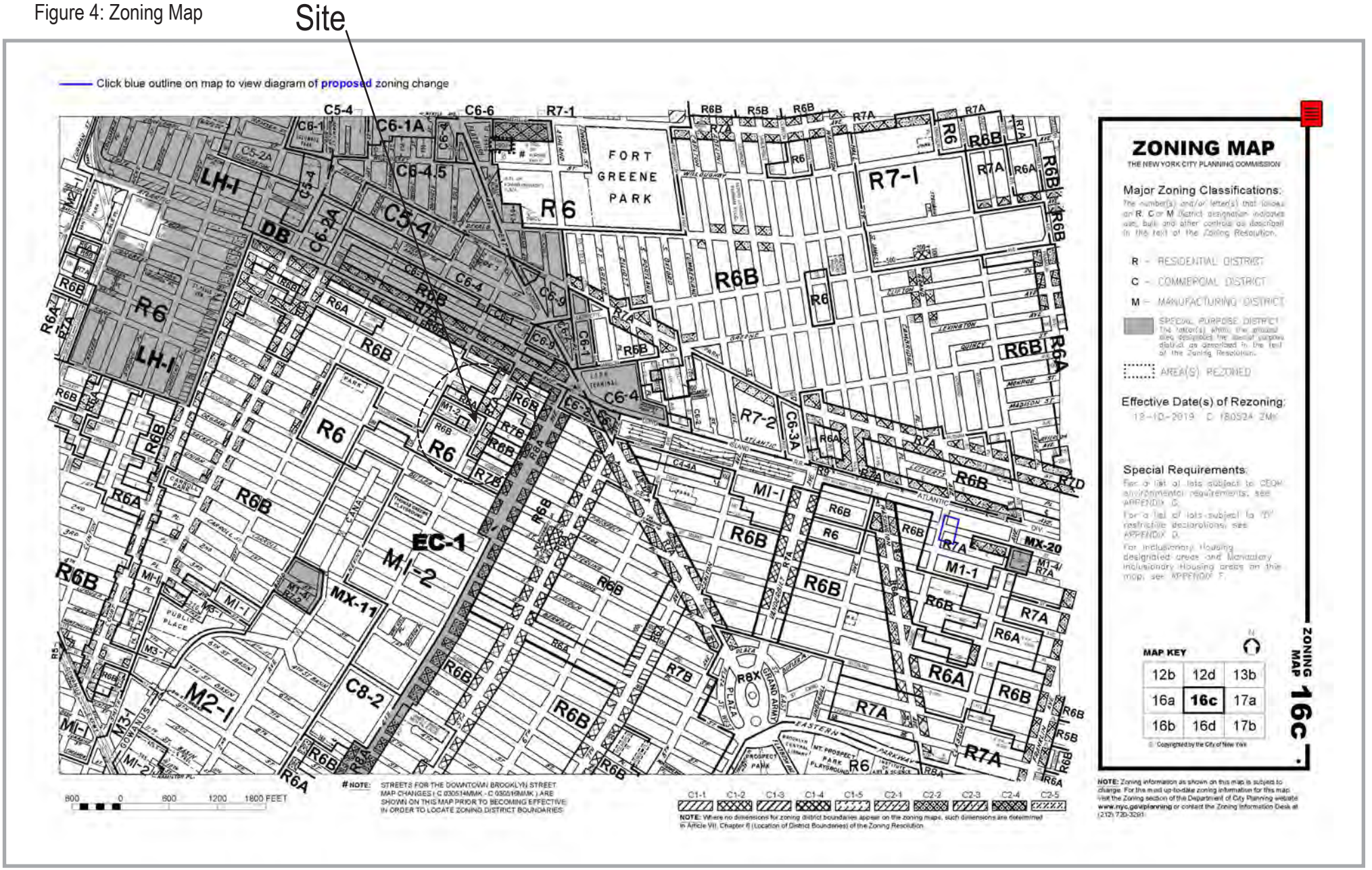


Data Source: MapPLUTO 2018v2.1, NYC DOF Digital Tax Map 2/22/19

Urban Cartographics

98 3rd Avenue, Brooklyn

Figure 4: Zoning Map



Urban Cartographics

98 3rd Avenue, Brooklyn

Figure 5: Aerial Map



Imagery Source: 2019 Bing, Microsoft Corporation (OR) 2019 Google

Urban Cartographics

buildings up to 4.0 FAR and generally yield 6- to 7-story buildings. Maximum lot coverage is 65 percent for interior and through lots and 100 percent on corner lots. Above a base height of 40 to 65 feet, (75 feet with a Qualifying Ground Floor [QGF]) the building must set back to a depth of 10 feet on a wide street, before rising to a maximum of 80 feet (85 feet with a Qualifying Ground Floor [QGF]). Parking is required for 50 percent of all dwelling units. Off-street parking is permitted only within, or to the side or rear of a building, never between the street wall and the street line.

Beyond 100 feet of Third Avenue are R6A, R6B and R7B districts. The R6A zoning district is a contextual district with a maximum residential FAR of 3.0. Quality Housing regulations are mandatory in these districts. Above a maximum base height of 60 feet, (65 feet with a Qualifying Ground Floor [QGF]) 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 70 feet (75 feet with a Qualifying Ground Floor [QGF]). Off-street parking is required for 50 percent of a building's dwelling units or can be waived if 5 or fewer spaces are required.

R6B is a contextual residential zoning district that predominantly produces four- and five-story buildings. Many of these are brownstone buildings that are set back from the street and have small front yards. The R6B zoning district allows for a maximum FAR of 2.0. The maximum height is 50 feet (55 feet with a Qualifying Ground Floor [QGF]). Off Street parking is required for 50 percent of all dwelling units. R7B districts are similar to R6B districts but allow a larger FAR of 3.0. R7B districts typically produce six- to seven-story buildings and require a base height between 40 and 65 feet before rising to a maximum height of 75 feet.

The block to the south of the Project Area, west of Third Avenue, is mapped R6 and includes the NYCHA Wyckoff Gardens complex. R6 is a general medium-density residential zoning district. The R6 district allows buildings under both Height Factor and Quality Housing regulations. Under Height Factor regulations, a maximum FAR from 0.78 to 2.43 for residential use is permitted; with a required open space ratio (OSR) ranging from 27.5 to 37.5 percent. Under Quality Housing regulations, 2.2 FAR is permitted along narrow streets, a higher 3.0 FAR is permitted for buildings on or within 100 feet of a wide street. For height factor buildings, 70 percent of dwelling units require parking, while for Quality Housing buildings, 50 percent of dwelling units require parking.

The Fourth Avenue corridor is one block to the east. This corridor is zoned R8A/C2-4. The R8A district primarily produces contextual 10- to 12-story apartment buildings at a maximum FAR of 6.02 and permits Use Groups 1-4. Within R8A districts, Quality Housing regulations are also mandatory. The maximum height for buildings in R8A districts is 120 feet (125 feet with a Qualifying Ground Floor [QGF]) with a base height of 60-85 feet (95 feet with a Qualifying Ground Floor [QGF]). Setbacks of 10 or 15 feet are required depending on street width. On a wide street, the street wall must extend along the entire width of the zoning lot and at least 70 percent of the street wall must be within eight feet of the street line. Parking is required for 40 percent of dwelling units, 20 percent for zoning lots between 10,001 and 15,000 square feet and waived for zoning lots 10,000 square feet and below, or if 15 spaces or fewer are required. This area is also in the Special Fourth Avenue Enhanced Commercial District, which includes additional

transparency requirements, limited curb cuts and special use provisions that require ground-floor neighborhood services and amenities, while limiting parking and residential uses on the ground floor facing Fourth Avenue.

The C2-4 commercial overlay portion of the R7A and R8A districts is commonly mapped in dense areas close to transit. The C2-4 districts allow for a wide variety of commercial uses (Use Groups 5-9 and 14) such as local retail, funeral homes and repair services. Within medium- density residential zoning districts (R7A and R8A) a maximum FAR of 2.0 is permitted for commercial uses. Parking requirements vary by use, with general retail typically requiring one space per 1,000 square feet of floor area and the requirement is waived up to 40 spaces.

The Project Area is in close proximity to numerous transit options and is located in a Transit Zone. The New York City Transit (NYCT) offers subway service two blocks to the northeast at 4th Avenue and Bergen Street with 2, 3, 4, 5, B, D, N, Q, R and W train service. In addition, this station is connected to the Atlantic Terminal, which offers MTA Long Island Railroad access. In terms of bus service, the B37 provides service along Third Avenue between Downtown Brooklyn and Bay Ridge. Furthermore, the B65 provides service along Dean and Bergen streets between Downtown Brooklyn and Crown Heights.

Description of the Proposed Project

The Proposed Actions would facilitate the development of a 35,274 gross square foot (gsf) 8-story mixed use building at Block 388, Lot 31 (the "Development Site") to contain 31,751 square feet of residential space and 3,523 square feet of ground-floor commercial retail (5.6 FAR). This would include 24 dwelling units, 8 of which would be affordable pursuant to MIH (the "Proposed Development"). The building would rise to a maximum height of approximately 85 feet.

Actions Necessary to Facilitate the Proposed Project

The Proposed Actions consist of a zoning map amendment from M1-2 to R7D/C2-4 and R6B. In addition, a zoning text amendment to Appendix F of the Zoning Resolution (*Inclusionary Housing Designated Areas*) is required to establish a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area (the "Proposed Actions"). The MIH area would be mapped as both Option 1 and Option 2. Option 1 requires that 25 percent of the new residential floor be reserved for incomes averaging 60 percent AMI and below, while Option 2 requires that 30 percent of the new residential floor area be reserved for incomes averaging 80 percent AMI and below. The Proposed Development would comply with MIH under Option 2, with 8 of the proposed 24 dwelling units reserved for incomes averaging 80 percent AMI and below.

The proposed R7D/C2-4 district would be mapped at a depth of 100 feet from Third Avenue on the eastern end of Block 388. This would rezone Lots 31, 34, 35, 36, 37, 38, 41 and p/o Lot 19 from M1-2 to R7D/C2-4. The eastern end of Lot 19 would be partially rezoned with a 50' by 100'

portion of the property rezoned or approximately 11 percent of the lot. In addition, a small portion of Lot 43, approximately 2 feet along the eastern lot line, would be rezoned from M1-2 to R6B. The remaining lot to be rezoned, Lot 42, would be rezoned R6B by extending the pre-existing R6B district to the east by 20 feet to encompass that property and align with the proposed R7D/C2-4 district.

Purpose and Need

The Project Area is zoned M1-2, which only permits commercial, light manufacturing-industrial and some community facility uses. Based on development trends in the surrounding area, which include predominantly mixed-use and residential development, and the location of this area along a vibrant mixed-use thoroughfare, a mixed-use zoning district (R7D/C2-4) is sought to mirror the districts located to the north along Third Avenue at a depth of 100 feet. In addition, the pre-existing R6B zoning district would be extended to the east to meet the proposed R7D/C2-4 district, which would include adjacent lots, to be consistent with the contextual midblock medium-density residential zoning districts present on the surrounding blocks to the north, east and west. Since the proposed zoning map amendments would result in an increase in residential density, a text amendment to make the Project Area applicable to MIH is required and would result in much needed income-restricted dwelling units.

Analysis Framework

Analysis year

It is assumed that the Proposed Actions would be approved in 2021 with a single construction period lasting approximately 16 months for the Proposed Development. The applicant does not control the remaining properties and any new development in the Project Area would need time to prepare, develop, and file plans upon approval of the Proposed Actions. As such, construction of non-applicant parcels would likely occur following the construction of the Proposed Development and overlap of substantial construction activities between applicant-owned and non-applicant-owned development sites is unlikely. Therefore, all projected new development is anticipated to occur by 2025 in the future with the Proposed Actions (the “Analysis Year”).

Existing Conditions

The Existing Conditions of the Project Area are noted below in Table 1 (Existing Conditions).

Table 1 – Existing Conditions[1]

Block	Lot	Lot Size (sf)	Address	Land Use	# of Floors	Gross FA (sf)	FAR	Workers
388	19	46,692	268 Bergen Street	Industrial/Manufacturing	2	49,293	1.05	49
388	31	4,984	98 Third Avenue	Automotive	1	154	0.03	2
388	34	1,300	No Mapped Address	Parking	0	-	0	
388	35	1,300	110 Third Avenue	Parking	0	-	0	
388	36	1,300	112 Third Avenue	Parking	0	-	0	
388	37	1,300	114 Third Avenue	Parking	0	-	0	
388	38	2,600	118 Third Avenue	Commercial	2	4,260	1.77	17
388	41	2,000	289 Wyckoff Street	Commercial	1	1,340	0.67	5
388	42	2,000	287 Wycoff Street	Commercial	1	2,000	1	8

Future No-Action Scenario

The underlying M1-2 zoning district permits commercial, industrial and manufacturing development at a maximum of 2.0 FAR and limited community facility uses at 4.8 FAR. The district does not permit mixed-use development with residences. New development is not anticipated under the current M1-2 zoning district and the Existing Conditions (Table 1) in the Project Area are anticipated to remain in the future without the Proposed Actions.

Future With-Action Scenario

In the future with the Proposed Actions it is conservatively assumed that development would occur within the Project Area both on the applicant-owned site (Projected Development Site 1) and on two non-applicant-owned properties (Projected Development Sites 2 and 3) as described below.

The Proposed Development ("Projected Development Site 1") would be redeveloped with a 35,274 square foot (5.6 FAR) 8-story mixed-use building at Block 388, Lot 31 (the "Development Site") to contain 31,751 gsf of residential space and 3,523 gsf of ground-floor commercial retail. A dwelling unit assumption of 850 GSF of space per unit is assumed, consistent with the nearby Gowanus Rezoning (19DCP157K). This would result in 38 dwelling units, compared to the 24 proposed dwelling units, for a more conservative analysis. Of those 38 dwelling units, approximately 30% would be applicable to MIH (12 units). The building would rise to a maximum height of approximately 85 feet*, where it would achieve the maximum permitted floor area.

[1] Worker assumptions include the following: Office 1/250sf and Industrial 1/1000 sf. The Development Site (98 Third Avenue) is identified by the Applicant to have two employees.

Block 388, Lot 38 ("Projected Development Site 2") would be redeveloped with a 17,600 gsf mixed-use building (5.6 FAR) that would rise to 6-stories (64') with 21 dwelling units (7 affordable under MIH or 30%). The building would contain 2,000 gsf of ground floor retail. The building would waive out of accessory parking requirements. The building would rise to 64'* where it would reach its maximum permitted floor area.

Block 388, Lot 42 ("Projected Development Site 3") would be redeveloped with a 4,800 gsf residential building (2.2 FAR) that would rise to 4-stories (44') with 6 dwelling units. The building would waive out of accessory parking requirements. The building would rise to 44'* where it would reach its maximum permitted floor area.

*For a conservative analysis, the maximum permitted building heights with the proposed zoning districts under MIH would be analyzed for the relevant EAS sections.

Table 2 – With-Action Workers [2]

Projected Site 1	***Use***	***Workers***
3,523	Retail (GSF)	11
Projected Site 2		
2,000	Retail (GSF)	6
Total		**17**

Table 4 – Existing Conditions, No-Action Scenario, With-Action Scenario and Incremental Development

Use (GSF)	**Existing Conditions**	**No-Action Condition**	**With-Action Condition**	**Increment**
Residential	0	0	52,151	52,151 (65 DUs – 19 affordable)
Commercial	6,620	6,620	5,523	-1,097
Community Facility	0	0	0	0
Industrial/Manufacturing	49,293	0	0	0
Transportation/Utility	154	154	0	-154
Workers	27	27	17	-10
Residents	0	0	125	125

[2] Assuming one worker per 333 square feet of retail.

In summary, based on incremental difference between the No-Action and With-Action scenarios described below, the Proposed Actions would result in a net increase of 65 dwelling units, 19 of which would be affordable under MIH. In terms of non-residential uses, the Proposed Actions would result in a net loss of 1,097 square feet of commercial space and 154 square feet of automotive space. In terms of additional residents and workers, the Proposed Actions would generate a net increment of 125 new residents[3] and a loss of 10 workers.

[3] Residents are calculated based on 65 dwelling units and 2.6 persons per household in Neighborhood Tabulation Area (Boerum Hill) per the 2013-2017 Census ACS data.



1. View of the Development Site facing west from the intersection of 3rd Avenue and Bergen Street.



2. View of Bergen Street facing southeast (Project Area at right).



3. View of the Project Area facing south from Bergen Street.





4. View of the Project Area facing southwest from Bergen Street.



5. View of the Development Site facing south from Bergen Street.



6. View of the Development Site facing southwest from Bergen Street.





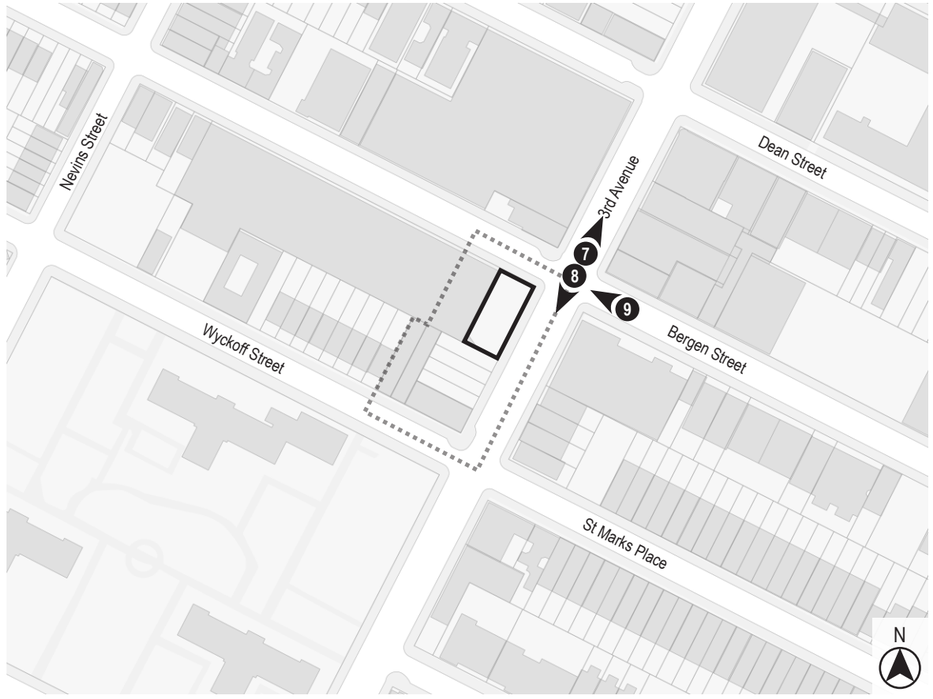
7. View of 3rd Avenue facing northeast from Bergen Street.



8. View of 3rd Avenue facing southwest from Bergen Street
(Development Site at right).



9. View of Bergen Street facing northwest from 3rd Avenue
(Development Site at left).





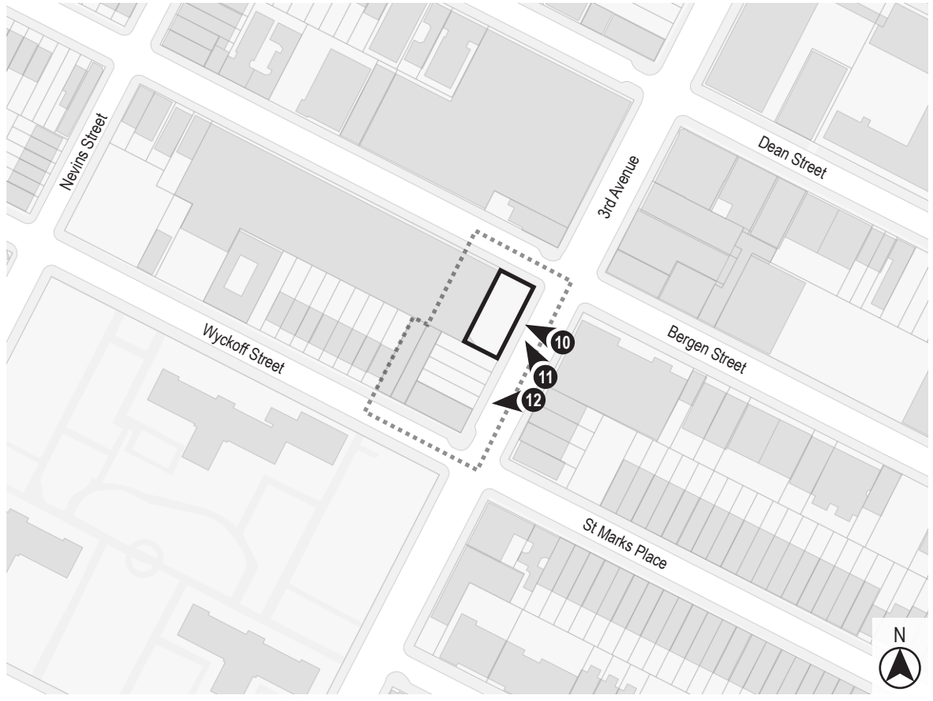
10. View of the Development Site facing northwest from 3rd Avenue.



11. View of the Development Site facing north from 3rd Avenue.



12. View of the Project Area facing west from 3rd Avenue.





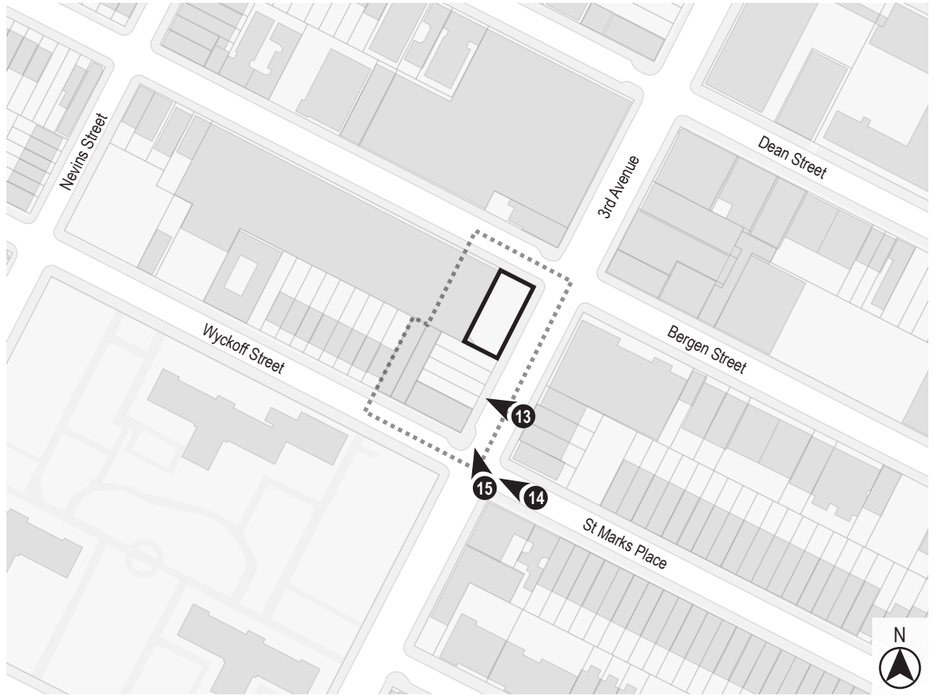
13. View of the Project Area facing northwest from 3rd Avenue.



14. View of Wyckoff Street facing northwest from 3rd Avenue (Project Area at right).



15. View of the Project Area facing north from the intersection of 3rd Avenue and St Marks Place.





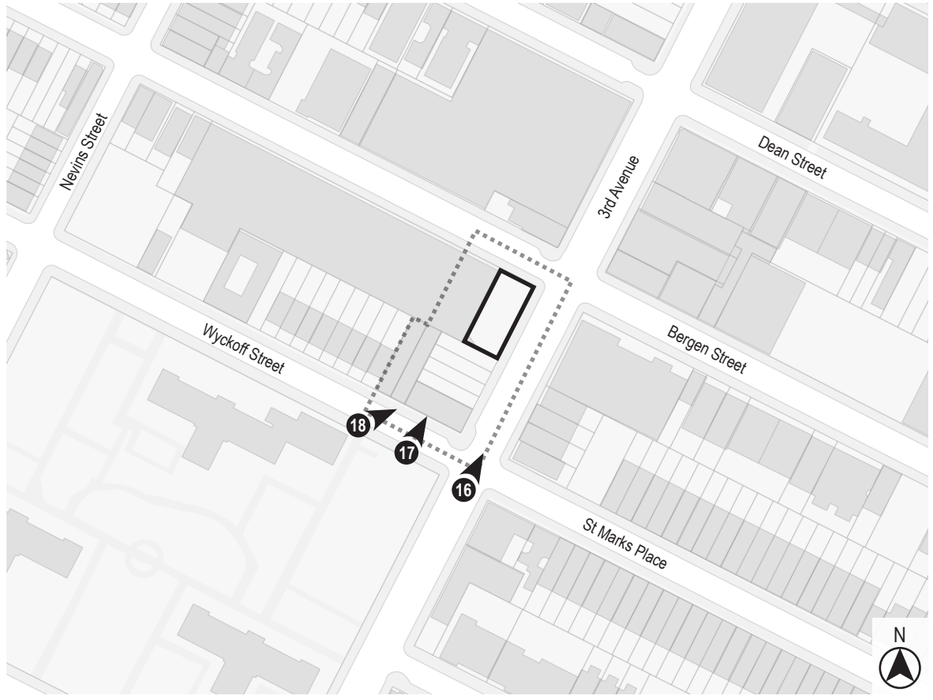
16. View of 3rd Avenue facing northeast from Wyckoff Street (Project Area at left).



17. View of the Project Area facing northeast from Wyckoff Street.



18. View of the Project Area facing northeast from Wyckoff Street.





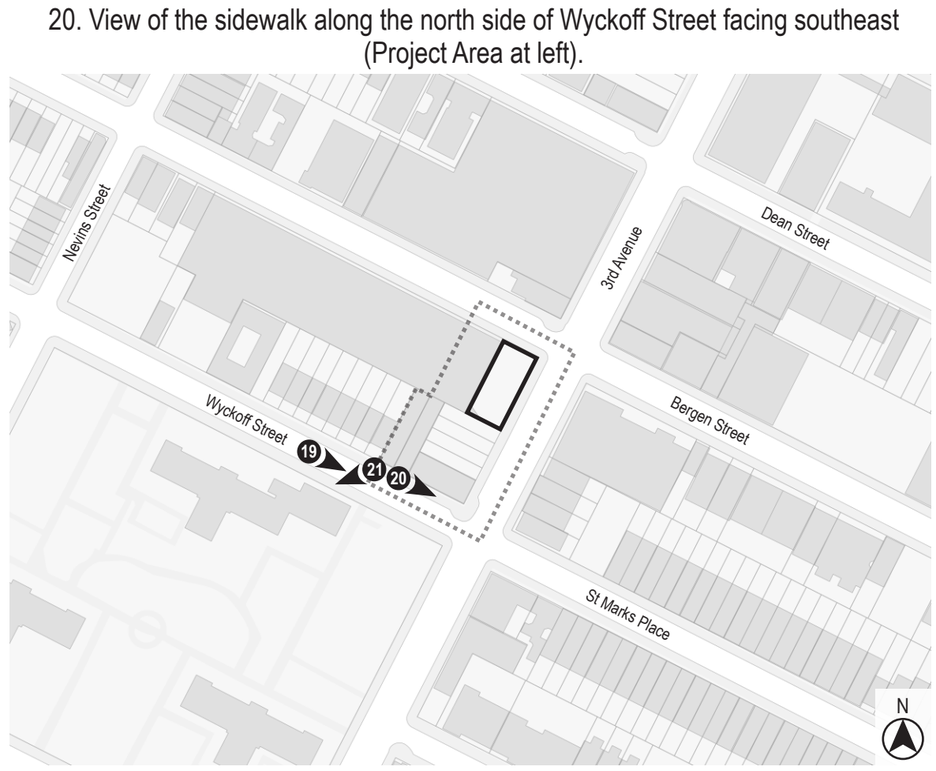
19. View of Wyckoff Street facing southeast (Project Area at left).



21. View of the south side of Wyckoff Street facing southwest from the Project Area.

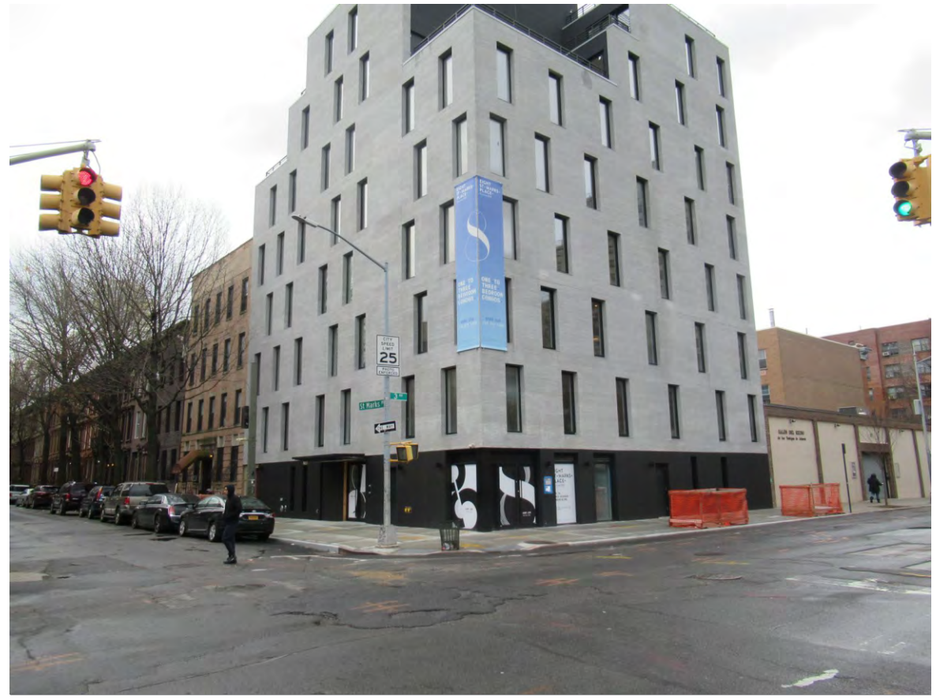


20. View of the sidewalk along the north side of Wyckoff Street facing southeast (Project Area at left).





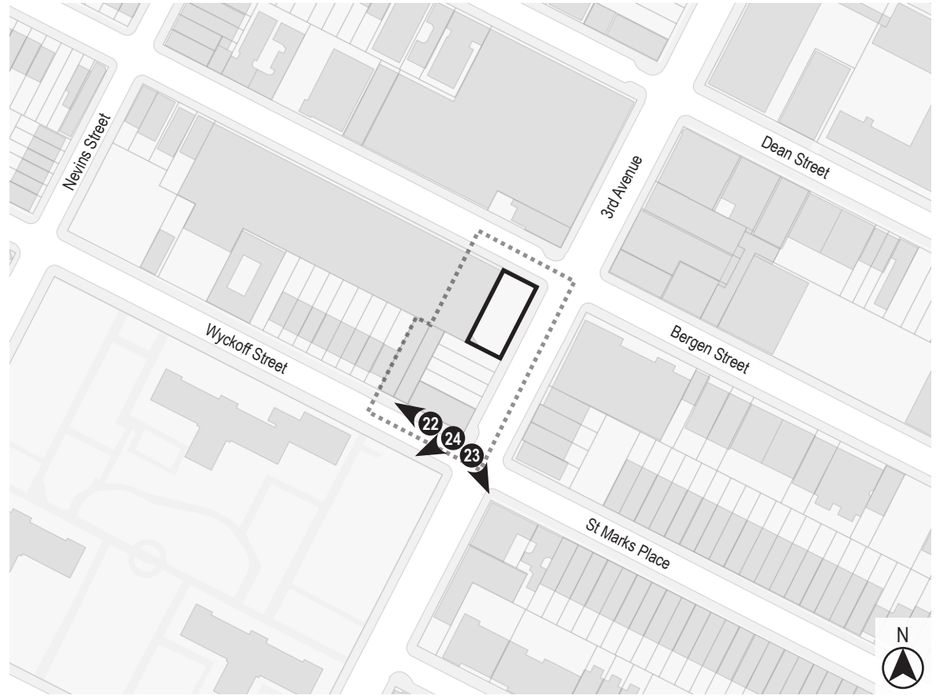
22. View of the sidewalk along the north side of Wyckoff Street facing northwest from 3rd Avenue (Project Area at right).



23. View of the intersection of 3rd Avenue and St Marks Place facing south from the Project Area.



24. View of the south side of Wyckoff Street facing southwest from the intersection of Wyckoff Street and 3rd Avenue.





25. View of the sidewalk along the west side of 3rd Avenue facing northeast from Wyckoff Street (Project Area at left).



26. View of the sidewalk along the west side of 3rd Avenue facing northeast (Development Site at left).



27. View of the east side of 3rd Avenue facing south from the Development Site.





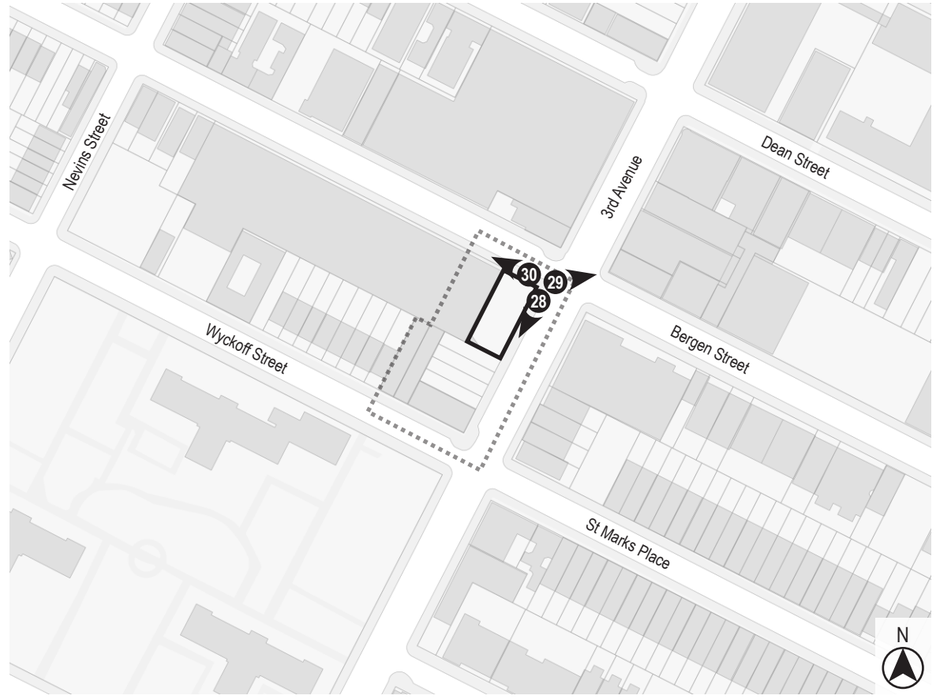
28. View of the sidewalk along the west side of 3rd Avenue facing southwest from Bergen Street (Development Site at right).



29. View of the intersection of 3rd Avenue and Bergen Street facing east from the Development Site.



30. View of the sidewalk along the south side of Bergen Street facing northwest from 3rd Avenue (Development Site at left).





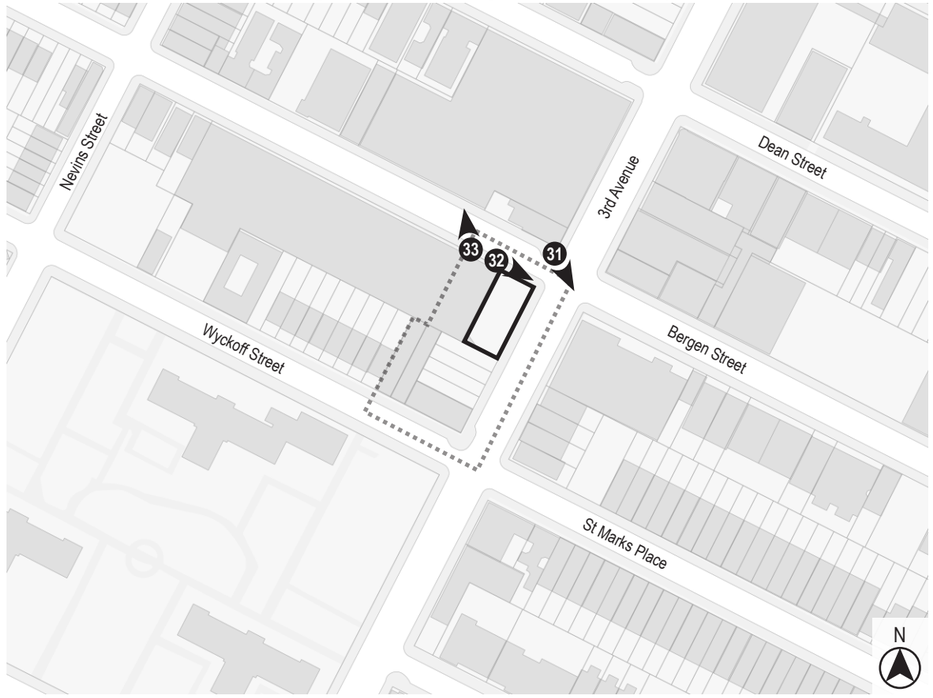
31. View of the intersection of 3rd Avenue and Bergen Street facing southeast.



32. View of the sidewalk along the south side of Bergen Street facing southeast (Project Area at right).



33. View of the north side of Bergen Street facing north from the Project Area.



Land Use, Zoning and Public Policy

A. Introduction

Under 2020 *City Environmental Quality Review (CEQR) Technical Manual* guidelines, a land use analysis evaluates the uses and development trends in the area that may be affected by a proposed action and determines whether the proposed action is compatible with those conditions or may affect them. Similarly, the analysis considers a proposed action's compliance with, and effect on, the area's zoning and other applicable public policies.

As described in Chapter 1, "Project Description," the proposed project consists of a series of land use actions (collectively, the "Proposed Actions") to facilitate a new mixed-use complex in the Boerum Hill area of Brooklyn Community District #2.

The Proposed Actions include:

- **Zoning Map Amendment:** a zoning map amendment is sought to rezone the Project Area from M1-2 district to R7D/C2-4 and R6B. In addition, the Proposed Actions include a zoning text amendment to make the Project Area applicable as a Mandatory Inclusionary Housing (MIH) area mapped as Option 1 and Option 2. At this time, the Proposed Actions would seek compliance with MIH through Option 2 of the program.
- **Zoning Text Amendment:** a zoning text amendment to make the Project Area applicable as a Mandatory Inclusionary Housing (MIH) area mapped as Option 1 and Option 2. At this time, the Proposed Actions would seek compliance with MIH through Option 2 of the program.

The Proposed Actions would facilitate underutilized parcels of land currently utilized as automotive service use and commercial office space to be redeveloped with mixed-use developments and a new residential building. The Proposed Actions intend to reinforce the increasingly mid-rise and mixed-use character of the Third Avenue corridor.

B. METHODOLOGY

The purpose of this chapter is to examine the effects of the Proposed Actions on land use, zoning, and public policy and determine whether or not they would result in any significant adverse impacts. As described in Chapter 1, "Project Description," in order to assess the possible effects of the Proposed Actions, a reasonable worst-case development scenario (RWCDS) was established for both the current zoning (No-Action) and proposed zoning (With-Action) conditions for the 2025 analysis year. As noted in Chapter 1, three projected sites were identified as a result of the Proposed Actions.

The incremental difference between the No-Action and With-Action conditions on the projected development sites forms the basis of the impact category analyses in this chapter. Under *CEQR* guidelines, a preliminary assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects.

The Proposed Actions exceed preliminary assessment thresholds outlined in the *CEQR Technical Manual*. Because the Proposed Actions include a zoning map amendment, detailed land use and zoning assessments are warranted. A detailed public policy analysis was also prepared to determine the potential of the Proposed Actions to alter or conflict with applicable public policies. In accordance with the *CEQR Technical Manual*, the detailed analysis describes existing and anticipated future (i.e., No-Action) conditions to a level necessary to understand the relationship of the Proposed Actions to such conditions. The detailed analysis assesses any changes to these conditions that could be created by the Proposed Actions in the 2025 analysis year. Existing land uses were identified through review of a combination of sources including 2020 field surveys and secondary sources, comprising the City's 2019 Primary Land Use Tax Lot Output (PLUTO) data files, online Geographic Information Systems (GIS) databases such as the New York City Open Accessible Space Information System (OASIS, http://www.oasisnyc.net), and ZOLA (http://zola.planning.nyc.gov). Other publications and approved environmental review documents that have been completed for projects in the area were also consulted, many of which are discussed in the "Public Policy" section, below. New York City Zoning Maps and the Zoning Resolution of the City of New York (ZR) were consulted to describe existing zoning districts in the study areas and provided the basis for the zoning evaluation of the future No-Action and With-Action conditions. Applicable public policies were identified, and a public policy analysis was prepared to determine the potential for the Proposed Actions to alter or conflict with applicable public policies.

Study Areas

According to the *2020 CEQR Technical Manual*, the appropriate study area for land use and zoning is related to the type and size of the project being proposed and the location and neighborhood context of the area that could be affected by the project. In accordance with the *2020 CEQR Technical Manual* guidelines, land use, zoning, and public policy are addressed and analyzed for two geographical areas: (1) the primary study area, which is coterminous with the Project Area; and (2) a secondary 400-foot study area (the "Study Area") which encompasses areas that have the potential to experience indirect impacts as a result of the Proposed Actions. As described in Chapter 1, "Project Description," the Project Area comprises three projected development sites that are anticipated as a result of the Proposed Actions (refer to Figure 1). The Study Area has been established in accordance with *CEQR Technical Manual* guidelines and can be seen in Figure 1.

98 3rd Avenue, Brooklyn

Figure 1: Land Use Map



Data Source: MapPLUTO 2018v2.1, NYC DOF Digital Tax Map 2/22/19

Urban Cartographics

C. DETAILED ASSESSMENT

Existing Conditions

Land Use

The Project Area is located in the Boerum Hill area of Brooklyn. Third Avenue is a two-way mixed-use corridor that travels from Downtown Brooklyn to Bay Ridge. Along this segment of Third Avenue the street is 70 feet wide in mapped width, classifying the street as 'narrow' under the Zoning Resolution. Third Avenue along this segment is predominantly mixed-use with residential uses, commercial buildings, institutional uses and some older warehouse, industrial and light manufacturing uses. An increasing amount of mixed use buildings are being developed along the corridor with ground-floor retail and residences above, pursuant to the underlying R7A/C2-4 district created as a result of the 2011 Boerum Hill Rezoning, which mapped the district at a depth of 100 feet from Third Avenue.

In terms of building types in the surrounding area, residential uses vary between three and four-story rowhouses located along mid-block portions of streets, and higher-density apartment buildings rising between 6- and 21-stories. The block to the south of the Project Area contains the NYCHA Wyckoff Gardens complex, which includes three, 21-story apartment buildings. More recent construction includes an 8-story apartment building directly to the east of the Project Area at 101 Third Avenue (Block 389, Lot 5).

Some older warehouse buildings are present in the surrounding area that range in height between 1- and 4-stories. Examples include the Ulano Corporation at 110 Third Avenue, a printing and graphic arts facility, a portion of which is within the proposed Project Area. Block 198 to the northeast of the Project Area also contains several 3- and 4-story warehouse buildings.

Institutional uses in this area range between 1 and 4-stories. A cluster of such uses exists along Dean and Pacific Streets at Third Avenue. These include P.S. 38 and 47, the Temple of Resolution, Acorn High School for Social Justice, and Brooklyn High School for the Arts. A Kingdom Hall of Jehovah's Witnesses is located to the south of the Project Area on Third Avenue at St. Mark's Place. A commercial warehouse building that houses various City services is located on the block to the north of the Project Area at 88 Third Avenue. In terms of parkland, the only space located in the 1000-foot radius is a schoolyard to playground area adjacent P.S. 38 and 47, referenced above.

The Project Area is in close proximity to numerous transit options and is located in a Transit Zone. The New York City Transit (NYCT) offers subway service two blocks to the northeast at 4th Avenue and Bergen Street with 2, 3, 4, 5, B, D, N, Q, R and W train service. In addition, this station is connected to the Atlantic Terminal, which offers MTA Long Island Railroad access. In terms of bus

service, the B37 provides service along Third Avenue between Downtown Brooklyn and Bay Ridge. Furthermore, the B65 provides service along Dean and Bergen streets between Downtown Brooklyn and Crown Heights.

Zoning

As shown in Figure 2, the Project Area is in an M1-2 district and in the Study Area is an R7A/C2-4 district to on the east side of Third Avenue, as well as R6, R6B, R6A, R7B and R8A/C2-4 districts in the surrounding area. The underlying M1-2 district is present on a majority of the subject tax block except for a mid-block segment that is zoned R6B. The M1-2 district allows for a variety of light manufacturing uses such as repair shops, wholesale service and storage facilities, as well as heavier industrial uses subject to stringent performance standards. The bulk parameters of the district allow for buildings up to 2.0 FAR, built to the front and side lot lines, with a 20-foot rear yard. Building heights for M1-2 districts are governed by a sky exposure plane that begins at 60 feet or four-stories, whichever is less. The sky exposure plane is 2.7 to 1 on narrow streets. Off-street parking and loading facilities vary in M1-2 districts according to the type and size of the use on the property. Setbacks of 20 feet are required on narrow streets and 15 feet on wide streets.

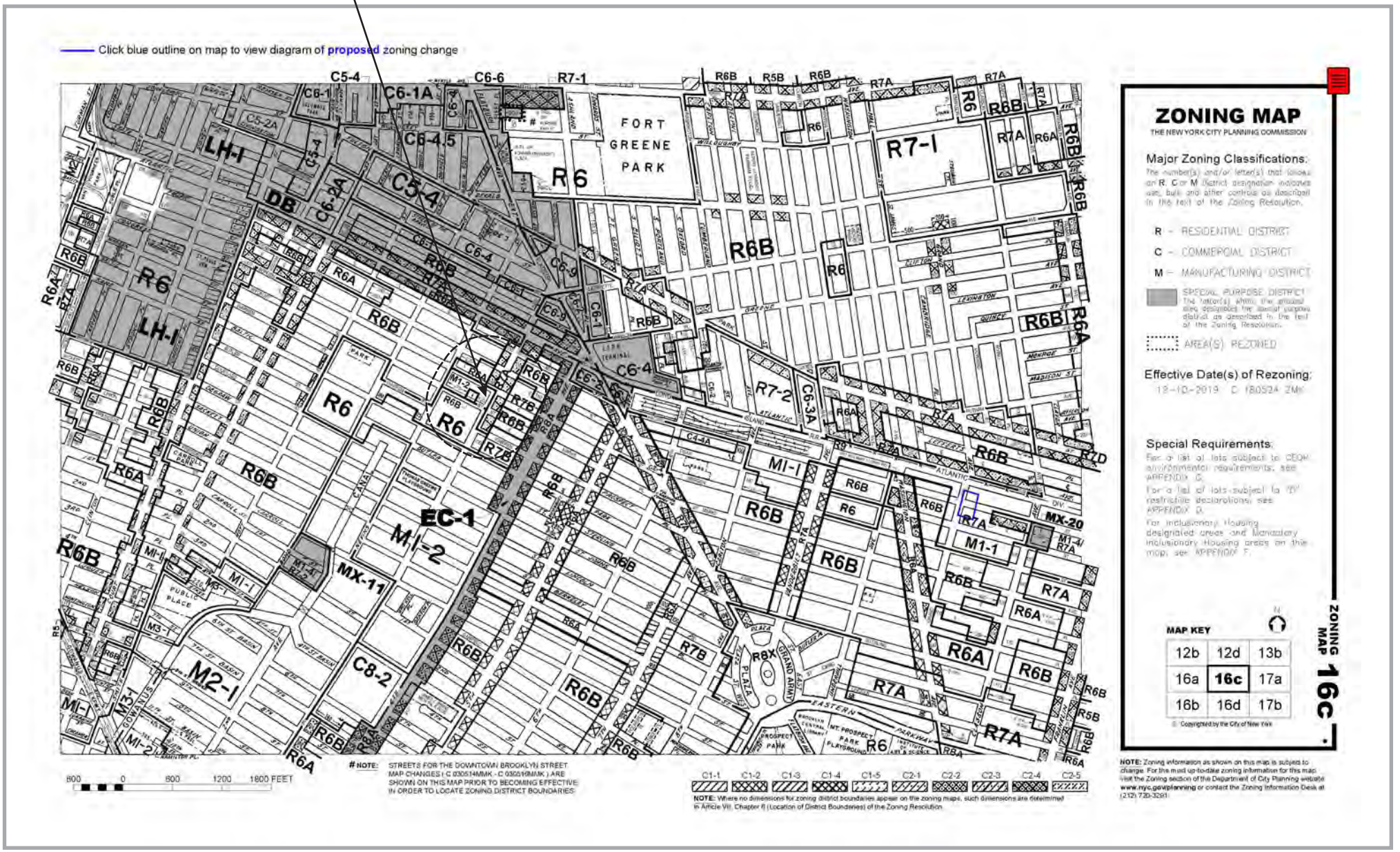
The area along Third Avenue, from Warren Street in the south to Pacific Street in the north, is mapped with an R7A/C2-4 district at a depth of 100 feet. The R7A district is a contextual zoning district that permits residential, commercial and community facility uses. R7A districts allow for buildings up to 4.0 FAR and generally yield 6- to 7-story buildings. Maximum lot coverage is 65 percent for interior and through lots and 100 percent on corner lots. Above a base height of 40 to 65 feet, (75 feet with a Qualifying Ground Floor [QGF]) the building must set back to a depth of 10 feet on a wide street, before rising to a maximum of 80 feet (85 feet with a Qualifying Ground Floor [QGF]). Parking is required for 50 percent of all dwelling units. Off-street parking is permitted only within, or to the side or rear of a building, never between the street wall and the street line.

Beyond 100 feet of Third Avenue are R6A, R6B and R7B districts. The R6A zoning district is a contextual district with a maximum residential FAR of 3.0. Quality Housing regulations are mandatory in these districts. Above a maximum base height of 60 feet, (65 feet with a Qualifying Ground Floor [QGF]) 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 70 feet (75 feet with a Qualifying Ground Floor [QGF]). Off-street parking is required for 50 percent of a building's dwelling units or can be waived if 5 or fewer spaces are required.

R6B is a contextual residential zoning district that predominantly produces four- and five-story buildings. Many of these are brownstone buildings that are set back from the street and have small front yards. The R6B zoning district allows for a maximum FAR of 2.0. The maximum height is 50 feet (55 feet with a Qualifying Ground Floor [QGF]). Off Street parking is required for 50 percent of all dwelling units. R7B districts are similar to R6B districts but allow a larger FAR of 3.0.

98 3rd Avenue, Brooklyn

Figure 2: Zoning Map



Urban Cartographics

R7B districts typically produce six- to seven-story buildings and require a setback between 40 and 60 feet before rising to a maximum height of 75 feet.

The block to the south of the Project Area, west of Third Avenue, is mapped R6 and includes the NYCHA Wyckoff Gardens complex. R6 is a general medium-density residential zoning district. The R6 district allows buildings under both Height Factor and Quality Housing regulations. Under Height Factor regulations, a maximum FAR from 0.78 to 2.43 for residential use is permitted; with a required open space ratio (OSR) ranging from 27.5 to 37.5 percent. Under Quality Housing regulations, 2.2 FAR is permitted along narrow streets, a higher 3.0 FAR is permitted for buildings on or within 100 feet of a wide street. For height factor buildings, 70 percent of dwelling units require parking, while for Quality Housing buildings, 50 percent of dwelling units require parking.

The Fourth Avenue corridor is one block to the east. This corridor is zoned R8A/C2-4. The R8A district primarily produces contextual 10- to 12-story apartment buildings at a maximum FAR of 6.02 and permits Use Groups 1-4. Within R8A districts, Quality Housing regulations are also mandatory. The maximum height for buildings in R8A districts is 120 feet (125 feet with a Qualifying Ground Floor [QGF]) with a base height of 60-85 feet (95 feet with a Qualifying Ground Floor [QGF]). Setbacks of 10 or 15 feet are required depending on street width. On a wide street, the street wall must extend along the entire width of the zoning lot and at least 70 percent of the street wall must be within eight feet of the street line. Parking is required for 40 percent of dwelling units, 20 percent for zoning lots between 10,001 and 15,000 square feet and waived for zoning lots 10,000 square feet and below, or if 15 spaces or fewer are required. This area is also in the Special Fourth Avenue Enhanced Commercial District, which includes additional transparency requirements, limited curb cuts and special use provisions that require ground-floor neighborhood services and amenities, while limiting parking and residential uses on the ground floor facing Fourth Avenue.

The C2-4 commercial overlay portion of the R7A and R8A districts is commonly mapped in dense areas close to transit. The C2-4 districts allow for a wide variety of commercial uses (Use Groups 5-9 and 14) such as local retail, funeral homes and repair services. Within medium- density residential zoning districts (R7A and R8A) a maximum FAR of 2.0 is permitted for commercial uses. Parking requirements vary by use, with general retail typically requiring one space per 1,000 square feet of floor area and the requirement is waived up to 40 spaces.

Last, the Landmarks Preservation District (LPC) designated Boerum Hill Historic District is located west of the Project Area, bounded by Warren Street to the south, Nevins Street to the east, Bond Street to the West, and the centerline of Block 196 to the north.

Public Policy

Public policies applicable to the Study Area are discussed below. The Proposed Actions' consistency with each of these policies is assessed in the "The Future with the Proposed Actions (With-Action Condition)" section of this chapter.

HOUSING NEW YORK

On May 5, 2020, the City released Housing New York, a ten-year strategy to build and preserve affordable housing throughout New York City in coordination with strategic infrastructure improvements to foster a more equitable and livable New York City through extensive community engagement processes. The 2020 plan outlined more than 50 initiatives to support the administration's goal of building or preserving 200,000 units of high- quality affordable housing to meet the needs of more than 500,000 people by 2024. The 2020 plan outlined five guiding policies and principles to meet this goal: fostering diverse, livable neighborhoods; preserving the affordability and quality of the existing housing stock; building new affordable housing for all New Yorkers; promoting homeless, senior, supportive, and accessible housing; and refining City financing tools and expanding funding sources for affordable housing. Housing New York further calls for fifteen neighborhood studies to be undertaken in communities across the five boroughs that offer opportunities for affordable housing.

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

VISION ZERO

The City's Vision Zero initiative seeks to eliminate all deaths from traffic crashes regardless of whether on foot, bicycle, or inside a motor vehicle. In an effort to drive these fatalities down, NYCDOT and the NYPD developed a set of five plans, each of which analyzes the unique conditions of one New York City borough and recommends actions to address the borough's specific challenges to pedestrian safety. These plans pinpoint the conditions and characteristics of pedestrian fatalities and severe injuries; they also identify priority corridors, intersections and areas that disproportionately account for pedestrian fatalities and severe injuries, prioritizing them for safety interventions. The plans outline a series of recommended actions comprised of engineering, enforcement and education measures that intend to alter the physical and behavioral conditions on city streets that lead to pedestrian fatality and injury. The most recent Vision Zero Brooklyn Pedestrian Safety Action Plan was released in 2019. The plan identifies the Study Area as a "Priority Area." The closest "Priority Corridor" however is 4th Avenue, to the east of the Study Area.

The Vision Zero Brooklyn Pedestrian Safety Action Plan identified a series of engineering/planning, enforcement, and education/awareness campaign strategies to enhance pedestrian safety along the borough's Priority Corridors and Priority Intersections. These strategies included measures such as reducing the speed limit to 25 miles per hour, expanding exclusive pedestrian crossing time, installing additional lighting around key transit stops, expanding the bicycle network, prioritizing targeted enforcement and deploying speed cameras, and targeting intensive street- level outreach.

NEW YORK CITY FOOD RETAIL EXPANSION TO SUPPORT HEALTH PROGRAM

The New York City Food Retail Expansion to Support Health (FRESH) Program provides zoning incentives and/or discretionary tax incentives to promote the establishment and retention o of neighborhood grocery stores in communities that lack full-line grocery stores. The Study Area is located within a FRESH- designated area, which qualifies development in this area for tax incentives.

The FRESH program is open to grocery store operators renovating existing retail space or developers seeking to construct or renovate retail space that will be leased by a full-line grocery store operator in FRESH-eligible areas that meet the following criteria:

- Provide a minimum of 6,000 square feet (sf) of retail space for a general line of food and non-food grocery products intended for home preparation, consumption and utilization;

- Provide at least 50 percent of a general line of food products intended for home preparation, consumption and utilization;

- Provide at least 30 percent of retail space for perishable goods that include dairy, fresh produce, fresh meats, poultry, fish, and frozen foods; and

- Provide at least 500 sf of retail space for fresh produce. Financial incentives are available to eligible grocery store operators and developers to facilitate and encourage FRESH Food Stores in the designated area. These incentives include real estate tax reductions, sales tax exemptions, floor area bonuses, and mortgage recording tax deferrals

Financial incentives are available to eligible grocery store operators and developers to facilitate and encourage FRESH Food Stores in the designated area. These incentives include real estate tax reductions, sales tax exemptions and mortgage recording tax deferrals.

ONENYC

In April 2015, Mayor Bill de Blasio released OneNYC, a comprehensive plan for a sustainable and resilient city for all New Yorkers that speaks to the profound social, economic, and environmental

challenges faced. OneNYC is the update to the sustainability plan for the City started under the Bloomberg administration, previously known as PlaNYC 2030: A Greener, Greater New York. Growth, sustainability, and resiliency remain at the core of OneNYC, but with the poverty rate remaining high and income inequality continuing to grow, the de Blasio administration added equity as a guiding principle throughout the plan. In addition to the focuses of population growth; aging infrastructure; and global climate change, OneNYC brings new attention to ensuring the voices of all New Yorkers are heard and to cooperating and coordinating with regional counterparts. Since the 2011 and 2013 updates of PlanNYC, the City has made considerable progress towards reaching original goals and completing initiatives. OneNYC includes updates on the progress towards the 2011 sustainability initiatives and 2013 resiliency initiatives and also sets additional goals and outlines new initiatives under the organization of four visions: growth, equity, resiliency, and sustainability.

Goals of the plan are to make New York City:

- A Growing, Thriving City—by fostering industry expansion and cultivation, promoting job growth, creating and preserving affordable housing, supporting the development of vibrant neighborhoods, increasing investment in job training, expanding high-speed wireless networks, and investing in infrastructure.

- A Just and Equitable City—by raising the minimum wage, expanding early childhood education, improving health outcomes, making streets safer, and improving access to government services.

- A Sustainable City—by reducing greenhouse gas emissions, diverting organics from landfills to attain Zero Waste, remediating contaminated land, and improving access to parks.

- A Resilient City—by making buildings more energy efficient, making infrastructure more adaptable and resilient, and strengthening coastal defenses. As the 2020 CEQR Technical Manual has yet to be updated to address the approach of OneNYC, the PlaNYC sustainability assessment, as described below, will continue to be utilized on large publicly-sponsored projects.

As the *2020 CEQR Technical Manual* has yet to be updated to address the approach of OneNYC, the PlaNYC sustainability assessment, as described below, will continue to be utilized on large projects.

PLANYC 2030: A GREENER, GREATER NEW YORK

In 2011, the Mayor's Office of Long Term Planning and Sustainability released an update to PlaNYC: A Greener, Greater New York. PlaNYC represents a comprehensive and integrated approach to planning for New York City's future. It includes policies to address three key

challenges that the City faces over the next twenty years: population growth; aging infrastructure; and global climate change. In the 2011 update, elements of the plan were organized into ten categories—housing and neighborhoods, parks and public space, brownfields, waterways, water supply, transportation, energy, air quality, solid waste, and climate change—with corresponding goals and initiatives for each category. As stated in the *CEQR Technical Manual*, a project is generally considered consistent with PlaNYC's goals if it includes one or more of the following elements:

- *Land Use*: pursue transit-oriented development; preserve and upgrade current housing; promote walkable destinations for retail and other services; reclaim underutilized waterfronts; adapt outdated buildings to new uses; develop underused areas to knit neighborhoods together; deck over rail yards, rail lines, and highways; extend the Inclusionary Housing Program in a manner consistent with such policy; preserve existing affordable housing; and redevelop brownfields.

- *Open Space*: complete underdeveloped destination parks; provide more multi-purpose fields; install new lighting at fields; create or enhance public plazas; plant trees and other vegetation; upgrade flagship parks; convert landfills into parkland; increase opportunities for water-based recreation; and conserve natural areas.

- *Water Quality*: expand and improve wastewater treatment plants; protect and restore wetlands, aquatic systems, and ecological habitats; expand and optimize the sewer network; build high level storm sewers; expand the amount of green, permeable surfaces across the City; expand the Bluebelt system; use "green infrastructure to manage stormwater; be consistent with the Sustainable Stormwater Management Plan; build systems for on-site management of stormwater runoff; incorporate planting and stormwater management within parking lots; build green roofs; protect wetlands; use water-efficient fixtures; and adopt a water conservation program.

- *Transportation*: promote transit-oriented development; promote cycling and other sustainable modes of transportation; improve ferry services; make bicycling safer and more convenient; enhance pedestrian access and safety; facilitate and improve freight movement; maintain and improve roads and bridges; manage roads more efficiently; increase capacity of mass transit; provide new commuter rail access to Manhattan; improve and expand bus service; improve local commuter rail service; and improve access to existing transit.

- *Air Quality*: promote mass transit; use alternative fuel vehicles; install anti-idling technology; use retrofitted diesel trucks; use biodiesel in vehicles and in heating oil; use ultra-low sulfur diesel and retrofitted construction vehicles; use cleaner-burning heating fuels; and plant street trees and other vegetation.

- *Energy*: exceed the energy code; improve energy efficiency in historic buildings; use

energy efficient appliances, fixtures, and building systems; participate in peak load management systems, including smart metering; repower or replace inefficient and costly in-City power plants; build distributed generation power units; expand the natural gas infrastructure; use renewable energy; use natural gas; install solar panels; use digester gas for sewage treatments plants; use energy from solid waste; and reinforce the electrical grid.

- *Natural Resources*: plant street trees and other vegetation; protect wetlands; create open space; minimize or capture stormwater runoff; and redevelop brownfields.

- *Solid Waste*: promote waste prevention opportunities; increase the reuse of materials; improve the convenience and ease of recycling; create opportunities to recover organic material; identify additional markets for recycled materials; reduce the impact of the waste systems on communities; and remove toxic materials from the general waste system.

INDUSTRIAL ACTION PLAN

In November 2015, Mayor Bill de Blasio and then City Council Speaker Melissa Mark-Viverito unveiled a ten-point action plan to modernize the City's industrial policy backed by more than $115 million in newly-announced City funding. The Plan is intended to further three major goals: protect and strengthen core industrial areas; invest in the long-term development of industrial and manufacturing businesses; and prepare New Yorkers for the industrial and manufacturing jobs of the future. The ten strategies to meet these goals are outlined below:

- *Invest in City-owned industrial assets*. As part of the ten-year Capital Plan, the City will invest a total of $442 million in City-owned industrial properties at Brooklyn Army Terminal, the Brooklyn Navy Yard, Sunset Park, and Hunts Point.

- *Limit new hotels and personal storage in core industrial areas to reduce use conflicts and support diverse economic growth*. The Administration will work with the City Council to create a new Special Permit that will be required for any hotel development in M1 districts within Industrial Business Zones (IBZs) and implement restrictions on personal mini-storage and household goods storage facilities in IBZs through appropriate land use controls.

- *Create new models for flexible workspace and innovation districts*. The Administration will work with the City Council, business groups, neighborhood associations, and other key stakeholders to develop a framework for "Innovation Districts." • Strengthen core industrial areas. The Administration and the Council have agreed to further strengthen the prohibition of residential uses in IBZs to curb speculation.

- *Create an industrial and manufacturing fund to spur development*. The fund will provide

$64 million in City loans and grants to fuel the creation of approximately 1,200 new jobs.

- *Launch Advances Manufacturing Network "Futureworks NYC," including the creation of a new Advanced Manufacturing Center*. The Advanced Manufacturing Center will provide shared workspaces and equipment and will serve as a cornerstone of "Futureworks NYC," which will feature a network of citywide resources.

- *Expand Brownfields Jumpstart Program to industrial properties*. The program will help businesses enroll in the NYS Brownfield Cleanup Program and provide grants to industrial and manufacturing businesses.

- *Relaunch the Industrial Business Solutions Providers network*. This SBS program will provide critical support to businesses in the City's IBZs and collect real-time data that will enable the City to refine policies and better respond to the evolving needs of industrial and manufacturing businesses.

- *Create industry partnerships to bolster workforce development*. The City will launch a Career Pathways to convene business leaders, services providers, and other stakeholders.

- *Establish career centers in IBZs*. SBS will create five additional satellite Workforce1 centers in select IBZs with high job density.

HISTORIC DISTRICTS AND LANDMARKS

The New York City Landmarks Law of 1965 established the New York City Landmarks Preservations Commission (NYCLPC) and authorized the NYCLPC to designate individual buildings, historic districts, interior landmarks, and scenic landmarks of historical, cultural, and architectural significance. The Landmarks law defines a Historic District as an area that has a "special character or special historic or aesthetic interest," represents "one or more periods of styles of architecture typical of one or more eras in the historic of the City," and constitutes "a distinct section of the City." Historic district designation by NYCLPC protects buildings from demolition and development that is out of context or insensitive to the historic natural of the area. The Study Area contains a single NYC LPC designated district, which is discussed in Chapter D, "Historic and Cultural Resources."

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

Land Use

Study Area

In the 2025 future without the Proposed Actions, no new development is anticipated in the Project Area. In addition, no notable new development would be experienced in the Study Area prior to the 2025 analysis year without the Proposed Actions.

Zoning and Public Policy

No changes to zoning or public policy in the primary or secondary study areas are anticipated in the 2025 No-Action condition.

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

As described in detail in Chapter A, "Project Description," the Proposed Actions include zoning map amendment and zoning text amendment to facilitate a mid-rise mixed-use development in the Project Area. This section describes the land use and zoning conditions that would result from the Proposed Actions by 2025 and evaluates the potential for the Proposed Actions to result in significant adverse impacts related to land use and zoning, and their consistency with the applicable public policies described earlier in this chapter.

Land Use

PROJECT AREA

The Proposed Actions would result in changes to some land uses in the Project Area, as compared to the No-Action condition.

Table 1 provides a summary of the RWCDS With-Action condition for the three projected development sites compared to the No-Action condition. As indicated in the table, the total development expected to occur on the projected development sites under the With-Action condition would consist of approximately 52,151 gsf of residential floor area (65 DUs), a loss of 1,097 gsf of commercial uses and a loss of 154 square feet of automotive use.

Table 1 – RWCDS (Existing, No-Action and With-Action Conditions & Increment)

Use (GSF)	Existing Conditions	No-Action Condition	With-Action Condition	Increment
Residential	0	0	52,151	52,151 (65 DUs, 19 affordable)
Commercial	6,620	6,620	5,523	-1,097
Community Facility	0	0	0	0
Industrial/Manufacturing	0	0	0	0
Transportation/Utility	154	154	0	-154
Workers	27	27	17	-10
Residents	0	0	125	125

STUDY AREA

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

Zoning

Proposed Zoning Map Amendment

The proposed zoning map amendment would rezone the Project Area from M1-2 to R7D/C2-4 and R6B (see Figure 2). The proposed R7D/C2-4 district would be mapped at a depth of 100 feet from Third Avenue on the eastern end of Block 388. This would rezone Lots 31, 34, 35, 36, 37, 38, 41 and p/o Lot 19 from M1-2 to R7D/C2-4. The eastern end of Lot 19 would be partially rezoned with a 50' by 100' portion of the property rezoned or approximately 11 percent of the lot. The remaining area to be rezoned, Lot 42 and a small portion of Lot 43, would be rezoned R6B by extending the pre-existing district to the east by 20 feet to encompass that property and align with the proposed R7D/C2-4 district. This would effectively remove the M1-2 zoning district from the eastern end of the subject block, except for a majority of Lot 19, which is improved with the Ulano Corporation building, an industrial printing facility.

The proposed R7D (MIH) district permits a max of 5.6 FAR under MIH and generally yields 8- to 11-story buildings. Maximum lot coverage is 65 percent for interior and through lots and 100 percent on corner lots. Above a base height of 60 to 85 feet, the building must set back to a depth of 15 feet on a narrow street, before rising to a maximum of 115 feet or 11-stories under MIH[1]. Parking is required for 50 percent of all dwelling units, with affordable units waived inside the Transit Zone. The C2-4 commercial overlay permits a wide range of neighborhood commercial

[1] With a qualifying ground floor

retail uses (Use Groups 5-9 and 14) on the first floor (with residential units overhead) at a maximum FAR of 2.0 within R7D districts. Parking requirements vary by use but most retail uses require one space per 1,000 square feet of floor area. The proposed R7D/C2-4 (MIH) district would alter the permitted uses within the first 100 feet from (Use Group 4-14, 16-17 to Use Groups 1-9 and 14) and would allow a maximum total FAR of 5.6. For commercial uses, the maximum FAR would remain the same at 2.0 FAR.

The proposed R6B district under MIH would permit a maximum of 2.2 FAR and a maximum height is 50 feet. This district would alter the permitted uses from Use Group 4-14, 16-17 to Use Groups 1-4. Commercial uses would no longer be allowed on this parcel.

Proposed Zoning Text Amendment

A proposed zoning text amendment to Appendix F of the Zoning Resolution (*Inclusionary Housing Designated Areas*) is required to establish a Mandatory Inclusionary Housing (MIH) area coterminous with the Project Area. The MIH area would be mapped as both Option 1 and Option 2. Option 1 requires that 25% of the new residential floor be reserved for incomes averaging 60% AMI and below, while Option 2 requires that 30% of the new residential floor area be reserved for incomes averaging 80 percent AMI and below. Under the proposed, approximately 19 of the anticipated 65 dwelling units would be income-restricted pursuant to MIH under Option 2.

STUDY AREA

The Proposed Actions would not alter zoning designations or seek other zoning actions within the approximate 400-foot Study Area. The consistency of the Proposed Actions with zoning in the Study Area is discussed in the “Assessment” section, below.

Public Policy

No changes to the applicable Study Area public policies are proposed as part of the Proposed Actions. The consistency of the Proposed Actions on the applicable Study Area public policies are discussed in the “Assessment” section, below.

Assessment

LAND USE AND ZONING

Project Area

According to the criteria set forth in Section 410 in Chapter 4 of the *CEQR Technical Manual*, the Proposed Actions would not result in significant adverse impacts on land use or zoning. The Proposed Actions would introduce zoning changes that would be in keeping with the City's land use, zoning, and public policy objectives for the area. As noted in the "Existing Conditions" section, above, the current land uses are underutilized and inconsistent with the increasing mid-rise and mixed-use character of the surrounding area.

The R7D/C2-4 medium-density mixed use zoning district under MIH would be appropriate for this area, which is located along a mixed use corridor, adjacent to similar medium-density mixed use zoning districts. Immediately to the north, the area within 100 feet of Third Avenue is zoned R7A/C2-4. Similarly, the Fourth Avenue corridor is zoned R8A/C2-4 with a depth of 100. These districts permit the same uses and similar densities under contextual quality housing regulations, with the R7A district permitting up to 9-stories under MIH and the R8A district permitting up to 14-stories under MIH.

Furthermore, the existing density in the surrounding area is similar to that of the Proposed Development, which would rise to 85 feet. To the south are 21-story apartment buildings (the NYCHA Wyckoff Gardens complex) and a recently constructed apartment building rising to 8-stories is located immediately to the east from the Project Area. Therefore, the proposed R7D/C2-4 district would serve as a buffer between the higher-density NYCHA towers to the south and the R7A/C2-4 district located immediately to the north and east.

The proposed extension of the R6B zoning district would serve to reinforce the rowhouse character of the mid-block portion of the subject block. This would be consistent with the pre-existing character of this block, as well as adjacent blocks to the north, east and west, which are mapped with R6B and similar R7B districts on interior portions beyond 100 feet of Third and Fourth Avenues.

When compared with the existing use on the Development Site, which consists of an automotive service use and open curb cuts on each frontage, the Proposed Actions would result in a more compatible development compared to the existing condition, with mid- to high-density contextual residential zoning districts present in a transit rich environment. Therefore, the underlying M1-2 zoning district is less compatible with surrounding uses and densities than the Proposed Actions and resulting development.

The Proposed Actions would result in a contextual mid-rise mixed use building with an active use on the ground floor and no curb cuts. When compared to the existing condition, an underutilized gas station with open curb cuts, the Proposed Actions would result in a more desirable building

with required contextual street wall heights and setback, which would blend harmoniously with new and existing development that has resulted in the surrounding area, as described above. In addition to providing a mid-rise building more consistent with the surrounding area, it would serve to improve the pedestrian experience over the existing condition, where three open curb cuts create potential conflicts between pedestrian sidewalk traffic and automobile traffic. The Proposed Development would provide no curb cuts, which would serve to overall improve the pedestrian experience at this location with less potential conflicts.

Conclusion

While the Proposed Actions would result in greater density along Third Avenue than currently permitted, the corridor is already vibrant with pedestrian activity and automotive traffic and is located in close proximity to a number of transit options as well as Downtown Brooklyn, the City's third largest central business district. Given the arterial nature of Third Avenue, which connects Downtown Brooklyn with points south, and close proximity to transit, this corridor is able to accommodate additional density. In addition, ground-floor local retail would be provided that would support nearby residents, as well as the surrounding community. This would also serve to increase the vibrancy of the corridor, including an enhanced pedestrian experience. Lastly, the required zoning text amendment to make the Project Area applicable to MIH would result in new permanently affordable dwelling units, a recognized need in all areas of the city.

In summary, the proposed medium-density zoning district would serve to permit an appropriate level of increased density along a vibrant corridor, would improve the built-form of the intersection compared to existing conditions, would provide much needed new dwelling units for various income levels, and would promote active uses at the ground-floor level. These changes would be in line with the increasingly dense mixed use character of the area and would be consistent with adjacent zoning districts.

Study Area

No zoning changes would be made to the remainder of the Study Area and the permitted uses in the Project Area would be in keeping with the uses permitted in the neighboring Study Area zoning districts. The proposed zoning district would therefore be compatible with those in the Study Area and would not affect the relationship between the Project Area and Study Area. While the Proposed Actions would result in new mixed-use development in close proximity similar uses and densities in the Study Area, and the Proposed Actions would not result in a significant adverse impact on land use. Therefore, land uses that are expected to be introduced as a result of the Proposed Actions are compatible with those in surrounding area. Therefore, it is not expected that the Proposed Actions would result in any significant adverse impacts on land use and zoning in the secondary study area.

Public Policy

Housing New York

The Proposed Actions are a direct result of the goals and principles outlined in Housing New York and support this public policy. As noted above, Housing New York's five guiding policies and principles are fostering diverse, livable neighborhoods; preserving the affordability and quality of the existing housing stock; building new affordable housing for all New Yorkers; promoting homeless, senior, supportive, and accessible housing; and refining City financing tools and expanding funding source for affordable housing. The Proposed Actions would result in 65 new dwelling units, of which 19 would be income-restricted to incomes at 80 percent AMI and below. A provision of which supports a key policy to meet the Housing New York goal of fostering diverse, livable neighborhoods.

Vision Zero

As noted above, the City's Vision Zero initiative seeks to eliminate all deaths from traffic crashes regardless of whether on foot, bicycle, or inside a motor vehicle. The 2019 Vision Zero Brooklyn Pedestrian Safety Action Plan (released in 2015) identified this area of Boerum Hill as a Priority Area, where targeted strategies should be implemented to meet the Vision Zero goal to eliminate all deaths from traffic crashes. As discussed in Chapter G, "Transportation," intersections in the traffic and pedestrian study will identify any notable "high crash intersections," as defined by the *CEQR Technical Manual*. None of these intersections (nor any within proximity to the proposed Project Area) are located within a designated Senior Pedestrian Focus Area (SPFA), which were identified by NYCDOT based on the density of senior (age 65+) pedestrian crashes resulting in fatalities or severe injuries in a five-year period, as well as variables such as senior trip generators, concentrations of senior centers, and senior housing locations. Improvements that could be employed to increase pedestrian/bicyclist safety at these high crash locations could include installation of additional high visibility crosswalks and improved street lighting. As the Proposed Actions are not expected to significantly worsen pedestrian and vehicular safety conditions, the Proposed Actions would be consistent with this public policy.

New York City Food Retail Expansion to Support Health Program

The entire Study Area is located within a FRESH-designated area. The Proposed Actions would result in a mixed-use district (refer to "Zoning" section, above) where a FRESH supermarket could be developed as-of-right. At this time, the Proposed Action would result in 5,523 square feet of space that could contain a FRESH supermarket. However, the specific tenants of this area have not been formalized but the Proposed Actions would not preclude the possibility of a FRESH store, where the current uses in the Project Area contain no such space. As such, the Proposed Actions would not alter or conflict with the objectives of the FRESH program, and no significant adverse impacts would result.

OneNYC

The Proposed Actions are consistent with the City's sustainability goals, including those outlined in OneNYC. Notably, the Proposed Actions would support OneNYC's land use goals of creating new housing for a range of incomes, including permanently affordable housing; redeveloping underutilized an underutilized site with an active use; focusing development in areas that are served by mass transit; and fostering walkable retail destinations. As noted in the EAS form, the Proposed Actions would not result in significant adverse impacts related to business displacement; the Proposed Actions are expected to result in the loss of 6,620 square feet of commercial office space but would create 5,523 square feet of new retail space, which would be consistent with the OneNYC goal of fostering an environment in which small businesses can succeed. In addition, the Proposed Actions would not conflict with the OneNYC goal of supporting the creation of an advanced manufacturing network, as the Proposed Actions would not directly affect any core industrial area, and existing manufacturing businesses would be not be affected, thereby maintaining the industrial uses in this area as a conforming land use, such as the Ulano Corporation (discussed above). Overall, the Proposed Actions would be supportive of the applicable goals and objectives of OneNYC.

PlaNYC 2030: A Greener, Greater New York

Land Use

The Proposed Actions would be consistent with PlaNYC's land use goals. The Proposed Actions would encourage increased development in an area well served by public transportation. The proposed rezoning would encourage mixed-use development, including residential and commercial uses, thereby promoting walkable destinations for retail and other services. In addition, the Proposed Development would facilitate new affordable housing through MIH.

Water Quality

The Projected Development facilitated by the Proposed Actions would have to comply with all applicable regulations regarding the implementation of low-flow, water efficient fixtures, as per the New York City Plumbing Code, Local Law 33 of 2007 and the United Stated Environmental Protection Agency's (EPA's) WaterSense Program. In addition, any development facilitated by the Proposed Actions would comply with the City's laws and regulations. Therefore, the Proposed Actions are consistent with PlaNYC's water quality goals.

Transportation

The Proposed Actions would support PlaNYC's transportation goals by facilitating transit-oriented development in an area served by multiple public transportation options. Varied retail offerings and a mix of uses are a key part of livable communities, providing destinations within walking distance and reducing the need for vehicle trips outside of the neighborhood. Therefore, the Proposed Actions would be consistent with PlaNYC's transportation goals.

Air Quality

The Proposed Actions would meet PlaNYC's air quality goals by promoting the use of mass transit through encouraging development in close proximity to existing transit stops. In addition, one street tree would be provided for every 25 feet of newly developed street frontage within the primary study area, in conformance with ZR Sections 33-03 and 26-41.

Energy

Development facilitated by the Proposed Actions would be required to meet the more stringent green building practices established in the 2010 update to the New York City Building Code as part of the Greener, Greater Buildings Law. The updated Building Code requires energy audits and benchmarking for larger buildings, among other requirements. The 2011 Enterprise Green Communities Criteria constitute the only comprehensive green building framework designed for affordable housing and provide proven, cost-effective standards for creating healthy and energy-efficient homes.

Natural Resources

The Proposed Actions would not result in any significant adverse impacts to natural resources. The Proposed Actions would not result in new development on previously undeveloped land (i.e., greenfields). All new development would be required to ensure a maximum stormwater release rate of 0.25 cubic feet per second (cfs) or ten percent of the allowable flow from their respective sites pursuant to the 2012 amendment to Title 15, Chapter 31 of the Rules of the City of New York (RCNY), the existing rules governing house and site connections to the City's sewer system. Future development in the Project Area would be subject to stormwater treatment Best Management Practice (BMP) requirements to meet the City's site connection requirements and comply with the proposed WAP requirements to increase open space/softscape areas. The stormwater BMPs and additional softscape areas would result in reduced stormwater runoff such that the Proposed Actions would not exacerbate existing combined sewage overflows during storm events. Therefore, the Proposed Actions would not degrade water quality or have a significant adverse impact on the aquatic biota of the East River or New York Bay. The Proposed Actions are expected to have beneficial effects on vegetation by increasing the presence of landscaped areas, including additional tree and shrub plantings, where none currently exist. As discussed above, one street tree would be provided for every 25 feet of newly developed street frontage within the Project Area, in conformance with ZR Sections 33-03 and 26-41. As such, the Proposed Actions are consistent with PlaNYC's natural resources goals.

Solid Waste

The Proposed Actions would not result in any significant adverse impacts to the City' solid waste system. The Proposed Development in the Project Area would be subject to mandatory recycling requirements. As such, the Proposed Actions would be consistent with PlaNYC's solid waste management goals.

Industrial Action Plan

The Proposed Actions would not alter or conflict with the policies of the Industrial Action Plan. The Proposed Actions would not alter zoning within an IBZ and, therefore, would be consistent with the policy's goal of strengthening core industrial areas. In addition, manufacturing districts would be retained in the Study Area.

Historic Districts and Landmarks

The Proposed Actions would not result in new development within NYCLPC-designated and/or S/NR-listed historic districts. Potential effects on historic districts are described in Chapter D, "Historic and Cultural Resources." No significant material changes to existing regulations or policy would occur.

SHADOWS

A. Introduction

Shadows are defined in the *2020 City Environmental Quality Review (CEQR) Technical Manual* 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. Within urban environments, built structures constantly cast shadows in their immediate vicinity. This chapter focuses on the interaction between proposed new structures and the shadows they may cast on sunlight sensitive resources of concern, which include publicly accessible open space, sunlight-dependent features of historic resources, and natural areas that depend on sunlight.

Under *CEQR Technical Manual guidelines*, a shadows assessment is required if the proposed project would result in structures 50 feet or greater in height, or of any height if the project site is located adjacent to, or across the street from, a sunlight-sensitive resource. The Proposed Actions would result in three new buildings, which will rise to approximately 140 feet (Projected Development Sites 1 and 2) and 55 feet (Projected Development Site 3). Therefore, a shadows assessment is warranted.

B. Definitions and Methodology

This analysis has been prepared in accordance with New York City CEQR procedures and follows the guidelines of the *CEQR Technical Manual*.

DEFINITIONS

Incremental shadow is the additional, or new, shadow on a sunlight-sensitive resource resulting from a proposed project.

Sunlight-sensitive resources are those that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Such resources generally include:

- *Public open space* such as parks, beaches, playgrounds, plazas, schoolyards (if open to the public during non-school hours), greenways, and landscaped medians with seating. Planted areas within unused portions of roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources.
- *Features of architectural resources that depend on sunlight for their enjoyment by the public*. Only the sunlight-sensitive features of such architectural resources need be considered, as opposed to the entire resource. Such sunlight-sensitive features might include: design elements that depend on the contrast between light and dark (e.g.,

recessed balconies, arcades, deep window reveals); elaborate, highly carved ornamentation; stained glass windows; historic landscapes and scenic landmarks; and features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as a historic landmark.

- *Natural resources* where the introduction of shadows could alter the resource's condition or microclimate. Such resources could include surface water bodies, wetlands, or designated resources such as coastal fish and wildlife habitats.

Non-sunlight-sensitive resources include, for the purposes of CEQR:

- City streets and sidewalks (except Greenstreets);
- Private open space (e.g., front and back yards, stoops, vacant lots, and any private, non-publicly accessible open space);
- Project-generated open space cannot experience a significant adverse shadow impact from the project, according to CEQR, because without the project the open space would not exist However, if the condition of project-generated open space is included in the qualitative analysis presented in the Open Space chapter of the EIS, a discussion of how shadows would affect the new space may be warranted.

A **significant adverse shadow** impact occurs when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources. Each case must be considered on its own merits based on the extent and duration of new shadow and an analysis of the resource's sensitivity to reduced sunlight.

METHODOLOGY

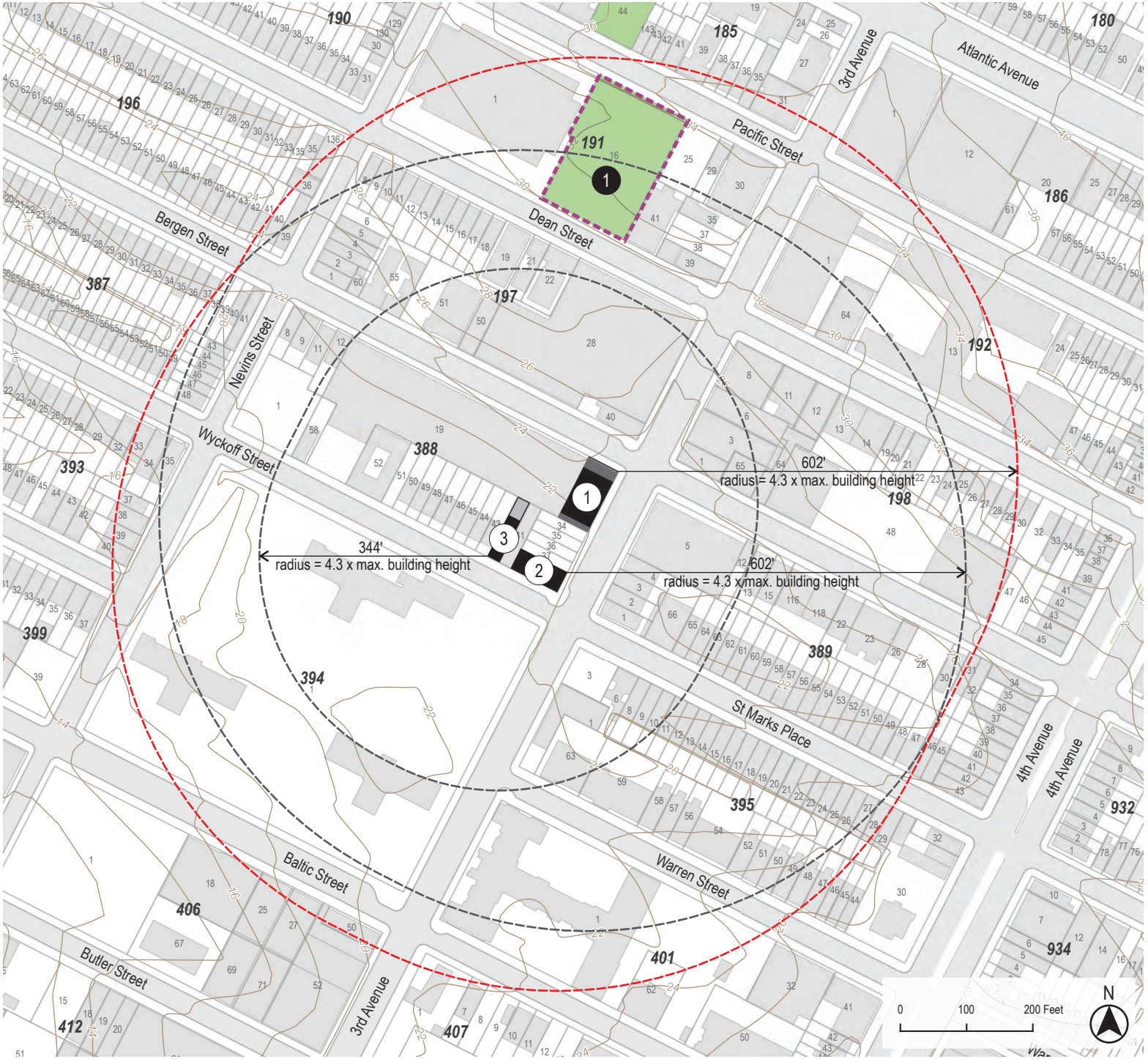
Following the guidelines of the *CEQR Technical Manual*, a preliminary screening assessment must first be conducted to ascertain whether a project's shadow could reach any sunlight sensitive resources at any time of year. The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around the proposed building representing the longest shadow that could be cast. If there are sunlight-sensitive resources within this radius, the analysis proceeds to the second tier, which reduces the area that could be affected by project shadow by accounting for the fact that shadows can never be cast between a certain range of angles south of the project site due to the path of the sun through the sky at the latitude of New York City.

If the second tier of analysis does not eliminate the possibility of new shadows on sunlight sensitive resources, a third tier of screening analysis further refines the area that could be reached by project shadow by looking at specific representative days in each season and determining the maximum extent of shadow over the course of each representative day.

98 3rd Avenue, Brooklyn

Figure 1: Tier 1 Screening Assessment

- Project Site
- Roof Above Base
- Roof Above Bulkheads
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource



Building Heights

	1	2	3
Base Height	95'	95'	45'
Roof Height	115'	115'	55'
Bulkhead Height	140'	140'	80'

Urban Cartographics

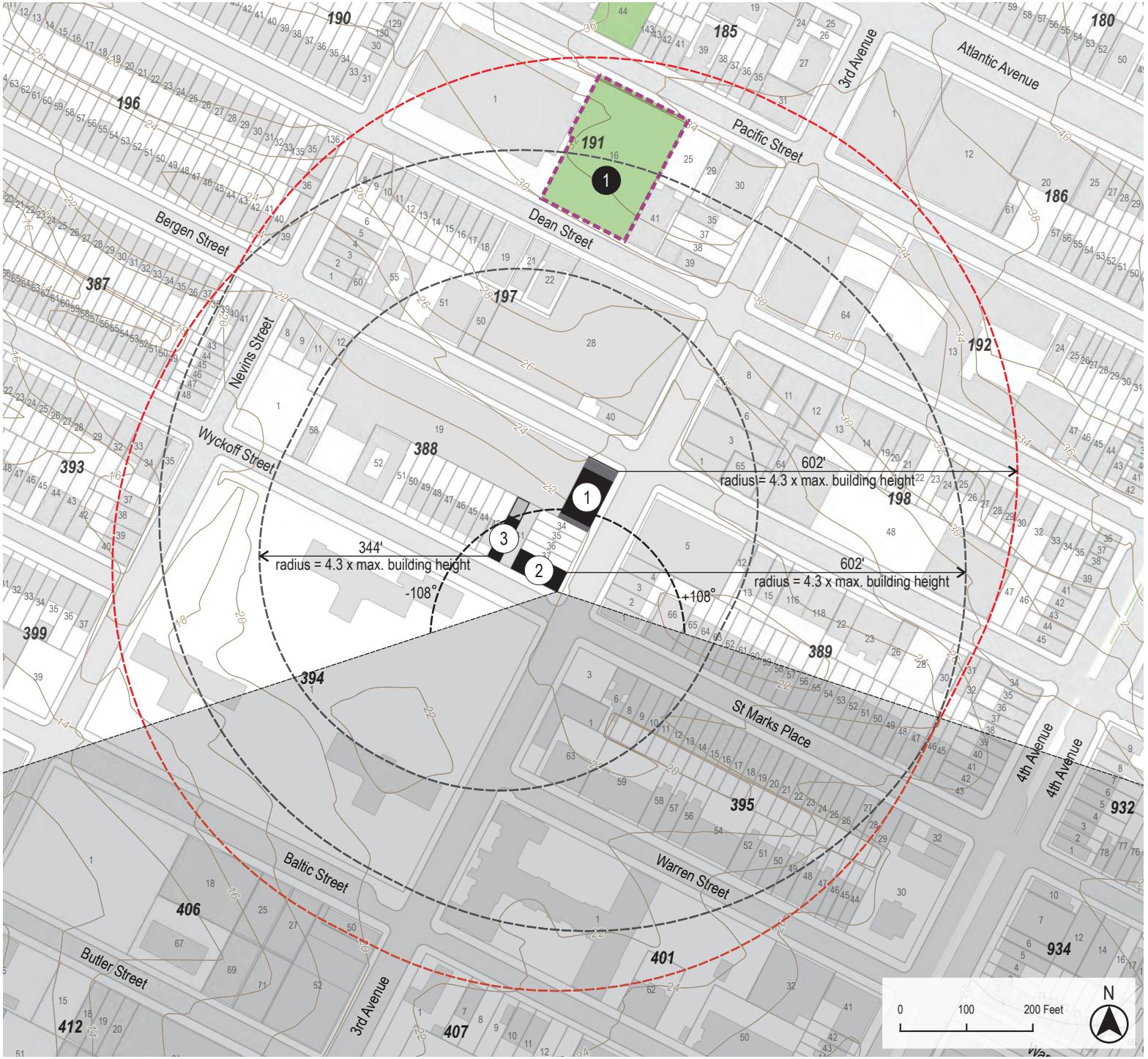
98 3rd Avenue, Brooklyn

Figure 2: Tier 2 Screening Assessment

- Project Site
- Roof Above Base
- Roof Above Bulkheads
- Longest Shadow Study Area Boundary
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource
- Area That Cannot Be Shaded by the Proposed Building

Building Heights

	1	2	3
Base Height	95'	95'	45'
Roof Height	115'	115'	55'
Bulkhead Height	140'	140'	80'



Urban Cartographics

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow resulting from the project. The detailed analysis provides the data needed to assess the shadow impacts. The effects of the new shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The results of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text.

C. Preliminary Screening Assessment

A base map was developed using Geographic Information Systems (GIS) showing the location of the projected sites and the surrounding street layout (see Figure 1). In coordination with the historic and cultural resources assessment presented in other chapters of this EAS, potential sunlight-sensitive resources were considered, with none identified in the study area.

TIER 1 SCREENING ASSESSMENT

For the Tier 1 assessment, the longest shadow that the proposed projects could cast is calculated, and, using this length as the radius, a perimeter is drawn around the Project Site. Anything outside this perimeter representing the longest possible shadow could never be affected by project-generated shadow, while anything inside the perimeter needs additional assessment.

According to the *CEQR Technical Manual*, the longest shadow that a structure can cast at the latitude of New York City occurs on December 21, the winter solstice, at the start of the analysis day at 8:51 AM, and is equal to 4.3 times the height of the structure. For the purpose of this analysis, 25-foot bulkheads were assumed on top of the maximum permitted height.

Therefore, at a maximum height of approximately 140 feet for Projected Development Sites 1 and 2, as well as 80 feet for Projected Development Site 3, three shadow radii are assumed that would cast shadows up to 602 feet (140’ x 4.3). Using these lengths, a perimeter was drawn around each Development Site, for a conservative analysis (see Figure 1).

The Tier 1 assessment showed that one publicly accessible open space is located within the longest shadow study area, and the next tier of assessment is required. No other sunlight sensitive resources are located within this radius (See Figure 1 and Table 1).

Table 6-1
Sunlight Sensitive Resources

Number	**#1**
Name	Schoolyard to Playground
Location	480 Pacific Street

TIER 2 SCREENING ASSESSMENT

Because of the path that 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. Figure 2 illustrates this triangular area south of the project sites. The complementary area to the north within the longest shadow study area represents the remaining area that could potentially experience new project generated shadow.

The Tier 2 assessment showed that the publicly accessible open space is located within the longest shadow study area, and the next tier of assessment was required.

TIER 3 SCREENING ASSESSMENT

The direction and length of shadows vary throughout the course of the day and also differ depending on the season. In order to determine whether project-generated shadow could fall on a sunlight-sensitive resource, three-dimensional computer modeling software is used in the Tier 3 assessment to calculate and display a proposed project's shadows on individual representative days of the year.

REPRESENTATIVE DAYS FOR ANALYSIS

Following the guidance of the *CEQR Technical Manual*, shadows on the summer solstice (June 21), winter solstice (December 21), and spring and fall equinoxes (March 21 and September 21, which are approximately the same in terms of shadow patterns) are modeled, to represent the range of shadows over the course of the year. An additional representative day during the growing season is also modeled, generally the day halfway between the summer solstice and the equinoxes, i.e., May 6, which have approximately the same shadow patterns.

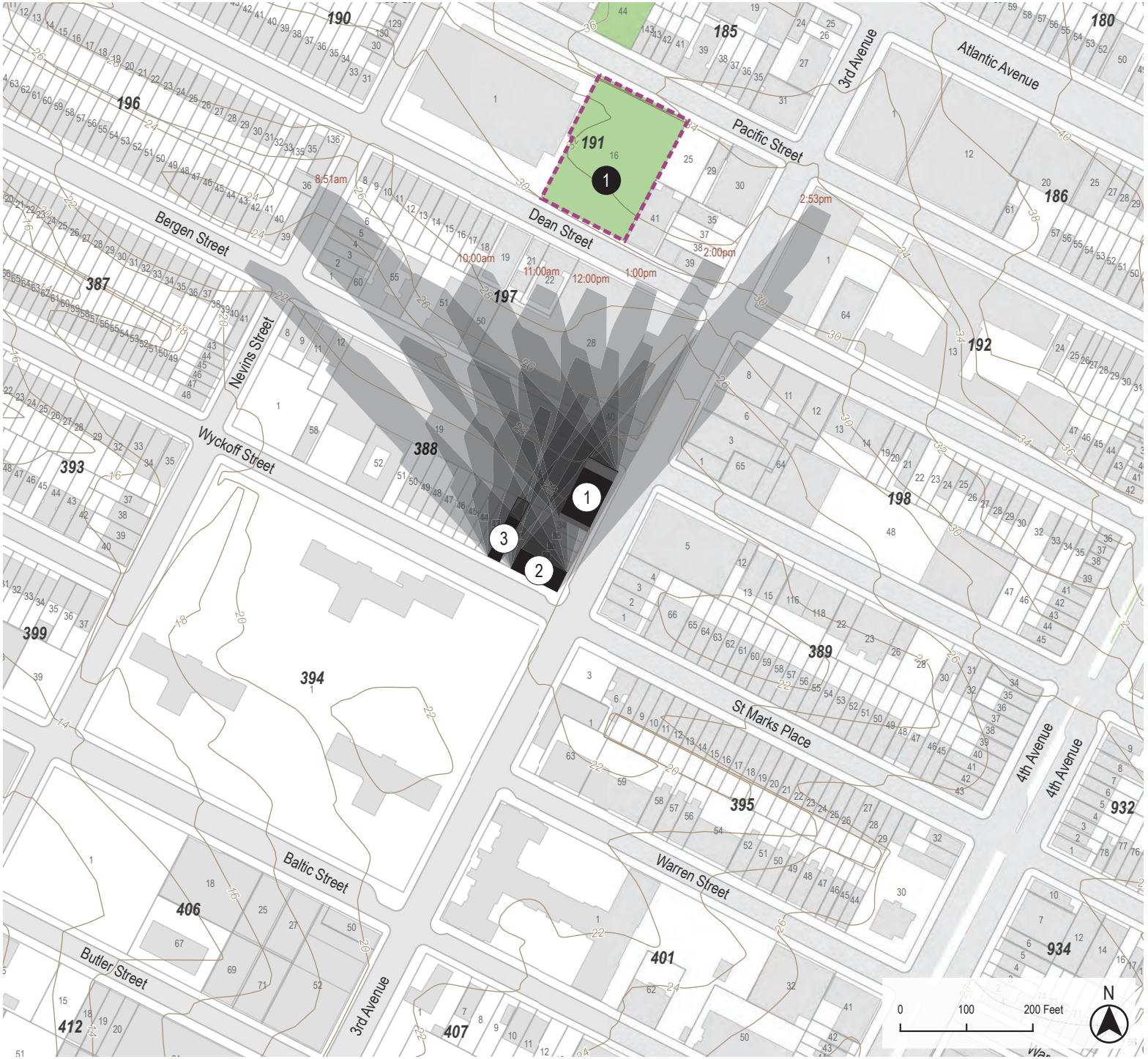
98 3rd Avenue, Brooklyn

Figure 3: Tier 3 Screening Assessment for the December 21 Analysis Day

- Project Site
- Roof Above Base
- Roof Above Bulkheads
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

Building Heights

	1	2	3
Base Height	95'	95'	45'
Roof Height	115'	115'	55'
Bulkhead Height	140'	140'	80'

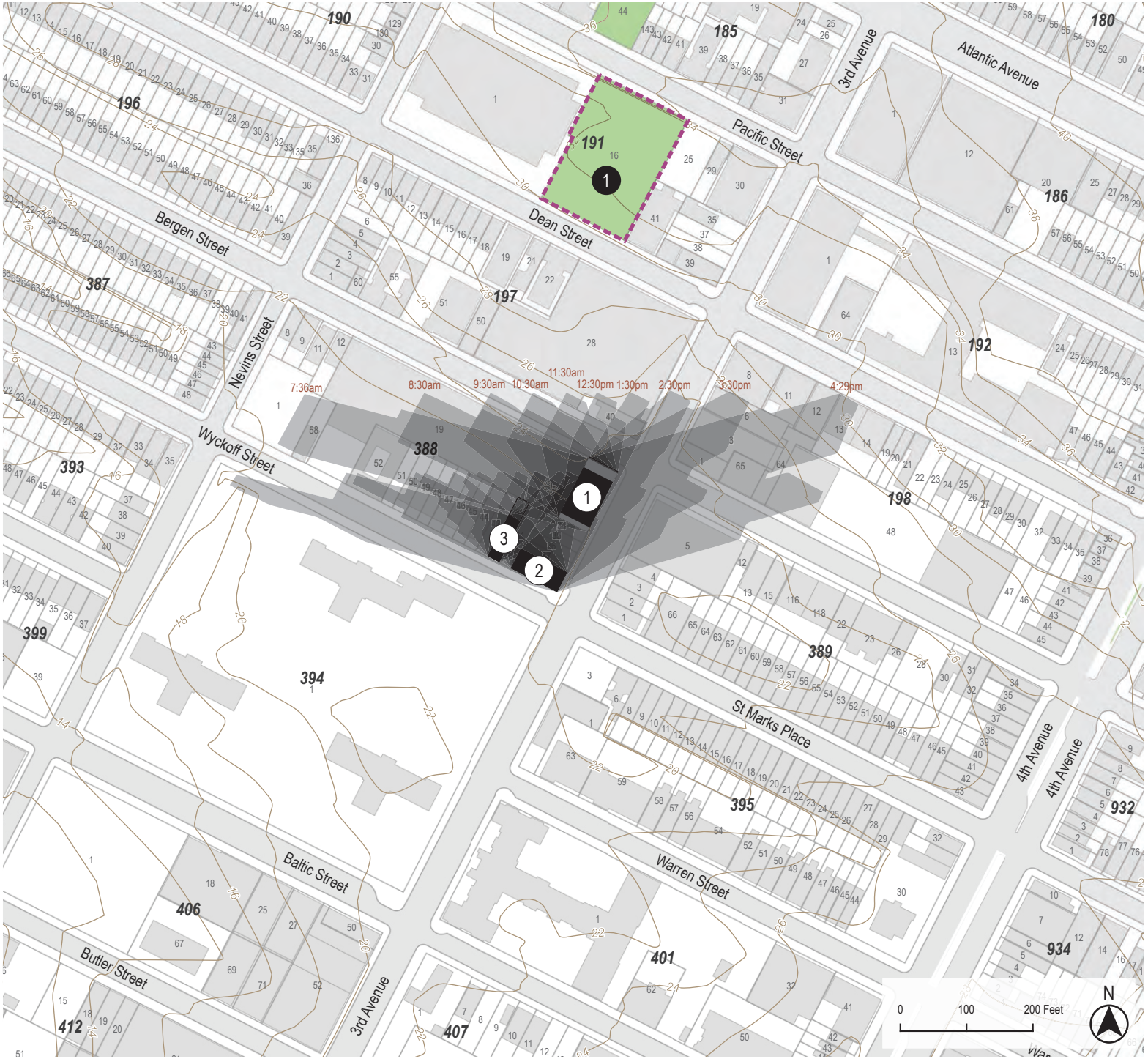


Urban Cartographics

98 3rd Avenue, Brooklyn

Figure 4: Tier 3 Screening Assessment for the March 21 Analysis Day

- Project Site
- Roof Above Base
- Roof Above Bulkheads
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource



Building Heights

	1	2	3
Base Height	95'	95'	45'
Roof Height	115'	115'	55'
Bulkhead Height	140'	140'	80'

Urban Cartographics

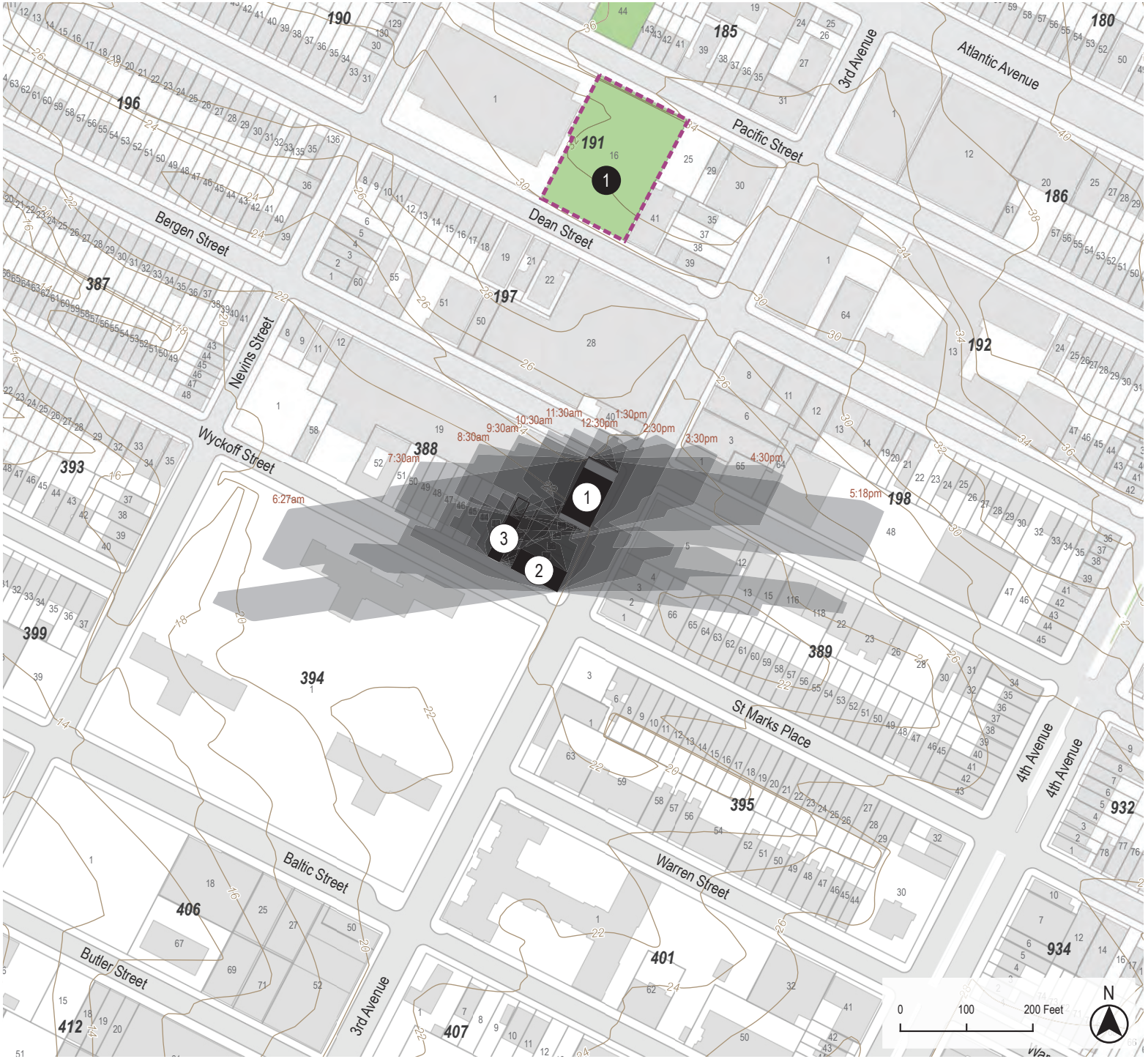
98 3rd Avenue, Brooklyn

Figure 5: Tier 3 Screening Assessment for the May 6 Analysis Day

- Project Site
- Roof Above Base
- Roof Above Bulkheads
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

Building Heights

	1	2	3
Base Height	95'	95'	45'
Roof Height	115'	115'	55'
Bulkhead Height	140'	140'	80'



Urban Cartographics

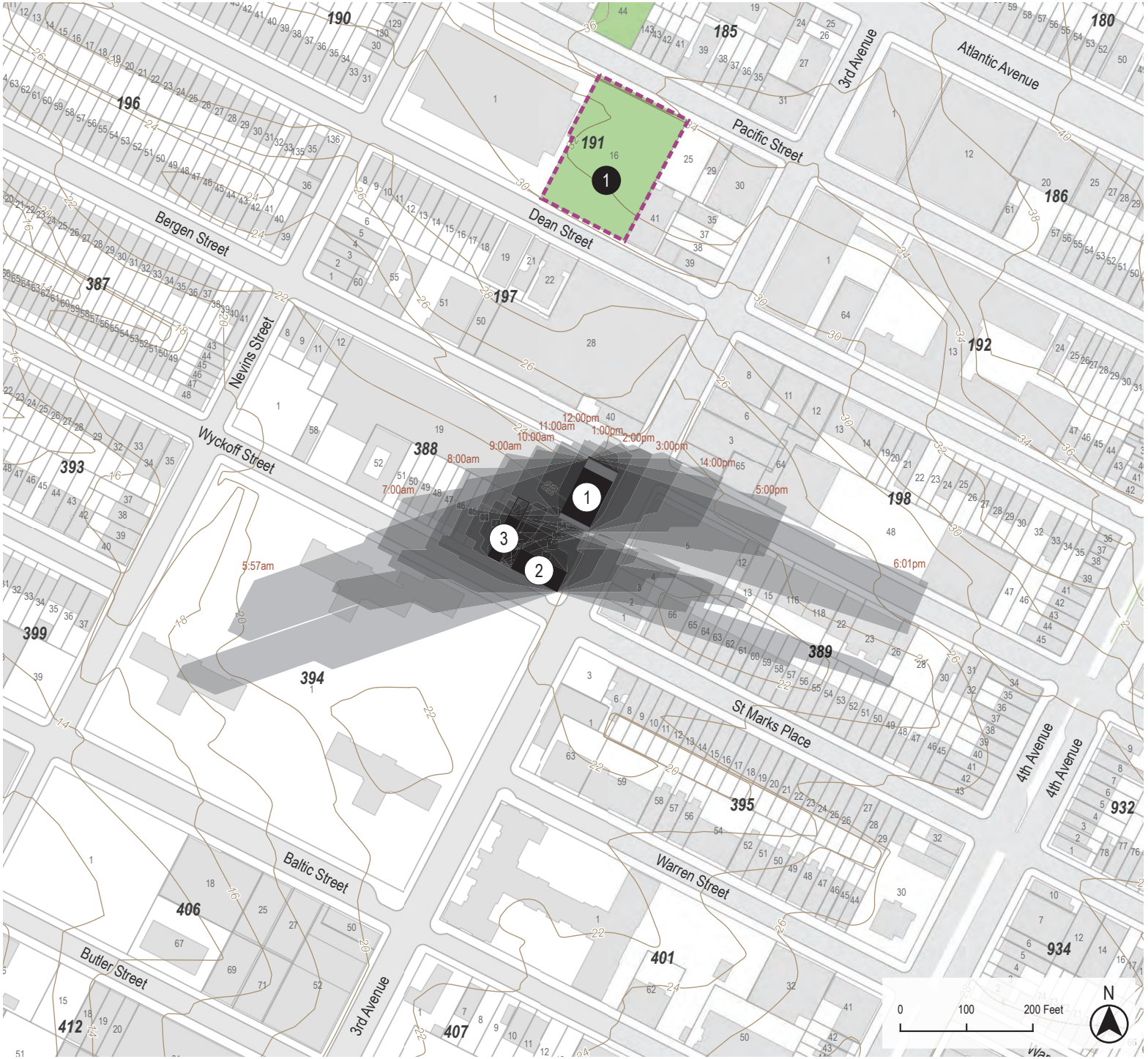
98 3rd Avenue, Brooklyn

Figure 6: Tier 3 Screening Assessment for the June 21 Analysis Day

- Project Site
- Roof Above Base
- Roof Above Bulkheads
- 8:51am Shadow Cast/Analysis Time
- # Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource

Building Heights

	1	2	3
Base Height	95'	95'	45'
Roof Height	115'	115'	55'
Bulkhead Height	140'	140'	80'



Urban Cartographics

TIMEFRAME WINDOW OF ANALYSIS

The shadow assessment considers shadows occurring between one and a half hours after sunrise and one and a half hours before sunset. At times earlier or later than this timeframe window of analysis, the sun is down near the horizon and the sun's rays reach the earth at very tangential angles, diminishing the amount of solar energy and producing shadows that are very long, move fast, and generally blend with shadows from existing structures until the sun reaches the horizon and sets. Consequently, shadows occurring outside the timeframe window of analysis are not considered significant under CEQR, and their assessment is not required.

TIER 3 SCREENING ASSESSMENT RESULTS

Figures 3 through 6 illustrate the range of shadows that would occur (in the absence of existing intervening buildings) from the Proposed Actions on the four representative days for analysis. As they move east and clockwise over the landscape, the shadows are shown occurring approximately every 60 minutes from the start of the analysis day (one-and-a-half hours after sunrise) to the end of the analysis day (one-and-a-half hours before sunset). The Tier 3 assessment showed that the single resource identified in the Tier 1/Tier 2 longest shadow study area would not receive project-generated shadows on any of the four analysis days. That resource therefore did not require any further analysis.

D. Conclusion

Incremental shadow from the proposed projects would not be substantial enough in extent and/or duration to reach any sunlight sensitives resources in the vicinity of the proposed project. As such, the Proposed Actions would not result in a significant adverse shadow impacts on sunlight-sensitive resources. While a single open space resource is within the area that could potentially be shaded as a result of the Proposed Actions, no incremental shadows would reach this resource. Therefore, no significant adverse shadows impacts would occur on this sunlight-sensitive resource.

Urban Design and Visual Resources

A. Introduction

A preliminary urban design screening assessment for the Proposed Actions is required because the Proposed Actions would introduce new buildings that would not be allowed under the existing zoning in the Project Area. As noted in the *CEQR Technical Manual*, a preliminary assessment is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including the following: (1) Projects that permit the modification of yard, height, and setback requirements; or (2) projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the proposed project.

Currently, the affected area is zoned M1-2. The M1-2 district allows for a variety of light manufacturing uses such as repair shops, wholesale service and storage facilities, as well as heavier industrial uses subject to stringent performance standards. The bulk parameters of the district allow for buildings up to 2.0 FAR, built to the front and side lot lines, with a 20-foot rear yard. Building heights for M1-2 districts are governed by a sky exposure plane that begins at 60 feet or four-stories, whichever is less. The sky exposure plane is 2.7 to 1 on narrow streets. Off-street parking and loading facilities vary in M1-2 districts according to the type and size of the use on the property. Setbacks of 20 feet are required on narrow streets and 15 feet on wide streets.

In the future with the Proposed Actions, the underlying M1-2 district would be mapped as R7D/C2-4 and R6B under MIH. As noted in Chapter A, "Project Description" this is anticipated to result in three projected development sites under the new zoning districts, with two buildings that could rise 140 feet (Projected Development Sites 1 and 2) under the R7D/C2-4 district, and a single building that could rise to 55 feet (Projected Development Site 3) under the proposed R6B district. Therefore, a shadows assessment is warranted. Since this development in the With-Action condition is anticipated to result in a different built-form at the street level, an assessment of urban design and visual resources is warranted.

Urban Design

The Urban design characteristics of a neighborhood are composed of various components that define the character of the area: building bulk, use, type and arrangement, block form and street pattern, streetscape elements, street hierarchy, and natural features. These components are discussed below.

Building Bulk, Use, Type, and Arrangement

The proposed R7D/C2-4 (MIH) district would alter the permitted uses within the first 100 feet of the Project Area (measured from Third Avenue) from Use Groups 4-14 & 16-17 to Use Groups 1-9 and 14. In addition, the permitted bulk would be increased to allow a maximum total FAR of 5.6 compared to a maximum FAR of 2.0 for commercial uses and 4.8 for community facility uses. For commercial uses, the proposed maximum FAR would remain the same at 2.0 FAR. The area beyond 100 feet of Third Avenue would be amended to R6B, which would alter the permitted uses of the M1-2 district from Use Groups 4-14 & 16-17 to Use Groups 1-4 and permit 2.2 FAR for residential uses under MIH and a community facility FAR of 2.0. As outlined in Chapter A, "Project Description" three projected developments are anticipated to occur as a result of the Proposed Actions:

The Proposed Development ("Projected Development Site 1") would be redeveloped with a 35,274 square foot (5.6 FAR) 8-story mixed-use building at Block 388, Lot 31 to contain residential space above ground-floor commercial retail. The building would rise to a maximum height of approximately 85 feet*, where it would achieve the maximum permitted floor area.

Block 388, Lot 38 ("Projected Development Site 2") would be redeveloped with a 17,600 gsf mixed-use building (5.6 FAR) that would rise to 6-stories (64') and contain ground floor retail. The building would rise to 64'* where it would reach its maximum permitted floor area.

Block 388, Lot 42 ("Projected Development Site 3") would be redeveloped with a 4,800 gsf residential building (2.2 FAR) that would rise to 4-stories (44') with 6 dwelling units. The building would rise to 44'* where it would reach its maximum permitted floor area.

*For a conservative analysis, the maximum permitted building heights with the proposed zoning districts under MIH are also displayed in the figures discussed below.

Figures 1, 2, 3 and 4 illustrate how these buildings would appear from the street level. Third Avenue is a two-way mixed-use corridor that travels from Downtown Brooklyn to Bay Ridge. Along this segment of Third Avenue the street is 70 feet wide in mapped width, classifying the street as 'narrow' under the Zoning Resolution. Third Avenue along this segment is predominantly mixed-use with residential uses, commercial buildings, institutional uses and some older warehouse, industrial and light manufacturing uses. An increasing amount of mixed use buildings are being developed along the corridor with ground-floor retail and residences above, pursuant to the underlying R7A/C2-4 district created as a result of the 2011 Boerum Hill Rezoning, which mapped the district at a depth of 100 feet from Third Avenue.

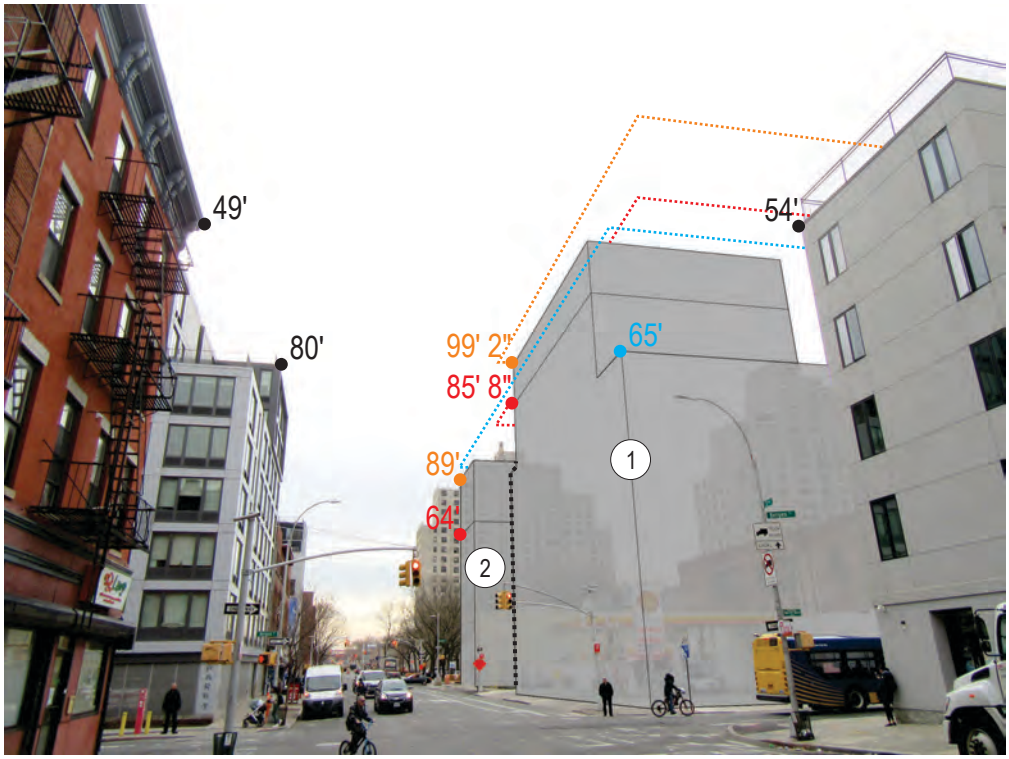
Zoning districts in the surrounding area include the underlying M1-2 district, as well as R7A/C2-4 districts and R6, R6B, R6A, R7B and R8A/C2-4 districts. The underlying M1-2 district is present on a majority of the subject tax block except for a mid-block segment that is zoned R6B. The bulk of the surrounding area generally corresponds to these zoning districts. Immediately to the north, the area within 100 feet of Third Avenue is zoned R7A/C2-4. Similarly, the Fourth Avenue corridor

98 3rd Avenue, Brooklyn
Urban Design Diagram: Figure 1

No-Action Scenario
3rd Avenue facing south (Site at right)



With-Action Scenario
3rd Avenue facing south (Site at right)



Maximum Permitted Base Height
R6B MIH - 45' | R7D MIH - 95'
Proposed/Potential Base Height

Maximum Permitted Building Height
R6B MIH - 55' | R7D MIH - 115'
Proposed/Potential Building Height

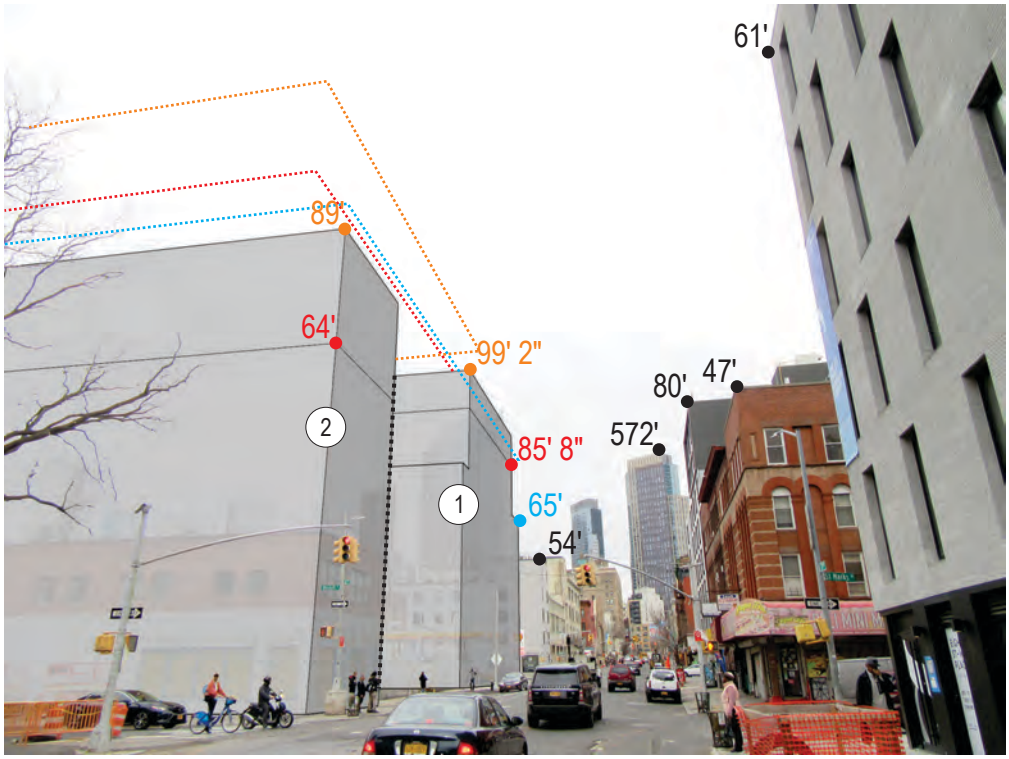
Bulkhead Height (25' Above Top Floor)
R6B MIH - 80' | R7D MIH - 140'
Proposed/Potential Bulkhead Height

98 3rd Avenue, Brooklyn
Urban Design Diagram: Figure 2

No-Action Scenario
3rd Avenue facing north (Site at left)



With-Action Scenario
3rd Avenue facing north (Site at left)



Maximum Permitted Base Height
R6B MIH - 45' | R7D MIH - 95'
Proposed/Potential Base Height

Maximum Permitted Building Height
R6B MIH - 55' | R7D MIH - 115'
Proposed/Potential Building Height

Bulkhead Height (25' Above Top Floor)
R6B MIH - 80' | R7D MIH - 140'
Proposed/Potential Bulkhead Height

98 3rd Avenue, Brooklyn
Urban Design Diagram: Figure 3

No-Action Scenario
Wyckoff Street facing south (Site at left)



With-Action Scenario
Wyckoff Street facing south (Site at left)



Maximum Permitted Base Height
R6B MIH - 45' | R7D MIH - 95'
Proposed/Potential Base Height

Maximum Permitted Building Height
R6B MIH - 55' | R7D MIH - 115'
Proposed/Potential Building Height

Bulkhead Height (25' Above Top Floor)
R6B MIH - 80' | R7D MIH - 140'
Proposed/Potential Bulkhead Height

is zoned R8A/C2-4 with a depth of 100. These districts permit the same uses and similar densities under contextual quality housing regulations, with the R7A district permitting up to 9-stories under MIH and the R8A district permitting up to 14-stories under MIH.

In terms of building types in the surrounding area, residential uses vary between three and four-story rowhouses located along mid-block portions of streets, and higher-density apartment buildings rising between 6- and 21-stories. The block to the south of the Project Area contains the NYCHA Wyckoff Gardens complex, which includes three, 21-story apartment buildings. More recent construction includes an 8-story apartment building directly to the east of the Project Area at 101 Third Avenue (Block 389, Lot 5).

Some older warehouse buildings are present in the surrounding area that range in height between 1- and 4-stories. Examples include the Ulano Corporation at 110 Third Avenue, a printing and graphic arts facility, a portion of which is within the proposed Project Area. Block 198 to the northeast of the Project Area also contains several 3- and 4-story warehouse buildings.

Institutional uses in this area range between 1 and 4-stories. A cluster of such uses exists along Dean and Pacific Streets at Third Avenue. A commercial warehouse building that houses various City services is located on the block to the north of the Project Area at 88 Third Avenue.

Zoning districts in the surrounding area include the underlying M1-2 district, as well as R7A/C2-4 districts and R6, R6B, R6A, R7B and R8A/C2-4 districts. The underlying M1-2 district is present on a majority of the subject tax block except for a mid-block segment that is zoned R6B.

Block Form, Street Pattern, and Street Hierarchy

As noted above, Third Avenue is a two-way mixed-use corridor that travels north-south from Downtown Brooklyn to Bay Ridge, while side streets (Bergen Street, Dean Street and Wyckoff Street) are predominantly residential and one-way that roughly travel east-west. A few blocks to the north is Atlantic Avenue, which is an arterial mixed-use use thoroughfare for the borough, which is approximately 120 feet in width and travels east-west. One block to the east is 4th Avenue, another notable arterial for the area and travels north-south. The surrounding area is a typical street grid. However, the area to the south is developed with several super-block developments, including the NYCHA Wyckoff Gardens complex, which interrupts the typical New York City street pattern.

Streetscape Elements

The Third Avenue corridor does not contain an abundance of street trees. However, new residential and mixed-use development along Third Avenue requires new street trees with new construction, so the area is emerging with a higher concentration of street trees. In addition, the residential side streets, such as Bergen Street, Dean Street and Wyckoff Street have pre-existing



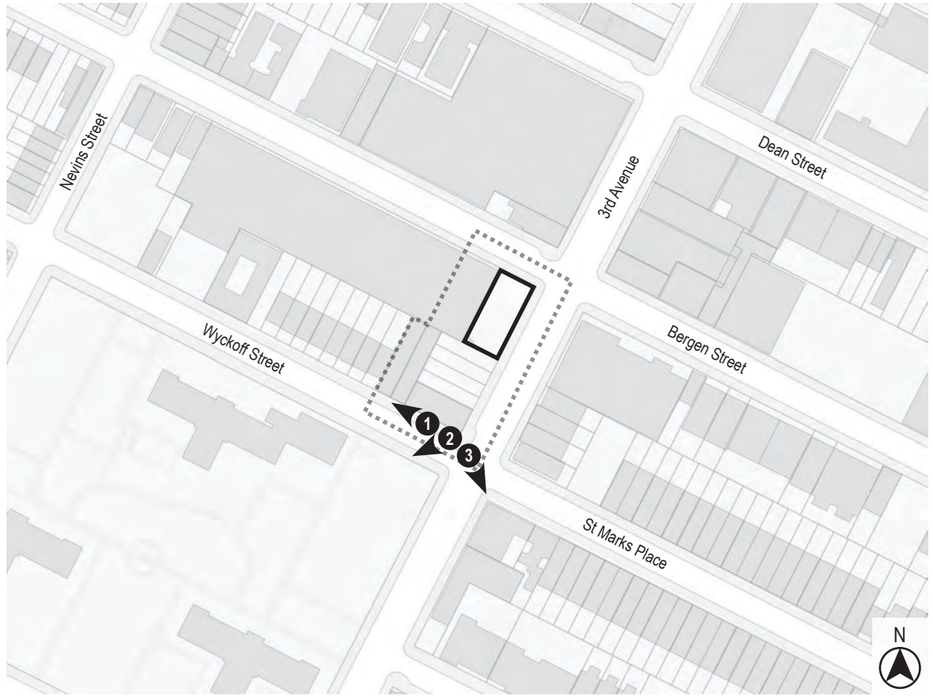
1. View of the sidewalk along the north side of Wyckoff Street facing northwest from 3rd Avenue (Project Area at right).



2. View of the intersection of 3rd Avenue and St Marks Place facing south from the Project Area.



3. View of the south side of Wyckoff Street facing southwest from the intersection of Wyckoff Street and 3rd Avenue.



98 3rd Avenue, Brooklyn
Figure 4

Urban Cartographics
Photographs Taken on April 4, 2020



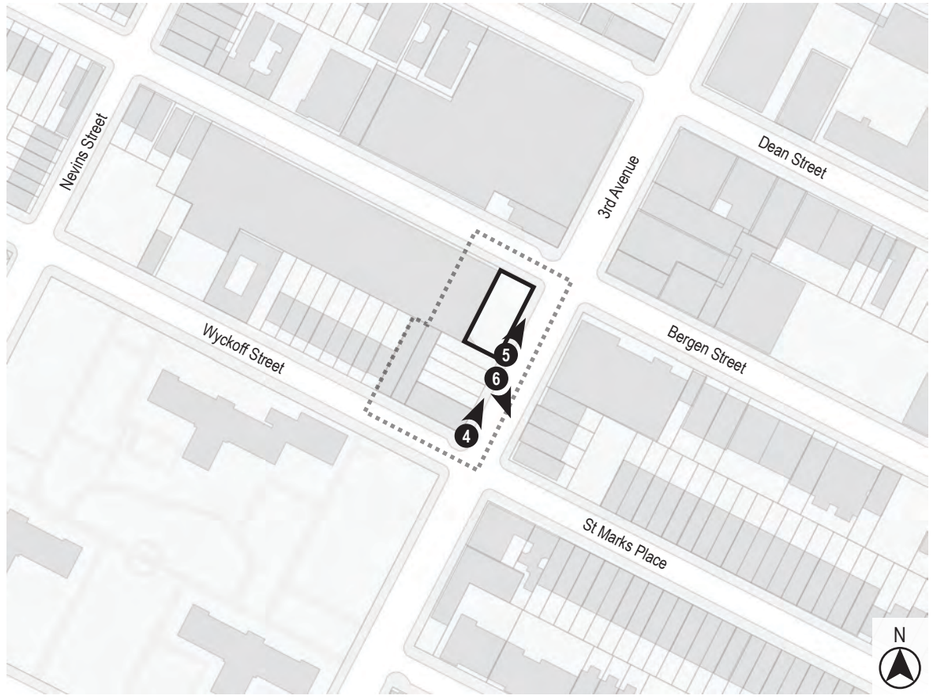
4. View of the sidewalk along the west side of 3rd Avenue facing northeast from Wyckoff Street (Project Area at left).



5. View of the sidewalk along the west side of 3rd Avenue facing northeast (Development Site at left).



6. View of the east side of 3rd Avenue facing south from the Development Site.



98 3rd Avenue, Brooklyn
Figure 5

Urban Cartographics
Photographs Taken on April 4, 2020

street trees, owing to the historic residential nature of these streets. Bergen and Dean Streets also contain bus shelters every few blocks, with the B65 bus traveling along those roadways.

Natural Features

There are no natural features in the Project Area or within the surrounding 400 feet. Therefore, no natural features are visible from the Project Area

Assessment

As noted above, The Proposed Actions are anticipated to result in two new buildings that could rise 140 feet (Projected Development Sites 1 and 2) under the R7D/C2-4 district, and a single building that could rise to 55 feet (Projected Development Site 3) under the proposed R6B district. The proposed R7D (MIH) district permits a max of 5.6 FAR under MIH and generally yields 8- to 11-story buildings. The proposed R6B district under MIH would permit a maximum of 2.2 FAR and a maximum base height of 30-40 feet (45 feet with a QGF) and a maximum height of 50 feet (55 feet with a QGF).

Projected Development Sites 1 and 2 would be appropriate for frontage along Third Avenue, which is a mixed-use corridor, adjacent to similar medium-density mixed use zoning districts. Immediately to the north, the area within 100 feet of Third Avenue is zoned R7A/C2-4 and facilitates similar densities of development. To the south are three, 21-story apartment buildings (the NYCHA Wyckoff Gardens complex) and a recently constructed apartment building rising to 8-stories is located immediately to the east from the Project Area. Therefore, the proposed R7D/C2-4 district and resulting development would serve as a buffer between the higher-density NYCHA towers to the south and the R7A/C2-4 district located immediately to the north and east.

In terms of Projected Development Site 3, which would produce a rowhouse similar to the character of the mid-block portions of these streets, would be consistent with development in these areas, away from Third Avenue.

For an illustrative display of the projected development sites, as well as the maximum permitted building envelopes under the Proposed Actions, see Figures 1 through 4. Based on these diagrams, the newly permitted bulk would not visually consist of a departure from building envelopes in the surrounding area.

Accordingly, the Proposed Actions would not result in buildings with dramatically different bulk, size and scale than existing buildings in the area, as multi-family apartment and mixed-use buildings are present in the surrounding area. In addition, the ground-floor commercial retail spaces along Third Avenue would be consistent with the mixed-use character of that roadway, which is already zoned for commercial, industrial and automotive uses, with the intersection of Bergen Street and Third Avenue defined by an underutilized gas station.



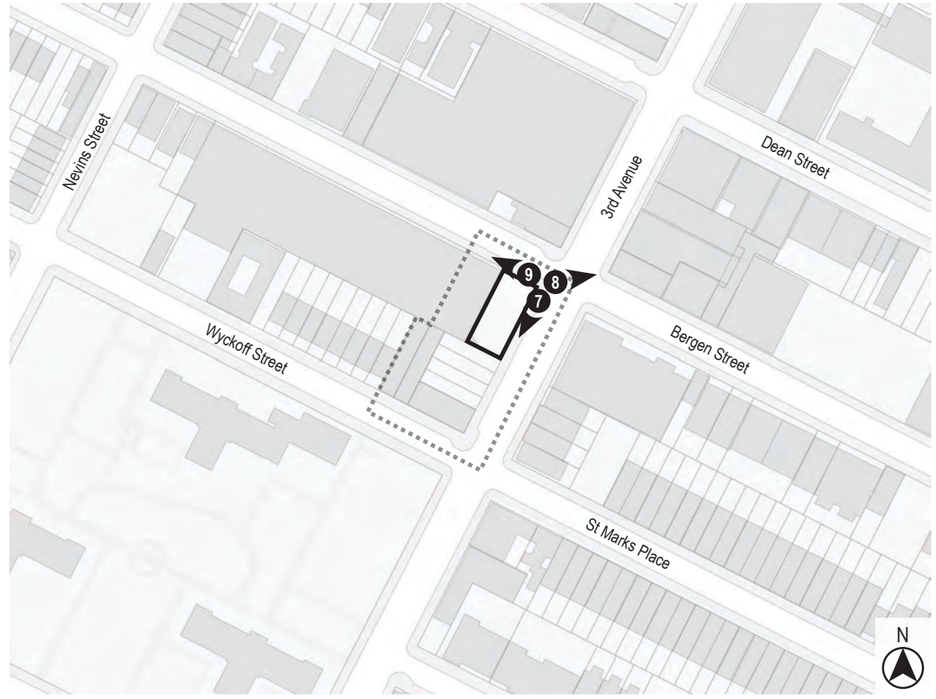
7. View of the sidewalk along the west side of 3rd Avenue facing southwest from Bergen Street (Development Site at right).



8. View of the intersection of 3rd Avenue and Bergen Street facing east from the Development Site.



9. View of the sidewalk along the south side of Bergen Street facing northwest from 3rd Avenue (Development Site at left).



98 3rd Avenue, Brooklyn
Figure 6

Urban Cartographics
Photographs Taken on April 4, 2020



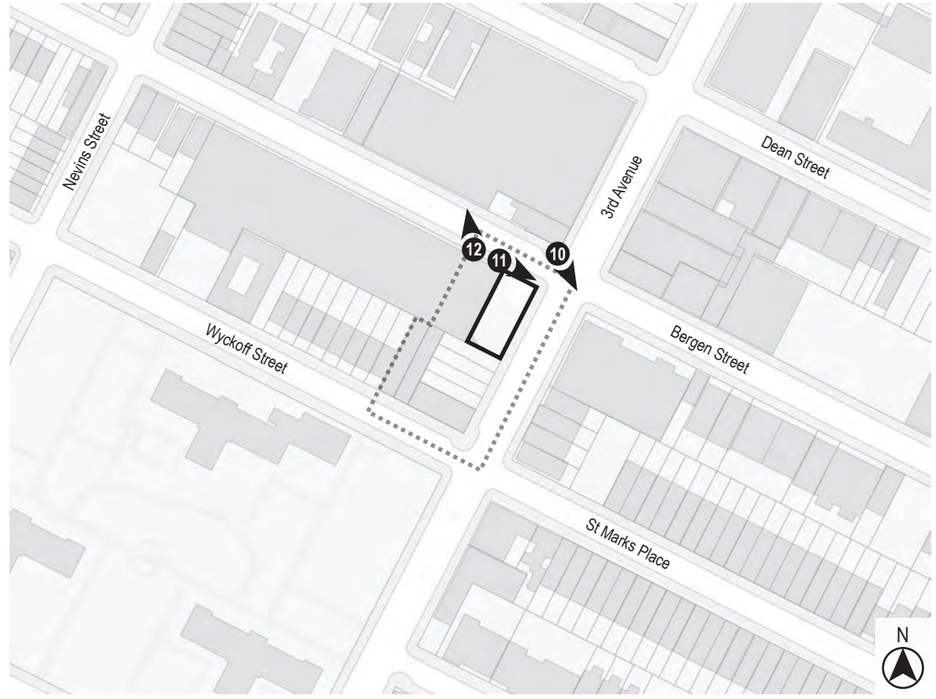
10. View of the intersection of 3rd Avenue and Bergen Street facing southeast.



11. View of the sidewalk along the south side of Bergen Street facing southeast (Project Area at right).



12. View of the north side of Bergen Street facing north from the Project Area.



98 3rd Avenue, Brooklyn
Figure 7

Urban Cartographics
Photographs Taken on April 4, 2020

As such, the Proposed Actions would improve the area's visual quality by developing underutilized parcels along a vibrant corridor and would provide a uniform street wall with an active ground floor use at the street level, consistent with the ongoing development of the Third Avenue corridor on the eastern side of the roadway, which is zoned R7A/C2-4, similar to the proposed R7D/C2-4 district. Therefore, no significant adverse impacts to the urban design character of the study area are anticipated as a result of the Proposed Actions.

Visual Resources

The Proposed Actions would not block the view of any natural resources, as no natural resources are within vicinity of the Project Area. Furthermore, there are no notable features or buildings in the immediate vicinity of the Project Area. Therefore, based on the criteria in the *CEQR Technical Manual,* the Proposed Actions would not block a view corridor or views of a natural or built visual resource. In this context, the Proposed Actions would not significantly alter views from streets. Therefore, no significant impacts related to visual resources are expected.

Conclusion

The Proposed Actions would permit a wider range of uses and create additional density that would allow for mid-rise contextual development along a vibrant mixed-use corridor, the opposite side of which already contains similar zoning districts and resulting development. In addition, a pre-existing walk-up apartment district (the R6B district) would be extended to meet the proposed mid-rise contextual district, thus eliminating the M1-2 district from the eastern end of the subject block, which would result in a new development consistent with the surrounding area. As such, no significant adverse impacts would occur for urban design. In addition, the Proposed Actions would not affect any natural resources or public view corridors to notable features or buildings in the immediate vicinity of the Project Area. Accordingly, no impacts to the urban design and/or visual resources of the area are expected.

Hazardous Materials

Introduction

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

Phase I Environmental Site Assessment

Impact Environmental Closures, Inc. prepared a Phase I Environmental Site Assessment (ESA) report (dated March 2014), for 98 Third Avenue, which is Projected Development Site 1 and will be used to assess the potential for hazardous materials in the Project Area, as the development sites are in close proximity to each other.

The purpose of the ESA is to identify, to the extent feasible in accordance with ASTM E 1527-05, recognized environmental conditions in connection with the Project Area with regard to hazardous materials as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and petroleum products. Additionally, several ASTM "Non-Scope" items including asbestos-containing materials, lead-based paints, and radon are also discussed. Recognized Environmental Conditions are identified through research into the history and uses of the site and surrounding area, an inspection of the subject property and a survey of adjoining and nearby uses, and a review of available regulatory agency records and environmental databases.

The following summarizes the findings, conclusions, and recommendations of the Phase I ESA.

The extent of the Projected Development Site 1 (Block 388, Lot 31) is currently utilized as a Shell branded gasoline filling station. The Site contains a one-story slab on grade, cement block, and brick masonry building, reportedly constructed circa 1986, with an approximate footprint of 300 square feet (sf). The on-site building is currently utilized as a convenience store including the sales of small retail sized automobile lubricants and motor oil. The interior of the building is comprised of a combination of painted cement block and drywall, with 9" by 9" tile flooring. The building is currently serviced by electric heat, connected to the NYC combined public sewer system and NYC municipal water. The exterior portions of the Site consist of a gasoline UST field containing four (4) 4,000 gallon gasoline USTs, two (2) gasoline dispensing islands with three (3) gasoline dispenser pumps and asphalt and concrete paved parking. The Site exhibits low topographic relief (less than three percent slope). The site is bound to the north by Bergen Street, and beyond by residential and commercial properties; to the south by parking lot; to the west by

a commercial/industrial property; and to the east by 3rd Avenue and beyond by commercial properties and the construction of a large residential building.

A review of historic municipal records in conjunction with City Directories/Sanborn fire insurance maps indicate that retail gasoline distribution operations have occurred since approximately 1939, and automotive service and repair activities were previously performed at the Site. The Site was historically utilized as mixed commercial and residential property from approximately 1886 to 1934.

This assessment revealed evidence of Recognized Environmental Conditions (RECs) associated with the Site. Accordingly, additional activities are recommended for the Site:

1. A review of the historic Sanborn fire insurance maps identified four (4) gasoline tanks located on-Site in 1939, and identified the Site as a filling station on the 1950, 1969, 1979 and 1988 Sanborn Maps - but did not provide tank location information. According to available environmental records, documents pertaining to previous generations of USTs at the Site prior to 1985 were not available. Four (4) 4,000-gallon USTs, two of which were installed in December 1985 and two of which were installed in August 1989, are listed as active for the Site and contain gasoline/ethanol. Frequently, abandoned USTs and associated subsurface piping are found at gasoline service station properties during investigations and site upgrade or redevelopment work. These abandoned USTs and associated piping can contain petroleum products with hazardous characteristics and can also be an unknown source for a release at a site. Furthermore, there is no documentation in regards to the removal and/or potential impacts to the subsurface by these previous generations of USTs.

2. Tank compliance documentation, such as tank tightness testing, reconciliation records, etc. for on-Site USTs was not able for review.

3. The 1939 Sanborn Map shows the south end of the Site occupied by a building that was labeled as a filling station and divided into three sections labeled as washing, greasing and office. The 1950 to 1988 Sanborn Maps show the Site as a filling station with a building similar in orientation to the building shown on the 1939 Sanborn Map; however, the building is not labeled. According to information obtained from the Site, automotive repairs were performed at the Site prior to 1989; therefore, past hazardous waste activity is indicated for the Site. The available information listed for the 98 Third Avenue Service Station, Inc. indicates that historically, the Site was listed as a conditionally, except small quantity generator of hazardous wastes. In general, automotive repair facilities handle chemicals and generate hazardous waste through activities associated with common automotive repair activities such as replacement of automotive parts, cleaning and dismantling of engine and other vehicle components, and through regular vehicle maintenance where waste fluids are generated (e.g., used oil, anti-freeze, transmission fluid, brake fluid, etc.). These repair activities have the potential to introduce contaminants into the environment and subsurface media through accidental spills or leaks from containers, as well as through volatilization of the automotive repair solvents

during regular handling activities. Additionally, floor drains located in service bays and storm water management drains, if present, can convey improperly handled waste to the subsurface environment. The improper handling, management and disposal of automotive repair waste can account for environmental contamination at and around automotive repair shops. Such wastes can pose a significant threat to human health and environment, if they are spilled or not properly managed and disposed. No information pertaining to the disposal of waste associated with such an operation on housekeeping is available.

4. Potential off-Site contamination sources were identified to exist within the ASTM search radius. Properties can be impacted as a result of the migration of hazardous substances from adjoining or nearby properties to the Site through a release to the soil, groundwater or other media. There are four "E" designated properties located adjacent to the Site where "Hazardous Materials Phase I and Phase II Testing Protocol" is provided in the description. Additionally, to the immediate west of the Site is the Ulano facility located at 280 Bergen Street, Brooklyn, New York. The Ulano facility is identified on the NYSDEC SPILLS database; NYSDEC PBS database; the USEPA Hazardous Waste Generators/Transporters database; the USEPA Air Discharge Facilities database; USEPA Toxic Air, Land and Water Releases; and the USEPA Civil and Administrative Enforcement Docket. The database information for the Ulano facility indicates that there is a 10,000-gallon fuel oil UST in service; one (1) 2,000-gallon UST was closed in place; eight (8) 550-gallon USTs were installed in 1946 and closed-removed in 1993; there was a tank test failure in March 1998 where NYSDEC assigned case number 97-13764 that was closed in May 1999; and the facility generates and stores hazardous waste. FOIL information received from the USEPA for hazardous waste activity indicates that the Ulano Corporation manufactures films for graphic arts/screen printing industry, aqueous and solvent coatings, and formulates emulsions for the same industry. Waste generated includes ethyl acetate, methyl ethyl ketone, toluene, isopropanol, ignitable waste, spent non-halogenated solvents and discarded unused formulations containing chlorophenols. Notices of Violation (NOVs) issued to the facility by the USEPA included but were not limited to improper storage of drums, improper disposal of waste rags, improper record keeping and failure to make a hazardous waste determination. The USEPA did indicate that manifest for shipments were maintained since December of 1980. It should be noted that Ulano is owned by Diagravure Film Corporation, who was listed as the occupant of the facility located at 280 Bergen Street on the 1969 to 1988 Sanborn Maps. Diagravure Film Corporation is identified as the maker of plastic film used in making stencils for screen printing.

In summary, the Phase I ESA revealed no other evidence of recognized environmental conditions in connection with the property. However, as indicated above, contamination may exist on the site and a Phase II ESA was prepared, which is outlined below.

Phase II Environmental Site Investigation

The Phase I ESA revealed evidence of recognized environmental conditions (RECs) associated

with the Site and off-site confirmed (or potential) contamination sources. Subsequently, a Phase II Environmental Site Assessment (ESA) was also performed for the Site by Impact Environmental Closures, Inc. in August of 2014.

The scope of the Phase II ESA consisted of limited subsurface investigation which included the following: (1) advancement of eleven soil borings, four of which were completed as monitoring wells; (2) collection of eleven unsaturated soil samples and soil samples for laboratory analysis from seven of the soil borings: four soil samples collected from 0-2 feet below grade (BEG) interval, four soil samples collected from 8-10 feet BEG, and three soil samples collected from 15 feet BEG; (3) collection of four groundwater samples from the four newly installed monitoring wells for laboratory analysis; (4) installation of four semi-permanent soil vapor points and the collection of four soil vapor samples for laboratory analysis; and (5) conduct a groundwater elevation survey to determine groundwater flow direction.

According to the Phase II ESA, three (3) undefined Areas of Concern (AOCs) were identified for the site. These include the following and are explained below in further detail.

1) *Potential vapor migration/intrusion issues resulting from activities associated with historic use of the Site as automobile repair facility and retail gasoline service station;*

2) *Presence of historic fill material across the Site; and*

3) *A release of petroleum hydrocarbons to soil and groundwater beneath the Site.*

- Four soil vapor sampling points were installed on the Site. Soil vapor sampling results indicate that PCE was detected in soil vapor sampling points SV-1 through SV-4 and TCE was detected in SV-1 at concentrations above the respective New York State Department of Health (NYSDOH) Indoor/Outdoor Air Guidance Values. Concentrations of other VOCs were also detected in the soil vapor samples collected from the Site. The concentrations of the TCE and PCE detected require additional vapor monitoring or mitigation.

- Four shallow soil borings were advanced to approximately 10 feet below existing grade (BEG) at the Site (the approximate excavation depth for redevelopment) and appeared to be comprised primarily of construction fill near grade to brown to light brown fine to medium sand with gravel. Some non-native construction fill material (e.g., pea gravel) was identified.

- Soil samples collected from shallow soil borings SB-4 through SB-7 at approximately 2 feet BEG, contained semi-volatile organic compounds (SVOCs), metals (inclusive of heavy metals) and/or polychlorinated biphenyls (PCBs) above their respective New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objectives (SCOs), which is indicative of the presence of historic fill material. Based on the samples collected from these soil borings at an interval of 8 to 10 feet BEG, the

concentrations of SVOCs, metals and PCBs declined or were not detected.

- Pesticides were not detected in the shallow soil samples (SB-4 through SB-7) with the exception of 4,4'-DDT at soil boring location SB-5 at 2 feet BEG.

- Shallow soils at the Site are planned for removal as part of the redevelopment of the Site. Soil characterization, management and disposal requirements will need to be completed in accordance with a Remedial Action Work Plan and Construction Health and Safety Plan prior to the initiation of any soil disturbances on the Site.

- Volatile organic compounds (VOCs) and SVOCs were detected at concentrations exceeding their respective NYSDEC Unrestricted Use SCOs in the deep soil sample collected at 15 feet BEG from soil boring SB-1. VOCs and SVOCs were also detected in the deep soil samples collected at 15 feet BEG from soil borings SB-2 and SB-3 at concentrations below the respective SCOs.

- Lead and nickel were detected at concentrations exceeding their respective NYSDEC Unrestricted Use SCOs in the deep soil sample collected at 15 feet BEG from soil boring SB-1 but were not detected above the respective NYSDEC SCOs in SB-2 and SB-3. Other metals were detected in the deep soil samples collected at 15 feet BEG from soil borings SB-1 through SB-3 at concentrations below the respective NYSDEC SCOs.

- Based on the analytical results from the deep soil samples collected from the Site, there appears to have been a release of petroleum hydrocarbons in the vicinity of SB-1. Deep soils at the Site (15 feet BEG) are not planned for removal as part of the redevelopment of the Site. Additional remedial investigation, potential remedial action and/or appropriate engineering controls (ECs) may be required at the Site.

- VOCs and SVOCs were detected at concentrations exceeding their respective NYSDEC Ambient Water Quality Standards (AWQS) in groundwater samples collected from newly installed monitoring wells MW-1 through MW-4.

- Total metals were detected above their respective NYSDEC AWQS in groundwater samples collected from monitoring wells MW-1 through MW-4. Filtered groundwater samples from MW-1 through MW-4 contained magnesium at concentrations exceeding the AWQS, and selenium exceeded the AWQS in MW-4.

- Based on the analytical data for groundwater samples collected from the Site, there appears to have been a release of petroleum hydrocarbons that have adversely impacted the groundwater quality beneath the Site.

- A groundwater elevation survey was performed on the Site to determine groundwater flow direction. Based on the measured groundwater depths and survey data, groundwater was interpreted to flow north at the Site. The groundwater flow direction and contamination concentration gradient indicate that the impacts to groundwater at

the site appear to be from an on-Site source.

The analytical data gathered as part of the Phase II ESA investigation are sufficient to determine that releases and/or discharges to the subsurface environment of the Site have resulted from current and/or former retail gasoline distribution operations and the former automobile repair facility at the Site. Additionally, the presence of historic fill is indicated in shallow soil at the Site.

Since chemicals of concern are present at concentrations above New York State Department of Environmental Conservation (NYSDEC) standards or New York State Department of Health (NYSDOH) Guidelines, as applicable, the NYSDEC must be notified. Additional remedial investigation, with the potential for off-site investigation based on the concentrations of dissolved-phase petroleum hydrocarbons detected in on-site groundwater, is warranted.

Based on the above, the Development Site is currently enrolled in the New York City Voluntary Cleanup Program (VCP). The VCP is a voluntary environmental remediation program administered by the New York City Office of Environmental Remediation (OER). It was established to ensure that any vacant property in NYC with light to moderate levels of contamination can be cleaned up to New York State standards with government support to protect public health and the environment and redeveloped in a timely manner. However, an (E) designation is still necessary to ensure the Development Site would be fully remediated, in case the Applicant withdraws from the VCP program (see attached correspondence with DEP under Appendix B)

Based on the above, the Development Site and remaining projected development sites (Projected Development Sites 2 and 3) are assumed to contain the same potential for contamination. To avoid any potential impacts associated with hazardous materials, the Proposed Actions would map an (E) designation (**E-647**) for hazardous materials for each projected development site within the Project Area. The text of the (E) designation is below:

Projected Development Site 1 - Block 388, Lot 31
Projected Development Site 2 - Block 388, Lot 38
Projected Development Site 3 - Block 388, Lot 42

Due to the possible presence of hazardous materials on the aforementioned designated site, there is potential for contamination of the soil and groundwater. To determine if contamination exists and perform the appropriate remediation, the following tasks must be undertaken by the fee owners of the lot restricted by this (E) designation prior to any demolition or disturbance of soil on the lot.

Task 1

Sampling Protocol

The applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER.

The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2

Remediation Determination and Protocol

A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER. If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

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

With the implementation of the above (E) designation, no significant adverse impacts related to hazardous materials would occur. Therefore, there is no potential for the Proposed Actions to result in significant adverse impacts related to hazardous materials.

Transportation

Introduction

In accordance with guidance prescribed in the CEQR Technical Manual, the evaluation of potential transportation-related impacts associated with a proposed development begins with screening assessments, which encompass the preparation of travel demand estimates (Level-1 screening analysis) and/or trip assignments (Level-2 screening analysis), to determine if detailed analyses would be warranted to address the potential impacts project-generated trips may have on the transportation system. If the Level-1 screening analysis results show that the Proposed Project would result in 50 or more peak hour vehicle trips, 200 or more peak hour transit trips (200 or more peak hour transit riders at any given subway station or 50 or more peak hour bus trips on a particular route in one direction), and/or 200 or more peak hour pedestrian trips, a Level-2 screening analysis would be undertaken. If the results of the Level-2 screening analysis show that the Proposed Project would generate 50 or more peak hour vehicle trips through an intersection, 50 or more peak hour bus riders on a bus route in a single direction, 200 or more peak hour subway passengers at any given station, or 200 or more peak hour pedestrian trips per pedestrian element, further quantified analyses may be warranted to evaluate the potential for significant transportation impacts. As such, a preliminary traffic analysis was conducted to determine if the Proposed Actions would require detailed analyses to identify possible significant adverse transportation impacts.

Mixed Use Development Program

The transportation screening analysis, preformed for the Proposed Actions, is based on the Future With-Action condition, where no transportation credits are taken for the no-action scenario (or rather, the increment is not utilized). As noted in Chapter A, "Project Description," the Future With-Action Scenario would consist of the development of a total 65 residential dwelling units (52,151 gross square feet), and a total of 5,523 gsf of ground floor commercial retail space. Of those 65 DUs., approximately 19 DU would be affordable. The proposed rezoning would provide no on-site parking.

The with-action development program is summarized below in **Table 1**.

Table 1: Proposed Mixed-Use Development

Proposed Uses	With-Action	Increment
Residential	65 DUs (52,151 gsf)	65 DUs (52,151 gsf)
Local Retail	5,523 gsf	5,523 gsf
Parking	0	0
Total	57,674 gsf	57,674 gsf

Screening Analysis

This level of development would not exceed the minimum development density potentially requiring a transportation analysis as shown in **Table 16-1** of the Transportation Chapter of the *2020 CEQR Technical Manual.* The applicable minimum development density for the location of

the project site in Zone 2 (project is within ¼ mile of Atlantic Avenue Barclays Center Station Complex) is 200 new residential dwelling units, 100,000 additional gross square feet of commercial office space, 15,000 additional gross square feet of commercial ground floor retail space, 25,000 additional gross square feet of community facility or 85 new off-street parking spaces.

Therefore, based on the *2020 CEQR Technical Manual, Table 16-1, Zone 2 threshold criteria* the weighted average is calculated below and results in less than 1[1]. Therefore, the proposed project would screen for transportation analyses and would require no detailed transportation analyses, per *CEQR Technical Manual Threshold*.

[1] Weighted Average Screening Analysis: 62 DU 5,523/15,000=0.31+0.37=0.68<1

Air Quality

A. INTRODUCTION

Analysis Framework

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. Under City Environmental Review (CEQR), an air quality assessment determines both a proposed project's effects on ambient air quality and the effects of ambient air quality on the project.

Air Pollutants and Applicable Standards and Guidelines

Criteria Pollutants - National Air Quality Standards

The EPA has established national ambient air quality standards (NAAQS) for seven of the most common air pollutants—known as "criteria" pollutants. The presence of these pollutants in ambient air is generally due to numerous diverse and widespread sources of emissions. The NAAQS primary standards are designed to protect public health with adequate margin of safety. The NAAQS secondary standards are designed to protect the public welfare from adverse effects, including those related to effects on soils, water, vegetation, visibility, and other aspects. As required by the Clean Air Act, EPA periodically conducts comprehensive reviews of the scientific literature on health and welfare effects associated with exposure to the criteria air pollutants. The NAAQS have been adopted as the ambient air quality standards for the State of New York.

The New York State Department of Environmental Conservation (NYSDEC) measures air pollutants at more than 50 sites across the state using continuous and/or manual instrumentation. These sites are a mix of federally-mandated and supplemental monitoring networks. The primary NAAQS and background concentrations from the nearest federally-mandated monitoring station(s) of the pollutant(s) that a detailed analysis was conducted for are presented in **Table 17-1.**

Table 17-1: NAAQS and Background Concentration Published in the NYSDEC 2019 Report

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
$PM_{2.5}$	24-Hour	35 µg/m^3	19.6 µg/m^3	Division Street
	Annual	12 µg/m^3	9.3 µg/m^3	
NO_2	1-Hour	188 µg/m^3	103.6 µg/m^3	Queens College
	Annual	100 µg/m^3	26.8 µg/m^3	
SO_2	1-Hour	196 µg/m^3	13.5 µg/m^3	
	Annual [(1)]	80 µg/m^3	1.0 µg/m^3	

1. 6 CRR-NY 257-2.3 for annual SO_2 standard: "During any 12 consecutive months, the annual average of the 24-hour average concentrations shall not exceed 0.03 ppm.

NO_2 NAAQS

The 1-hour NO_2 NAAQS was promulgated in the United States in February 2010. The 1-hour standard is based on a percentile rank from the annual distribution of daily maximum 1-hour values, averaged across the number of years processed. The 1-hour NO_2 modeled design value is based on the 98th percentile, or 8th highest, of the daily maximum 1-hour values across the year. For typical multi-year modeling analysis based on 5 years of National Weather Service (NWS) meteorological data, the modeled design value is the 5-year average of the 8th highest values for NO_2.

Nitrogen oxide (NOx) emissions from combustion consist predominantly of nitric oxide (NO) at the source. The NOx in these emissions is then gradually converted to NO_2. For determining compliance with the 1-hour standard, the EPA has developed a three-tiered modeling approach: a) Tier 1, the most conservative approach, assumes a full (100%) conversion of NOx to NO_2. b) Tier 2 is the Ambient Ratio Method 2 (ARM2) which assumes ambient equilibrium between NO and NO_2. AERMOD multiplies Tier 1 impacts with default ambient ratios, or source-specific NO_2/NO_x in-stack ratio (ISR) data (the national default minimum and maximum ambient ratios for the primary facility are 0.5 and 0.9, respectively.) c) Tier 3, which is the most precise approach, accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations.

<u>NYC Guidelines</u>

The city's *de minimis* criteria are used to determine the significance of the incremental increase in CO and $PM_{2.5}$ concentrations that would result as a consequence of the proposed project. The following criteria are used for determination of significant adverse $PM_{2.5}$ incremental impacts for projects subject to CEQR:

- 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 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources; or for mobile sources, at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations); or

- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

Accordingly, 24-hour $PM_{2.5}$ *de minimis* design value is 7.7 $\mu g/m^3$. As no mobile source detailed analysis is required, CO detailed analysis is not required and, therefore, CO *de minimis* is not shown.

Non-Criteria Pollutants

The NYSDEC Department of Air Resources established short-term (one-hour) and annual concentrations standards for certain noncriteria pollutants. The standards are acceptable ambient levels for these pollutants, which are based on human exposure. The New York State standards for noncriteria pollutants are published in the DAR-1 guidance document (latest version dated August 10, 2016). DAR-1 presents Annual and Short-Term Guideline Concentrations (AGCs and SGCs, respectively) for contaminants that range in toxicity from high to low. The AGCs and SGCs are annual and 1-hour guideline concentrations, respectively, for potentially toxic or carcinogenic air contaminants. In addition, NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic, or duration.

B. MOBILE SOURCE

According to the *CEQR Technical Manual,* projects 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 (e.g., diesel trains, helicopters, boats), or add new uses near mobile sources (e.g., roadways, garages, parking lots). Detailed analyses are required to predict whether a proposed action could potentially result in significant adverse air quality impact if certain threshold criterions are met or exceeded. Proposed actions that do not meet or exceed the threshold criterions (screen out) are not expected to result in mobile source impacts.

Screening Assessment

Existing Sources

According to the *CEQR Technical Manual*, projects that would result in new sensitive uses within 200 feet of an atypical roadway or near other major mobile source of pollutant may result in significant adverse mobile source air quality impacts. The Proposed Project is not located near a highway or a large parking facility. Therefore, no analysis is required.

Parking Garage

Based on CEQR guidelines, the projected number of new parking spaces to be added is evaluated with a threshold criterion to predict whether the potential impacts associated with mobile source emissions are significant. If the threshold is met or exceeded, a detailed analysis is warranted. The proposed project would include no new off-street parking spaces. Therefore, no analysis is required.

Project-Generated Traffic

Per the *CEQR Technical Manual*, localized increases in CO and $PM_{2.5}$ levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the proposed project. For this area of the City, the threshold volume for a detailed analysis of CO concentration, using MOVES2014 and CAL3QHC/R or AERMOD, is an

increment of 170 vehicles. $PM_{2.5}$ threshold criterion is an increment of applies heavy-duty diesel vehicles (HDDVs) screen.

As the Proposed Actions screened out of the need for a transportation analysis (*CEQR Technical Manual Table 16-1 Minimum Development Densities Potentially Requiring Transportation Analysis*), the Proposed Project would not result in 50 or more peak hour vehicle trip-ends at an intersection (Level 2 screening assessment). As such, no intersection would experience peak-hour project generated traffic that exceeds the 170 incremental vehicular trips threshold (condition outlined in Sections 210 of Chapter 17 of *the CEQR Technical Manual*). Therefore, no CO detailed analysis is required.

The project-generate peak hour HDDVs traffic or its equivalent in vehicular emission that would require a detailed $PM_{2.5}$ analysis depends on the type of road. The thresholds incremental traffic per road type ranges from 12 to 23 HDDVs. Per the NYS Department of Transportation (NYSDOT)[1], Wyckoff Street, a one-way roadway, is classified as a local street (12 HDDVs threshold screen), which is paved road with 5,000 vehicles, Bergen Street as a collector type roadway (19 HDDVs threshold screen), and Third Avenue is classified as an arterial roadway (23 HDDVs threshold screen).

The NYC Department of City Planning (DCP) online CEQR App was used to predict the project-generated traffic, where the CEQR App output is based on the *CEQR Technical Manual* planning factors. These resulted, using the CEQR App, in a maximum peak hour increment of 4 autos and no (0) trucks. The HDDVs screen assumed that all autos are LDGT1 class vehicles. The worst-case HDDVs or its equivalent in vehicular emissions would result in 2 equivalent trucks traveling on Wyckoff Street. **Table 17-2** shows the *CEQR Technical Manual* Equivalent Truck Calculation.

Table 17-2: *CEQR Technical Manual* Equivalent Truck Calculations

Roadway	Roadway Classification (Threshold HDDVs screen)	Peak-Hour Period	Truck Per Hour (4)	Auto Per Hour	Equivalent Truck	Pass / Fail
Wyckoff Street	Paved (12)	AM	0	4	1.9	Pass
		Midday	0	2	1.0	Pass
		PM	0	4	1.9	Pass
		Sat	0	4	1.9	Pass
Note: Roadway classification obtained from the New York State Department of Transportation (NYSDOT) map application (Feb. 2020). https://gis3.dot.ny.gov/html5viewer/?viewer=FC						

As seen in **Table 17-2**, the Proposed Project total net HDDVs or its equivalent in vehicular emissions does not exceed the threshold of 12 HDDVs for paved roadways. Therefore, the Proposed Actions equivalent in vehicular emissions passes the $PM_{2.5}$ HDDVs screening analysis, and no detailed analysis is required.

[1] https://gis3.dot.ny.gov/html5viewer/?viewer=FC

C. STATIONARY SOURCE

Heating and Hot Water Systems

Per the *CEQR Technical Manual*, the heating/hot water, ventilation, and air conditioning (HVAC) systems analysis considers the potential for emissions from the HVAC system of the Proposed Actions to result in development that significantly impact existing land uses (project-on-existing). Based on CEQR guidance, a preliminary screening assessment 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 is applicable 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.

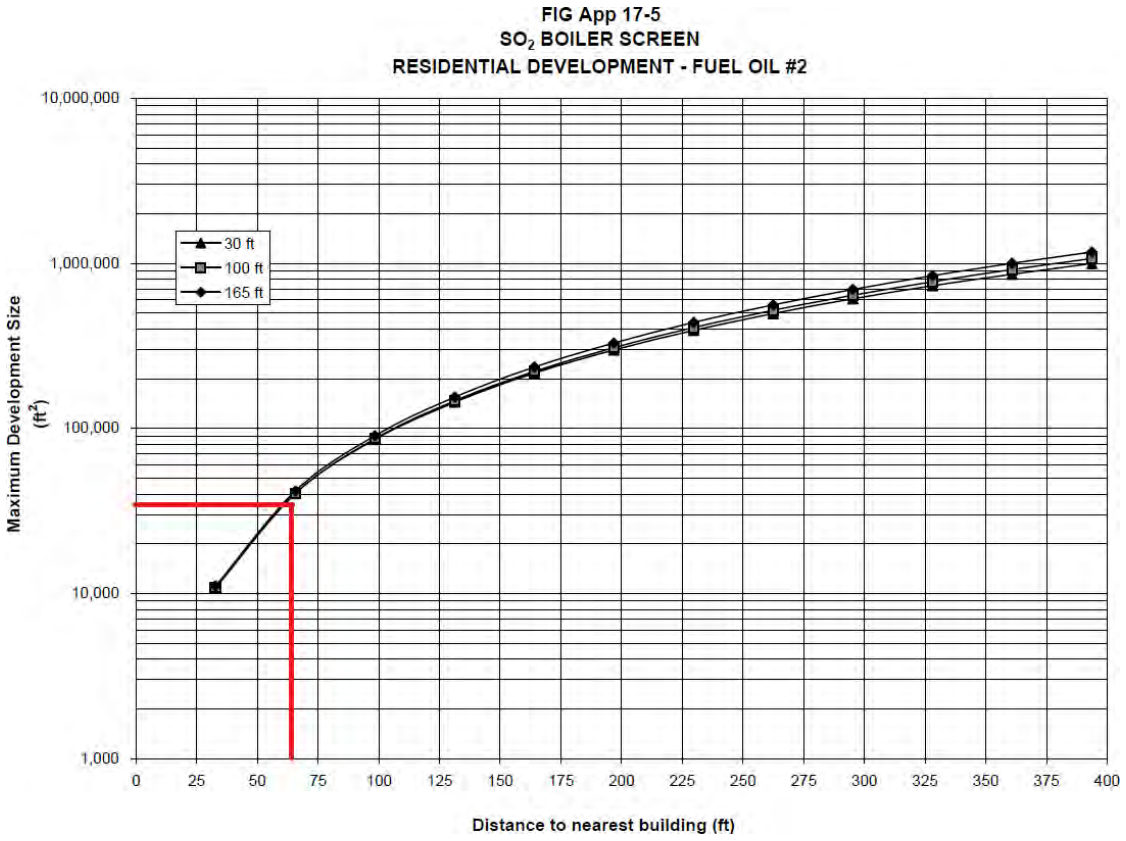
Screening Assessment

The potential for the heat and hot water system(s) to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used by the HVAC system, the height of the stack venting the emissions, the distance to the nearest building of similar or greater height, the building's use and the square footage of the development that would be served by the system, both of which effect the amount of fossil fuel consumed. The *CEQR Technical Manual* screening analysis is based on these factors. A detailed analysis is required if the screening analysis failed. The following screening analysis was conducted:

If the actual distance between the source building and the receptor building is greater than the threshold distance for a building size, then that building passes the screening analysis (and no significant impact is predicted). However, if the actual distance is less than the threshold distance for a building, then there is a potential for a significant impact and a detailed analysis would be required. In addition, according to 15 RCNY 2-15, no new boiler or burner installations may use No. 6 or No. 4 fuel oils. Therefore, the highest-emitting fuel that could be used is No. 2 fuel oil. The following screening analyses were conducted:

1. Projected Development Site 1 on existing land uses: The Projected Development Site 1, an 85-foot tall, 35,274 gsf residential building potential impact on the nearest building of similar or greater height. Fuel oil #2 would be the type of fuel used in the HVAC system. A distance of 65 feet was applied, which is the distance between Projected Development Site 1 (Block 388, Lot 31) and the property at 101 Third Avenue (Block 395, Lot 5). The CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendices* was used for the screening analysis. This stationary source screen is a generic screen for fuel oil No. 2 fueled boiler serving a residential use building. **Figure 17-1** (using Figure 17-5 of the *CEQR Technical Manual Appendices*) shows the screening analysis.

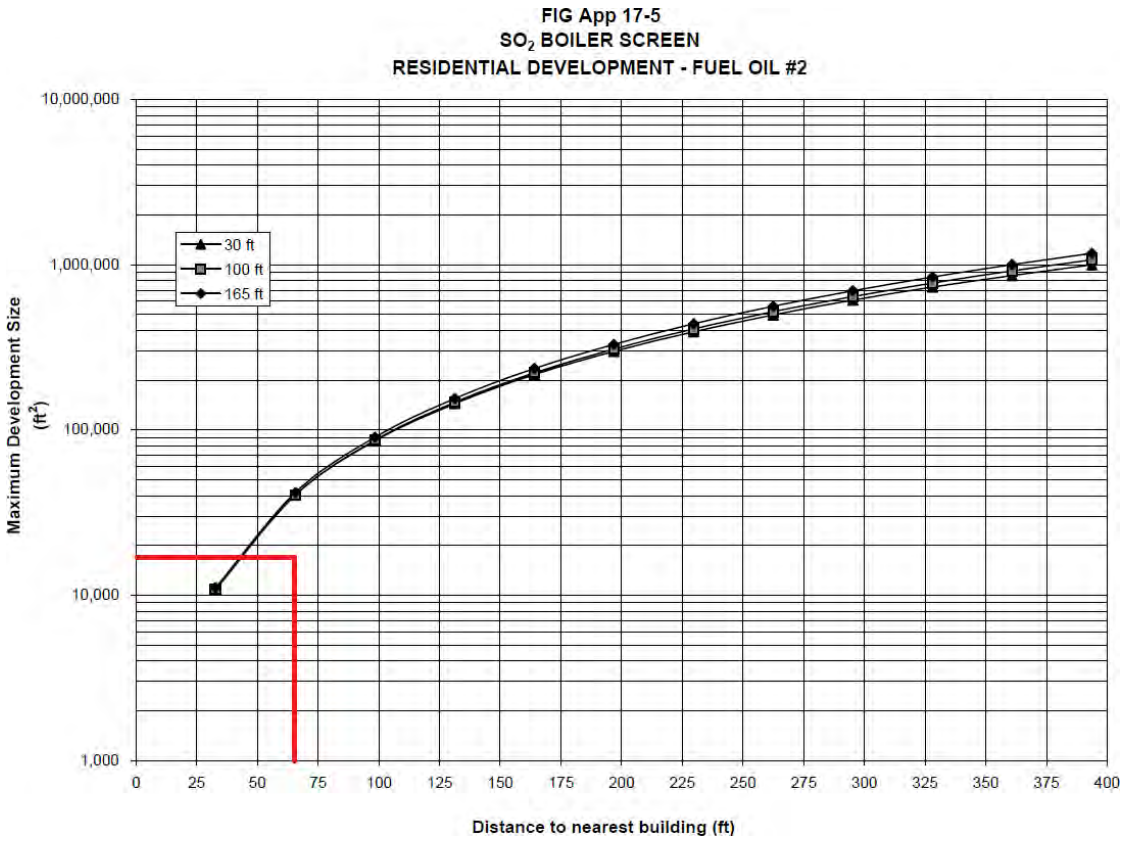
Figure 17-1: Projected Development Site 1-on-101 Third Avenue – HVAC Screen



As seen in the screening analysis (see **Figure 17-1**), using the nomograph provided in the *CEQR Technical Manual*, the Projected Development Site 1 intersects the curve for fuel oil No. 2 at a distance greater than 65 feet. As such, no detailed analysis is required. However, as a conservative measure, a detailed analysis was conducted for the 8-story building located at 101 third Avenue (Block 389, Lot 5) to account for the other development sites.

2. Projected Development Site 2 on existing land uses or other Projected Development sites: The Projected Development Site 2, a 64-foot tall, 17,600 gsf residential building potential impact on the nearest building of similar or greater height. Fuel oil #2 would be the type of fuel used in the HVAC system. A distance of 66 feet was applied, which is the distance between Projected Development Site 2 (Block 388, Lot 38) and Projected Development Site 1 (Block 388, Lot 31). The CEQR nomograph depicted on Figure 17-5 of the *CEQR Technical Manual Appendices* was used for the screening analysis. This stationary source screen is a generic screen for fuel oil No. 2 fueled boiler serving a residential use building. **Figure 17-2** (using Figure 17-5 of the *CEQR Technical Manual Appendices*) shows the screening analysis.

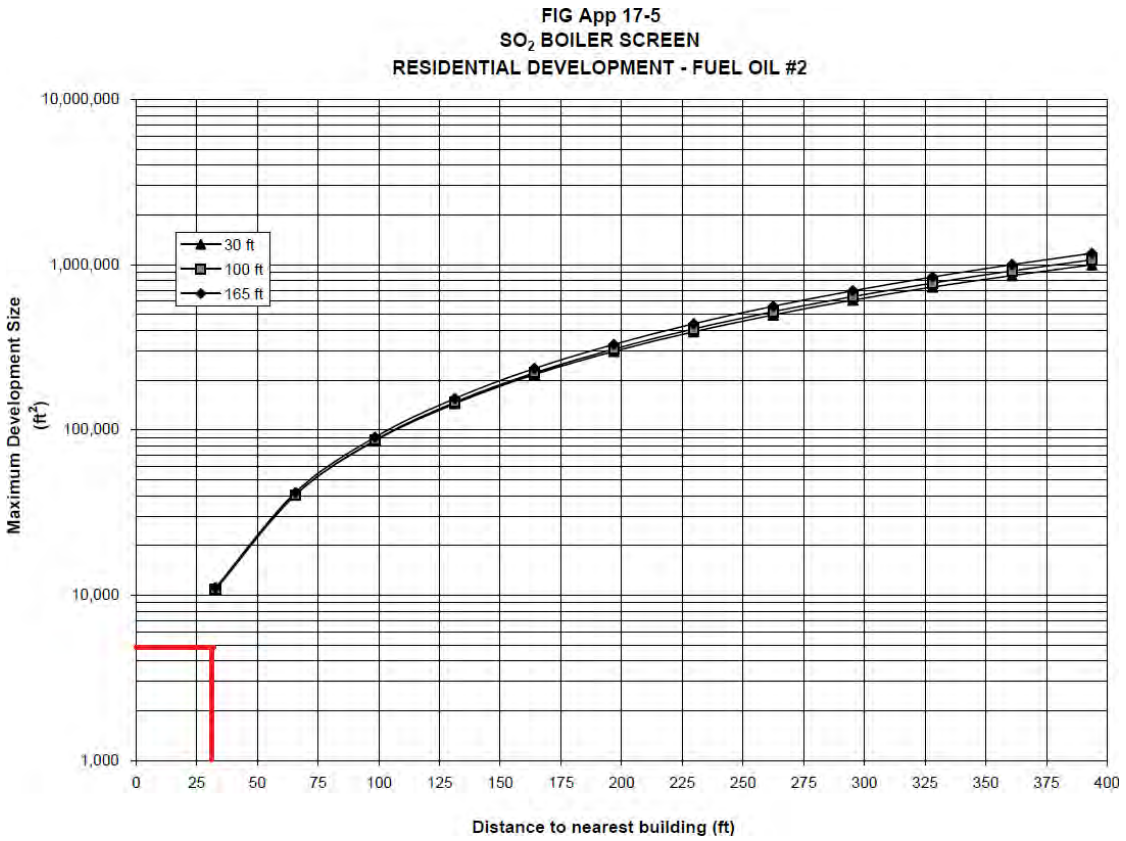
Figure 17-2: Projected Development Site 2-on-Projected Development Site 1 – HVAC Screen



As seen in the screening analysis (see **Figure 17-2**), using the nomograph provided in the *CEQR Technical Manual*, Projected Development Sites 2 on the closest building with a similar or taller building height would fall below the curve for fuel oil No. 2. As such, Projected Development Sites 2 passes the HVAC screening analysis on existing land uses.

3. Projected Development Site 3 on existing land uses or other Projected Development Sites: The Projected Development Site 3, a 44-foot tall, 4,800 gsf residential building minimum screen distance where no impact is predicted. Fuel oil #2 would be the type of fuel used in the HVAC system. **Figure 17-3** (using Figure 17-5 of the CEQR Technical Manual Appendices) shows the screening analysis.

Figure 17-3: Projected Development Site 3 Minimum HVAC Screen Distance



As seen in **Figure 17-3** using the nomograph provided in the *CEQR Technical Manual*, the line corresponding to 4,800 gsf is below the curve at any point. Therefore, the minimum screen distance where no impact is predicted is 30 feet.

The Projected Development Site 3 is located 48 feet from the Projected Development Site 1. Therefore, the HVAC emissions of the Projected Development Site 3 would not pose significant adverse impacts to Projected Development Site 1. In addition, all existing land uses similar or greater in height are more than 30 feet distance from the Projected Development Site 3.

The Projected Development Site 3 is located 20 feet from the Projected Development Site 2. Therefore, a detailed analysis is required to predict the potential for significant adverse air quality impact of the Projected Development Site 3 on the Projected Development Site 2.

Detailed Analysis

A stationary source modeling was conducted to evaluate the potential impacts associated with the boilers stacks emissions. Lakes Environmental MPI executable was used in the analysis. The

MPI executable take advantage of computers with multiple processors, reducing run-time significantly. Lakes Environmental has adjusted the US EPA AERMOD source code and recompiled the model to parallelize the processing of receptors. The latest MPI executable (used in the analysis) modified the EPA's AERMOD latest executable model version 19191. The AERMOD model incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. The model was run with the regulatory default option and for both with and without downwash effect options, where the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses were conducted using five consecutive years of meteorological data (2015-2019), obtained from the NYSDEC. Surface data used in the analysis is from LaGuardia Airport, upper air data is from Brookhaven station, New York. According to NYSDEC, the meteorological data was processed using the latest versions of AERMINUTE, AERSURFACE and AERMET. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period. Population in Brooklyn county, obtained from the U.S. Census Bureau (July 2019), was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

Fuel Oil No. 2 would be the type of fuel used in the Projected Development Site 2 heating and hot water systems, and natural gas the type of fuel used in Projected Development Sites 1 and 3 boilers. The pollutants of concern of Oil No. 2 fueled boilers are NO_2, $PM_{2.5}$, and SO_2, and NO_2 and $PM_{2.5}$ the pollutants of concern for natural gas fueled boilers. The boilers' energy intensitieswere calculated based on energy consumption rate, obtained from the *CEQR Technical Manual Appendices*, corresponding to residential use in the building. Emissions were calculated based on emission factors published in the EPA's AP-42 manual for external combustion sources.[2] All fuel was assumed to be consumed during the 100-day (or 2,400 hour) heating season, based on *CEQR Technical Manual* guidance. **Table 17-3** shows the boilers' energy intensities and pollutants emission rates.

Table 17-3: HVAC System(s) Short-term and Annual Emission Rates

Site ID	Development Site RWCDS Floor Area (gsf)	Boiler's Energy Intensity (MMBtu); Fuel Used	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
Projected Development Site 1	35,274	0.89; Natural gas	NO_2	1.09E-02	3.00E-03
			$PM_{2.5}$	8.32E-04	2.28E-04
Projected Development Site 2	17,600	0.44; Oil No. 2	NO_2	7.98E-03	2.19E-03
			$PM_{2.5}$	8.50E-04	2.33E-04
			SO_2	8.50E-05	2.33E-05
Projected Development Site 3	4,800	0.12; Natural gas	NO_2	1.49E-03	4.08E-04
			$PM_{2.5}$	1.13E-04	3.10E-05

[2] EPA. *Compilation of Air Pollutant Emission Factors AP-42 Fifth Edition, Vol. 1:* Chapter 1: External Combustion Sources, https://www3.epa.gov/ttn/chief/ap42/ch01/final/c01s04.pdf. July 1998.

The *CEQR Technical Manual* default stack's diameter and exhausts exit velocity were applied in the analysis, and the stack's exit temperature was assumed to be 426°K, which is appropriate for boilers. The boiler's stack was placed 3 feet above the roof and as close as possible to the receiving building; hence, a stack set back distance was specified if exceedance of a threshold concentration standard was predicted.
The Projected Development sites were modeled as buildings that cover their entire lot(s) area(s) (the wall façade located on the outer lot lines) and rise to their Reasonable Worst Case Development Scenarios (RWCDSs) heights. Buildings in the surrounding area were accounted for in the downwash effect on plums dispersions (BPIP). Receptors on the receiving building were placed on all wall façade from the ground floor to the roof-top height in spaced intervals.

The USGS National Elevation Dataset (NED) 1/3 arc-second resolution (GeoTIFF dataset), the terrain data set recommended by the US EPA for use in the United States for regulatory purposes, was used to process buildings base elevations. The base elevations of receptors and stacks were set to their buildings base elevations. Roof heights of buildings in the area were obtained from the NYC Building Footprint database[3], and satellite imagery and the New York City Department of Building (DOB) database consulted to augment and/or verify certain buildings' roof heights (such as buildings that were recently constructed).

24-hour $PM_{2.5}$ was modeled with 1st highest output concentration, which is the *de minimis* design value. The 1-hour NO_2 concentration was modeled with 8th highest concentration (the NAAQS design value) and a Tier 2 approach (ARM 2), where the national default in-stack and ambient ratios of 0.5 and 0.9, respectively, were applied. All other pollutants concentrations were modeled with generic emission rates of 1 gram per second and 1st highest output concentrations.
Results of Dispersion Analyses

Each pollutant averaging time was modeled twice; with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these. The NO_2 and SO_2 modeled concentrations were added to the background concentrations. The $PM_{2.5}$ modeled concentrations were evaluated with the NYC Guidelines threshold, *de minimis*, for stationary sources. The HVAC dispersions analysis results are shown in **Table 17-4**.

Table 17-4: HVAC Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration ($\mu g/m^3$) [(2)]	Background Concentration ($\mu g/m^3$)	Evaluated Concentration ($\mu g/m^3$)	Threshold Concentration ($\mu g/m^3$)	Threshold Standard
Projected Development Site 3 – on – Projected Development Site 2					
1-hour NO_2	75.83	103.59	179	188	NAAQS
Annual NO_2	1.93	26.8	29	100	NAAQS
24-hour $PM_{2.5}$	4.10	19.6	4.1	7.7	*de minimis*
Annual $PM_{2.5}$	0.15	9.3	0.1	0.3	*de minimis*
Project (cumulative) – on – Existing 101 Third Avenue					

[3] City of New York, nyc-geo-metadata (May 03, 2016); https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh

1-hour NO_2	77.46	103.59	181	188	NAAQS
Annual NO_2	1.94	26.8	29	100	NAAQS
24-hour $PM_{2.5}$	6.02	19.6	6.0	7.7	*de minimis*
Annual $PM_{2.5}$	0.16	9.3	0.16	0.3	*de minimis*
1-hour SO_2	0.8	13.5	14	196	NAAQS
Annual SO_2	0.004	1.0	1	80	NAAQS

The concentrations shown in **Table 17-4** were predicted with certain restrictions to ensure that no significant adverse air quality impact(s) would occur. The restrictions for the Proposed Actions are specified in the Air Quality E-Designations that would be placed on the Development Sites, which are detailed further below.

(E) Designation (E-647)

Block 388, Lot 31 (Projected Development Site 1): Any new residential or commercial development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s), ensure that the stack is located at the building's highest level at a minimum of 88 feet above the grade, and that the stack is located at least 25 feet from the eastern lot line facing 3rd Avenue to avoid any potential significant adverse air quality impacts.

Block 388, Lot 38 (Projected Development Site 2): Any new residential or commercial development on the above-referenced property must ensure that the heating, ventilating, air conditioning (HVAC), and hot water system(s) stack is located at the building's highest level at a minimum of 67 feet above the grade to avoid any potential significant adverse air quality impacts.

Block 388, Lot 42 (Projected Development Site 3): Any new residential development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC), and hot water system(s) and ensure that the stack is located at the building's highest level at a minimum of 47 feet above the grade to avoid any potential significant adverse air quality impacts.

Industrial Source

Identifying Potential Emission Sources

Per the *CEQR Technical Manual*, projects that would result in new uses (particularly schools, hospitals, parks, and residences) within 400 feet of manufacturing processing facilities may result in potentially significant adverse impacts. The analysis first determines if there are any existing manufacturing uses within the 400-foot study area containing exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project. If warranted, an air dispersion analysis is then conducted for any existing industrial source(s) located in the study area.

Existing manufacturing uses with exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project were identified by reviewing the New York City Department of Environmental Protection (DEP) online Clean Air Tracking System (CATS) database, the NYS Department of Environmental Conservation map application (DECinfo Locator), the EPA databases, and by a field observation / site investigation. A Freedom of Information Law (FOIL) request was filed with the DEP to review the processing permit applications of the facilities in the study area that were identified in the CATS database. Results of the fieldwork and DEP CATS database are presented in **Table 17-5**.

Table 17-5: Fieldwork and DEP CATS Database Study result - Industrial Sources Within 400 Feet of the Proposed Project

Block	Lot	Address	Current Land Use and Notes
191	16	480 Pacific Street	Playground
191	35	74 3 Avenue	Church sub building and yard
191	37	76 3 Avenue	Parking lot
191	38	78 3 Avenue	Parking lot
191	39	80 3 Avenue	Deli & grocery, eatery, warehouse/storage/parking in the back;
191	41	297 Dean Street	Colony Houses - youth club
192	1	500 Pacific Street	Public school building
192	7501	321 Dean Street	Residential/commercial use offices
197	28	88 3 Avenue	NYC Human Resources Administration office
197	40	96 3 Avenue	Veterinary office; residential above
197	50	269 Bergen Street	Small parking garage
197	51	265 Bergen Street	Religious facility
198	1	93 3 Avenue	Lango (school); residential above
198	3	87 3 Avenue	Digital printing, community facility; residential above
198	6	83 3 Avenue	Building for sale or lease - storage/warehouse, offices above
198	11	314 Dean Street	Hi-teach/startup company, marshal art school, packaging store, offices
198	12	320 Dean Street	
198	48	311 Bergen Street	Yard and shed (spray booth area distance to the Project Site > 400 feet); PB030305, PB001013
198	64	309 Bergen Street	Parking garage
388	19	268 Bergen Street	Ulano Corporation - multiple DEP processing certificates
388	31	300 Bergen Street	Gas station (Development Site)
388	34	3 Avenue	Parking lot
388	35	110 3 Avenue	Parking lot
388	36	112 3 Avenue	Parking lot
388	37	114 3 Avenue	Parking lot
388	38	118 3 Avenue	Projected Development Site 2. Permit PB004000 of a dry-cleaning facility expired in 2006. Currently, a hair salon and yoga place
388	41	289 Wyckoff Street	Ulano Corporation
388	42	287 Wyckoff Street	Ulano Corporation
388	51	Wyckoff Street	Parking lot
388	52	267 Wyckoff Street	Clothing store, residential, possibly an event space

389	2	107 3 Avenue	Hair Salons and convenient stores; residential above
389	66	11 St Marks Place	New building under construction
395	1	127 3 Avenue	Religious facility
395	3	125 3 Avenue	New building under construction

As seen in **Table 17-5**, three land uses in the study area were identified in the CATS database as having ("having" means current or expired status DEP permit application) manufacturing processing emission sources. These land uses are discussed here:

- The facility located at 118 3rd Avenue (Block 388, Lot 38) is Projected Development Site 2. In the future with-action the site would be redeveloped with a mixed-use residential and commercial (ground-floor retail) building. Therefore, no potential manufacturing processing facility is predicted to operate from this land use.

- The facility located at 311 Dean Street (Block 198, Lot 48) is the J & I Maintenance Corp., a yellow taxi yard and repair shop. Per certificate PB001013, which supersedes certificate PB030305, the facility operates two spray booths. Per DEP permit PB001013, the spray booths/work area are located in the building at the eastern side of the lot and at least 485 feet from the Projected Development Sites. The location of the spray booth or work area was confirmed in the fieldwork observation. As such, the emission source (or facility/building where the process operation is) minimum distance to any of the development sites is greater than 400 feet. Therefore, no analysis is required.

- The Ulano Corporation, located at 280 Bergen Street (Block 388, Lot 19), was identified as an active industrial source with multiple emission sources. However, according to an article published in the Brooklyn Daily Eagle "the facility would begin a "phased cessation of operations" starting on July 1, 2019 and continue for 36 months. All 45 employees will be laid off.[4]" As indicted in the article, a New York State Worker Adjustment and Retraining Notification (WARN) notice dated March 13, 2019 has been published for the Ulano Corporation and operations are anticipated to cease before the Build Year in 2025.

There were no other potential sources of toxics air emissions identified in the study area. As such, no analysis is warranted, and no significant adverse air quality impacts are predicted from these types of facilities.

Major And Large Source

Per the *CEQR Technical Manual*, projects that would introduce new uses near (within 1,000 feet of the proposed project) major sources, large sources, or odor producing facilities may result in potentially significant adverse air quality impacts. Major emission sources are identified as those sources located at Title V facilities that require Prevention of Significant Deterioration permits; large emission sources are generally identified as sources located at facilities which require a

[4] Enman, S. (April 15, 2019). A Brooklyn factory, once the city's top polluter, will close after 89 years. *Brooklyn Daily Eagle.* https://brooklyneagle.com.

State facility permit. Solid waste or medical waste incinerators, asphalt and concrete plants, power generating plants, large boilers of large public facilities, and large industrial facilities are typical type of sources requiring these permits. Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

No major, large or odor producing facility is located within 1,000 feet of the Project Area (the Clinton Hill Apartments Air State Facility (Permit ID: 2-6104-00276/00001) is incorrectly located at the corner of 4th Avenue and Bergen Street in the NYSDEC Info Locator map application rather than at 345 Clinton Avenue). The nearest Air State Facility is the Brooklyn Technical High School, located at 29 Fort Green Place, and approximately 2,200 feet north of the proposed project. As such, no analysis is warranted.

D. CONCLUSION

Based on the detailed air quality analysis, conditions associated with the Proposed Actions would not result in any violations of the ambient air quality standards. Therefore, there is no reason to believe that the Proposed Actions would result in any potentially significant adverse stationary or mobile source air quality impacts, and further assessment is not warranted.

Noise

Introduction

In the future with the Proposed Actions, development is expected to occur within the Rezoning Area both on the applicant-owned site (Projected Development Site 1) and on a non-applicant-owned property (Projected Development Sites 2 and 3) as described below.

The Proposed Development ("Projected Development Site 1") would be redeveloped with a 35,274 square foot (5.6 FAR) 8-story mixed-use building at Block 388, Lot 31 (the "Development Site") to contain 31,751 gsf of residential space and 3,523 gsf of ground-floor commercial retail.

Block 388, Lot 38 ("Projected Development Site 2") would be redeveloped with a 17,600 gsf mixed-use building (5.6 FAR) that would rise to 6-stories (64') with 21 dwelling units (7 affordable under MIH or 30%). The building would contain 2,000 gsf of ground floor retail.

Block 388, Lot 42 ("Projected Development Site 3") would be redeveloped with a 4,800 gsf residential building (2.2 FAR) that would rise to 4-stories (44') with 6 dwelling units.

Vehicular traffic is the predominant source of noise in the vicinity of the sites, and therefore the Proposed Actions warrant an assessment of the potential for adverse effects on project occupants from ambient noise. The Projected Development Sites are not significant noise generators. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways (as noted in Chapter G, "Transportation"), and therefore would not result in a perceptible increase in vehicular noise. This noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development.

Bergen Street is a one-way westbound street with one moving lane for motorized vehicles and a bicycle lane, while Third Avenue is a two-way arterial street with one moving lane in each direction. The intersection of Bergen Street with Third Avenue is controlled by a traffic light. The area in which the subject property is located is primarily residential and commercial.

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 a sound pressure 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. The following Table 19-1 lists some noise levels for typical daily activities.

Table 19-1 Noise Levels of Common Sources	
Sound Source	**SPL (dB(A))**
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear	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	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.

Source: 2020 CEQR Technical Manual

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 weighting networks used are the A- and C-weighting networks. 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-weighted network is the most commonly used, 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.

The following is typical of human response to relative changes in noise level:

- 3-dBA change is the threshold of change detectable by the human ear;
- 5-dBA change is readily noticeable; and

- 10-dBA change is perceived as a doubling or halving of the noise level.

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.

Table 19-2
Noise Exposure Guidelines For Use in City Environmental Impact Review[1]

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	$L_{dn} \leq 60$ dBA		$60 < L_{dn} \leq 65$ dBA		(I) $65 < L_{dn} \leq 70$ dBA, (II) $70 \leq L_{dn}$		$L_{dn} \leq 75$ dBA
2. Hospital, nursing home		$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 65$ dBA		$65 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
3. Residence, residential hotel, or motel	(7 AM to 10 PM)	$L_{10} \leq 65$ dBA		$65 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	(10 PM to 7 AM)	$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ 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 not increase the ambient noise level by 3 dB(A) or more.

[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 L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.

[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 octave band standards).

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

The sound level exceeded during a given percentage of a measurement period is the percentile-exceeded sound level (LX). Examples include L10, L50, and L90. L10 is the A-weighted sound level that is exceeded 10% of the measurement period.

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law (i.e., the SPL changes in inverse proportion to the square of the distance from the sound source). In a large open area with no obstructive or reflective surfaces, it 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.

Table 19-3
Required Attenuation Values To Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise level with proposed project	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Attenuation[A]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)$[B] dB(A)

Note: [A] 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.
[B] Required attenuation values increase by 1 dB(A) increments for L_{10} values greater than 80 dBA.
Source: New York City Department of Environmental Protection

Measurement Location and Equipment

Because the predominant noise sources in the area of the proposed project consist of vehicular traffic, noise monitoring was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day. Therefore, the noise assessment is limited to as assessment of vehicular traffic noise. Pursuant to CEQR Technical Manual Methodology, three measurements were conducted for 20-minute periods during each of the peak periods at each monitoring location at the Project Area: Location One (1) was at the frontage of Project Site along Bergen Street; Location Two (2) was at the frontage of the Project Site along Third Avenue; and Location Three (3) was at the frontage of the Project Site along Wyckoff Avenue. The noise monitoring locations are shown in **Figure 19-1** and **Photo 19-1, 19-2,** and **19-3** below.

Noise monitoring was conducted using a using Type 1 Casella CEL-633 sound level meter with wind screen. The monitor was placed on a tripod at a height of approximately four feet above the ground, away from any other noise-reflective surfaces. The monitor was calibrated prior to and following each monitoring session. Periods of peak vehicular traffic around the Project Area constitute a worst-case condition for noise. Noise meter calibration certification and back up data are provided in Appendix C.

Photo 19-1: ***Noise Monitoring Location One (1)***
Bergen Street



Photo 19-2: ***Noise Monitoring Location Two (2)***
Third Avenue



Photo 19-3: ***Noise Monitoring Location Three (3)***
Wyckoff Avenue



Figure 19-1: Noise Monitoring Location



Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Thursday, March 4, 2021. The weather was dry and wind speeds were moderate during all monitoring periods. The sound meter was calibrated before and after each monitoring session.

Existing Conditions

Based on the noise measurements, the predominant source of noise is vehicular traffic.

Table 19-4, 19-5, and 19-6 below *contains the results for the measurements taken at the Project Site:*

Table 19-4 *Noise Levels (dB) at Location 1*			
Thursday, March 4, 2021			
Time	**7:30 am – 7:54 am**	**1:00 pm – 1:20 pm**	**4:30 pm – 4:50 pm**
L_{max}	80.0	82.2	85.9
L_{10}	63.0	68.5	63.0
L_{eq}	61.0	66.1	62.6
L_{50}	57.0	64.0	58.0
L_{90}	54.5	61.0	54.5
L_{min}	52.5	59.2	52.7

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the CEQR Technical Manual

Table 19-5 *Noise Levels (dB) at Location 2*			
Thursday, March 4, 2021			
Time	**8:12 am – 8:33 am**	**1:22 pm – 1:42 pm**	**4:53 pm – 5:13 pm**
L_{max}	90.7	82.4	87.3
L_{10}	**70.0**	**71.0**	69.5
L_{eq}	69.3	67.5	67.9
L_{50}	65.5	64.5	64.0
L_{90}	62.5	61.0	61.0
L_{min}	61.3	56.9	59.5

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the CEQR Technical Manual

Table 19-6 *Noise Levels (dB) at Location 3*			
Thursday, March 4, 2021			
Time	**8:35 am – 8:56 am**	**1:44 pm – 2:04 pm**	**5:15 pm – 5:35 pm**
L_{max}	100.5	83.0	85.2
L_{10}	**72.0**	64.5	68.5
L_{eq}	**76.8**	61.8	65.7
L_{50}	63.5	59.0	63.0
L_{90}	59.5	55.5	59.5
L_{min}	57.7	53.6	57.4

Note: **Bold** denotes L_{10} or L_{eq} noise level exceedances, according to Table 19-2 of the CEQR Technical Manual

Table 19-7, 19-8, and 19-9 *below contains the traffic counts and vehicle classifications during each monitoring period for 20 minutes:*

Table 19-7 ***Location 1:*** *Traffic volumes and vehicle classifications*			
	7:30 am – 7:54 am	**1:00 pm – 1:20 pm**	**4:30 pm – 4:50 pm**
Car/ Taxi	84	76	80
Van/Light Truck/SUV	82	69	65
Medium Truck	15	8	7
Heavy Truck	3	4	2
Bus	9	3	6
Train	0	0	0

Table 19-8 ***Location 2:*** *Traffic volumes and vehicle classifications*			
	8:12 am – 8:33 am	**1:22 pm – 1:42 pm**	**4:53 pm – 5:13 pm**
Car/ Taxi	90	82	92
Van/Light Truck/SUV	74	71	70
Medium Truck	12	6	10
Heavy Truck	1	2	5
Bus	8	4	4
Train	0	0	0

Table 19-9 ***Location 3:*** *Traffic volumes and vehicle classifications*			
	8:35 am – 8:56 am	**1:44 pm – 2:04 pm**	**5:15 pm – 5:35 pm**
Car/ Taxi	80	69	87
Van/Light Truck/SUV	77	58	79
Medium Truck	13	2	9
Heavy Truck	2	0	4
Bus	7	1	7
Train	0	0	0

Stationary Source

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.

Determination of Impacts/Building Attenuation Requirements

The 2020 *CEQR Technical Manual* (Table 19-2) contains noise exposure guidelines. For a residential use such as would occur under the proposed action, an L_{10} of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An L_{10} of between 70 and 75 dB(A) is identified as marginally unacceptable general external exposure. The highest recorded L_{10} at Location One (1) of the subject property was 68.5 dB(A) during the MD monitoring period. The highest recorded L_{10} at Location Two (2) of the subject property was 71.0 dB(A) during the MD monitoring period. The highest recorded L_{eq} at Location Three (3) of the subject property was 76.8 dB(A) during the AM monitoring period.

Based on the results of the noise monitoring, the facades facing Third Avenue would require a 28 dB(A) window/wall attenuation and the façades facing Wyckoff Street would require a 33 dB(A) window/wall attenuation. No other facades require window/wall attenuation. With these levels of attenuation there would be no potential for adverse impacts related to ambient noise.

Conclusions

In this instance the Leq measurement was higher than the L10 measurement. According to the noise backup data there was an elevated noise level around 8:41 am. This is confirmed by the field notes that indicate an ambulance passing the monitoring equipment at 8:41 am. The Leq descriptor accounts for noise fluctuation from moment to moment by averaging the louder and quieter moments and giving more weight to the louder moments. This most likely means an ambulance. So, while the L10 is the statistical descriptor of the sound level exceeded for 10% of the time, the elevated Leq represents that the elevated sound level was fast moving and accounted for less than 10% of the monitoring period. Although this elevated Leq may not be completely representative of the sound levels of the site, basing the attenuation requirements off this level is a conservative assumption.

With this level of noise attenuation, there would be no potential for adverse impacts related to noise, and an acceptable interior noise exposure level of 45 dB(A) would be achieved. For commercial uses, a reduction of 5 dB(A) would be permitted to ensure an acceptable interior noise exposure level of 45 dB(A). To ensure this level of attenuation, an E-designation would be required for the Projected Development Sites

The text for the E-designation (**E-647**) would be as follows for Block 388, Lots 31 and 38 (Projected Development Sites 1 and 2):

"To ensure an acceptable interior noise environment, future residential and community facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation along the façade facing Third Avenue and 33 dBA window/wall attenuation along the façade facing Wyckoff Street "

The text for the E-designation would be as follows for Block 388, Lot 42 (Projected Development Site 3):

"To ensure an acceptable interior noise environment, future residential and community facility uses must provide a closed-window condition with a minimum of 33dBA window/wall attenuation along the façade Wyckoff Street. "

By providing this level of window-wall noise attenuation, the Proposed Actions do not result in significant adverse impacts related to noise.

Public Health

Introduction

According to the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a project, and if so, to identify measures to mitigate such effects.

According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. As outlined in the air quality, hazardous materials and noise chapters, the Proposed Actions are not anticipated to result in any significant adverse impacts related to air quality, noise, or hazardous materials. Solid waste would not be expected to attract vermin or pest populations during construction or upon completion of the action-generated developments. During construction, solid waste would be carted by a private solid waste management company and would consist predominantly of construction materials. Upon completion of construction, the building's superintendent would be responsible for maintaining the trash and recycling collection area. Regular solid waste collection by the New York Department of Sanitation would ensure that vermin problems do not arise. Therefore, the Proposed Actions are anticipated to result in a significant adverse impact to public health, and no further analysis is provided.

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Neighborhood Character

Introduction

The *CEQR Technical Manual* states that a neighborhood character assessment is generally required when the proposed action would significantly impact land use, urban design, visual resources, historic resources, socioeconomic conditions, open space, shadows, transportation or noise within the neighborhood; or if it would have moderate effects on several of the elements that contribute to neighborhood character. The Proposed Actions would not have the potential to result in any significant adverse impacts to the pertinent analysis areas related to neighborhood character, as discussed below.

Land Use, Zoning, and Public Policy

As stated in the detailed Land Use, Zoning and Public Policy analysis (Chapter B), the Proposed Actions would not result in significant adverse impacts. Although the Land Use, Zoning, and Public Policy technical areas of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the Proposed Actions do not have the potential to result in any significant adverse Land Use, Zoning, or Public Policy impacts.

Regarding land use, the Study Area already contains a mix of residential, commercial, and industrial properties. No significant adverse impacts related to land-use would occur as a result of the proposed zoning map amendment or text amendment. Regarding zoning, the proposed zoning map amendment to R7D/C2-4 and R6B under MIH is appropriate, given the context of the Study Area. The Study Area is located on a heavily trafficked street in an area that is increasingly mixed-use, with both residential and commercial uses, with an increasing amount of mid-rise developments and is located in close proximity to public transit. Thus, the increase in height and FAR, as well as permitted uses by the Proposed Actions are consistent with what is already permitted in the surrounding area. In accordance with the stated public policies within the Study Area, the Proposed Actions would be suitable for the Project Area and the Study Area as a whole.

Shadows

As stated in the Shadows chapter (Chapter C), there are no sunlight-sensitive resources within the area that can be shaded by buildings resulting from the Proposed Actions and no significant shadows impacts are anticipated.

Historic and Cultural Resources

As stated in the Historic and Cultural Resources analysis (Chapter D), appended to this document is a letter from the Landmarks Preservation Commission (LPC) stating that the Project Area and/or Study Area does not contain any architectural or archeological resources. As such, no historic or cultural resources in the Project Area or the surrounding area would be affected by the Proposed Actions.

Urban Design and Visual Resources

As stated in the analysis chapter of urban design and visual resources (Chapter E), the Proposed Actions would not result in a significant adverse impact to urban design and visual resources. Although the Urban Design and Visual Resources technical area of the EAS provides a detailed analysis, a neighborhood character assessment is not warranted as the project does not have the potential to result in any significant adverse Urban Design and Visual Resources impacts, as further discussed below.

The proposed building, as well as any development occurring within the Rezoning Area as a result of the Proposed Actions would adhere to the underlying floor area, yard, height, and setback regulations of the proposed R7D/C2-4 and R6B zoning districts, which are consistent with pre-existing zoning districts in the immediate area. The Project Area is located along a vibrant and heavily trafficked mixed-usel corridor (Third Avenue), an arterial that travels from Downtown Brooklyn (immediately to the north) to mixed-use and residential areas to the south.

Mixed-use zoning districts are present along this corridor with an increasing amount of mid-rise buildings with active ground-floor commercial retail spaces. Many of the blocks surrounding the Project Area and study area are zoned with medium density residential districts with the Project Area situated adjacent several transit options, with subway, bus and commuter rail service available within a quarter-mile of the Study Area.

Accordingly, the Proposed Actions would permit a wider range of uses and create additional density that would allow for mid-rise contextual development along a vibrant mixed-use corridor, the opposite side of which already contains similar zoning districts and resulting development. As such, no significant adverse impacts would occur for urban design. In addition, the Proposed Actions would not affect any natural resources or public view corridors to notable features or buildings in the immediate vicinity of the Project Area. Accordingly, no impacts to the urban design and/or visual resources of the area are expected.

Transportation

As noted in the transportation analysis (Chapter G), the Proposed Actions are not expected to exceed thresholds for traffic, subway and pedestrian analyses. Therefore, the projected trips associated with the Proposed Actions are not anticipated to significantly impact traffic in the surrounding area nor significantly impact the pedestrian experience or transit operations.

Noise

The Proposed Actions required a detailed noise analysis due to ambient noise levels in the vicinity of the Project Area that could have a potentially adverse impact on future residents or visitors of the Projected Development Sites. As discussed in the noise analysis (Chapter I), window-wall noise attenuation will be required for the Projected Development Sites and therefore would not result in adverse impacts related to noise for any new sensitive receptors in the Project Area. In order to avoid a significant adverse impact related to noise, E designations will be placed on the

Projected Development Sites. In addition, no potential significant adverse noise impacts would be generated by the Proposed Actions on uses or users in the surrounding area. As such, no significant adverse impacts from noise would occur.

Conclusion

While a combination of moderate changes in several of these technical areas may potentially have a significant effect on neighborhood character, the Proposed Actions would result in new mixed-used and residential buildings that would be consistent with the existing character of the surrounding neighborhood, and as discussed in the relevant sections of this EAS, is not anticipated to result in any significant adverse impacts on land use, zoning and public policy; shadows; historic and cultural resources; urban design and visual resources; transportation or noise within the neighborhood.

The Proposed Actions will not alter the character of the neighborhood, impair the appropriate use or development of adjacent properties, nor be detrimental to the public welfare. The Proposed Actions would not negatively affect the pedestrian experience along Third Avenue or Bergen Street and would have no adverse effects on the vitality, walkability, or visual character of the area – but would instead promote an active mixed-use building over underutilized commercial and automotive properties. The neighborhood is a mix of commercial, residential, and industrial uses, and the projected uses (residential and commercial) would not be inconsistent with the surrounding area.

Therefore, no significant adverse impacts on neighborhood character are anticipated as a result of the Proposed Actions.

Construction

Introduction

Based on *CEQR Technical Manual* guidelines, where the duration of construction is expected to be short-term (less than two years), any impacts resulting from construction generally do not require detailed assessment. It is assumed that the Proposed Actions would be approved in 2020 with a single construction period lasting approximately 16 months for the Proposed Development. The applicant does not control the remaining properties and any new development in the Project Area would need time to prepare, develop, and file plans upon approval of the Proposed Actions. As such, construction of non-applicant parcels would likely occur following the construction of the Proposed Development and overlap of substantial construction activities between applicant-owned and non-applicant-owned development sites is unlikely. Therefore, active construction across multiple development sites would not be expected to be continuous or extend two consecutive years or more. Therefore, all projected new development is anticipated to occur by 2025 in the future with the Proposed Actions.

Construction of each of the Projected Development Sites is expected to be completed under 18 months. Nevertheless, a preliminary screening of construction impacts resulting from the Proposed Actions are recommended as construction activities on the sites may require the closing, narrowing, or otherwise impeding of traffic, transit or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.) along streets bordering the Project Site.

The development associated with the Proposed Actions would affect Third Avenue and Bergen Street, and during construction the sidewalks along these streets adjacent to the sites may need to be closed at times in order to accommodate construction vehicles, equipment, and supplies. If sidewalk closure is necessary, jersey barriers would be erected, and a covered pedestrian walkway would be created to accommodate pedestrian traffic around the property. This closure would be considered to be a routine closure that would be addressed by a permit (and pedestrian access plan) to be issued by the NYC Department of Transportation (DOT) Office of Construction Mitigation and Coordination (OCMC) at the time of closure so that impacts are not expected to occur.

Although during construction on-street parking may be affected adjacent to the construction area which will occur along Third Avenue and Bergen Street, it is not anticipated that vehicle moving lanes adjacent to the sites along any of these streets would need to be closed during construction. An analysis of potential transportation impacts resulting from the Proposed Actions from construction of the sites is not required, as most construction traffic would take place outside of the AM and PM traffic peak hours in the vicinity of the sites. In addition, the construction peak would generate fewer vehicle trips than the operational project peak for each site and, as discussed in the transportation analysis (Chapter G), the project has been determined not to produce the potential for significant adverse traffic impacts.

On the basis of the above analysis, the proposed action would not have any potentially significant adverse construction impacts, and further analysis would not be warranted.

Appendix A – LPC Correspondence

NYC Landmarks Preservation Commission
1 Centre Street
9th Floor North
New York, NY 10007
Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / 21DCP096K
Project: 98_THIRD_AVE_REZONING
Date Received: 2/1/2021

Properties with no Architectural significance:

1) 268 BERGEN STREET, BBL: 3003880019
2) 300 BERGEN STREET, BBL: 3003880031
3) 3 AVENUE, BBL: 3003880034
4) 110 3 AVENUE, BBL: 3003880035
5) 112 3 AVENUE, BBL: 3003880036
6) 114 3 AVENUE, BBL: 3003880037
7) 118 3 AVENUE, BBL: 3003880038
8) 289 WYCKOFF STREET, BBL: 3003880041
9) 287 WYCKOFF STREET, BBL: 3003880042

In the radius:

LPC DESIGNATED BOERUM HILL HISTORIC DISTRICT AND BOERUM HILL HISTORIC DISTRICT EXTENSION WITHIN RADIUS. S/NR LISTED BOERUM HILL HISTORIC DISTRICT AND S/NR ELIGIBLE P.S. 38, 450 PACIFIC STREET; FORMER BROOKLYN PRINTING PLANT, NEW YORK TIMES, 500 PACIFIC STREET, AND S/NR ELIGIBLE BOERUM HILL EXPANSION WITHIN RADIUS. S/NR ELIGIBLE BROOKLYN HIGH SCHOOL OF THE ARTS, 327-347 DEAN STREET ADJACENT TO RADIUS.

Comments:

LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th Century occupation on the following bbl:

3003880034
3003880035
3003880036
3003880037

Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2020).

No archeological concerns for the following bbl:

1) 268 BERGEN STREET, BBL: 3003880019
2) 300 BERGEN STREET, BBL: 3003880031
3) 118 3 AVENUE, BBL: 3003880038
4) 289 WYCKOFF STREET, BBL: 3003880041

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

5) 287 WYCKOFF STREET, BBL: 3003880042

Gina Santucci 2/1/2021

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 35428_FSO_GS_02012021.docx

Appendix B – DEP Correspondence

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

March 5, 2021

Rachel Antelmi
Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 98 Third Avenue
Block 388, Lots 31, 34, 35, 36, 37, 38, 41, 42 and p/o Lots 19 and 43 CEQR # 21DCP096K

Dear Ms. Antelmi:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the November 2020 Environmental Assessment Statement (EAS) prepared by Environmental Studies Corporation and the March 2014 Phase I Environmental Site Assessment (Phase I) prepared by Impact Environmental Closures, Inc. on behalf of 98 Third Avenue Realty LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment and a zoning text amendment from the New York City Department of City Planning (DCP) that would affect 10 tax lots on a single block (Block 388, Lots 31, 34, 35, 36, 37, 38, 41, 42 and p/o Lots 19 and 43) in the Boerum Hill neighborhood of Brooklyn Community District 2. The proposed actions include a zoning amendment portions of an M1-2 district to R7D/C2-4 and R6B. In addition, the proposed actions include a zoning text amendment to make the Rezoning Area applicable as a Mandatory Inclusionary Housing (MIH) area mapped as Option 1 and Option 2. At this time, the Proposed Actions would seek compliance with MIH through Option 2 of the program. The proposed actions would facilitate the development of a 35,274 gross square foot (gsf) 8-story mixed use building at Block 388, Lot 31 (Projected Development Site 1) to contain 31,751 square feet of residential space and 3,523 square feet of ground-floor commercial retail. This would include 24 dwelling units, 8 of which would be affordable pursuant to MIH. In the future with the proposed actions, development is also expected to occur on Block 388, Lot 38 (Projected Development Site 2) and Block 388, Lot 42 (Projected Development Site 3), which are non-applicant owned.

Projected Development Site 1: Block 388, Lot 31

The March 2014 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including a gasoline filling station, a convenience store, churches, garages, a library, a school, a day care center, an auto body shop, a film corporation, tire,

service, sheet metal works, a machine shop, pen manufacturing, carpet cleaning, a post office, a theatre, a milk depot, a dairy company, a stable, etc. Regulatory databases identified 34 spills and 21 petroleum bulk storage sites within 1/8 mile; 6 brownfield sites and 1 voluntary cleanup program site within a 1/2 mile; and 1 National Priority List site within 1 mile of the subject property.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

Projected Development Site 1: Block 388, Lot 31 (Site under the control or ownership of the applicant

- Based on the applicant's proposal to construct subject to the New York City Voluntary Cleanup Program (VCP) requirements, DEP concurs that the incorporation of all testing and remedial measures under the VCP requirements will ensure that there would be no potential for significant adverse hazardous materials impacts as a result of the proposed project. DEP concurs with the EAS recommendation that an (E) Designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property. The (E) Designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance in the event the applicant withdraws their participation from the VCP. These measures will ensure that the development is protective of human health and the environment through the Mayor's Office of Environmental Remediation oversight as part of the New York City Department of Buildings approval process.

Projected Development Sites 2 and 3: Block 388, Lots 38 and 42 (Sites not under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination, DEP concurs with the EAS recommendation that an (E) Designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject properties. The (E) Designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Future correspondence and submittals related to this project should include the following CEQR # **21DCP096K**. If you have any questions, you may contact Mohammad Khaja-Moinuddin at (718) 595-4445.

Sincerely,

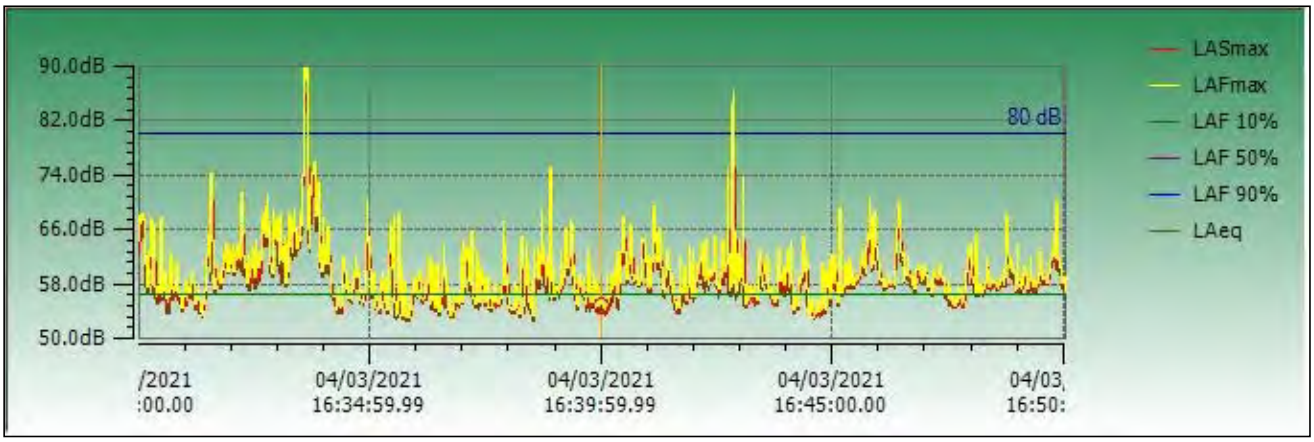


Wei Yu
Deputy Director, Hazardous Materials

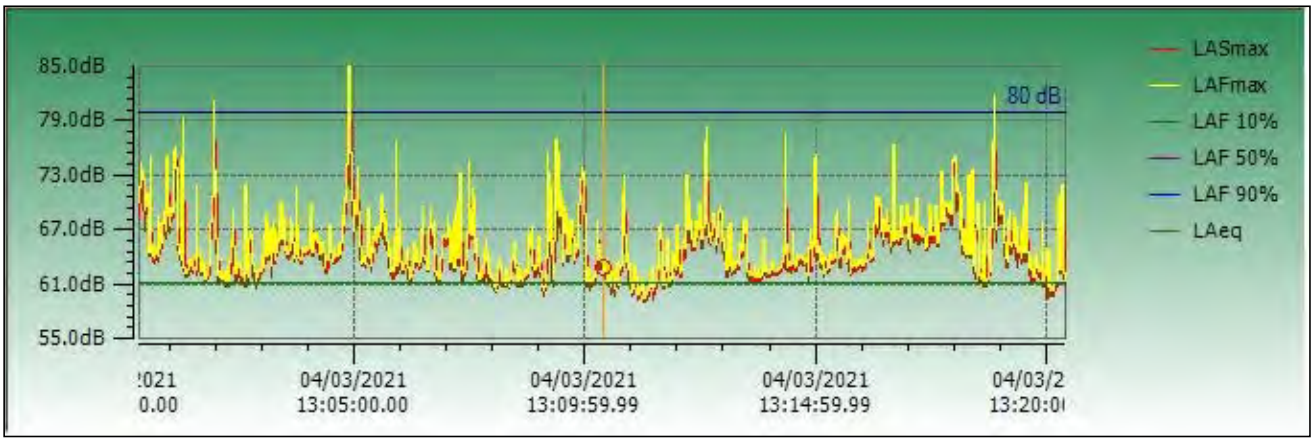
c: R. Weissbard
M. Khaja-Moinuddin
T. Estesen
M. Wimbish
R. Lucas
O. Abinader - DCP
M. Bertini - OER

Appendix C – Noise Back-Up

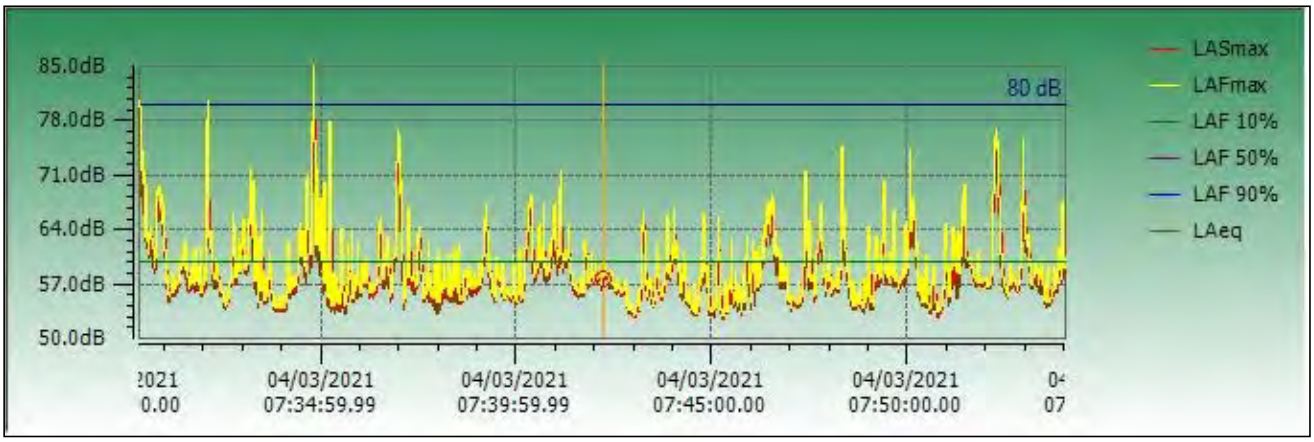
Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	63 dB	Result
LASmax	85.9 dB	LAS 50%	58 dB	
LASmin	52.7 dB	LAS 90%	54.5 dB	
Start Date & Time	3/4/2021 4:30:01 PM	Calibration (Before) Date	3/4/2021 4:29:56 PM	
Duration	00:20:02 HH:MM:SS	Calibration (After) Date	3/4/2021 4:50:14 PM	
LAeq	62.6 dB	Calibration Drift	0.2 dB	
End Date & Time	3/4/2021 4:50:03 PM	Battery Low	No	
Notes				



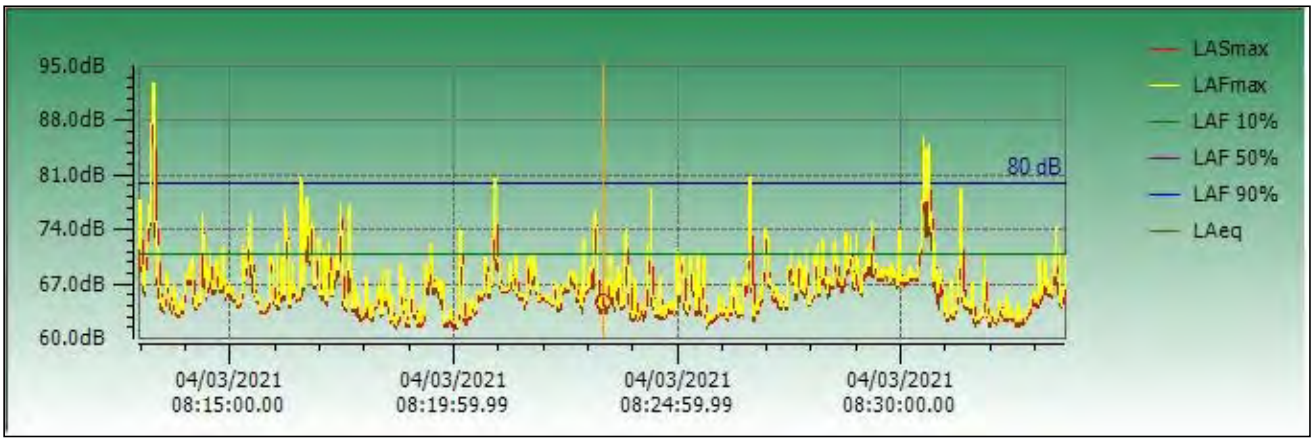
Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	68.5 dB	Result
LASmax	82.2 dB	LAS 50%	64 dB	
LASmin	59.2 dB	LAS 90%	61 dB	
Start Date & Time	3/4/2021 1:00:21 PM	Calibration (Before) Date	3/4/2021 1:00:06 PM	
Duration	00:20:04 HH:MM:SS	Calibration (After) Date	3/4/2021 1:20:38 PM	
LAeq	66.1 dB	Calibration Drift	0.1 dB	
End Date & Time	3/4/2021 1:20:25 PM	Battery Low	No	
Notes				



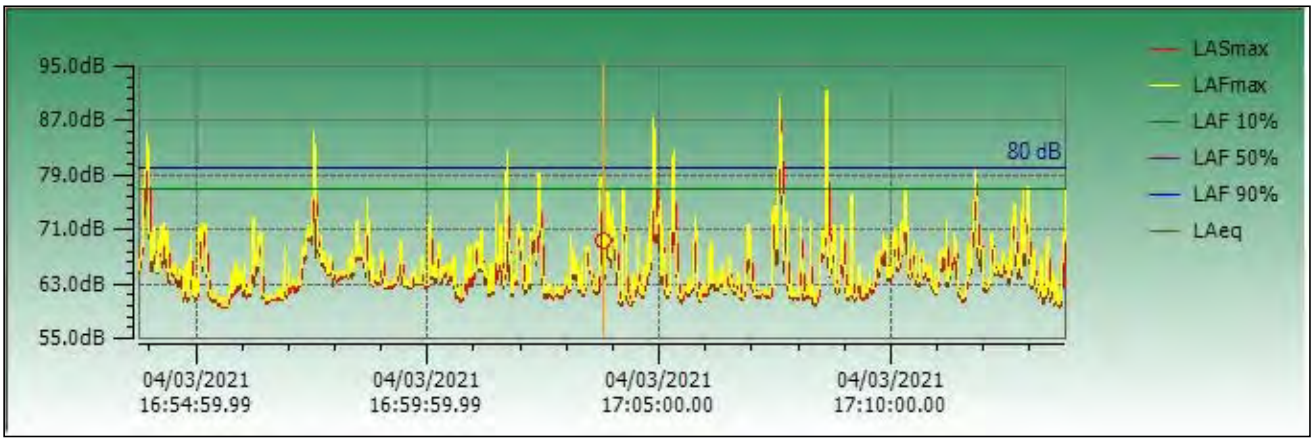
Instrument Model	CEL-633C			
Serial Number	5086866	LAS 10%	63 dB	Result
LASmax	80 dB	LAS 50%	57 dB	
LASmin	52.5 dB	LAS 90%	54.5 dB	
Start Date & Time	3/4/2021 7:30:21 AM	Calibration (Before) Date	3/4/2021 7:30:16 AM	
Duration	00:23:41 HH:MM:SS	Calibration (After) Date	3/4/2021 7:54:28 AM	
LAeq	61 dB	Calibration Drift	-0.2 dB	
End Date & Time	3/4/2021 7:54:02 AM	Battery Low	No	
Notes				



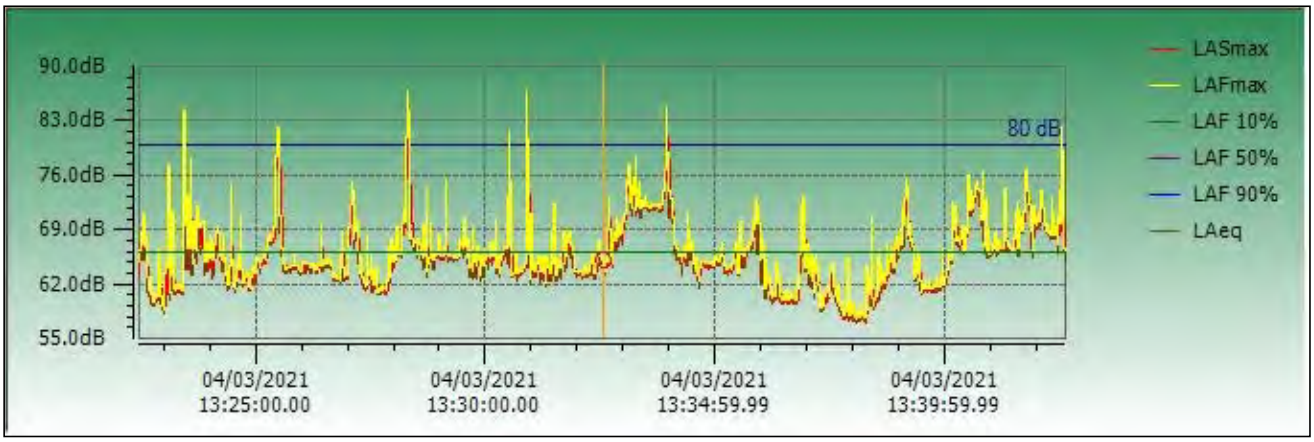
Instrument Model	CEL-633C			
Serial Number	5086866	LAS 10%	70 dB	Result
LASmax	90.7 dB	LAS 50%	65.5 dB	
LASmin	61.3 dB	LAS 90%	62.5 dB	
Start Date & Time	3/4/2021 8:12:58 AM	Calibration (Before) Date	3/4/2021 8:01:28 AM	
Duration	00:20:43 HH:MM:SS	Calibration (After) Date	3/4/2021 8:35:20 AM	
LAeq	69.3 dB	Calibration Drift	0.2 dB	
End Date & Time	3/4/2021 8:33:41 AM	Battery Low	No	
Notes				



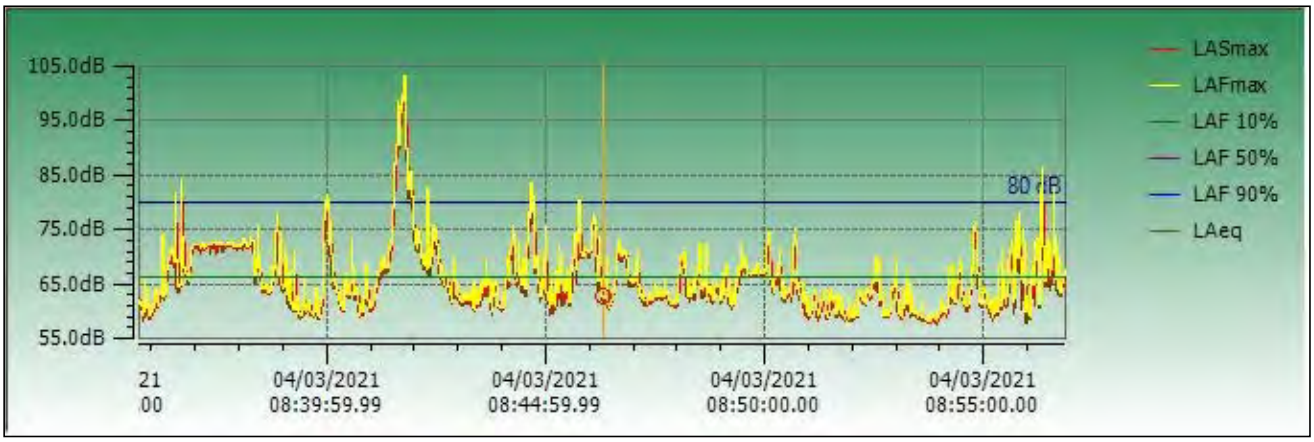
Instrument Model	CEL-633C			
Serial Number	5086866	LAS 10%	69.5 dB	Result
LASmax	87.3 dB	LAS 50%	64 dB	
LASmin	59.5 dB	LAS 90%	61 dB	
Start Date & Time	3/4/2021 4:53:46 PM	Calibration (Before) Date	3/4/2021 4:50:22 PM	
Duration	00:20:00 HH:MM:SS	Calibration (After) Date	3/4/2021 5:14:00 PM	
LAeq	67.9 dB	Calibration Drift	0.0 dB	
End Date & Time	3/4/2021 5:13:46 PM	Battery Low	No	
Notes				



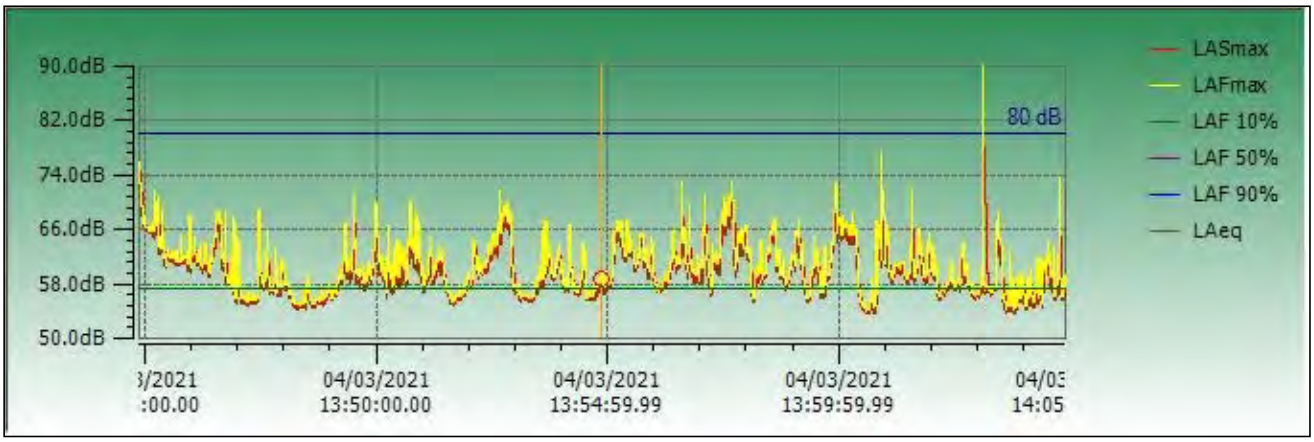
Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	71 dB	Result
LASmax	82.4 dB	LAS 50%	64.5 dB	
LASmin	56.9 dB	LAS 90%	61 dB	
Start Date & Time	3/4/2021 1:22:28 PM	Calibration (Before) Date	3/4/2021 1:20:45 PM	
Duration	00:20:10 HH:MM:SS	Calibration (After) Date	3/4/2021 1:43:08 PM	
LAeq	67.5 dB	Calibration Drift	12.5 dB	
End Date & Time	3/4/2021 1:42:38 PM	Battery Low	No	
Notes				



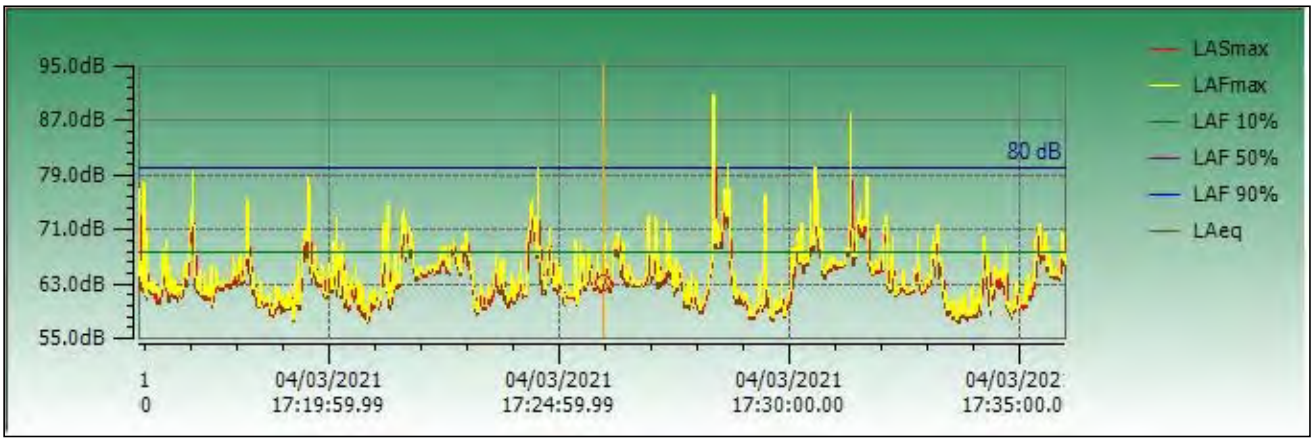
Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	72 dB	Result
LASmax	100.5 dB	LAS 50%	63.5 dB	
LASmin	57.7 dB	LAS 90%	59.5 dB	
Start Date & Time	3/4/2021 8:35:43 AM	Calibration (Before) Date	3/4/2021 8:35:35 AM	
Duration	00:21:09 HH:MM:SS	Calibration (After) Date	3/4/2021 8:57:30 AM	
LAeq	76.8 dB	Calibration Drift	0.2 dB	
End Date & Time	3/4/2021 8:56:52 AM	Battery Low	No	
Notes				



Instrument Model	CEL-633C			
Serial Number	5086866	LAS 10%	64.5 dB	Result
LASmax	83 dB	LAS 50%	59 dB	
LASmin	53.6 dB	LAS 90%	55.5 dB	
Start Date & Time	3/4/2021 1:44:52 PM	Calibration (Before) Date	3/4/2021 1:43:16 PM	
Duration	00:20:02 HH:MM:SS	Calibration (After) Date	3/4/2021 7:30:16 AM	
LAeq	61.8 dB	Calibration Drift	12.6 dB	
End Date & Time	3/4/2021 2:04:54 PM	Battery Low	No	
Notes				



Instrument Model	**CEL-633C**			
Serial Number	5086866	LAS 10%	68.5 dB	Result
LASmax	85.2 dB	LAS 50%	63 dB	
LASmin	57.4 dB	LAS 90%	59.5 dB	
Start Date & Time	3/4/2021 5:15:53 PM	Calibration (Before) Date	3/4/2021 5:14:06 PM	
Duration	00:20:05 HH:MM:SS	Calibration (After) Date	3/4/2021 5:36:13 PM	
LAeq	65.7 dB	Calibration Drift	0.0 dB	
End Date & Time	3/4/2021 5:35:58 PM	Battery Low	No	
Notes				



Noise Job Field Sheet

Name of Project: 98 Third Avenue 2021017

Project Address: 98 Third Avenue Brooklyn, NY

Date(s) of Field Work: 3/3/21

Personnel: John Vrabel

Project Specific Scope of Work:

2 x 20-minute locations AM, Midday, PM

Maximum Billable Hours for the Day: 15

I. Start of Noise Monitoring Day

Departure Time: 6:00 Arrival Time: 7:50

Weather Conditions (temp, wind speed, precipitation): cloudy, 40's, low wind, dry

Meter Type: Cirrella Meter Serial #: 5086866 Meter Location: 1+2
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
Meter Type: _____ Meter Serial #: _____ Meter Location: _____
*If more locations are needed for a project use a second Field Sheet

Calibrator Serial #: 4478208 Meters used on: 5086866
Calibrator Serial #: _____ Meters used on: _____
Calibrator Serial #: _____ Meters used on: _____
Were Photos Taken of Each Location? (Y)/ N *Discuss specific photo instructions w/ Project Manager

**On a separate sheet of paper (field book) make a sketch of the noise meter locations and the distances to nearest wall, fence, building, or other solid surfaces.*

II. Morning Session 7:30 AM – 9:00 AM

Before Measurement:

Meter Serial #: 5086866 Time: 8:01 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " " Time: 8:35 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " " Time: 7:30 Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: " " Time: 8:25 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " Time: 8:56 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " " Time: 7:51 Calibration Passed at 114 dB? Y / N

*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
1	[redacted] 8:13	[redacted] 8:33
2	8:36	8:56
3	7:30	7:50

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
1	84	82	15	3	9	—
2	90	74	12	1	8	—
3	80	77	13	2	7	—

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):
8:41 Ambulance Siren

Please place noise meters in their respective cases between sessions to avoid damage.

III. Midday Session 12:00 PM – 1:30 PM

Before Measurement:

Meter Serial #: 5086866 Time: 12:00 Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: 12:20 Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: 12:43 Calibration Passed at 114 dB? Y / N

After Measurement:

Meter Serial #: _____ Time: 12:20 Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: 12:43 Calibration Passed at 114 dB? Y / N
Meter Serial #: _____ Time: 13:04 Calibration Passed at 114 dB? Y / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
1	12:00	12:20
2	12:22	12:42
3	12:44	13:04

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
1	76	64	8	4	3	—
2	82	71	6	2	4	—
3	69	58	2	0	1	—

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):
Immature man claps at meter at 13:03

Please place noise meters in their respective cases between sessions to avoid damage.

IV. Evening Session 4:30 PM – 6:00 PM

Before Measurement:

Meter Serial #: S-86866 Time: 16:30 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " " Time: 16:50 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " " Time: 17:13 Calibration Passed at 114 dB? (Y) / N

After Measurement:

Meter Serial #: " " Time: 16:50 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " " Time: 17:13 Calibration Passed at 114 dB? (Y) / N
Meter Serial #: " " Time: 17:36 Calibration Passed at 114 dB? (Y) / N
*If more locations are needed for a project use a second Field Sheet

Location #	Start Time	End Time
1	~~16:30~~ 16:53	~~16:50~~ 17:13
2	17:16	17:36
3	16:30	16:50

*If more locations are needed for a project use a second Field Sheet

Location #	Car	SUV	Medium Truck	Heavy Truck	Bus	Train
1	80	65	7	2	6	—
2	92	70	10	5	4	—
3	87	79	9	4	7	—

*If more locations are needed for a project use a second Field Sheet

Noise Source: please note any loud noises here and time (sirens, garbage truck, etc):

Please place noise meters in their respective cases between sessions to avoid damage.

V. End of Noise Monitoring Day

- Please return all noise meters to their cases.
- Do not return dead batteries to the cases, throw them out.
- Did you take photos? (Y) / N
- Did you complete the site sketch? Y / N
- If a meter(s) was rented, please scan in calibration documents.

Anything of note/concern for the day: _____

_____

_____

Departure Time: 17:45 Arrival Time: 19:30

Total Time to Be Billed: 1.5

Certificate of Conformity and Calibration



Instrument Model:-	**CEL-633C**		
Serial Number	5086866		
Firmware revision	V006-03		
Microphone Type:-	**CEL-251**	**Preamplifier Type:-**	**CEL-495**
Serial Number	3700	Serial Number	003409
Instrument Class/Type:-	**1**		

Applicable standards:-

IEC 61672: 2002 / EN 60651 (Electroacoustics - Sound Level Meters)
IEC 60651 1979 (Sound Level Meters), ANSI S1.4: 1983 (Specifications For Sound Level Meters)

Note:- The test sequences performed in this report are in accordance with the current Sound level meter *Standard - IEC61672. The combination of tests performed are considered to confirm the products electro-acoustic performance to all applicable standards including superceeded Sound Level Meter Standards - IEC60651 and IEC60804.*

Test Conditions:-	22.7 °C	**Test Engineer:-**	Stephen Adams
	51.4 %RH	**Date of Issue:-**	September 22, 2020
	1000.7 mBar		

Declaration of conformity:-

This test certificate confirms that the instrument specified above has been successfully tested to comply with the manufacturer's published specifications. Tests are performed using equipment traceable to national standards in accordance with Casella's ISO 9001:2008 quality procedures. This product is certified as being compliant to the requirements of the CE Directive.

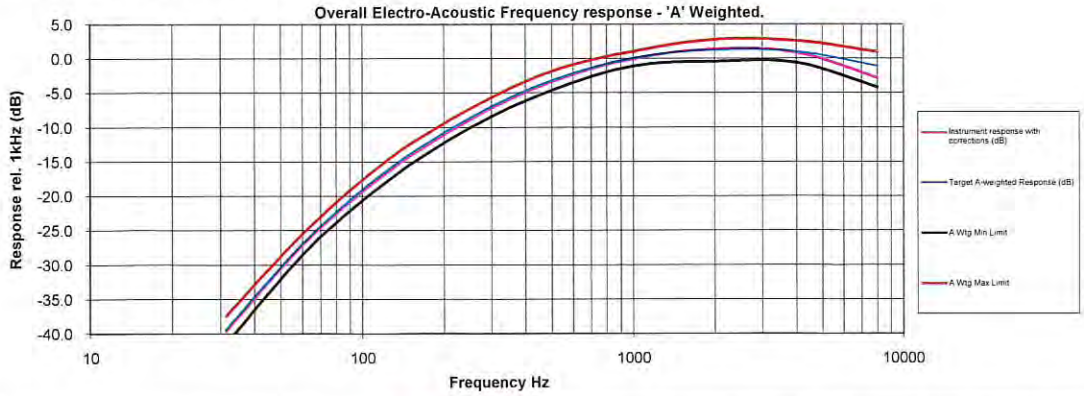
Test Summary:-

Self Generated Noise Test	**All Tests Pass**
Electrical Signal Test Of Frequency Weightings	**All Tests Pass**
Frequency & Time Weightings At 1 kHz	**All Tests Pass**
Level Linearity On The Reference Level Range	**All Tests Pass**
Toneburst Response Test	**All Tests Pass**
C-peak Sound Levels	**All Tests Pass**
Overload Indication	**All Tests Pass**
Acoustic Tests	**All Tests Pass**

Combined Electro-Acoustic Frequency Response - A Weighted

Combined Electro-Acoustic Frequency Response - A Weighted (IEC 61672-3:2006)

The following A-Weighted frequency response graph shows this instruments overall frequency response based upon the application of multi-frequency pressure field calibrations. The microphones Pressure to Free field correction coefficients are applied to pressure response. Reference level taken at 1kHz.



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Tested to CEL-63X test sheet TP444 revision 01-00